CITY OF PINELLAS PARK
• SIMPLY CENTERED •

CITY HALL - P.O.Box 1100 PINELLAS PARK, FL 33780-1100

CONTRACT CHANGE ORDER

CONTRACTOR: Badger Meter, Inc.
4545 W Brown Deer Rd
Brown Deer, WI 53223

CONTRACT NO: 24.001
CONTRACT TITLE: Advanced Water Meter Infrastructure (AMI) System
CHANGE ORDER #: 1

ORIGINAL CONTRACT AMOUNT: $9,279,657.59

PREVIOUS CHANGE ORDERS: APPROVED _____ No. _____ AMOUNT: _____
APPROVED _____ No. _____ AMOUNT: _____
APPROVED _____ No. _____ AMOUNT: _____

You are hereby directed to comply with the following change(s) to the contract documents, plans and/or specifications.

DESCRIPTION OF CHANGES: Increase in final cost following citywide meter audit. Change order includes additional meters, lids and boxes with associated labor as well as additional labor of survey associated with the extra accounts that were not included in the scope.

PRICE: ☒ INCREASE ☐ DECREASE BY $ 432,889.12

DURATION: ☐ INCREASE ☐ DECREASE BY _____ DAYS

FOR MULTI-YEAR CONTRACTS, IS THIS AN ANNUAL CHANGE OR ONE TIME: ☐ ANNUAL ☐ ONE TIME

RECOMMENDED BY: _____ DATE: _____
CITY MANAGER OR PURCHASING DIRECTOR

ACCEPTED BY: Rod Krings DATE: 9-28-25
CONTRACTOR

APPROVED BY: _____ DATE: 9-28-25
DEPARTMENT ADMINISTRATOR

DATE APPROVED BY COUNCIL/AGENDA ITEM #: _____

Project Name

CHANGE ORDER TRANSMITTAL

Project Details

Utility Name:	**Pinellas Park AMI Project**		
Project Name:	Pinellas Park AMI Project		
Contract No.:	535 RFP24.001	Purchase Order No.:	
Change Requested By:	Erin Pinch PMP	Date of Request:	9/5/2025
		Change Order No.	#1

Narrative Summary

Description of Change Request:	In order to true up the scope of work in Attachment C (Pricing Details) in the current Agreement, certain line items are being adjusted as well as certain line items are being added to the scope of work including: additional meters and associated labor, lids and boxes and associated labor, and labor to survey the extra accounts that were not included in the original scope. These adjustments are all reflected in Exhibit A attached hereto.
Reason Change is Required:	Customer Request and to accommodate unforeseen conditions.
Support and Justification Documents Provided:	The Pinellas Park AMI project has concluded its survey and assessed total demand needed to complete the project exceeds the exisiting quantities allotted in the current contract. This Change Order lists the items and quantities that require remediation to capture full scope needed.

Contract Change Summary (after acceptance)

Change in Value

Net Previous Contract + Change Orders:	$	9,279,657.59
This Change Order:	$	432,889.12
Revised Contract Value:	$	9,712,546.71

Change in Duration

Current Contract End Date (Inc. Change Orders)	5/1/2026
Revised End Date through Previous Change Orders:	5/1/2026
Revised Contract End Date:	5/1/2026

Department (by Approval Sequence)	Signature	Date	Status
TK Director			
Pinellas Park Representative			

Pinellas Park

Advanced Metering Infrastructure Project

Change Order #01

Exhibit A

Meters & End Points				Original Scope		Proposed Adjustment		Net Change	
SOV Item #	Description	Unit Price		Original Quantity	Original Value Extended	Revised Quantity	Revised Value Extended	Net Qty Change	Net Total $ Change
10	Disc, M25 5/8"(3/4x7-1/2),	$	220.00	14,956	$ 3,290,320.00	15103	$ 3,322,660.00	147	$ 32,340.00
11	Disc, M55 1"(10-3/4),	$	315.00	653	$ 205,695.00	629	$ 198,135.00	-24	$ (7,560.00)
12	Disc, M120 1-1/2"	$	610.00	102	$ 62,220.00	234	$ 142,740.00	132	$ 80,520.00
13	Disc, M170 2"	$	739.00	219	$ 161,841.00	294	$ 217,266.00	75	$ 55,425.00
14	E-Series B-Alloy, 3" RND(12),	$	1,945.00	28	$ 54,460.00	12	$ 23,340.00	-16	$ (31,120.00)
NEW	E-Series B-Alloy, 3" RND (17)	$	1,945.00	0	$ -	11	$ 21,395.00	11	$ 21,395.00
15	E-Series B-Alloy, 4" RND(14),	$	2,394.00	27	$ 64,638.00	14	$ 33,516.00	-13	$ (31,122.00)
NEW	E-Series B-Alloy 4" RND (20)	$	2,394.00	0	$ -	16	$ 38,304.00	16	$ 38,304.00
16	E-Series B-Alloy, 6"x18" RND Std Gskt,	$	3,540.00	23	$ 81,420.00	13	$ 46,020.00	-10	$ (35,400.00)
NEW	E-Series B-Alloy 6" RND (20)	$	3,540.00	0	$ -	27	$ 95,580.00	27	$ 95,580.00
17	E-Series B-Alloy, 8"x20" RND,	$	4,293.00	13	$ 55,809.00	12	$ 51,516.00	-1	$ (4,293.00)
18	Disc, M170 2"-ELL Dr w/TP, Rclmd,Instl Ki	$	773.00	122	$ 94,306.00	98	$ 75,754.00	-24	$ (18,552.00)
19	E-Series B-Alloy, 3" RND(12), Rclmd	$	1,945.00	1	$ 1,945.00	3	$ 5,835.00	2	$ 3,890.00
20	E-Series B-Alloy, 4" RND(14), TP Rclmd,	$	2,394.00	10	$ 23,940.00	9	$ 21,546.00	-1	$ (2,394.00)
23	EP Only for Enc	$	110.00	0	$ -	25	$ 2,750.00	25	$ 2,750.00
NEW	Splicing Kit	$	4.12	0		100	$ 412.00	100	$ 412.00
A1	Subtotal for Meter Adjustment			16,154	$ 4,096,594.00	16600	$ 4,296,769.00		$ 200,175.00

3rd Party Product				Original Scope		Proposed Adjustment		Net Change	
SOV Item #	Description	Unit Price		Original Quantity	Original Value Extended	Revised Quantity	Revised Value Extended	Net Qty Change	Net Total $ Change
41	Nicor B12 (11"x18") Tier 15 w/Recessed Hole	$	49.44	1	$ 49.44	500	$ 24,720.00	499	$ 24,670.56
42	Nicor 11"x18" Meter Box	$	59.47	1	$ 59.47	500	$ 29,735.00	499	$ 29,675.53
43	Nicor 11"x32" Tier 15 w/Recessed Hole	$	63.27	1	$ 63.27	1250	$ 79,087.50	1249	$ 79,024.23
NEW	Nicor 17"x18" lid	$	82.50	0	$ -	80	$ 6,600.00	80	$ 6,600.00
NEW	Nicor 17"x18" box	$	106.25	0	$ -	80	$ 8,500.00	80	$ 8,500.00
B1	Subtotal for Additional Components Adjustment			3	$ 172.18	2410	$ 148,642.50		$ 148,470.32

Labor & Services				Original Scope		Proposed Adjustment		Net Change	
SOV Item #	Description	Unit Price		Original Quantity	Original Value Extended	Revised Quantity	Revised Value Extended	Net Qty Change	Net Total $ Change
69	Install 5/8" x 3/4" Meter		$67.85	14,956	$ 1,014,764.60	15096	$ 1,024,263.60	140	$ 9,499.00
70	Install 1" Meter	$	67.85	653	$ 44,306.05	624	$ 42,338.40	(29)	$ (1,967.65)
71	Install 1.5" Meter	$	276.00	102	$ 28,152.00	234	$ 64,584.00	132	$ 36,432.00
72	Install 2" Meter	$	276.00	219	$ 60,444.00	286	$ 78,936.00	67	$ 18,492.00
73	Install 3" Meter	$	828.00	28	$ 23,184.00	23	$ 19,044.00	(5)	$ (4,140.00)
74	Install 4" Meter	$	1,035.00	27	$ 27,945.00	30	$ 31,050.00	3	$ 3,105.00
75	Install 6" Meter	$	1,236.25	23	$ 28,433.75	39	$ 48,213.75	16	$ 19,780.00
76	Install 8" Meter	$	1,646.80	13	$ 21,408.40	12	$ 19,761.60	(1)	$ (1,646.80)
77	Install 2" Meter - RCW	$	276.00	122	$ 33,672.00	97	$ 26,772.00	(25)	$ (6,900.00)
78	Install 3" Meter - RCW	$	828.00	1	$ 828.00	3	$ 2,484.00	2	$ 1,656.00
79	Install 4"Meter - RCW	$	1,035.00	10	$ 10,350.00	9	$ 9,315.00	(1)	$ (1,035.00)
82	Replace Meter Pit Lid (Up to 17"x30")	$	11.50	1	$ 11.50	80	$ 920.00	79	$ 908.50
84	Install Buddy Box for Vault-Set Meters	$	63.25	1	$ 63.25	80	$ 5,060.00	79	$ 4,996.75
86	Preinstallation Survey	$	16.88	16,158	$ 272,747.04	16458	$ 277,811.04	300	$ 5,064.00
C1	Subtotal for Labor Adjustment			14956	$ 1,566,309.59	15096	$ 1,650,553.39		$ 84,243.80

Total	$ 432,889.12

CITY OF



PINELLAS PARK

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Request For Proposal 24.001
Advanced Water Meter Infrastructure (AMI) System

Badger Meter, Inc.
4545 West Brown Deer Road
Milwaukee, WI 53223
800.876.3837

Public Works Utilities

CONTRACT CHECKLIST

CITY CLERK'S OFFICE

CITY OF PINELLAS PARK • SIMPLY CENTERED •

CONTRACTOR NAME/ PROJECT MANAGER Badger Meter, Inc. / Chris Wade

PROJECT NAME / PROJECT NUMBER Advanced Water Meter Infrastructure (AMI) System / Request for Proposal 24-001

✓	**RISK MANAGEMENT APPROVAL**	Date sent to RM: 11.25.24 print email
✓	**CITY ATTORNEY APPROVAL**	Attorney letter attached
✓	**CITY COUNCIL APPROVAL**	Date: 11/26/24 Pg. 67 Amount: $9,279,657.59
✓	**HOLD HARMLESS**	Verify completed, signed and sealed
✓	**CONTRACT: CONSTRUCTION, MASTER, CONSULTANT** **GENERAL TERMS AND CONDITIONS** *Renewal contracts are reviewed the same as an original (add original council approval date and renewal number)	1. Verify all requested information is completed 2. Contract price (written & spelled) matches Council approved amount 3. Signed by authorized officer and witness (attest) and sealed 1. Printed contractor name and attest title
✓	**SWORN STATEMENT AND PUBLIC ENTITY CRIMES**	1. Condition # 6 – First line checked, if not, refer to City Attorney 4. Signed, dated and notarized
✓	**PUBLIC CONSTRUCTION, PERFORMANCE OR CONTRACT BOND** *RFP Contracts typically have no bonds, per Purchasing 2/14/2013	1. Contractor name & insurer, project name and number 2. Contract price matches Council approved amount 3. "Performs the contract" date matches construction contract (not always applicable) 2. Sealed two (2) times (contractor & insurer)
✓	**CHANGES**	1. All loose pages are stapled to those being replaced 2. All changes must be initialed by signatory of that section 3. Changes (any deviation from City Attorney original approved of the bid packet) must be flagged and discussed with the City Attorney prior to signature 4. If there are multiple or complicated changes, Call the City Attorney to see if the bid packet needs to be reviewed again

CITY OF
PINELLAS PARK
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CITY HALL - P.O.Box 1100
PINELLAS PARK, FL 33780-1100

Please Respond To:

James W. Denhardt
City Attorney
Law Offices of James W. Denhardt
2700 First Avenue North
St. Petersburg, Florida 33713
(727) 327-3400 - Telephone
(727) 323-0888 - Facsimile

September 16, 2024

Mr. Doug Sexton
Purchasing Coordinator
City of Pinellas Park
P. O. Box 1100
Pinellas Park, Florida 33780-1100

RE: **City Document #24-211**
RFP 24.001 Advanced Water Meter Infrastructure (AMI) System

Dear Mr. Sexton:

We have received and reviewed the above-referenced Agreement, and would approve of the same as to form and correctness.

Very truly yours,

James W. Denhardt
City Attorney

cc: Bart Diebold, City Manager
Jennifer Carfagno, City Clerk
Dan Hubbard, Asst. City Manager
Kelly Schrader, Finance Administrator
Rosanna Hany, Purchasing Director
Ryan Mendrala, Project Manager

JWD/dh
24-211.20240916.RFP 24.001 AMI System.wpd

CITY OF
PINELLAS PARK
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CITY HALL - P.O.Box 1100
PINELLAS PARK, FL 33780-1100

Please Respond To:

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City Attorney
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2700 First Avenue North
St. Petersburg, Florida 33713
(727) 327-3400 - Telephone
(727) 323-0888 - Facsimile

November 4, 2024

Mr. Doug Sexton
Purchasing Coordinator
City of Pinellas Park
P. O. Box 1100
Pinellas Park, Florida 33780-1100

RE: City Document #24-262 (Additional Comments)
AMI Water Meter Contract – Changes from Badger Meter, Inc.

Dear Mr. Sexton:

We have received and reviewed the response from Badger Meter to our earlier comments forwarded to you on October 14, 2024. We have again reviewed the previous comments as well as Badger's suggested changes. We find all of Badger's suggested modifications to our suggestions to be legally appropriate. Their suggested changes constitute more "management decisions" rather than "legal decisions." Assuming management is willing to go along with the terms they have proposed (i.e., liquidated damages of $500 per day vs. $1,000 per day), then from a legal standpoint, we find the proposed changes to be correct, and would otherwise approve of the changes in the Agreement as to form and correctness.

Very truly yours,

James W. Denhardt
City Attorney

cc: Bart Diebold, City Manager
Jennifer Carfagno, City Clerk
Dan Hubbard, Asst. City Manager
Kelly Schrader, Finance Administrator
Rosanna Hany, Purchasing Director
Ryan Mendrala, Project Manager

JWD/dh
24-262.20241014.LDS.AMI Badger Changes.wpd.

CITY OF
PINELLAS PARK
• SIMPLY CENTERED •

CITY HALL - P.O.Box 1100
PINELLAS PARK, FL 33780-1100

Please Respond To:

James W. Denhardt
City Attorney
Law Offices of James W. Denhardt
2700 First Avenue North
St. Petersburg, Florida 33713
(727) 327-3400 - Telephone
(727) 323-0888 - Facsimile

October 14, 2024

Mr. Doug Sexton
Purchasing Coordinator
City of Pinellas Park
P. O. Box 1100
Pinellas Park, Florida 33780-1100

RE: City Document #24-262
AMI Water Meter Contract – Changes from Badger Meter, Inc.

Dear Mr. Sexton:

Our office has received and reviewed the above-referenced Contract with the proposed changes from Badger Meter, Inc. Badger's proposed changes often reference the Statement of Work as "Attachment A," but such Attachment is not included in the proposed Contract. This Attachment will need to be included.

Additionally, we would recommend that the "Liquidated Damages" paragraph on page 51 of the Contract as well as the "Final Inspection" paragraph on page 58 remain in the Contract.

Pursuant to Badger's request for the "Suspension of Work" paragraph on page 64, the following language may be added:

> If the work is defective, or the Contractor fails to supply sufficient skilled workmen or suitable materials or equipment, or the Contractor fails to make prompt payments to Subcontractors for labor, materials or equipment, or the Contractor fails to comply with work schedules, the Designee may, by written notice to the Contractor, allow the Contractor thirty (30) days from the date of the notice to cure the cause for such notice. If the cause is not

> cured within thirty (30) days, the Designee may order the Contractor to stop all work or any portion thereof and terminate payments to the Contractor until the cause for such order has been eliminated. No extension of Contract time will be allowed for this suspension.

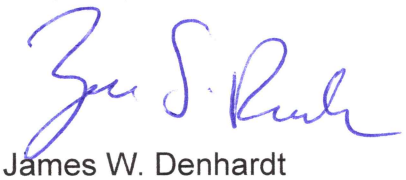
We would also request that the language on page 67 of the Contract in the paragraph titled "WARRANTY AND GUARANTEE PROVISIONS" remain in tact so as to maintain consistency with page 9 of the RFP, which states in part:

> If, within the guarantee period, any defect or signs of deterioration are noted, which, in the opinion of the City, are due to faulty . . . materials, upon notification, the successful contractor, at their expense, shall repair or adjust the equipment or parts to correct the condition, or they shall replace the part or entire unit to the complete satisfaction of the buyer.

Finally, we are agreeable to a Statement of Values being added to the Contract and referenced on page 74, Article II, of the Contract, so long as such Statement is consistent with the one provided in Badger's Proposal and the Statement is referenced in addition to the other "Contract Documents" noted in that paragraph.

Subject to the foregoing comments and changes, our office would approve of the proposed Contract as to form and correctness.

Very truly yours,



for James W. Denhardt
City Attorney

cc: Bart Diebold, City Manager
Jennifer Carfagno, City Clerk
Dan Hubbard, Asst. City Manager
Kelly Schrader, Finance Administrator
Rosanna Hany, Purchasing Director
Ryan Mendrala, Project Manager

JWD/pl
24-262.20241014.LDS.AMI Badger Changes.wpd.

Badger Meter

4545 W Brown Deer Road
PO Box 245036
Milwaukee, Wisconsin 53224-9536
414-355-0400 | 800-876-3837
www.badgermeter.com

CERTIFICATION

OF SIGNATURE AUTHORITY

I certify as follows:

By Board Resolution adopted by the Board of Directors of Badger Meter, Inc. and in full force and effect as of this date:

The following *elected executive officers* are, among other things, hereby authorized to execute, amend, and cancel bids and contracts for the sale of products, distributor and representative agreements, bid bonds, surety bonds, contracts, leases and certain other legally binding documents in the ordinary course of business, in the name of Badger Meter, Inc.

Kenneth C. Bockhorst	Chairman, President and Chief Executive Officer
Robert A. Wrocklage	Senior Vice President – CFO
Kimberly K. Stoll	Vice President – Sales & Marketing
Matthew L. Stuyvenberg	Vice President – SaaS, Global Commercial & International Utility
William R. A. Bergum	Vice President – General Counsel & Secretary
Daniel R. Weltzien	Vice President - Controller

Pursuant to the Power granted by the Board of Directors, the following *elected non-executive officers* are hereby authorized to execute, amend, and cancel bids, bid-related contracts and documents, requests for proposals and quotes, and all other bid-related documentation in the name of Badger Meter, Inc.

Wayne Dennis	Assistant Secretary	Senior Director - International Sales & Marketing
Charla D. Dury	Assistant Secretary	Proposal Lead – Bids and Contract Administration
Nicholas J. Gemmell	Assistant Secretary	Director - Senior Legal Counsel
Matthew B. Gieseke	Assistant Secretary	Proposal Lead – Bids and Contract Administration
Shauna A. Griffin	Assistant Secretary	Sr. Director – Utility Sales
David A. Miller	Assistant Secretary	Director – Legal Counsel
Rachel J. Meyer	Assistant Secretary	Proposals Manager – Bids and Contract Administration
Jessica A. O'Malley	Assistant Secretary	Director – Turnkey Operations
Kavin Tedamrongwanish	Assistant Secretary	Director – Legal Counsel
Monique D. White	Assistant Secretary	Proposal Lead – Bids and Contract Administration

BY:

William R. A. Bergum

October 24, 2024
Date

William R. A. Bergum,
Vice President - General Counsel & Secretary
Badger Meter, Inc.



Detail by Entity Name

Foreign Profit Corporation
BADGER METER, INC.

Filing Information

Document Number	841521
FEI/EIN Number	39-0143280
Date Filed	09/28/1978
State	WI
Status	ACTIVE
Last Event	CORPORATE MERGER
Event Date Filed	12/03/2018
Event Effective Date	12/31/2018

Principal Address

4545 W. BROWN DEER RD.
MILWAUKEE, WI 53223

Mailing Address

4545 W. BROWN DEER RD.
MILWAUKEE, WI 53223

Changed: 01/07/2019

Registered Agent Name & Address

CORPORATION SERVICE COMPANY
1201 HAYS STREET
TALLAHASSEE, FL 32301-2525

Name Changed: 12/27/2007

Address Changed: 12/27/2007

Officer/Director Detail

Name & Address

Title VP, Secretary, General Counsel

BERGUM, WILLIAM ROBERT AXEL
N63 W29924 Woodfield Ct
Hartland, WI 53029

Title VP

Begale, Fred Joseph
3656 North Hickory Ln
Oconomowoc, WI 53066

Title VP

Stoll, Kimberly Kvistad
W294 N6012 River Grove Ln
Hartland, WI 53029

Title Director

TELLOCK, GLEN E.
4545 W. BROWN DEER RD.
MILWAUKEE, WI 53223

Title Director

STERN, JAMES F.
4545 W. BROWN DEER RD.
MILWAUKEE, WI 53223

Title CEO, President, Director

Bockhorst, Kenneth Charles
923 East Kilbourn Avenue
Unit 701
MILWAUKEE, WI 53202

Title CFO, SVP

Wrocklage, Robert Alan
19915 West Pheasant Run Drive
New Berlin, WI 53146

Title Treasurer, VP

Bauer, Karen M.
150 Bunker Hill Drive
Brookfield, WI 53005

Title Director

Myers, Tessa
4545 W. BROWN DEER RD.
MILWAUKEE, WI 53223

Title VP

Weltzien, Daniel R.
4545 W. BROWN DEER RD.
MILWAUKEE, WI 53223

Title Director

McGill, James W.
4545 W. BROWN DEER RD.
MILWAUKEE, WI 53223

Title VP

Hopkins, Sheryl
4545 W. BROWN DEER RD.
MILWAUKEE, WI 53223

Title Director

Adams, Todd A.
4545 W. BROWN DEER RD.
MILWAUKEE, WI 53223

Title VP

Parisen, Williams James
4545 W. BROWN DEER RD.
MILWAUKEE, WI 53223

Title Director

Brooks, Henry F.
4545 W. BROWN DEER RD.
MILWAUKEE, WI 53223

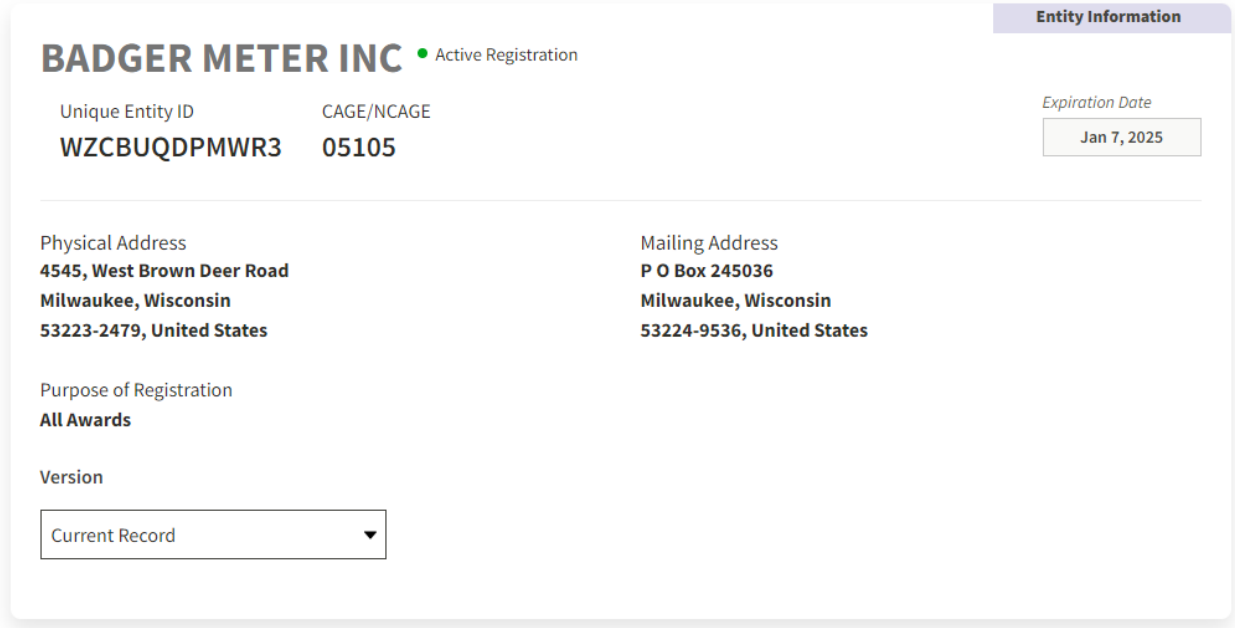
Annual Reports

Report Year	Filed Date
2022	04/24/2022
2023	04/01/2023
2024	03/15/2024

Document Images

03/15/2024 -- ANNUAL REPORT	View image in PDF format
04/01/2023 -- ANNUAL REPORT	View image in PDF format
04/24/2022 -- ANNUAL REPORT	View image in PDF format
04/19/2021 -- ANNUAL REPORT	View image in PDF format
02/04/2020 -- ANNUAL REPORT	View image in PDF format
01/11/2019 -- AMENDED ANNUAL REPORT	View image in PDF format
01/07/2019 -- ANNUAL REPORT	View image in PDF format
01/15/2018 -- ANNUAL REPORT	View image in PDF format

DEPARTMENT OF BUSINESS & PROFESSIONAL REGULATION REGISTRATION



Entity Information

BADGER METER INC ● Active Registration

Unique Entity ID
WZCBUQDPMWR3

CAGE/NCAGE
05105

Expiration Date
Jan 7, 2025

Physical Address
4545, West Brown Deer Road
Milwaukee, Wisconsin
53223-2479, United States

Mailing Address
P O Box 245036
Milwaukee, Wisconsin
53224-9536, United States

Purpose of Registration
All Awards

Version

Current Record

may subject the Web Services Employer, its subcontractors, its employees, or its representatives to: (1) prosecution for false statements pursuant to 18 U.S.C. 1001 and/or; (2) immediate termination of its MOU and/or; (3) possible debarment or suspension.

G. The foregoing constitutes the full agreement on this subject between DHS and the Web Services Employer.

Approved by:

Web Services Employer Badger Meter, Inc.	
Name (Please Type or Print) Donna R Koepke	Title
Signature Electronically Signed	Date 08/07/2008
Department of Homeland Security – Verification Division	
Name (Please Type or Print) USCIS Verification Division	Title
Signature Electronically Signed	Date 08/07/2008

Company ID Number: 142953

Information Required for the E-Verify Program **Information relating to your Company:**	
Company Name	Badger Meter, Inc.
Company Facility Address	4545 W. Brown Deer Road Milwaukee, WI 53223
Company Alternate Address	P. O. Box 245036 Milwaukee, WI 53224-9536
County or Parish	MILWAUKEE
Employer Identification Number	390143280
North American Industry Classification Systems Code	332
Parent Company	
Number of Employees	500 to 999
Number of Sites Verified for	5

NOTICE
REQUEST FOR PROPOSAL 24.001
ADVANCED WATER METER INFRASTRUCTURE (AMI) SYSTEM

Notice is hereby given that the City of Pinellas Park is soliciting proposals for a complete, fixed-based, potable and reclaimed water advanced meter infrastructure (AMI) system, including software, hardware, support, and ongoing information technology maintenance. The proposer should have verifiable experience in cost analysis, planning, implementation, and public interaction.

This project has a budget of **$15,000,000.00** and is partially funded by the American Rescue Plan Act (ARPA). Any party receiving federal funding must be registered on the System for Award Management (SAM or SAM.gov) and not debarred with no exemptions. All funds for this project must be encumbered before the end of 2024 and installation must be complete before 2026.

Upon award of the contract, and before final acceptance, a proof-of-concept demonstration and a preinstallation survey, including a cost analysis, are mandatory to evidence system functionality and to evaluate the existing meters and boxes.

The City reserves the right to negotiate the contract for best and final pricing based on the preinstallation survey results. Best and final pricing shall be presented in a format that clearly indicates a quantity schedule supported by the preinstallation survey.

All proposers must submit one **(1)** unbound, single-sided original containing the Technical Proposal and Pricing Proposal, with a maximum of 80 pages, along with seven **(7)** bound copies, and one **(1)** electronic copy with a maximum of 20MB. Covers, table of contents, divider tabs, and required documents are not considered in the page limit, provided no additional information is included on those pages. The financial statement is also excluded in the limited response and should be in a separate, labeled, and sealed envelope.

Sealed proposals shall be delivered to the City of Pinellas Park Purchasing Division at 8000 60th Street North, Pinellas Park, FL 33781 no later than until **10:00 A.M. EST on Wednesday, 17 April 2024**. The City of Pinellas Park assumes no responsibility for the timely delivery of proposals, any proposal received after the specified time and date will not be considered, unsealed bids will not be accepted.

Communication between a proposer and the City shall be communicated through the City of Pinellas Park Purchasing Division at *Purchasing@Pinellas-Park.com*. Proposers to this solicitation or persons acting on their behalf may not contact, between the release of the solicitation and the end of the 72-hour period following the agency posting the notice of intended award, excluding Saturdays, Sundays, and state holidays, any employee or officer of the executive or legislative branch concerning any aspect of this solicitation, except in writing to the procurement officer or as provided in the solicitation documents. Violation of this provision may be grounds for rejecting a proposal.

Please address all questions regarding this project to *Purchasing@Pinellas-Park.com* no later than **10:00 A.M. EST on Wednesday, 10 April 2024.**

A voluntary pre-proposal conference is scheduled to occur at **2:00 P.M. EST on Wednesday, 27 March 2024** at the Public Works Operation Center located at 6250 82nd Avenue North, Pinellas Park, FL 33781 or attend virtually via Google Meet.

Google Meet joining info:

Video call link: https://meet.google.com/mdp-uwrd-hyj

Or dial: (US) +1 470-285-0369 PIN: 545 951 860#

More phone numbers: https://tel.meet/mdp-uwrd-hyj?pin=3384724290770

Background

The City of Pinellas Park is located within Pinellas County, Florida. Currently, Pinellas Park has over 53,000 residents and has approximately 21,500 potable and reclaimed water meters. Pinellas Park has a mixture of both residential, commercial and industrial customers located within City limits. The City currently utilizes Tyler Munis for utility management, billing, and customer relationship management.

Scope of Work

The City of Pinellas Park is seeking proposals regarding a "turn key" potable and reclaimed water meter reading system and management to install a complete fixed-based, advanced meter infrastructure (AMI) system complete with associated software, hardware, support, and continuing I/T maintenance and support. The proposer should have broad experience in citizen involvement, planning, cost analysis, and implementation. A proof-of-concept period shall also be required proving the system functionality on a smaller scale prior to final acceptance. Once the City has awarded the RFP contract to a proposer, the City will then have the right to further negotiate the contract for the best and final pricing based on the results of a preinstallation survey performed or managed by the selected provider. Best and final pricing should be provided in a format clearly showing a schedule of quantities as supported by the preinstallation survey.

The City expects continued growth and should the need for more meters arise, the pricing shall remain firm for a period of (5) years. Annual pricing adjustments thereafter for meters, maintenance, and I/T support may be adjusted to correlate to the annual CPI (Tampa Bay Region) with a maximum of a (3) three percent increase.

The system must have the capability to improve meter reading efficiency, increase meter reader safety, and provide data that facilitates resolution of customer bill complaints, water conservation initiatives, and distribution system management efforts. The proposer shall describe in detail, the upgrade requirements needed to incorporate the proposed network including, but not limited to, radio frequency (RF) technology, cellular, wide area network (WAN), or other network options possessing the same characteristics. Additionally, the system should be capable of receiving meter readings while utilizing a mobile reading unit (collectively "AMR" or "mobile") or otherwise offer a means of reading while the meter itself safely stores reads, should the primary mean of collection goes down.

Financial Considerations

This project will be, in part, funded through the American Rescue Plan Act (ARPA). The proposers shall have the responsibility to ensure that, should the proposal be awarded, they meet all ARPA guidelines including but not limited to planning, implementation material and staffing needed for installation, project milestones/deadlines and any other regulatory concerns that are outlined in the Federal Register / vol. 87, No. 18 / Rules and Regulations.

AMI Functionality and Specifications

In the response to this City's RFP, the proposer shall clearly describe their system and/or product's performance and speak to their AMI functionality including (but is not limited to) the following features:

- The AMI proposer shall clearly outline in detail the installation, support and maintenance requirements necessary for their system to function.
- The system selected must have a twenty (20) year operational life span.
- The availability of accurate interval readings from the meters, is of utmost importance. Over the twenty (20) year life of the system, infrastructure outages may occur. The contractor shall provide details on how the proposed system uploads the missing interval read data from the period of the outage to avoid data gaps.

- The AMI network shall provide (but is not limited to) alarm notifications of failure to read, failure to transmit, low battery, "cut wire," as well as a priority alarm notification for broken pipes, potential leaks and/or reverse flow events with user configurable email or text messages for notification to specific City utility personnel.
- The AMI network will be capable of providing all necessary data to the City's I/T system (MUNIS).
- The system, as designed, shall provide for a meter read over a three (3) day window for at least 98.5% of all meters in the service area and at least 95% of all meters will successfully report all reading and interval data in the last twenty-four (24) hours.
- Primary data collection units (receivers, collectors, endpoints etc.) shall have on-board battery backup in the event of a power interruption and shall be capable of retaining at least 30 days of reading intervals from all meters in their coverage area. Meters should have a back method of reading both AMR and manual should the network go down.
- The meter endpoint and its connections shall be water submersible, capable of operating in 100% condensing humidity. Provide details on rated submersion depth and duration.
- The endpoint must transmit the meter reading, unique endpoint ID number, and meter location for diagnostic purposes.
- Endpoint must have a battery alarm that indicates the battery is nearing the end of its life.
- Endpoint connection to the meter shall have an inline connector capable of quick connect and disconnect and be suitable to operate in submersible conditions.
- A software application shall be included with the proposal that will meet the requirements as specified in this RFP. A special focus should be given to the applications ability to be integrated with other future software applications.
- Should a "NaaS" be proposed, the service shall include all costs related to design and build, network hardware, and ongoing maintenance and upgrades of the AMI network for a minimum of 10 years. Details of this will be outlined in a separate service level agreement provided by the proposer and approved by the City.
- Should a "SaaS" be proposed, the proposer shall include all costs and hardware related to operating and maintaining of the software required to ensure the intended functionality of the service for a minimum of 10 years. Details of this will be outlined in a separate service level agreement provided by the proposer.

Network Infrastructure Considerations

To alleviate the burden of network management and free utility personnel to focus on core utility needs, this City is considering outsourcing the AMI network infrastructure including all costs associated with hardware, design, and ongoing maintenance. The City will hear proposals from all AMI providers no matter network type, so long as it meets the requirements as outlined in this RFP.

- The City requires the contractor provide all required infrastructure, service, maintenance and support for their AMI solutions. If network towers are required, all appropriate engineering requirements must be met and each installation shall require all proper permitting.
- If a provider responds with a proposal that is networked via RF frequency transmission, an official RF Propagation Study from a licensed RF engineering firm that displays exact location and height of all data collection equipment and related coverage patterns will be required. The Propagation Study shall demonstrate 100% coverage of the City's reading platform. This is to include residential, commercial, industrial and institutional. The RF Propagation Study must identify all required collection infrastructure required for system operation.

- The contractor shall provide and install any additional data collection equipment (receivers, collectors) required after endpoint deployment to achieve the coverage depicted in the RF Propagation Study, at their own cost.
- All network systems shall be designed to cover the entire City's meter reading platform.
- All network systems must have diagnostic capabilities to monitor the AMI network.
- All network collection hardware shall have an on-board battery backup in the event of a power outage.
- If City-owned towers or structures are planned to be utilized, the following requirements must be met:
    - Permits required.
    - Antenna height shall not be greater than 100 ft.
    - Any antenna on the tower and hardware installed in the City of Pinellas Park must meet all national, state and local codes along with FAA, engineering specifications and standards among other federal regulations.

Network-As-A-Service (NaaS) and Software-As-A-Service (SaaS)

The City of Pinellas Park is looking to deploy an AMI network solution as efficiently and cost effectively as possible. To avoid obsolescence and to allow for future technologies to be implemented, the network infrastructure should utilize a configurable format that is capable of being updated and/or reconfigured remotely. The host software must also be formatted for future upgrade integrations and updates with current and future technologies owned by the proposer and the City.

Should the City should consider outsourcing the AMI network infrastructure maintenance, the proposer shall draft a Service Level Agreement and detail their proposed responsibilities for providing, installing and maintaining the system, which includes software, hardware, and Network-as-a-Service ("NaaS") AMI infrastructure for the expected life of the AMI project.

The City may also consider a vendor provided Software-as-a-Service ("SaaS") that is responsible for ownership of the software and all associated hardware to operate the software. In this scenario, the City shall only be responsible for the computers or laptops needed to access the applications via a web browser. The proposer shall draft a Service Level Agreement and detail their proposed responsibilities for providing, installing and maintaining the system hardware and software. The City would maintain ownership of all data received by the AMI system/network or the AMI network and would be provided online access to all data during an active subscription. In the event the subscription terminates, the vendor will provide the data to the City in an agreed upon media format.

Proposers will provide all monthly or annual fees into a service agreement no less than 10 years in length. This minimum 10-year agreement will begin after the final acceptance of the AMI system by the City of Pinellas Park. This minimum 10-year agreement will allow for an adjustment of prices after the initial 5 years based on current market CPI (Tampa Bay Region) not to exceed 3% annually. Any remaining fees shall be documented in a fee payment schedule and shall be included with this response.

System Head-End Control and Data Management Capabilities

- Ability to notify City staff of alert conditions through email, SMS or automated call, based on the City's preferences.
- The City shall have the ability to export data to 3rd party software applications CMEP, XML, direct database interface or similar. The system contractor shall place no restrictions on exporting data to 3rd party software applications.

- The head end control computer must provide data security of SOC2 compliance standards or greater.
- System diagnostic software shall include a mapping interface to graphically report endpoint and collection system equipment location and performance and pending meter issues (low battery, etc.).
- The system diagnostic software shall be capable of displaying and generating reports, tables and text files of configurable data in compliance with this RFP (including but not limited to):
    - Endpoint installation date
    - Endpoint transmission history and transmission success rate
    - Alarm conditions and alarm history.
- Import / Export capabilities shall be able to smoothly integrate with the City's I/T system.
- The AMI software shall have the ability to search for (including but not limited to) records, alarm conditions, resident accounts and consumption.

Software Application Overview (Consumer Engagement Portal)

The services provided through an AMI meter system are best appreciated at the consumer level; therefore, the proposer shall provide a pre-integrated Consumer Engagement Portal with common and shared access to the vendors singular data architecture that provides City customers with web-based viewing. The utility application must provide all the controls needed in the network for the essential functions of the metering data output received from the communication with field collection devices. The application must present this data within an intuitive user interface that is easy to interpret and understand. Portal shall also make clearly visible a help site and phone number feature with contractor's customer service staff. The application shall be secured and only permit viewable data pertaining to the individual consumer login with the exception of an administrator account which shall have full access to features available within the application for use of the City.

Portal should include, but may not be limited to, the following:

- Display of daily, monthly and yearly views of the consumers water consumption data, monthly comparison and financial views, in graphical, table and exportable views.
- Display and notification of alarm conditions in a customizable communication preference based on customer preferences (application notification, text/SMS, email, or automated call).
- Ability for the consumer to set and modify password access and contact information.
- Ability for the City to configure and add to the main tiles of the home page based on common requests of the utility.
- Ability for the City to communicate AMI data interruptions to City customers through their data feed to decrease the number of customer calls.

The application must be designed in such a way as to be updated along with future platforms and/or technologies. The systems shall be highly secure to protect the customers and the City of Pinellas Park. The data needs to be encrypted in transit and rest. The company should be able to produce documentation of being SOC 2 compliant or greater. It must integrate seamlessly with other third-party applications the utility utilizes such as Tyler Munis/billing software applications and work order management systems. The application must be able to integrate to other I/T systems in the event of a change.

Project Execution and Installation Requirements

Project execution and installation requirements shall conform to the proposed project schedule provided in response to this RFP. All meter equipment including fastener/connections, main cases, measuring chambers, strainers and registers furnished under this specification shall conform and meet the requirements as set forth in the latest version of the AWWA 700-15 as well as the specifications as outlined in the "**General Meter and Encoder Specifications**" section listed below. Meter shall produce accurate water flow data and information at normal flow limits and at minimum flow rates in compliance with AWWA C700-15. The contractor will be required to notify the City, on the date of a meter placement, of any preexisting leaking or deteriorated back flow prevention assemblies and/or all piping, valves, and fittings, identified by the contractor during the meter replacement.

- Proposers are allowed to use subcontractors in their proposals; however, the proposer (prime proposer) shall be fully responsible to the City of Pinellas Park for the acts and omissions of all subcontractors and of persons indirectly employed by them. All subcontractors must comply with the terms and conditions of this RFP and be approved by the City before any work may commence.
- Should the proposer or their subcontractors not meet the terms and conditions of this RFP, the City of Pinellas Park reserves the right to terminate the contract and pursue negotiations with the next highest ranked respondent.
- The proposer shall provide a detailed plan of execution of a proof-of-concept, meeting the requirements that is outlined in this RFP.
- All meters and related attributes must be onboarded into the City's GIS and Tyler/Munis systems in such a way so as not interrupt service or reading cycles. The proposer shall provide means and methods on how they will meet the meter data onboarding requirements.
- Installation of meters, testing and activation of AMI system shall be coordinated in such a way as to not interrupt meter reading and billing cycles.
- All meters shall present readings in measuring units of gallons.
- For the purposes of ensuring the installer has all material, tools, personnel and qualifications to complete the AMI system installation in its entirety, it will be the responsibility of the installer to provide a preinstallation survey prior to the system installation roll out. This preinstallation survey will evaluate what the existing brands of meters and boxes are present and will be executed in such a way that all pertinent data will be collected for the needs of the installer.
- The City retains ownership of the old meters that will be removed. All old meters shall be accounted for and return to the City on a regular basis.
- The installer shall be required to install the new water and reclaimed water meters, corresponding endpoints, meter boxes and lids as needed; however, every effort shall be made to retrofit existing boxes and lids.
- The successful proposer shall be responsible for the installation, activation and electronic meter data transfer to the billing software (Tyler/Munis), for all the meters associated with the scope of this project including the retrofitting of the 6,313 AMR meters currently installed within the City, if possible.
- The successful contractor shall demonstrate operational functionality of their AMI system by performing a proof-of-concept, as outlined in this RFP, of their proposed AMI solution.

- A digital photograph of the location before and after installation, meter reading before and after installation, old and new meter serial number, and a Date/Time Stamp for each photo will be required for each meter installed. GPS captured coordinates for each meter shall also be required.
- The installers shall have a minimum of 10 years of experience this field and must be able to provide proof of at least 3 separate AMI projects installed of similar size, scope and scale.
- The installers shall make every effort to retrofit existing meter boxes and lids (potable and reclaimed), only installing new boxes should it be absolutely necessary for the meter to operate as intended.
- The installers are required to provide an up-to-date description of its employee's organizational structure with crew leaders, foreman, supervisors and managers, with current contact information for each.
- The proposer and their contractors shall provide their own internal quality assurance and quality control inspector(s) and maintain regular communication/coordination with City inspectors. For purposes of tracking progress, any information (paper or digital) pertaining to the project installation shall be made available to the City of Pinellas Park upon request.
- The City can inspect any installation for compliance with contract requirements. Any installations that do not meet installation requirements will be corrected by the contractor at their expense.
- Weekly progress meetings shall be held on a mutually agreed upon date with at least one representative from each organization being present.
- Having minimal impact on our residents is of utmost concern; therefore, any damages to water service lines, meter couplings, meter valves, service fittings, irrigation lines, other underground utilities, sprinkler heads, meter boxes or lids during excavation or installation shall be immediately repaired.
- Damaged water and reclaimed lines shall be tested prior to restoration of services.
- Restoration work shall begin after meter installation is completed and verified service functionality. Restoration activities include, but are not limited to, any backfill, landscaping, concrete, asphalt, bricks or pavers for driveway, or other items encountered. All existing landscaping shall be replaced in kind or a City approved variety.
- Restoration work shall follow a schedule/timeline presented by the contractor and must be approved by the City of Pinellas Park. Every effort must be made to ensure all restoration activity is completed for all the installs before the end of each week. Utility services (water reclaimed, etc.) shall be restored immediately.
- Failure to repair damages, test new installs for leaks and restore residents and businesses property in a timely fashion (as reasonably determined, situationally by the City) will result in termination of contract in which the City of Pinellas Park.
- For the purposes of possible repairs being required on the private side of the property line due to complications with a meter install, the installers shall be certified Florida licensed plumbers and certified Florida General Contractors.
- The installers will be responsible for compliance with all local, state and federal laws, regulations provisions and requirements in the execution of all aspects of the project.

- The installers are responsible for all Maintenance of Traffic as required to perform the work. At a minimum, Maintenance of Traffic shall be in accordance with the most recent FDOT Standard Specifications for Road and Bridge Construction.
- The installers shall be required to provide resident notification of at least one week notice by means of door hangers. Condominiums and medical facilities have stringent criteria for providing advanced notice and the contractor shall adhere to those requirements, providing extra notice as dictated. Adjustments in installation times may be required to limit business interruption, the contractor shall adjust their work schedule to accommodate these situations as needed, including the possibility of night or weekend scheduling.
- Door knockers shall clearly indicate the installers business name and date of install for that resident while also advertising AMI system benefits and providing instructions for the customer to sign up for the user portal.
- The installers shall have uniforms that clearly identify who they are. Their uniform and vehicle identification shall match that of the information indicated on the door hangers of which the residents were given.

The contractor must provide a contact and respond on a 24-hour-per-day basis as callers from the City or from the customer associated with that installation, experience problems associated with installation. Contractor must respond within thirty (30) minutes of receiving the call and arrive at customers premises ready to correct and problems within thirty (30) minutes. Should the contractor receive a call or complaint from a customer or the City regarding installation, the contractor shall immediately log the call, include the caller's name, address, phone number, account number if available, date and time of call, nature of the problem and the action taken. All calls reporting complaints shall be updated within a minimum of 24 hours indicating if the complaints have been resolved or not. All copies of the call logs shall be forwarded to the City by a mutually agreed upon means every day.

All equipment, accessories and component parts shall be guaranteed by the contractor to be free of defects in workmanship and design and to operate as specified and intended. For any equipment not covered by the network as a service and software as a service and their associated service level agreements, a minimum of a two (2) year warranty will be provided to the City, from the formal time of acceptance, to cover any damage caused by installation of system equipment.

If, within the guarantee period, any defect or signs of deterioration are noted, which, in the opinion of the City, are due to faulty design and installation, workmanship, or materials, upon notification, the successful contractor, at their expense, shall repair or adjust the equipment or parts to correct the condition, or they shall replace the part or entire unit to the complete satisfaction of the buyer. These repairs, replacements or adjustments shall be made only at such time as will be designated by the City as least detrimental to the operation of the business. Contractor must be capable of processing warranty claims.

General Meter and Encoder Specifications

Meters used for measuring the consumption of water can be either nutating disc or oscillating piston type. Nutations or oscillation cannot exceed those listed in AWWA Standard C700-15 and NSF-61. Meters sized 5/8" x ¾" and 1" furnished under these specifications shall be bolted bottom entry, split case design. Meters sized 1-1/2" and 2" furnished under this specification may be top bolted entry split case design. Register box screws, locking pins, main case top, adjustment vanes, and inlet and outlet coupling nuts, if provided, shall be equipped with tamper-resistant features. If drilled for seal wires, seal wire holes shall not be less than 3/32" in diameter.

The Main Case of all 5/8" x ¾" meters shall be manufactured from copper allow containing not less than 75% copper. Cast iron main cases are not acceptable. For 5/8"x ¾" and 1" meters only, the bottom plate shall be plastic. If plastic materials are used in the manufacture of bottom plates and/or register lids, only virgin or first-generation-grade rigid engineering plastic materials compounded with ultraviolet stabilizers shall be used. Engineered plastic bottom plates and/or register lids shall have sufficient dimensional stability to retain operating clearances at working temperatures up 105 degrees Fahrenheit and shall not permanently warp or deform when exposed to temperatures up to 150 degrees Fahrenheit for one hour. The design of plastic bottom plates and/or register lids shall meet the fatigue limits and burst pressure requirements of AWWA 700-15. All 1-1/2" and 2" meter main cases shall be manufactured from copper alloy containing not less than 75% copper. Plastic bottom plates are not acceptable on 1-1/2" and larger meters.

The size, model and direction of flow through the meter shall be permanently marked on the outer cases of all meters. The size of the meter shall be marked permanently on the register dial face. The manufacturer's meter serial number shall be cut on a raised pad on the top portion of the main case and raised characters cast on the main case to properly indicate the direction of flow through the meter. Serial numbers on the side of the main case are not acceptable. Bottom plates on 5/8" x ¾" shall be copper alloy or plastic; cast iron cases are not acceptable.

All external fasteners such as bolts, nuts, locking pins, and washers shall be made of brass, bronze or stainless steel in accordance with AWWA C700-15, latest revision, be equipped with tamper-resistant features, and be designed for easy removal following lengthy service. Shear pin bolts will only be allowed when used as register tamper-resistant devices. 5/8" x ¾" and 1" meters shall have external threaded end connections. The 1-1/2" and 2" sizes shall have female Iron Pipe (IP) thread screw ends or flanged ends.

Meters shall have an outer case with separate removable measuring chambers. The measuring chambers shall be self-contained units, smoothly finished, firmly seated and easily removed from the main cases. Measuring chambers shall have sufficient dimensional stability to retain operating clearances at working temperatures up to 80 degrees Fahrenheit and shall not warp or deform when exposed to operating temperatures of 100 degrees Fahrenheit. Measuring chambers shall be secured in the main cases so that the accuracy of the meter will not be affected by any distortion of the main case that might occur when operating at a pressure less than 150psi. Measuring chambers shall be made of copper alloy containing not less than 85% copper or similar copper alloy listed in ASTM B584 or suitable engineered plastic as described in AWWA C700-15. Non-metallic gaskets shall not be used to seal the chamber from the case. Direct Read Registers: Registers shall be DIRECT straight-reading, permanently sealed by the manufacturer and encased in a copper or stainless-steel shell within the register housing and meet all AWWA C701-15 requirements. The lens shall be made of high strength impact resistant glass and must be scratch resistant. The measuring units shall be in US gallons or cubic feet. Register housing and lid shall be made of a suitable engineering plastic for two-inch (2") and smaller meters in accordance with AWWA C700-15. Register housing and lid shall be made of a copper alloy containing not less than fifty-seven (57%) percent copper or a suitable engineering plastic for four-inch (4") and larger meters in accordance with AWWA C700-15.

All register lids shall be securely attached in a manner that will allow the meter to be carried by the lid. The name of the manufacturer shall be permanently marked on the lid of the register box. The serial number of the meter shall be imprinted on the lid by cutting to a minimum depth of .008 inches on the register lid.

No portion of the reduction gearing; including frames, gears and pinions; or totalizing mechanism shall be in contact with the measured water. The register must include a leak indicator independent of the sweep hand for easy visual checks for possible service leaks.

Register gear trains shall be located in the register compartment. Piston oscillations or disc nutations shall be transmitted by magnetic couplings. The mechanical register shall receive the necessary power to operate from the chamber and disc assembly by means of permanent magnets. The totalizing numbers on the registers shall not be less than 5/32 inches in height and shall be readable at a 45° angle from the vertical. Billable units shall be clearly indicated on the register. Registers shall be furnished with center-sweep test hands with an index circle located near the periphery of the register face graduated in 100 equal parts, with each tenth graduation being numbered. The hand or pointer shall taper to a point and shall be set accurately and held securely in place. The quantities indicated by a single revolution of the test hand and the minimum capacity shall be as listed in Table 4 of AWWA C700-15. The meter assembly face plate shall be white for meters for potable water and purple for meters for reclaimed water.

Encoder Type Registers: Encoder type registers shall use an absolute encoder to produce a visual numerical reading and record the readings in an electronic data storage medium that can be obtained semiautomatically or automatically at a remote location. The encoder type register consists of a meter register assembly, a signal encoder assembly, and a signal transmission assembly. All system components shall have the impact resistance and other physical characteristics required for this application. The register assembly shall be capable of two-way communication. All systems shall provide for visual register reading at the meter. Register housing and lid shall be made of a suitable engineering plastic for 2” and smaller meters in accordance with AWWA C700-15. Register housing and lid shall be made of a copper alloy containing not less than 57 percent copper or a suitable engineering plastic for 4” and larger meters in accordance with AWWA C700-15.

The meter assembly shall be designed to provide field installation and removal. The meter register assembly shall be straight reading, permanently sealed by the manufacturer and encased in a copper or stainless-steel shell within the register housing and meet all AWWA C701-15 requirements. The register assembly shall not be affected by temperature variations from 32°F to 105°F or high humidity. No portion of the reduction gearing or totalizing mechanism within the register shall come in contact with the measured water. Verification of register operation and accuracy shall be provided by use of a test hand, index circle or the electronic equivalent capable of displaying 1/1000 of the maximum allowable initial dial indication from Table 4 of AWWA C700-15. The meter register assembly shall be equipped for testing by a test hand, test index circle, number wheels or the electronic equivalent capable of displaying 1/1000 of the maximum allowable initial dial indication to consistently meet the testing accuracy requirements. Registration units shall be clearly visible on the face of the meter register assembly and show units as US gallons, cubic feet or cubic meters. The meter register assembly shall be labeled with a unique identification number separate from the meter serial number. The meter register assembly shall be adaptable to magnetic-type and mechanical-type register drives of various meters. The electronic display register digits shall not be less than 5/32 inches in height and shall be easily readable at a 45-degree angle from the vertical position. Register capacity and initial dial indication shall be compliant with tables for the particular meter type and size on which the assembly is being installed. The meter assembly face plate shall be white for meters for potable water and purple for meters for reclaimed water. The size of the meter shall be marked permanently on the register dial face. The register cover shall be recessed and shall overlap the register to protect the lens. The lens shall be held securely in place. The name of the manufacturer shall be permanently marked on the lid of the register box.

The serial number of the meter shall be imprinted on the lid by cutting to a minimum depth of .008 inches on the register lid.

The Signal Encoder Assembly shall be designed to provide field installation and removal. The signal (data) encoder assembly shall not induce drag that would result in premature wear of the meter or cause the meter to register below the accuracy requirement of the applicable AWWA meter standard. The index mechanism shall not display ambiguous reads.

The signal encoder assembly shall encode at least the four (4) most significant meter registration digits on meters of all sizes. The totalized consumption shall be displayed with leading zeros so that all digits capable of displaying are readable. The delimiter in the totalized display shall be in the form of a period (.) or a comma (,). The electronic display register shall clearly distinguish digits used for customary billing units. If a battery is used as the primary power source, the electronic display register shall indicate low battery voltage and shall be designed to provide at least 180 days of useful life from initial low-battery-voltage indication to the end of the battery's life. The electronic display shall 1) be capable of toggling between totalized flow and flow rate if the same digits are used; 2) have indication to clearly designate when the display is in the rate mode; and 3) be capable of providing flow rate information – volume (U.S. Gallons, cubic feet) per unit time (per second, per minute, per hour) in the preferred units of measure. Reverse flow, backflow, flow direction and leak alarm indicators shall be displayed as required by the user.

The encoder register shall effectively integrate water consumption data and information from the meter to the utility billing system software, Tyler/Munis billing and workorder software.

Proof-of-Concept

The proposer shall demonstrate operational functionality of their AMI system, by performing a proof-of-concept, of their proposed solution. The proof-of-concept approach, provided by the contractor, will be evaluated and selected by the City. It must demonstrate operational functionality of the data collection network, endpoint functionality and system head-end hardware, software, test bill customers and provide interface operational effectiveness in regards to alarms and events, customer reports, and signal communication routes. This proof-of-concept should include a minimum of one hundred (100) installations include a balanced variety of test meters for each different meter size within our City starting with City buildings and unbilled accounts but extend out to the far limits of our water service area boundaries. In addition, during the proof-of-concept phase, the proposer shall provide adequate training of City staff in all aspects of the system as well as perform system acceptance testing.

The duration of the proof-of-concept timeframe should be a minimum of two (2) months beginning at the time the system is deemed operational at 100%. The City may require the extension of the proof-of-concept period by one month for each month where there are one (1) or more issues. If the proof-of-concept results do not confirm compliance with the RFP requirements, the City of Pinellas Park reserves the right to terminate the contract.

Existing System

The City currently reads its meters by handheld device, with the exception of 6,300 (Master Meter Brand) meters which are read via drive by AMR readers. The meters are primarily Neptune, Master Meter, and Badger (other meters include Hersey, Rockwell, and Sensus). Our meter inventory listed below was compiled by our current active accounts over our past reading cycles and does not account for a 100% accuracy of every meter in the ground. A detailed inventory of make and model meters by their sizes, boxes, and even the total number of meters cannot be provided; thus, we ask that the selected provider perform a preinstallation survey to ensure full system account coverage can be achievable.

PROPOSAL OUTLINE

Letter of Interest

This letter should summarize, in a brief and concise manner, the proposer's understanding of the scope of work.

Financial Statement

Include a copy of the company's latest financial statement in a separate, sealed envelope.

Letter of Bondability

Respondents must submit a Letter of Bondability from their Surety Company (not the surety agent) showing their bonding capacity, which shall not be less than $1,000,000.00. Any issuer of a Letter of Bondability must be licensed to transact a fidelity and surety business in the State of Florida.

If the surety agent is named on the Surety's Power of Attorney as a true and lawful Attorney-in-Fact, to make, execute, seal and deliver said letter then a letter from the surety's agent will be allowed as long as a copy of the Surety's Power of Attorney documenting said appointment is included with the Letter of Bondability.

Proposal Format

Proposers desiring consideration should fully respond to the following items. The City reserves the right to include any, all, or none of the listed items or services in any agreement resulting from this RFP. Please provide all of the proposal information required in the following sections 1–15.

Table of Contents

The proposer's table of contents should include a clear and complete identification of the materials submitted by section and page number.

1. **Capability to Perform the Work: (10 Points)**
    a. Include a statement describing why your company is best qualified to provide the desired services.
    b. Explain how the proposed system aligns with the requests outlined in this RFP. If the proposed system does not align, provide details on the potential benefits that the City would gain from the suggested alternatives.
2. **Adequacy of Personnel: (10 Points)**
    a. List the project managers and key staff, by position, who will be assigned to provide the required services.
    b. Provide an organized chart outlining the operational methods, structure, and services. This description should incorporate a comprehensive list of personnel, contractors, and subcontractors assigned to this contract. Include any relevant degrees, certificates, and specialties within the disciplines associated with the company's scope of services.
3. **Relevant Experience: (10 Points)**
    a. Provide a company history, including the number of years conducting business.
    b. What is your understanding of AMI technology, including metering equipment, communication protocols, data management systems, and analytics capabilities?
    c. How do you stay updated with the latest advancements and best practices in AMI implementation?
    d. Share examples of recent projects related to this type of work.
    e. Include references from at least three (3) clients with whom the firm has performed similar work (see Firm Information form).

f. How many similar AMI projects have you successfully completed? Provide references or case studies of previous AMI projects?

4. <u>Ability to Meet Time and Budget Requirements</u>: (10 Points)

a. Describe the proposed timeline, including key milestones and deliverables.
    1. Outline the approach to the project, including the project schedule, sequence of events, estimated timeframe, and identification of the contractor's and City's role in the sequence of events.
    2. Explain the ability to accomplish the proposed work and sequence of events within the given timeframe and budget. of the ability to accomplish proposed work/sequence of events within a given timeframe and budget.
b. How do you plan to manage and mitigate any potential delays or bottlenecks?
c. Describe the approach and execution of:
    1. Installation
    2. Service
    3. Maintenance
    4. Classroom and field training
d. Describe the overall cost-effectiveness of the proposed system, including the initial implementation costs, ongoing maintenance expenses, and potential long-term savings or return on investment (ROI) for the City.
e. What is the proposed budget breakdown for equipment, installation, software, and ongoing maintenance?
f. Are there any potential additional costs that may arise during or after the implementation?

5. <u>Proposed System Overview</u>: (10 Points)

a. Provide a detailed description of the proposed AMI system architecture, including the components involved and their functionalities?
b. How does your system handle data collection, communication, storage, and analysis?
c. Describe the proposed system's compatibility and ability to integrate with the City’s existing utility management, billing, and customer relationship management (CRM) platform, Tyler Munis.
    1. Hardware:
        i. What types of meters, sensors, communication devices, and other hardware components are included in your proposed solution?
        ii. What is the quality and reliability of the hardware, and do you have any certifications or industry approvals?
    2. Software:
        i. What software applications or platforms are utilized for data management, analytics, visualization, and reporting?
        ii. Can you explain the software's key features and how it addresses the specific needs of water utility management?
    3. Network Infrastructure:
        i. What communication technologies and protocols are used for data transmission between meters and the central system?
        ii. How do you ensure reliable and secure communication, especially in areas with poor connectivity or high interference?
    4. Describe the system's performance and capabilities in accurately capturing and

reporting meter readings, minimizing errors, and providing reliable data for billing and analysis purposes.

6. **Scalability and Flexibility:** **(5 Points)**
    a. How easily can the proposed infrastructure accommodate future growth and changes in demand, such as adding new meters or expanding the network coverage?
    b. What measures are in place to ensure that scalability does not compromise the system's performance or functionality?
    c. How scalable is the data management system and analytics capabilities to handle increasing volumes of meter data efficiently?
    d. What measures are in place to ensure the system can handle peak usage periods and maintain data accuracy and reliability?
    e. Provide examples of other projects where the system was successfully scaled up or modified?

7. **Communication Technology:** **(5 Points)**
    a. Describe the communication technology employed by the system, such as cellular networks, radio frequency, or other wireless protocols. Describe the reliability, range, and interference resistance of the communication infrastructure.
    b. Describe the system's best management practice for the network installation, maintenance, and ownership.
        1. How will this management practice benefit the City?

8. **Remote Management and Monitoring:** **(5 Points)**
    a. Describe the system's features that enable remote management, monitoring, and control of meters, including the ability to detect leaks, tampering, or abnormal usage patterns.

9. **Date Security and Privacy:** **(5 Points)**
    a. Describe the proposed system's measures to ensure the security and privacy of customer data, including encryption protocols, access controls, data backup procedures, and compliance with relevant data protection regulations.
    b. What encryption methods are proposed to ensure the secure transmission and storage of metering data?
    c. How do you address privacy concerns and comply with relevant data protection regulations?
    d. What access control mechanisms and user authentication methods are in place to prevent unauthorized access to the system?
    e. How do you ensure that only authorized personnel can access sensitive customer data?
    f. How do you ensure the integrity and availability of customer data in case of system failures or emergencies?
    g. What protocols are in place for data retention, periodic backups, and disaster recovery strategies?

10. **Customer Engagement and Transparency:** **(5 Points)**
    a. Describe the system's features that promote customer engagement, such as providing access to consumption data, usage patterns, and educational resources to encourage water conservation and customer awareness.

11. **Helpdesk and Support:** **(5 Points)**
    a. What channels are available for customer support, such as a dedicated helpdesk, online portals, or self-service options?

b. How is efficient and accessible customer support ensured during the installation process and after the final system acceptance?
c. How is efficient and accessible customer support ensured, particularly during critical situations or emergencies?
d. How does your helpdesk meet the requirements as outlined in this RFP?

12. <u>Service Level Agreements (SLAs)</u>: (5 Points)

a. What channels are available for customer support, such as a dedicated helpdesk, online portals, or self-service options?
b. How is efficient and accessible customer support ensured during the installation process and after the final system acceptance?
c. How is efficient and accessible customer support ensured, particularly during critical situations or emergencies?
d. How does your helpdesk meet the requirements as outlined in this RFP?
e. Describe the network and software maintenance

13. <u>Training and Documentation</u>: (5 Points)

a. What training programs and documentation will be provided to ensure effective adoption and operation of the AMI system by utility staff and end-users?
b. Provide examples of comprehensive training materials or user guides?
c. Provide an in-person training plan.

14. <u>Certification as a MBE (Minority Business Enterprise)/WBE (Women Business Enterprise)/VBE (Veteran Business Enterprise) (Attach certificates for consideration)</u>: (5 Points)

Evaluation criteria points for certification as a MBE, WBE, VBE, SBE, and DBE apply to the proposer and secondary subcontractors; however, proposers requesting consideration must address how the contractor will provide maximum practicable opportunities for subcontractors and may also require prime contractors to report on their subcontracting achievements and efforts.

15. <u>Proposal Pricing</u>: (5 Points)

a. Proof of concept cost
b. Preinstallation survey cost
c. Installation cost
d. Training agreement cost
e. Maintenance cost
f. Service cost

FORMS

The last section of the proposal should be the "FORMS" section, which must contain the forms below. Under a tab labeled "FORMS," the following forms labeled 1-9 must be completed and inserted within the proposal. Ensure documents are executed by an Authorized Person as designated on the Florida Division of Corporation's website (Sunbiz); *if using an alternative signator, include a Corporate Resolution evidencing the signator's authority to execute documents on the firm's behalf.*

Additional forms and certifications may be required dependent upon grant funding sources.

1. Firm Information
2. Acknowledgement of Addenda
3. Disclosure of Relationships

4. Certification Regarding Prohibition Against Contracting with Scrutinized Companies
5. Certification Regarding Lobbying
6. Certification Regarding Debarment, Suspension Ineligibility and Voluntary Exclusion
7. Public Entity Crimes Statement
8. Indemnification and Hold Harmless Agreement
9. Proposal Cover Sheet

GENERAL INSTRUCTIONS

Addenda to Solicitations: Interpretations of the solicitation, clarification of solicitation specifications, and requirements or changes to the solicitation which have a material effect will be documented and communicated to respondents only by written addenda posted on Demandstar.com. Verbal replies to questions do not constitute an official response unless documented in the form of written addenda and shall be considered inadmissible in protest proceedings. All such written addenda should be acknowledged on the "Acknowledgement of Addenda" form or by returning a copy of the signed addendum along with your response as proof of receipt. Failure to acknowledge such addenda may constitute cause for rejection of the proposal.

Anti-Discrimination: That Contractor, for itself, its personal representatives, successors in interests, assigns, subcontractors, and sub-lessees, as a part of the consideration hereof, hereby covenants and agrees that:

a) No person on the ground of race, color, religion, sex, national origin, age, marital status, political affiliation, familial status, disability, sexual orientation, pregnancy, gender identity or expression, or veteran or service member status be excluded from participation in, denied the benefits of, or be otherwise subjected to discrimination in the use of or performance of services described herein; and

b) No employee or applicant for employment on the ground of race, color, religion, sex, national origin, age, marital status, political affiliation, familial status, disability, sexual orientation, pregnancy, gender identity or expression, or veteran or service member status will be discriminated against during the course of employment or application for employment to be employed in the performance of this Agreement with respect to hiring, tenure, terms, conditions or privileges of employment, or any matter directly or indirectly related to performance of this Agreement.

Antitrust Violations: Pursuant to Section 287.137, Florida Statutes, as may be amended, a person or an affiliate who has been placed on the antitrust violator vendor list (electronically published and updated quarterly by the State of Florida) following a conviction or being held civilly liable for an antitrust violation may not submit a bid, proposal, or reply for any new contract to provide any goods or services to a public entity; may not submit a bid, proposal, or reply for a new contract with a public entity for the construction or repair of a public building or public work; may not submit a bid, proposal, or reply on new leases of real property to a public entity; may not be awarded or perform work as a contractor, supplier, subcontractor, or consultant under a new contract with a public entity; and may not transact new business with a public entity. By entering this Agreement, Contractor certifies neither it nor its affiliate(s) are on the antitrust violator vendor list at the time of entering this Agreement. False certification under this paragraph or being subsequently added to that list will result in termination of this Agreement, at the option of the City consistent with Section 287.137, Florida Statutes, as amended.

Applicable Law and Venue: Contract(s) resulting from this RFP and all rights and duties of the parties hereto shall be governed by the laws of the State of Florida, including but not limited to the provisions

of the Florida Uniform Commercial Code Chapters 671-679 F.S., for any terms and conditions not specifically stated in this solicitation and resulting agreement. Venue for any court action allowed by this agreement shall be in the Circuit Court of the Sixth Judicial Circuit in and for Pinellas County, Florida, or in the Middle District of Florida, United States District Court, Tampa Division.

Contractor agrees that it will comply with all federal, state, and local laws and regulations applicable to the production, sale, and delivery of goods or the furnishing of any labor or services called for by this solicitation and resulting agreement, and any provisions required thereby to be included herein shall be deemed to be incorporated herein by reference. Noncompliance may be considered grounds for termination of contracts.

Awards: The City reserves the right to cancel the solicitation, reject any and all proposals, or waive any irregularity or technicality in submittals received, that serves in the best interest of the City. The City reserves the right to not make any award(s) under this solicitation.

Compliance with Grants, Laws and Regulations: Contractor agrees that it will comply with all grant requirements in addition to all federal, state, and local laws and regulations applicable to the production, sale, and delivery of the goods or the furnishing of any labor or services called for by this solicitation and resulting agreement, and any provisions required thereby to be included herein shall be deemed to be incorporated herein by reference. Noncompliance may be considered grounds for termination of contracts.

Conflict of Interest*:* Any entity submitting a bid, proposal, qualifications or entering into a contract with the City shall disclose any relationship that may exist between the contracting entity and a City Employee. The relationship with a City Employee that must be disclosed is as follows: *father, mother, son, daughter, brother, sister, uncle, aunt, first cousin, nephew, niece, husband, wife, father-in-law, mother-in-law, daughter-in-law, son-in-law, brother-in-law, sister-in-law, stepfather, stepmother, stepson, stepdaughter, stepbrother, stepsister, half- brother, half-sister, grandparent, or grandchild.* The term "affiliate" includes those officers, directors, executives, partners, shareholders, employees, members, and agents who are active in the management of the entity. The disclosure of relationships shall be a sworn statement made on a City approved form. Failure to submit the form will be cause for rejection of the bid or proposal.

Department of Business & Professional Regulation: Pursuant to Florida Statute 489.131, proposers must be registered with Florida DBPR. Register at MyFloridaLicense.com/DBPR and include verification of registration with your proposal.

Discriminatory Vendor List: Contractor hereby acknowledges its continuous duty to disclose to the City if the Contractor or any of its affiliates, as defined by Section 287.134(1)(a), Florida Statutes, are placed on the Discriminatory Vendor List. Pursuant to Section 287 .134(2)(a), Florida Statutes: "An entity or affiliate who has been placed on the discriminatory vendor list may not submit a bid, proposal, or reply on a contract to provide any goods or services to a public entity; may not submit a bid, proposal, or reply on a contract with a public entity for the construction or repair of a public building or public work; may not submit bids, proposals, or replies on leases of real property to a public entity; may not be awarded or perform work as a contractor, supplier, subcontractor, or consultant under a contract with any public entity; and may not transact business with any public entity.

Environmental and Social Government and Corporate Activism: Pursuant to Section 287.05701, Florida Statutes, as may be amended, the City cannot give preference to a Contractor based on social, political or ideological interests such as:

a. The Contractor's political opinions, speech, or affiliations;
b. The Contractor's religious beliefs, religious exercise, or religious affiliations;
c. The Contractor's lawful ownership of a firearm;
d. The Contractor 's engagement in the lawful manufacture, distribution, sale, purchase, or use of firearms or ammunition;
e. The Contractor's engagement in the exploration, production, utilization, transportation, sale, or manufacture of fossil fuel-based energy, timber, mining, or agriculture;
f. The Contractor 's support of the state or Federal Government in combatting illegal immigration, drug trafficking, or human trafficking;
g. The Contractor's engagement with, facilitation of, employment by, support of, business relationship with, representation of, or advocacy for any person described in this paragraph;
h. The Contractor's failure to meet or commit to meet, or expected failure to meet, any of the following as long as such Contractor is compliant with applicable state or federal law:
    1. Environmental standards, including emissions standards, benchmarks, requirements, or disclosures;
    2. Social governance standards, benchmarks, or requirements, including, but not limited to, environmental or social justice;
    3. Corporate board or company employment composition standards, benchmarks, requirements, or disclosures based on characteristics protected under the Florida Civil Rights Act of 1992; or
    4. Policies or procedures requiring or encouraging employee participation in social justice programming, including, but not limited to, diversity, equity, or inclusion training.

Contractors are also prohibited from giving preference to subcontractors based on the above referenced factors. Violations of this Section will result in termination of this Agreement and may result in administrative sanctions and penalties by the Office of the Attorney General of the State of Florida.

E-Verify: Effective January 1, 2021, public and private employers, contractors, and subcontractors must require registration with, and use of the E-Verify System in order to verify work authorization status of all newly hired employees. Contractor acknowledges and agrees to utilize the U.S. Department of Homeland Security's E-Verify System to verify the employment eligibility of:

a) All persons employed by Contractor to perform employment duties within Florida during the term of the contract; and
b) All persons (including subvendors/subconsultants/subcontractors) assigned by Contractor to perform work pursuant to the contract with the City. The Contractor acknowledges and agrees that use of the U.S. Department of Homeland Security's E-Verify System during the term of the contract is a condition of the contract with the City of Pinellas Park.

Include proof of E-Verify registration with the proposal.

Foreign Gifts and Contracts: The Contractor must comply with any applicable disclosure requirements in Section 286.101, Florida Statutes. Pursuant to Section 286.101 (7)(c), Florida Statutes: "In addition to any fine assessed under [§ 286.101 (7)(a), Florida Statutes], a final order determining a third or subsequent violation by an entity other than a state agency or political subdivision shall automatically disqualify the entity from eligibility for any grant or contract funded by a state agency or any political subdivision until such ineligibility is lifted by the Administration Commission for good cause.

Florida Division of Corporations: To conduct business in the State of Florida, proposers must be registered with the Florida Division of Corporations. Register at https://dos.myflorida.com/sunbiz/ and include verification of registration with your proposal.

Indemnification: Contractor shall indemnify, hold harmless, and/or defend the City and its commissioners, officers, employees and agents, from liabilities, damages, losses, and costs, including, but not limited to, reasonable attorney's fees, to the extent caused by the negligence, recklessness, or intentionally wrongful conduct of the professional and other persons employed or utilized by the professional in the performance of the contract.

Independent Contractor: This Agreement does not create an employee/employer relationship between the Parties. It is the intent of the Parties that the Contractor is an independent contractor under this Agreement and not the City's employee for any purposes, including but not limited to, the application of the Fair Labor Standards Act minimum wage and overtime payments, Federal Insurance Contribution Act, the Social Security Act, the Federal Unemployment Tax Act, the provisions of the Internal Revenue Code, the State Worker's Compensation Act, and the State Unemployment Insurance law. The Contractor will retain sole and absolute discretion in the judgment of the manner and means of carrying out Contractor's activities and responsibilities hereunder provided, further that administrative procedures applicable to services rendered under this Agreement will be those of Contractor, which policies of Contractor will not conflict with City, State, or United States policies, rules or regulations relating to the use of Contractor's funds provided for herein. The Contractor agrees that it is a separate and independent enterprise from the City, that it had full opportunity to find other business, that it has made its own investment in its business, and that it will utilize a high level of skill necessary to perform the work. This Agreement must not be construed as creating any joint employment relationship between the Contractor and the City and the City will not be liable for any obligation incurred by Contractor, including but not limited to unpaid minimum wages and/or overtime premiums.

Inquiries and Information: Any inquiries regarding this solicitation shall be addressed by e-mail to Purchasing@Pinellas-Park.com. The Purchasing Division will assist with questions and direct them to the appropriate individuals. Requests for interpretation of the solicitation or additional information should be communicated to the Purchasing Division by e-mail prior to **10:00 A.M. EST on Wednesday, 10 April 2024**. Proposers are encouraged to visit Demandstar.com for previously issued information, available 24/7. It is the proposer's responsibility to regularly check Demandstar.com for updates and addenda.

Insurance: Include proof of insurance evidencing insurance coverages with your proposal. Contractor's insurance shall be primary. The City shall be named as an additional insured for both General Liability and Automobile Liability. The awarded firm shall maintain the following limits of insurance during the term duration of this agreement.

General Liability
Each Occurrence $2,000,000
Products Completed/Operations Aggregate $1,000,000
Personal and Advertising Injury $1,000,000
General Aggregate $2,000,000
Combined Single Limit $1,000,000

Worker's Compensation as required by the State of Florida
Each accident $100,000
Each Disease – Each employee $100,000 Each disease – policy limit $500,000

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY): 11/19/2024

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER 1-414-443-0000 Hays Companies, Inc. 1200 North Mayfair Road, Suite 100 Milwaukee, WI 53226	CONTACT NAME: PHONE (A/C, No, Ext): FAX (A/C, No): E-MAIL ADDRESS:
INSURED Badger Meter, Inc. 4545 West Brown Deer Road Milwaukee, WI 53223 USA	INSURER(S) AFFORDING COVERAGE / NAIC # INSURER A: PHOENIX INS CO 25623 INSURER B: TRAVELERS PROP CAS CO OF AMER 25674 INSURER C: CONTINENTAL INS CO 35289 INSURER D: ACCIDENT FUND INS CO OF AMER 10166 INSURER E: COALITION, INC. INSURER F:

COVERAGES **CERTIFICATE NUMBER:** 751513659 **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
A	X COMMERCIAL GENERAL LIABILITY CLAIMS-MADE X OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: X POLICY PRO-JECT LOC OTHER:	X		Y660 268J2023	01/01/24	01/01/25	EACH OCCURRENCE DAMAGE TO RENTED PREMISES (Ea occurrence) MED EXP (Any one person) PERSONAL & ADV INJURY GENERAL AGGREGATE PRODUCTS - COMP/OP AGG	$ 1,000,000 $ 300,000 $ 10,000 $ 1,000,000 $ 4,000,000 $ 2,000,000
B	AUTOMOBILE LIABILITY X ANY AUTO OWNED AUTOS ONLY X HIRED AUTOS ONLY SCHEDULED AUTOS X NON-OWNED AUTOS ONLY			BA 2L694073	01/01/24	01/01/25	COMBINED SINGLE LIMIT (Ea accident) BODILY INJURY (Per person) BODILY INJURY (Per accident) PROPERTY DAMAGE (Per accident)	$ 1,000,000 $ $ $
C	X UMBRELLA LIAB X OCCUR EXCESS LIAB CLAIMS-MADE DED X RETENTION $ 10,000			6076540927	01/01/24	01/01/25	EACH OCCURRENCE AGGREGATE	$ 5,000,000 $ 5,000,000
D	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANYPROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) Y/N If yes, describe under DESCRIPTION OF OPERATIONS below	N/A		UH WCP 100074452 02	01/01/24	01/01/25	X PER STATUTE OTH-ER E.L. EACH ACCIDENT E.L. DISEASE - EA EMPLOYEE E.L. DISEASE - POLICY LIMIT	 $ 1,000,000 $ 1,000,000 $ 1,000,000
E	Cyber/Tech E&O(Prof Liab)			C-4LWN-137183-CYBER-2024	01/01/24	01/01/25	Limit	5,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

The City of Pinellas Park (Owner) is additional insured on the General Liability policy as respects to RFP 24.001 AMI Water Meters where required by written contract. The General Liability policy is primary and non-contributory when required by written contract.

CERTIFICATE HOLDER

City of Pinellas Park
5141 78th Avenue N.
Pinellas Park, FL 33781 USA

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

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Professional Liability Insurance
$1,000,000 per occurrence
$2,000,000 aggregate combined single limit
$5,000 maximum deductible per claim

Automobile Liability – Combined Single Limit $1,000,000

Pollution Legal Liability
(If project involves environmental hazards) with limits no less than $1,000,000 per occurrence or claim, and $2,000,000 policy aggregate.

Cyber Risk Liability (Network Security/Privacy Liability)
Insurance including cloud computing and mobile devices, for protection of private or confidential information whether electronic or non-electronic, network security and privacy; privacy against liability for system attacks, digital asset loss, denial or loss of service, introduction, implantation or spread of malicious software code, security breach, unauthorized access and use; including regulatory action expenses; and notification and credit monitoring expenses with at least minimum limits as follows:

Limits Each Occurrence $ 5,000,000
General Aggregate $ 5,000,000

The policy shall cover the firm, all employees, and/or volunteers, and all independent contractors, subcontractors and professional contractual persons hired or retained by contractor.

All above insurance policies shall be placed with insurers with a Best's rating of no less than A-VII. The insurer chosen shall also be licensed to do business in Florida. The insurance policies procured shall be "Claims Made" policies or as generally available on the open insurance market.

The insurance carriers shall supply Certificates of Insurance evidencing such coverage to the City of Pinellas Park Risk Management Department prior to the execution of this agreement.

The insurance companies selected shall send written verification to the City of Pinellas Park Risk Management Division that they will provide 30 days written notice to the City of Pinellas Park Department of Risk Management of its intent to cancel or terminate.

Non-Collusion: By offering a proposal to this RFP, the proposer certifies it has not divulged to, discussed or compared its competitive proposal with other proposers and has not colluded with any other proposers or parties to this competitive solicitation whatsoever. In addition, the proposer certifies, and in the case of a joint competitive proposal, each party thereto certifies as to its own organization, in connection with the competitive proposal.

Opening Location: Proposals must be received by the Purchasing Division at 8000 60th St. North, Pinellas Park, FL 33781 on or before the closing hour and date listed in the Request for Proposals.

Prohibited Telecommunications Equipment: Contractor represents and certifies that it and its applicable subcontractors do not and will not use any equipment, system, or service that uses covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology as part of any system, as such terms are used in 48 CFR §§ 52.204-24 through 52.204-26. By executing this Agreement, Contractor represents and certifies that Contractor and its applicable subcontractors must not provide or use such covered telecommunications equipment, system, or services for any scope of work performed for the City for the entire duration of this Agreement. If Contractor is

notified of any use or provisions of such covered telecommunications equipment, system, or services by a subcontractor at any tier or by any other source, Contractor must promptly report the information in 48 CFR § 52.204-25(d)(2) to City.

Prohibition on Gratuities and Kickbacks: It is unethical for any person to offer, give, or agree to give any employee or for any employee to solicit, demand, accept or agree to accept from another person, a gratuity or an offer of employment in connection with any decision, approval, disapproval, recommendation, preparation of any part of program requirement or a purchase request, influencing the content of any specification or procurement standard, rendering of advice, investigation, audit, or in any other advisory capacity in any proceeding or application, request for ruling, determination claim or controversy, or other particular matter, pertaining to any program requirement or an Agreement or subcontract, or any solicitation or proposal thereof. It shall be unethical for any payment, gratuity, or offer of employment to be made by or on behalf of a Sub-contractor under a Contract to Contractor or higher tier sub-contractor or any person associated therewith, as an inducement of the award of a subcontract or order. The prohibition against gratuities and kickbacks prescribed in this section shall be conspicuously set forth in every Contract and subcontract and solicitation therefore. The Contractor hereby certifies that prices the City agreed to are fair and proper and are not tainted by any collusion, conspiracy, or unlawful agreement on the part of the Contractor or any other parties and interest.

Public Access: Contractor shall comply with Florida's Public Records Law in accordance with the provisions of Chapter 119, Florida Statutes. Specifically, Contractor shall keep and maintain public records that ordinarily and necessarily would be required by the City in order to perform the service. Contractor shall provide the public with access to public records on the same terms and conditions that the City would provide the records at a cost that does not exceed the costs provided in Chapter 119 or as otherwise provided by law. Contractor shall ensure that public records that are exempt or confidential and exempt from public records disclosure requirements are not disclosed except as authorized by law. Contractor shall meet all requirements for retaining public records and transfer, at no cost, to the City, all public records in possession of Contractor upon termination of the contract and destroy any duplicate public records that are exempt or confidential and exempt from public records disclosure requirements. All records stored electronically must be provided to the City in a format that is compatible with the information technology systems of the City.

Any portion of the submitted proposal which is asserted to be exempt from disclosure under Chapter 119, Florida Statutes, shall be clearly marked "exempt," "confidential," or "trade secret" (as applicable) and shall also contain the statutory basis for such claim on every page. Pages containing trade secret shall be marked "trade secret as defined in Section 812.081, Florida Statutes". Failure to segregate and identify such portions shall constitute a waiver of any claimed exemption and the Agency will provide such records in proposal to public records requests without notifying the proposer. Designating material simply as "proprietary" will not necessarily protect it from disclosure under Chapter 119, F.S. An entire proposal should not be considered trade secret. Proposers who fail to identify trade secret as directed herein acknowledge and agree that they waive any right or cause of action, civil or criminal, against the City, its employees and its representatives, for the release or disclosure of trade secret information not so identified.

Public Entity Crimes: Pursuant to Florida Statutes Section 287.133(2)(a), all Contractors are hereby notified that a person or affiliate who has been placed on the convicted vendor list following a conviction for a public entity crime may not submit a bid, proposal, or reply on a contract to provide any goods or services to a public entity (defined as the State of Florida, any of its departments or agencies, or any

political subdivision); may not submit a bid, proposal, or reply on a contract with a public entity for the construction or repair of a public building or public work; may not submit bids, qualifications, or replies on leases of real property to a public entity; may not be awarded or perform work as a contractor, supplier, subcontractor, or Contractor under a contract with any public entity; and may not transact business with any public entity in excess of the threshold amount provided in Florida Statutes Section 287.017 for CATEGORY TWO [currently $35,000] for a period of 36 months from the date of being placed on the convicted vendor list. A "public entity crime" means a violation of any state or federal law by a person with respect to and directly related to the transaction of business with any public entity or with an agency or political subdivision of any other state or with the United States, including, but not limited to, any bid, proposal, reply, or contract for goods or services, any lease for real property, or any contract for the construction or repair of a public building or public work, involving antitrust, fraud, theft, bribery, collusion, racketeering, conspiracy, or material misrepresentation.

Regulations: It shall be the responsibility of Contractor to assure compliance with Federal and State of Florida rules, regulations, ordinances, or other requirements, as each may apply.

Right to Protest: Any actual or prospective responding contractor who is aggrieved in connection with a competitive selection process may protest per the terms of Pinellas Park Administrative Regulation 13.43(L). The protest shall be submitted to the appropriate party in writing within seven (7) calendar days after the proposer knows or should have known of the facts giving rise to the protest.

Scrutinized Companies Lists: Contractor hereby certifies that it: a) has not been placed on the Scrutinized Companies that Boycott Israel List, nor is engaged in a boycott of Israel; b) has not been placed on the Scrutinized Companies with Activities in Sudan List nor the Scrutinized Companies with Activities in the Iran Petroleum Energy Sector List; and c) has not been engaged in business operations in Cuba or Syria. If City determines that Contractor has falsely certified facts under this paragraph or if Contractor is found to have been placed on the Scrutinized Companies Lists or is engaged in a boycott of Israel after the execution of this Agreement, City will have all rights and remedies to terminate this Agreement consistent with Section 287 .135, Florida Statutes, as amended. The City reserves all rights to waive the certifications required by this paragraph on a case-by-case exception basis pursuant to Section 287.135, Florida Statutes, as amended.

Sealed Submittals and Envelope Markings: All proposals shall be submitted in a sealed envelope or box. The outside of the envelope shall be clearly marked with proposer's name, return address, RFP number and title, and date and time of opening.

Suspension and Debarment: City of Pinellas Park will not make award to parties listed on the government-wide exclusions in the System for Award Management (SAM). Contractors agree to comply with the requirements of 2 C.F.R. pt. 180, subpart C, and 2 C.F.R. pt. 3000, subpart C, while this offer is valid and throughout the period of any contract that may arise from this offer. Contractor further agrees to include a provision requiring such compliance in its lower tier covered transactions.

Termination by the City: The City reserves the right to terminate a contract by giving a 30-day notice, in writing, of the intention to terminate, if at any time Contractor fails to abide by or fulfill any of the terms and conditions of the contract. The City also reserves the right to terminate the contract for convenience of the City and/or with or without cause by giving a 30-day notice.

PROPOSAL CHECKLIST

The following checklist is included to help ensure that you include all the submittals necessary to complete a thorough evaluation of your proposal.

Items are checked if they are required with your proposal or if they must be on file prior to award. Additional documentation may be requested by the City to ensure contract compliance.

✓	DESCRIPTION OF SUBMITTAL	PAGE	SUBMIT WITH PROPOSAL	SUBMIT PRIOR TO AWARD
	Financial Statement	13	✓	
	Letter of Bondability	13	✓	
	DBPR Registration	18	✓	
	E-Verify Registration	19	✓	
	Florida Division of Corporations Registration (Sunbiz)	20	✓	
	Proof of Insurance	20	✓	
	Proposal Cover Sheet	25	✓	
	Firm Information	26	✓	
	Acknowledgement of Addenda	28	✓	
	Disclosure of Relationships	29	✓	
	Scrutinized Companies Disclosure	31	✓	
	Lobbying Certification	32	✓	
	Debarment and Suspension Certification	33	✓	
	Public Entity Crimes Statement	34	✓	
	Indemnification and Hold Harmless Agreement	36	✓	
	W-9		✓	
	Certificate of Insurance			✓
	Payment and Performance Bond			✓
	Maintenance Warranty Bonds			✓

RFP 24.001 PROPOSAL COVER SHEET

AMI WATER METERS

ORIGINAL

Badger Meter, Inc.

(Firm Name)

4545 West Brown Deer Road

(Address)

Milwaukee, WI 53223

(City, State, Zip Code)

800-876-3837

(Telephone Number)

proposals@badgermeter.com

(Email Address)

Assistant Secretary and Proposal Lead

(Title of Authorized Officer)

Charla D. Dury

(Print/Type Name of Authorized Officer)

(Signature of Authorized Officer)

April 15, 2024

(Date)

Please complete this form & attach it to the front of your proposal

FIRM INFORMATION

Communications concerning this proposal shall be addressed to:

Company Name	Badger Meter, Inc.
Address	4545 W Brown Deer Rd, Milwaukee, WI 53223
Contact Name	Charla D. Dury
Title	Assistant Secretary and Proposal Lead
Phone	800-876-3837
Email	proposals@badgermeter.com

1. How many years has your organization provided these services? 119 Years

2. List any applicable State of Florida Registration Number(s): Unique Entity ID Number: WZCBUQDPMWR3

3. List government agencies and private firm(s) with whom you have completed similar work:

Agency/Firm Name: Jacksonville Energy Authority
Address: 21 W Church St Jacksonville, FL 32202
Contact Name: Brandon Cottrell Title: Manager Water Meter Services
E-Mail: cottbr@jea.com Phone: (904)-382-0281
Services Provided: 450,000 Services (Active), Residential Disc Meters with Orion Cellular. E-Series Ultrasonic Meters with cellular for commercial 3" and larger
Dates of Service: 2019- Current

Agency/Firm Name: Pinellas County, FL
Address: 400 South Ft. Harrison Sixth Floor Clearwater, FL 33756
Contact Name: Joan Luttmann Title: Technical Services Manager, Utilities Department
E-Mail: jluttmann@pinellas.gov Phone: (727)-464-
Services Provided: 125,000 Services (Active), Residential Disc Meters with Orion Cellular. E-Series Ultrasonic Meters with cellular for commercial 3" and larger
Dates of Service: 2022- Current

Agency/Firm Name: City of Ocala, FL

Address: 3800 Gardenia Avenue Orlando, FL 32839

Contact Name: Stacey Ferrante Title: Manager, Water Resources Infrastructure Maint., Engineering and Water Resources

E-Mail: sferrante@ocalafl.gov Phone: (352)-572-0484

Services Provided: 35,000 Services (Completed), E-Series with Orion Cellular for All Meters

Dates of Service: 2019- Current

Agency/Firm Name: Orlando Utilities Commission

Address: 3800 Gardenia Avenue Orlando, FL 32839

Contact Name: Charlie Wright Title: Manager, Meter & Field Operations – Water

E-Mail: Charles_Wright@ouc.com Phone: (407)-383-7784

Services Provided: 175,000 Services (Active), Disc Meters with Orion Cellular.

Dates of Service: 2017-Current

4. List all ligation cases during the past three (3) years in which the Contractor has been a named party. Use additional sheets as necessary.

Year filed	Case number	Venue	Description

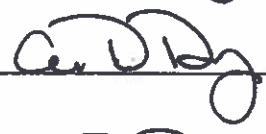
Badger Meter is a publicly traded company regulated by the U.S. Securities and Exchange Commission and audited by an outside independent auditor. Our most recent quarterly Form 10-Q disclosure filing with the SEC, states the following about contingencies and litigation: "In the normal course of business, the Company is named in legal proceedings. There are currently no material legal proceedings pending with respect to the Company." This statement is still accurate to the date of the filing. More information is available upon request.

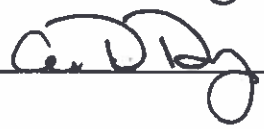
ACKNOWLEDGEMENT OF ADDENDA

Addenda may be issued to this solicitation, any such addendum will be posted on **Demandstar.com**. It is the proposer's responsibility to periodically check the website for any addendum which may have been issued. The Addendum Acknowledgement must be submitted with the proposal.

Addendum No. 1 Signature  L.S.

Addendum No. 2 Signature  L.S.

Addendum No. 3 Signature  L.S.

Addendum No. 4 Signature  L.S.

Addendum No. 5 Signature  L.S.

Addendum No. 6 Signature  L.S.

Addendum No. 7 Signature  L.S.

Addendum No. _____ Signature _____ L.S.

Addendum No. _____ Signature _____ L.S.

Addendum No. _____ Signature _____ L.S.

Addendum No. _____ Signature _____ L.S.

Addendum No. _____ Signature _____ L.S.

Addendum No. _____ Signature _____ L.S.

DISCLOSURE OF RELATIONSHIPS

THIS FORM MUST BE SIGNED IN THE PRESENCE OF A NOTARY PUBLIC OR OTHER OFFICER AUTHORIZED TO ADMINISTER OATHS.

1. This sworn statement **MUST** be submitted in response to RFP 24.001.

2. This sworn statement is submitted by: Badger Meter, Inc.

(Name of entity submitting Statement) whose business address is:

4545 W Brown Deer Rd, Milwaukee, WI 53223

and its Federal Employer Identification Number (FEIN) is 39-0143280

My name is Charla D. Dury
(Please print name of individual signing)

and my relationship to the entity named above is Assistant Secretary and Proposal Lead

4. I understand that an "affiliate" as defined means:

The term "affiliate" includes those officers, directors, executives, partners, shareholders, employees, members, and agents who are active in the management of the entity.

5. I understand that the relationship with a City employee that must be disclosed as follows:

Father, mother, son, daughter, brother, sister, uncle, aunt, first cousin, nephew, niece, husband, wife, father-in-law, mother-in-law, daughter-in-law, son-in-law, brother-in-law, sister- in-law, stepfather, stepmother, stepson, stepdaughter, stepbrother, stepsister, half-brother, half-sister, grandparent, or grandchild.

6. Based on information and belief, the statement, which I have marked below, is true in relation to the entity submitting this sworn statement. [Please indicate which statement applies.]

X Neither the entity submitting this sworn statement, nor any officers, directors, executives, partners, shareholders, employees, members, or agents who are active in management of the entity, have any relationships with any City employee.

_____ The entity submitting this sworn statement, or one or more of the officers, directors, executives, partners, shareholders, employees, members, or agents, who are active in management of the entity have the following relationships with a City employee:

Name of Affiliate	Name of Employee	Relationship or entity

(Signature)

April 15, 2024

(Date)

STATE OF Wisconsin

COUNTY OF Milwaukee

Sworn to (or affirmed) and subscribed before me by means of ☐ physical presence or ☒ online notarization, this fifteenth day of April 2024,

by Charla D. Dury

(Authorized Officer Name).

(Signature of Notary Public - State of ~~Florida~~ Wisconsin)

Dakota M. Collofello

(Print, Type, or Stamp Commissioned Name of Notary Public)

My commission expires 11-20-2027

DAKOTA M. COLLOFELLO NOTARY PUBLIC STATE OF WISCONSIN

☒ who is personally known to me or

☐ who has produced _____ as identification.

CERTIFICATION REGARDING PROHIBITION AGAINST CONTRACTING WITH SCRUTINIZED COMPANIES

I hereby certify that neither the undersigned entity, nor any of its wholly owned subsidiaries, majority-owned subsidiaries, parent companies, or affiliates of such entities or business associations, that exists for the purpose of making profit have been placed on the Scrutinized Companies that Boycott Israel List created pursuant to s. 215.4725 of the Florida Statutes, or are engaged in a boycott of Israel.

In addition, if this solicitation is for a contract for goods or services of one million dollars or more, I hereby certify that neither the undersigned entity, nor any of its wholly owned subsidiaries, majority-owned subsidiaries, parent companies, or affiliates of such entities or business associations, that exists for the purpose of making profit are on the Scrutinized Companies with Activities in Sudan List or the Scrutinized Companies with Activities in the Iran Petroleum Energy Sector List, created pursuant to s. 215.473 of the Florida Statutes, or are engaged in business operations in Cuba or Syria as defined in said statute.

I understand and agree that the City may immediately terminate any contract resulting from this solicitation upon written notice if the undersigned entity (or any of those related entities of proposer as defined above by Florida law) are found to have submitted a false certification or any of the following occur with respect to the company or a related entity: (i) it has been placed on the Scrutinized Companies that Boycott Israel List, or is engaged in a boycott of Israel, or (ii) for any contract for goods or services of one million dollars or more, it has been placed on the Scrutinized Companies with Activities in Sudan List or the Scrutinized Companies with Activities in the Iran Petroleum Energy Sector List, or it is found to have been engaged in business operations in Cuba or Syria.

Charla D. Dury

Authorized Officer Name

Assistant Secretary and Proposal Lead

Title of Authorized Officer



Authorized Officer Signature

April 15, 2024

Date

CERTIFICATION REGARDING LOBBYING

The undersigned Contractor certifies, to the best of his or her knowledge, that:

1. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

2. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

3. The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31, U.S.C. § 1352 (as amended by the Lobbying Disclosure Act of 1995). Any person who fails to file the required certification shall be subject to a civil penalty of not less than $10,000 and not more than $100,000 for each such failure.

The Contractor, Badger Meter, Inc., certifies or affirms the truthfulness and accuracy of each statement of its certification and disclosure, if any. In addition, the contractor understands and agrees that the provisions of 31 U.S.C. § 3801 et seq., apply to this certification and disclosure, if any.

Charla D. Dury
Authorized Officer Name

Assistant Secretary and Proposal Lead
Title of Authorized Officer


Authorized Officer Signature

April 15, 2024
Date

CERTIFICATION REGARDING DEBARMENT, SUSPENSION INELIGIBILITY AND VOLUNTARY EXCLUSION

(1) Contractor certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency.

(2) Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

Charla D. Dury

Authorized Officer Name

Assistant Secretary and Proposal Lead

Title of Authorized Officer



Authorized Officer Signature

April 15, 2024

Date

SWORN STATEMENT PURSUANT TO SECTION 287.133(3)(a), FLORIDA STATUTES, ON PUBLIC ENTITY CRIMES

THIS FORM MUST BE SIGNED AND SWORN TO IN THE PRESENCE OF A NOTARY PUBLIC OR OTHER OFFICIAL AUTHORIZED TO ADMINISTER OATHS.

1. This sworn statement is submitted to the City of Pinellas Park

by Charla D. Dury
(print individual's name and title)

for Badger Meter, Inc.
(print name of entity submitted sworn statement)

whose business address is:
4545 W Brown Deer Rd, Milwaukee, WI 53223

and (if applicable) its Federal Employer Identification Number (FEIN) is 39-0143280

(If the entity has not FEIN, include the Social Security Number of the individual signing this sworn statement: _____.)

2. I understand that a "public entity crime" as defined in Paragraph 287.133(1)(g), Florida Statutes, means a violation of any state or federal law by a person with respect to and directly related to the transaction of business with any public entity or with any agency or political subdivision of any other state or of the United States, including, but not limited to, any bid or contract for goods or services to be provided to any public entity or an agency or political subdivision of any other state or of the United States and involving antitrust, fraud, theft, bribery, collusion, racketeering, conspiracy, or material misrepresentation.

3. I understand that "convicted" or "conviction" as defined in Paragraph 287.133(1) (b), Florida Statutes, means a finding of guilt or a conviction of a public entity crime, with or without an adjudication of guilt, in any federal or state trial court of record relating to charges brought by indictment or information after July 1, 1989, as a result of a jury verdict, nonjury trial, or entry of a plea of guilty or nolo contendere.

4. I understand that an "affiliate" as defined in Paragraph 287.133(1) (a), Florida Statutes, means:
   1. A predecessor or successor of a person convicted of a public entity crime; or
   2. An entity under the control of any natural person who is active in the management of the entity and who has been convicted of a public entity crime. The term "affiliate" includes those officers, directors, executives, partners, shareholders, employees, members, and agents who are active in the management of an affiliate. The ownership by one person of shares constituting a controlling interest in another person, or a pooling of equipment or income among persons when not fair market value under an arm's length agreement, shall be a prima facie case that one person controls another person. A person who knowingly enters into a joint venture with a person who has been convicted of a public entity crime in Florida during the preceding 36 months shall be considered an affiliate.

5. I understand that a "person" as defined in Paragraph 287.133(1) (e), Florida Statutes, means any natural person or entity organized under the laws of any state or of the United States with the legal power to enter into a binding contract and which bids or applies to bid on contract for the provision of goods or services let by a public entity, or which otherwise transacts or applies to transact business with a public entity. The term "person"

includes those officers, directors, executives, partners, shareholders, employees, members, and agents who are active in management of an entity.

6. Based on information and belief, the statement which I have marked below is true in relation to the entity submitting this sworn statement (indicate which statement applies)

x
_____Neither the entity submitting this sworn statement, nor any of its officers, directors, executives, partners, shareholders, employees, members, or agents who are active in the management of the entity, nor any affiliate of the entity has been charged with and convicted of a public entity crime subsequent to July 1, 1989.

_____The entity submitting this sworn statement, or one or more of its officers, directors, executives, partners, shareholders, employees, members, or agents who are active in the management of the entity, or an affiliate of the entity, has been charged with and convicted of a public entity crime subsequent to July 1, 1989.

_____The entity submitting this sworn statement, or one or more of its officers, directors, executives, partners, shareholders, employees, members, or agents who are active in the management of the entity, or an affiliate of the entity, has been charged with and convicted of a public entity crime subsequent to July 1, 1989. However, there has been a subsequent proceeding before a Hearing Officer of the State of Florida, Division of Administrative Hearings and the Final Order entered by the Hearing Officer determined that it was not in the public interest to place the entity submitting this sworn statement on the convicted vendor list. (attach a copy of the final order)

I UNDERSTAND THAT THE SUBMISSION OF THIS FORM TO THE CONTRACTING OFFICER FOR THE PUBLIC ENTITY IDENTIFIED IN PARAGRAPH 1 (ONE) ABOVE IS FOR THAT PUBLIC ENTITY ONLY AND THAT THIS FORM IS VALID THROUGH DECEMBER 31 OF THE CALENDAR YEAR IN WHICH IT IS FILED. I ALSO UNDERSTAND THAT I AM REQUIRED TO INFORM THE PUBLIC ENTITY PRIOR TO ENTERING INTO A CONTRACT IN EXCESS OF THE THRESHOLD AMOUNT PROVIDED IN SECTION 287.017, FLORIDA STATUTES FOR CATEGORY TWO OF ANY CHANGE IN THE INFORMATION CONTAINED IN THIS FORM.

_____
Signature

STATE OF Wisconsin

COUNTY OF Milwaukee

The foregoing instrument was acknowledged before me by means of ☐ physical presence or ☒ online

notarization, this 15 day of April, 2024, by Charla D. Dury,
(Name of person acknowledging)

Who is personally known to me or who has produced _____
(Type of Identification)

as identification.

NOTARY PUBLIC Dakota M. Collofello

MY COMMISSION EXPIRES 11/20/2027

DAKOTA M. COLLOFELLO NOTARY PUBLIC STATE OF WISCONSIN **(NOTARY SEAL)**

INDEMNIFICATION AND HOLD HARMLESS AGREEMENT

By this agreement, Badger Meter, Inc., hereinafter "Contractor," agrees, for a specific consideration, the receipt and sufficiency of which are hereby acknowledged, to indemnify, hold harmless, and/or defend the City of Pinellas Park, its agents and employees, from any and all claims, demands, suits, and actions, including attorney's fees and all costs and expenses of litigation and judgments of every kind brought against the City of Pinellas Park or its agents or employees, as a result of loss, damage, or injury to any person(s) or property occasioned wholly or in part by any act, or failure to act on the part of the Contractor, its agents, servants, or employees. Contractor shall be responsible to the City of Pinellas Park for any damages caused by the Contractor's negligence, wrongdoing, misconduct, want or need of skill, default or breach of contract, guarantee, or warranty in the performance of **RFP 24.001 – AMI Water Meters.**

Under no circumstances shall any of the provisions of this agreement be deemed to waive the requirements and limitations of Florida Statute §768.28, as such applies to the City of Pinellas Park, Florida, a Florida municipal corporation.

Charla D. Dury

Authorized Officer Name

Assistant Secretary and Proposal Lead

Title of Authorized Officer

Authorized Officer Signature

April 15, 2024

Date

CERTIFICATION OF COMPLIANCE WITH ANTI-HUMAN TRAFFICKING LAWS
FLORIDA STATUTE §787.06(13)

Vendor Name: Badger Meter, Inc

Vendor FEIN: 39-0143280

Address: 4545 W. Brown Deer Road

City: Milwaukee **State:** WI **Zip:** 53224

Phone Number: (800) 876-3837

Email Address: proposals@badgermeter.com

Florida Statute §787.06(13) requires all nongovernmental entities executing, renewing, or extending a contract with a governmental entity to provide an affidavit signed by an officer or representative of the nongovernmental entity under penalty of perjury that the nongovernmental entity does not use coercion for labor or services as defined in that statute.

In accordance with Section 787.06 (13), Florida Statutes, the undersigned, on behalf of the entity named below ("Entity"), hereby attests under penalty of perjury that the Entity does not use coercion for labor or services as defined in Section 787.06, Florida Statutes, entitled "Human Trafficking".

I understand that I am swearing or affirming under oath to the truthfulness of the claims made in this affidavit and that the punishment for knowingly making a false statement includes fines and/or imprisonment.

As the officer or representative of the company, I certify that the company identified above does not:

- Use or threaten to use physical force against any person;
- Restrain, isolate, or confine or threaten to restrain, isolate, or confine any person without lawful authority and against his or her will;
- Use lending or other credit methods to establish a debt by any person when labor or services are pledged as a security for the debt, if the value of the labor or services as reasonably assessed is not applied towards the liquidation of the debt, the length and nature of the labor or services are not respectively limited and defined;
- Destroy, conceal, remove, confiscate, withhold, or possess any actual or purported passport, visa, or other immigration document, or any other actual or purported government identification, of any person;
- Cause or threaten to cause financial harm to any person;
- Entice or lure any person by fraud or deceit;
- Provide controlled substances as outlined in Schedule I or Schedule II of Florida State Statute §893.03 to any person for the purpose of exploitation of that person.

The undersigned is authorized to execute this affidavit on behalf of Entity. Under penalties of perjury, I declare that I have read the foregoing document and that the facts stated in it are true.

Authorized Vendor's Signature

Rachel J. Meyer
Print Authorized Vendor's Name

Assistant Secretary and Proposal Lead
Print Authorized Vendor's Title

STATE OF Wisconsin

COUNTY OF Milwaukee

The foregoing instrument was acknowledged before me by means of ☒ physical presence or

☐ online notarization, this 20th day of November 2024,

By Rachel J. Meyer .

(Name of person acknowledging)

Who is personally known to me or who has produced _____ as identification.

(Type of identification)

NOTARY PUBLIC Kimberly A. Ellingson

(NOTARY SEAL)

KIMBERLY A ELLINGSON NOTARY PUBLIC STATE OF WISCONSIN

MY COMMISSION EXPIRES March 14, 2027

Proposals must be in sealed packaging, unsealed proposals may be opened and discarded.

Include the name of the company submitting the proposal where requested.

To identify your submission as a "Sealed Proposal," cut along the border and affix this label to your sealed envelope.

SEALED PROPOSAL • DO NOT OPEN

SOLICITATION NO.: **RFP 24.001**
SOLICITATION TITLE: **AMI WATER METERS**
SUBMISSION DUE: **10:00 A.M. EST on Wednesday, 17 April 2024**

SUBMITTED BY: _____
(Name of Company)

DELIVER TO:

City of Pinellas Park
Purchasing Division
8000 60th St. N.
Pinellas Park, FL 33781

Addenda may be issued to this solicitation; any such addendum will be posted on Demandstar.com. It is the proposer's responsibility to periodically check the website for any addendum which may have been issued. The Addendum Acknowledgement must be submitted with the proposal.

In addition to other provisions required by the Federal agency or non–Federal entity, the Parties Agreement includes the following provisions, as applicable.

A. Copeland "Anti-Kickback Act" (18 U.S.C. § 874, 40 U.S.C. § 3145)

1. Contractor. The contractor shall comply with 18 U.S.C. § 874, 40 U.S.C. § 3145, and the requirements of 29 C.F.R. pt. 3 as may be applicable, which are incorporated by reference into this contract.
2. Subcontracts. The contractor or subcontractor shall insert in any subcontracts the clause above and such other clauses as FEMA may by appropriate instructions require, and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all of these contract clauses.
3. Breach. A breach of the contract clauses above may be grounds for termination of the contract, and for debarment.

B. Federal Water Pollution Control Act (33 U.S.C. 1251 et seq)

1. The contractor agrees to comply with all applicable standards, orders, or regulations issued pursuant to the Federal Water Pollution Control Act, as amended, 33 U.S.C. 1251 et seq.
2. The contractor agrees to report each violation to the City and understands and agrees that the City will, in turn, report each violation as required to assure notification to the Federal Emergency Management Agency, and the appropriate Environmental Protection Agency Regional Office.
3. The contractor agrees to include these requirements in each subcontract exceeding $150,000 financed in whole or in part with Federal assistance provided by FEMA.

C. Procurement of Recovered Materials

1. In the performance of this contract, the Contractor shall make maximum use of products containing recovered materials that are EPA-designated items unless the product cannot be acquired—
   a. Competitively within a timeframe providing for compliance with the contract performance schedule;
   b. Meeting contract performance requirements; or
   c. At a reasonable price.
2. Information about this requirement, along with the list of EPA- designated items, is available at EPA's Comprehensive Procurement Guidelines web site, https://www.epa.gov/smm/comprehensive-procurement-guideline-cpg-program.
3. The Contractor also agrees to comply with all other applicable requirements of Section 6002 of the Solid Waste Disposal Act."

D. Prohibition on certain telecommunications and video surveillance services or equipment.

1. Recipients and subrecipients are prohibited from obligating or expending loan or grant funds to:
   a. Procure or obtain;
   b. Extend or renew a contract to procure or obtain; or
   c. Enter into a contract (or extend or renew a contract) to procure or obtain equipment, services, or systems that uses covered telecommunications equipment or services as a

substantial or essential component of any system, or as critical technology as part of any system. As described in Public Law 115–232, section 889, covered telecommunications equipment is telecommunications equipment produced by Huawei Technologies Company or ZTE Corporation (or any subsidiary or affiliate of such entities).

2. For the purpose of public safety, security of government facilities, physical security surveillance of critical infrastructure, and other national security purposes, video surveillance and telecommunications equipment produced by Hytera Communications Corporation, Hangzhou Hikvision Digital Technology Company, or Dahua Technology Company (or any subsidiary or affiliate of such entities).
3. Telecommunications or video surveillance services provided by such entities or using such equipment.

   Telecommunications or video surveillance equipment or services produced or provided by an entity that the Secretary of Defense, in consultation with the Director of the National Intelligence or the Director of the Federal Bureau of Investigation, reasonably believes to be an entity owned or controlled by, or otherwise connected to, the government of a covered foreign country

E. Domestic Preference for Procurements

1. As appropriate and to the extent consistent with law, the non–Federal entity should, to the greatest extent practicable under a Federal award, provide a preference for the purchase, acquisition, or use of goods, products, or materials produced in the United States (including but not limited to iron, aluminum, steel, cement, and other manufactured products). The requirements of this section must be included in all subawards including all contracts and purchase orders for work or products under this award.
2. For purposes of this section: (1) "Produced in the United States" means, for iron and steel products, that all manufacturing processes, from the initial melting stage through the application of coatings, occurred in the United States. (2) "Manufactured products" means items and construction materials composed in whole or in part of non-ferrous metals such as aluminum; plastics and polymer-based products such as polyvinyl chloride pipe; aggregates such as concrete; glass, including optical fiber; and lumber.
3. Contractors and subcontractors must adhere to the Buy America Act, as required by law for federally funded projects, requiring that a product be manufactured in the U.S. of more than 50 percent U.S. parts to be considered Made in USA for government procurement purposes, as required by law. For more information, review the Buy American Act at 41 U.S.C. §§ 10a-10c, the Federal Acquisition Regulations at 48 C.F.R. Part 25, and the Trade Agreements Act at 19 U.S.C. §§ 2501-2582.

F. DHS Seal, Logos, and Flags

The contractor shall not use the DHS seal(s), logos, crests, or reproductions of flags or likenesses of DHS agency officials without specific FEMA pre-approval. The contractor shall include this provision in any subcontracts.

G. No Obligation by the Federal Government

The federal government is not a party to this contract and is not subject to any obligations or liabilities to the non-federal entity, contractor, or any other party pertaining to any matter resulting from the contract.

H. Program Fraud and False or Fraudulent Statements or Related Acts

The contractor acknowledges that 31 U.S.C. Chap. 38 (Administrative Remedies for False Claims and

Statements) applies to the Contractor's actions pertaining to this contract.

I. License and Delivery of Works Subject to Copyright and Data Rights

The Contractor grants to the City, a paid-up, royalty-free, nonexclusive, irrevocable, worldwide license in data first produced in the performance of this contract to reproduce, publish, or otherwise use, including prepare derivative works, distribute copies to the public, and perform publicly and display publicly such data. For data required by the contract but not first produced in the performance of this contract, the Contractor will identify such data and grant to the City or acquires on its behalf a license of the same scope as for data first produced in the performance of this contract. Data, as used herein, shall include any work subject to copyright under 17 U.S.C. § 102, for example, any written reports or literary works, software and/or source code, music, choreography, pictures or images, graphics, sculptures, videos, motion pictures or other audiovisual works, sound and/or video recordings, and architectural works. Upon or before the completion of this contract, the Contractor will deliver to the City data first produced in the performance of this contract and data required by the contract but not first produced in the performance of this contract in formats acceptable by the City.

J. Access to Records:

The following access to records requirements apply to the Contracting Firm, which includes its successors, transferees, assignees, and subcontractors:

1. The Contracting Firm agrees to provide the Department of Economic Opportunity, Housing and Urban Development, Department of Justice, Department of Transportation, Florida Department of Environmental Protection, Florida Department of Agriculture and Consumer Services, Florida Department of State, the State of Florida, the FEMA Administrator, the Comptroller General of the United States, or any of their authorized representatives access to any books, documents, papers, and records which are directly pertinent to this agreement for the purpose of making audits, examinations, excerpts, and transcriptions;

2. The Contracting Firm agrees to permit any of the foregoing parties to reproduce by any means whatsoever or to copy excerpts and transcriptions as reasonably needed; and

3. Contracting Firm agrees to provide the Department of Economic Opportunity, Housing and Urban Development, Department of Justice, Department of Transportation, Florida Department of Environmental Protection, Florida Department of Agriculture and Consumer Services, Florida Department of State, FEMA Administrator or his authorized representatives access to construction or other work sites pertaining to the work being completed under this agreement.

4. In compliance with section 1225 of the Disaster Recovery Reform Act of 2018, the Contractor acknowledges and agree that no language in this contract is intended to prohibit audits or internal reviews by the FEMA Administrator or the Comptroller General of the United States.

K. Minority/Women's/Labor Surplus Firms Participation:

The City of Pinellas Park, in accordance with the requirements as stated in C.F.R. 200.321 encourages the active participation of minority business, women's business enterprises, and labor surplus area firms as a part of any subsequent agreement whenever possible. If subcontractors are to be let, through a prime contractor, that contractor is required to take the affirmative steps listed in items (1) through (5) below.

1. Placing qualified small and minority businesses and women's business enterprises on solicitation lists;

2. Assuring that small and minority businesses, and women's business enterprises are solicited whenever they are potential sources;
3. Dividing total requirements, when economically feasible, into smaller tasks or quantities to permit maximum participation by small and minority businesses and women's business enterprises;
4. Using the services and assistance, as appropriate, of such organizations as the Small Business Administration and the Minority Business Development Agency of the Department of Commerce;
5. Establishing delivery schedules, where the requirement permits, which encourage participation by small and minority businesses, and women's business enterprises.

CONSTRUCTION CONTRACT
GENERAL TERMS AND CONDITIONS
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DEFINITIONS AND TERMS

The terms used in these specifications are defined as follows:

OWNER: CITY OF PINELLAS PARK
PINELLAS COUNTY, FLORIDA

CONTRACTOR: The person, firm, or corporation with whom this Contract is executed by the Owner.

DESIGNEE: The City Manager of the City of Pinellas Park or the person so designated in writing.

SUBCONTRACTOR: Any person, firm, or corporation other than the Contractor supplying material, equipment, supplies, or labor for work at the site of the project. Such person or firm has contractual relations with the Contractor, but not with the City.

SURETY: Any person, firm, or corporation that has executed the Contractor's performance bond securing the performance of this Contract.

SCOPE OF WORK: The detailed written description of the work as set forth in Attachment A.

PROJECT: The entire service to be performed as set forth in the Contract Documents.

NOTICES & CLAIMS: A notice is defined to be information rendered by either party to the other upon a condition becoming known, pursuant to the following requirements. All claims, requests, substitutions, changes, notices, delays, and any and all other forms of notices or claims by the contractor to the City Manager must be in writing and promptly presented. If none is so made, it is irrefutably presumed not to have been given by the Contractor to the City Manager.

OWNER'S ADDRESS FOR NOTICES: City of Pinellas Park
Purchasing Division
P.O. Box 1100
Pinellas Park, FL 33780-1100

ANTI-DISCRIMINATION

Contractor, for itself, its personal representatives, successors in interests, assigns, subcontractors, and sub-lessees, as a part of the consideration hereof, hereby covenants and agrees that:

(a) No person on the ground of race, color, religion, sex, national origin, age, marital status, political affiliation, familial status, disability, sexual orientation, pregnancy, gender identity or expression, or veteran or service member status be excluded from participation in, denied the benefits of, or be otherwise subjected to discrimination in the use of or performance of services described herein; and

(b) No employee or applicant for employment on the ground of race, color, religion, sex, national origin, age, marital status, political affiliation, familial status, disability, sexual orientation, pregnancy, gender identity or expression, or veteran or service member status will be discriminated against during the course of employment or application for employment to be employed in the performance of this Agreement with respect to hiring, tenure, terms, conditions or privileges of employment, or any matter directly or indirectly related to performance of this Agreement.

ANTITRUST VIOLATIONS: DENIAL OR REVOCATION UNDER SECTION 287.137, FLORIDA STATUTES

Pursuant to Section 287.137, Florida Statutes, as may be amended, a person or an affiliate who has been placed on the antitrust violator vendor list (electronically published and updated quarterly by the State of Florida) following a conviction or being held civilly liable for an antitrust violation may not submit a bid, proposal, or reply for any new contract to provide any goods or services to a public entity; may not submit a bid, proposal, or reply for a new contract with a public entity for the construction or repair of a public building or public work; may not submit a bid, proposal, or reply on new leases of real property to a public entity; may not be awarded or perform work as a contractor, supplier, subcontractor, or consultant under a new contract with a public entity; and may not transact new business with a public entity. By entering this Agreement, Contractor certifies neither it nor its affiliate(s) are on the antitrust violator vendor list at the time of entering this Agreement. False certification under this paragraph or being subsequently added to that list will result in termination of this Agreement, at the option of the City consistent with Section 287.137, Florida Statutes, as amended.

APPRENTICES

In the event Contractor employs apprentices, the parties acknowledge that Florida Statute Chapter 446 shall apply.

APPROVAL OF SUBCONTRACTS

The Contractor shall, as soon as practicable after the signing of the Contract and prior to the preconstruction conference, notify the Designee in writing of the names of subcontractors proposed for the work and shall not employ any that have not been approved by the Designee and/or the Owner in writing.

The Contractor agrees that he is fully responsible to the Owner for the acts and omissions of his subcontractors, suppliers, materialmen, laborers, equipment providers, etc., of persons either directly or indirectly employed, used, authorized, or utilized by the Contractor, Subcontractors, materialmen, laborers, suppliers, equipment providers, etc. Nothing contained in the Contract documents shall create any contractual relation between any subcontractor, materialmen, laborers, suppliers, equipment providers, etc. (and any person/entity either directly or indirectly employed, authorized, utilized, or used by any of them) and the Owner.

AUTHORITY AND DUTY OF THE CITY DESIGNEE

(a) Authority of the Designee

The work shall be always subject to the review of the Designee, or his authorized representative. The Designee shall decide any and all questions which may arise as to the quality and acceptability of materials furnished, work performed, rate of progress of work, areas of work, maintenance of schedules, interpretation of drawings and specifications, and the acceptable fulfillment of the Contract on the part of the Contractor.

In case of differences between the drawings and specifications, the Designee shall determine whether the specifications or the drawings represent the intent of the Contract, and such determinations shall be communicated to the Contractor in writing. All claims of the Contractor shall be presented in writing to the Designee for decision. The Designee's written decision shall be available within a reasonable time, not to exceed five (5) days. All decisions of the Designee shall be final. See definition of Notice.

(b) Inspection and Examination of the Work

The Designee and his authorized representative shall have free access to the project at any time for purposes of inspection, and shall be furnished by the Contractor with facilities to determine, as best as can reasonably be done under the circumstances, the work performed and the nature of same. Such assistance of the Contractor shall, if necessary, include the uncovering, testing, or removal of portions of finished work.

Duly authorized inspectors, who shall perform their duties periodically on the project, may be assigned to all or any part thereof, at any time. The number of inspectors will be at the discretion of the Designee. The presence or absence of an inspector shall in no way lessen the responsibility of the Contractor to perform properly the Contractor's duties to the Owner under these Contract documents. In case any dispute arises between the Contractor and an inspector as to materials furnished or the manner and method of performing the work, the inspector shall have authority to reject materials or work until the question at issue can be referred to and decided by the Designee. An inspector is not authorized to revoke, alter, enlarge, relax, release, or amend any of the specifications or requirements thereof, nor to issue any instructions on, nor to approve or accept any portion of the work, materials, or equipment which are contrary to the drawings and specifications nor are any of his actions, authorized or unauthorized, to be so construed.

All materials shall be subject to inspection, examination, and test by the Designee at any time, including and during manufacture and at all places where such manufacture is being carried on. The right is reserved to reject defective materials during manufacture, before and/or after they have been incorporated into the work. If the Contractor fails to replace defective work or rejected materials, the Owner, after reasonable notice determined by the Designee, may replace such materials or correct such defective work and charge the cost thereof to the Contractor, or may terminate the right of the Contractor to proceed as noted in these General Conditions.

Since no inspection, either final or interim, can be complete within itself, no final inspection, acceptance of work, material, or equipment, or final or interim acceptance of same by the Owner or the Designee, or Certificate of Engineer shall relieve the obligation of the Contractor to the Owner to do the work in a good, workmanlike manner and to furnish proper, specified equipment and materials, and to perform properly all and any obligations and duties to the Owner under the terms of the Contract Documents.

CHANGES

(a) Compliance with Specifications and Drawings

The terms of this Contract, including all specifications, drawings and other Contract Documents, shall be strictly followed by the Contractor unless they are modified in writing by the Owner or the Designee in accordance with these provisions.

(b) Changes in the Work

The Owner or the Designee, without invalidating the contract, may order extra work or make changes by altering, adding to, or deducting from the work, the Contract sum being adjusted accordingly. Upon mutual agreement from the Contractor, all such work shall be executed under the conditions of the original Contract, except that any claim for extensions of time caused thereby shall be adjusted at the time of ordering such changes.

The value of any such extra work or change shall be determined in one or more of the following ways: (a) Contract unit prices, (b) by an agreed lump sum price, or (c) the actual cost of:

1. Labor, including foremen,
2. Materials entering permanently into the work,
3. The ownership or rental cost of construction plant and equipment during the time of use on the extra work,
4. Power and consumable supplies for the operation of power equipment,
5. Insurance and Social Security, old age and employment contributions, and
6. 15% overhead and profit.

As a result of the preceding requirements, a written Change Order will be prepared by the Designee in a form to be approved by the Public Works Administrator. Such Change Order will be provided to Contractor for review. The Change Order will be affective subject to mutual agreement to the change in work described in the Change Order by the Contractor.

It is the Contractor's responsibility to notify his Surety of any changes affecting the general scope of the work or change in the Contract Price, and the amount of the applicable bonds shall be adjusted accordingly, unless otherwise provided for in the bond. The Contractor will furnish proof of such adjustment to the Owner.

CLAIMS AND DAMAGES

(a) Requirement for Notice

Any requirement of the Contract Documents (or) for notice, approval, decision, or direction by the Designee, shall be a condition precedent to be complied with by the Contractor in writing before any claim for extra compensation can be made. See definition of "Notice."

(b) Claims for Extra Cost

If the Contractor claims that any instructions in writing or by drawings or otherwise involve extra cost under this Contract, he shall give the Designee written notice within a reasonable time after the receipt of such instructions, before proceeding to execute the work, except in emergency endangering life or property. A decision by the Designee will then be made as specified in The Authority and Duty of the City Designee. If this decision requires a change order, the procedure shall be as provided for in Changes in the Work and no claim shall be valid unless so made.

(c) Claims for Damages

Any claim for damages by the Contractor against the Owner arising under this Contract shall be made in writing within thirty (30) days of the first observance of such damage, except as expressly

stipulated otherwise in the case of faulty work or materials, and shall be adjusted by agreement validated by change order. Any claim not reported within thirty (30) days shall be considered invalid.

(d) Liquidated Damages

If the Contractor refuses or fails to prosecute the work, or any separable part thereof, with such diligence as will ensure its completion within the time specified in Attachment A (Scope of Work), as may be modified by any subsequent amendment or change order to this Agreement, or any extension thereof, or fails to complete said work within such time stated in Attachment A, the Owner may, by written notice to the Contractor, terminate his right to proceed with the work or such part of the work on which there has been delay. In such event, the Owner may take over the work and prosecute the same to completion, by contract or otherwise, and the Contractor and his Sureties shall be liable to the Owner for any excess cost occasioned the Owner thereby. If the Contractor's right to proceed is so terminated, the Owner may take possession of and utilize in completing the work such materials, appliances, and plant as may be on the site of the work and necessary therefore. If the Owner does not terminate the right of the Contractor to proceed, the Contractor shall continue the work, in which event, the actual damages for the delay will be impossible to determine, and, in lieu thereof, the Contractor shall pay to the Owner the sum of Five Hundred Dollars ($500) as fixed, agreed, and liquidated damages for each calendar day of the delay until the work is finally accepted by the Owner, and the Contractor and his Sureties shall be liable for the amount thereof.

CLEAN UP

Subject to the Scope of Work, the Contractor shall keep the construction site free of rubbish and waste materials and shall restore to their original condition those portions of the site disrupted by the construction. Clean up and restoration shall be accomplished on a continuing basis throughout the contract period and in such manner as to maintain a minimum of nuisance and interference to the Owner, residents, and workers at or adjacent to the project site. The Contractor shall remove all temporary structures and equipment once they are no longer needed. It is the intent of this specification that the construction areas and those other areas not designated for alteration by the Contract Documents shall be kept clean and free of construction debris on a continuous basis and restored to their original condition as nearly as possible.

COMPLIANCE WITH LAWS AND REGULATIONS

The Contractor shall perform all the work required under this Agreement in accordance with applicable federal, state, and local statutes, ordinances, rules, and regulations, whether or not expressly set forth in the Contract Documents. The Contractor shall maintain all required State and local licenses that are required to perform the work and supply the equipment under this Contract, including registration with "Sunbiz.org" as required by applicable Florida law. The required licenses shall remain valid during the entire term of this Contract. The Contractor shall provide the City with a copy of all required licenses upon request.

CONFLICTS OF INTEREST

The Contractor shall be required to disclose prior to signing a Contract with the City the name of any officer, director, employee, or agent who may be employed by the City or otherwise affiliated with the City. The Contractor shall disclose the name of any City official or employee who owns, directly or indirectly, any interest in the Contractor's company or any affiliated business entity. Any additional conflicts of interest that may occur during the term of the Contract must be disclosed to the City immediately upon discovery of the conflict or potential conflict.

DELAYS AND EXTENSION OF TIME

If the Contractor is delayed at any time in the progress of the work by any act or neglect of the Owner or his employees, or by any other Contractor employed by the Owner, or by changes ordered in the work, or by strikes, fire, lockouts, unusual delays in transportation, unavoidable casualties or by delay authorized by the Designee pending arbitration, or by any cause which the Designee shall decide justifies the delay, then the time of completion may be reasonably extended by the Owner in writing signed by Owner. No extension shall be made for delay unless notice of a claim is made by the Contractor in writing to the Designee within seven (7) business days of the event or incident causing the delay, and as otherwise provided by the definition of Notice.

If no schedule or agreement stating the dates upon which drawings shall be furnished is made, then no claim for delay shall be allowed on account of failure to furnish drawings until two weeks after demand in writing for such drawings, and not then unless such claim be reasonable and as otherwise provided by the definition of Notice.

This article does not exclude the recovery of damages for delay by either party under other provisions in the Contract Documents. In the event of any conflict between the terms or conditions of the Construction Contract and the terms or provisions of these General Conditions, then the Construction Contract shall control.

DISCRIMINATORY VENDOR LIST

Contractor hereby acknowledges its continuous duty to disclose to the City if the Contractor or any of its affiliates, as defined by Section 287.134(1)(a), Florida Statutes, are placed on the Discriminatory Vendor List. Pursuant to Section 287.134(2)(a), Florida Statutes: "An entity or affiliate who has been placed on the discriminatory vendor list may not submit a bid, proposal, or reply on a contract to provide any goods or services to a public entity; may not submit a bid, proposal, or reply on a contract with a public entity for the construction or repair of a public building or public work; may not submit bids, proposals, or replies on leases of real property to a public entity; may not be awarded or perform work as a contractor, supplier, subcontractor, or consultant under a contract with any public entity; and may not transact business with any public entity."

ENVIRONMENTAL AND SOCIAL GOVERNMENT AND CORPORATE ACTIVISM

Pursuant to Section 287.05701, Florida Statutes, as may be amended, the City cannot give preference to a Contractor based on social, political or ideological interests such as:

(a) The Contractor's political opinions, speech, or affiliations;

(b) The Contractor's religious beliefs, religious exercise, or religious affiliations;

(c) The Contractor's lawful ownership of a firearm;

(d) The Contractor's engagement in the lawful manufacture, distribution, sale, purchase, or use of firearms or ammunition;

(e) The Contractor's engagement in the exploration, production, utilization, transportation, sale, or manufacture of fossil fuel-based energy, timber, mining, or agriculture;

(f) The Contractor's support of the state or Federal Government in combatting illegal immigration, drug trafficking, or human trafficking;

(g) The Contractor's engagement with, facilitation of, employment by, support of, business relationship with, representation of, or advocacy for any person described in this paragraph;

(h) The Contractor's failure to meet or commit to meet, or expected failure to meet, any of the

following as long as such Contractor is compliant with applicable state or federal law:

1. Environmental standards, including emissions standards, benchmarks, requirements, or disclosures;
2. Social governance standards, benchmarks, or requirements, including, but not limited to, environmental or social justice;
3. Corporate board or company employment composition standards, benchmarks, requirements, or disclosures based on characteristics protected under the Florida Civil Rights Act of 1992; or
4. Policies or procedures requiring or encouraging employee participation in social justice programming, including, but not limited to, diversity, equity, or inclusion training.

Contractors are also prohibited from giving preference to subcontractors based on the above referenced factors. Violations of this Section will result in termination of this Agreement and may result in administrative sanctions and penalties by the Office of the Attorney General of the State of Florida.

E-VERIFY

The Contractor (and its subcontractors) have an obligation to utilize the U.S. Department of Homeland Security's (OHS) E-Verify system for all newly hired employees. By executing this Contract, the Contractor certifies that it is registered with, and uses, the E-Verify system for all newly hired employees. The Contractor must obtain an affidavit from its subcontractors in accordance with paragraph (5)(b) of section 448.095, F.S., and maintain a copy of such affidavit for the duration of the Contract.

This section serves as notice to the Contractor regarding the requirements of section 448.095, F.S., specifically sub-paragraph (5)(c)1, and the City's obligation to terminate the Contract if it has a good faith belief that the Contractor has knowingly violated section 448.09(1), F.S. If terminated for such reason, the Contractor will not be eligible for award of a public contract for at least one (1) year after the date of such termination. The City reserves the right to order the immediate termination of any contract between the Contractor and a subcontractor performing work on its behalf should the City develop a good faith belief that the subcontractor has knowingly violated section 448.09(1), F.S.

EXISTING UTILITIES

Representation of utilities are shown from information received from the various utility owners. The locations or elevations of utilities are not represented to be exact and are shown for the convenience of the Contractor. The Contractor shall contact the utility owner concerned for any additional information and coordinate his construction activities accordingly. Any cost incurred for the protection of and/or damages to existing utilities will be considered as part of the applicable Contract price, and no additional compensation will be paid to the Contractor. If in the judgment of the Designee, it is impossible to construct a given improvement in the location shown on the drawings, as a result of a utility conflict, either the utility owner will move the utility or an appropriate change order for an alternative solution will be executed. The following is a list of known utilities and their owners:

Cable, Telephone & Fiber	Charter Spectrum
Electric Towers, Poles, Power Lines	Duke Energy (Progress Energy Corp)
Fiber, Conduit & Signal Cable	Pinellas County Highway/Engineering
Gas Mains	TECO/Peoples Gas Co./Clearwater Gas
Telephone Poles, Lines & Cables	Frontier Communications

Water Mains, Sewer & Reclaim Lines	City of Pinellas Park, City of St. Petersburg & Pinellas County, Pinellas Park Water Mgmt. District

FAIR LABOR STANDARDS ACT AND MINIMUM WAGE

It shall be the Contractor's responsibility to conform to all provisions of federal, state, municipal and local laws including but not limited to the Fair Labor Standards Act and Minimum Wage requirements, rules, laws, and/or regulations.

FOREIGN GIFTS AND CONTRACTS

The Contractor must comply with any applicable disclosure requirements in Section 286.101, Florida Statutes. Pursuant to Section 286.101 (7)(c), Florida Statutes: "In addition to any fine assessed under [§ 286.101 (7)(a), Florida Statutes], a final order determining a third or subsequent violation by an entity other than a state agency or political subdivision shall automatically disqualify the entity from eligibility for any grant or contract funded by a state agency or any political subdivision until such ineligibility is lifted by the Administration Commission for good cause.

INDEPENDENT CONTRACTOR

This Agreement does not create an employee/employer relationship between the Parties. It is the intent of the Parties that the Contractor is an independent contractor under this Agreement and not the City's employee for any purposes, including but not limited to, the application of the Fair Labor Standards Act minimum wage and overtime payments, Federal Insurance Contribution Act, the Social Security Act, the Federal Unemployment Tax Act, the provisions of the Internal Revenue Code, the State Worker's Compensation Act, and the State Unemployment Insurance law. The Contractor will retain sole and absolute discretion in the judgment of the manner and means of carrying out Contractor's activities and responsibilities hereunder provided, further that administrative procedures applicable to services rendered under this Agreement will be those of Contractor, which policies of Contractor will not conflict with City, State, or United States policies, rules or regulations relating to the use of Contractor's funds provided for herein. The Contractor agrees that it is a separate and independent enterprise from the City, that it had full opportunity to find other business, that it has made its own investment in its business, and that it will utilize a high level of skill necessary to perform the work. This Agreement must not be construed as creating any joint employment relationship between the Contractor and the City and the City will not be liable for any obligation incurred by Contractor, including but not limited to unpaid minimum wages and/or overtime premiums.

The Contractor acknowledges that it is responsible for complying with the provisions of the Immigration Reform and Control Act of 1986, located at 8 U.S.C. Section 1324, et seq., and regulations relating thereto. Failure to comply with the above provisions of this Contract shall be considered a material breach and shall be grounds for immediate termination of the Contract.

INSPECTION

(a) Inspection

Each step of construction is subject to approval by the Designee prior to proceeding with a subsequent step; however, this shall not relieve the Contractor of the responsibility for delivering to the City a project completed in conformance with the plans and specifications and guaranteed as elsewhere stipulated.

(b) Weather

Each time, in the opinion of the Designee, inclement weather prevents the Contractor from

proceeding with the work for more than one-half (1/2) day, the Owner may add one (1) calendar day to the number of days allowed for completion.

(c) Work Days

The work shall be discontinued Saturdays, Sundays, and all legal and/or City-designated holidays, except for special operations that may be necessary to maintain, check, or protect work already performed**.**

INSURANCE REQUIREMENTS

Please provide proof of insurance evidencing the ability to provide the required insurance, the cost of all insurance shall be included in the response.

The Contractor shall not commence work under this Contract until all insurance required has been obtained and such insurance has been approved by Risk Management Division, the Contractor allow any subcontractor to commence any subcontract until similar insurance required of the subcontractor has been so obtained and approved.

Companies issuing the insurance policy, or policies, shall have no recourse against the City for payment of premium or assessments for any deductibles; all are the sole responsibility of the Contractor.

The Contractor's insurance coverage shall be primary for operations under this contract. Any insurance or self-insurance maintained by the City, its officials, employees, or volunteers shall be excess of the Contractor's insurance and shall not contribute with it. The Contractor's and Consultant's policy clause "Other Insurance" shall not apply to any insurance currently held by the City of Pinellas Park, to any such future coverage, or to the City's Self-Insurance Retentions of whatever nature.

The term "City of Pinellas Park" shall include all Authorities, Boards, Bureaus, Commissions, and individual members; Divisions, Departments, and Offices of the City; the Mayor, Vice Mayor and Councilmen; and employees thereof in their official capacities and/or while acting on behalf of the City.

The insurance required shall provide protection for the Contractor, Consultant, and subcontractors, respectively, against damage claims which may arise from operations under this Contract, whether such operations are by the insured or by anyone directly or indirectly employed by the Contractor or Consultant, and also against any of the special hazards which may be encountered in the performance of this Contract.

LIMITS OF INSURANCE

General Liability

Type - Commercial General Liability (CGL), Occurrence Basis

Limits - $2,000,000 General Aggregate
- $1,000,000 Products Completed/Operations Aggregate
- $1,000,000 Personal and Advertising Injury
- $1,000,000 Combined Single Limit
- $2,000,000 Each Occurrence

Automobile Liability

Type - Any Auto, Hired autos, and Non-Owned Autos

Limits - $1,000,000 Combined Single Limit

Workers' Compensation

Type - Workers' Compensation and Employer's Liability or Work Comp. Exemption Certificate

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY): 11/19/2024

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER 1-414-443-0000 Hays Companies, Inc. 1200 North Mayfair Road, Suite 100 Milwaukee, WI 53226	CONTACT NAME: PHONE (A/C, No, Ext): FAX (A/C, No): E-MAIL ADDRESS:
INSURED Badger Meter, Inc. 4545 West Brown Deer Road Milwaukee, WI 53223 USA	INSURER(S) AFFORDING COVERAGE / NAIC # INSURER A: PHOENIX INS CO 25623 INSURER B: TRAVELERS PROP CAS CO OF AMER 25674 INSURER C: CONTINENTAL INS CO 35289 INSURER D: ACCIDENT FUND INS CO OF AMER 10166 INSURER E: COALITION, INC. INSURER F:

COVERAGES **CERTIFICATE NUMBER:** 751513659 **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
A	X COMMERCIAL GENERAL LIABILITY CLAIMS-MADE X OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: X POLICY PRO-JECT LOC OTHER:	X		Y660 268J2023	01/01/24	01/01/25	EACH OCCURRENCE DAMAGE TO RENTED PREMISES (Ea occurrence) MED EXP (Any one person) PERSONAL & ADV INJURY GENERAL AGGREGATE PRODUCTS - COMP/OP AGG	$ 1,000,000 $ 300,000 $ 10,000 $ 1,000,000 $ 4,000,000 $ 2,000,000
B	AUTOMOBILE LIABILITY X ANY AUTO OWNED AUTOS ONLY X HIRED AUTOS ONLY SCHEDULED AUTOS X NON-OWNED AUTOS ONLY			BA 2L694073	01/01/24	01/01/25	COMBINED SINGLE LIMIT (Ea accident) BODILY INJURY (Per person) BODILY INJURY (Per accident) PROPERTY DAMAGE (Per accident)	$ 1,000,000 $ $ $
C	X UMBRELLA LIAB X OCCUR EXCESS LIAB CLAIMS-MADE DED X RETENTION $ 10,000			6076540927	01/01/24	01/01/25	EACH OCCURRENCE AGGREGATE	$ 5,000,000 $ 5,000,000
D	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANYPROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) Y/N If yes, describe under DESCRIPTION OF OPERATIONS below	N/A		UH WCP 100074452 02	01/01/24	01/01/25	X PER STATUTE OTH-ER E.L. EACH ACCIDENT E.L. DISEASE - EA EMPLOYEE E.L. DISEASE - POLICY LIMIT	 $ 1,000,000 $ 1,000,000 $ 1,000,000
E	Cyber/Tech E&O(Prof Liab)			C-4LWN-137183-CYBER-2024	01/01/24	01/01/25	Limit	5,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

The City of Pinellas Park (Owner) is additional insured on the General Liability policy as respects to RFP 24.001 AMI Water Meters where required by written contract. The General Liability policy is primary and non-contributory when required by written contract.

CERTIFICATE HOLDER

City of Pinellas Park
5141 78th Avenue N.
Pinellas Park, FL 33781 USA

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

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Limits - Statutory, Workers' Compensation
- $100,000 Each Accident
- $500,000 Disease – Policy
- $100,000 Disease – Each Employee

Professional Liability Insurance

Limits - $1,000,000 per occurrence
- $2,000,000 aggregate combined single limit
- $5,000 maximum deductible per claim

Cyber Risk Liability (Network Security/Privacy Liability)

Insurance including cloud computing and mobile devices, for protection of private or confidential information whether electronic or non-electronic, network security and privacy; privacy against liability for system attacks, digital asset loss, denial or loss of service, introduction, implantation or spread of malicious software code, security breach, unauthorized access and use; including regulatory action expenses; and notification and credit monitoring expenses with at least minimum limits as follows:

Limits Each Occurrence $ 5,000,000
General Aggregate $ 5,000,000

Excess or Umbrella Liability

When used to reach minimum limits shown for General Liability and Automobile Liability, the primary (underlying) policy limits shall be no less than $500,000. The primary policy and any excess or umbrella policies shall be with the same insurance carrier. The coverage shall not be more restrictive than the primary policy coverages, including but not limited to coverage trigger, defense, notice of occurrence/accident/circumstances, and notice of claim and extended reporting period.

The policy shall cover the firm, all employees, and/or volunteers, and all independent contractors, subcontractors and professional contractual persons hired or retained by contractor.

All above insurance policies shall be placed with insurers with a Best's rating of no less than A-VII. The insurer chosen shall also be licensed to do business in Florida.

The insurance carriers shall supply Certificates of Insurance evidencing such coverage to the City of Pinellas Park Risk Management Department prior to the execution of this agreement.

The selected vendor shall send a 30-day written notice to the City of Pinellas Park Risk Management Division of its intent to cancel or terminate.

NOTICE TO PROCEED

When the Contract is executed by the Owner, it shall be forwarded to the Contractor together with notice from the Designee to commence work. The Notice to Proceed will include the time for completion. The Contractor shall begin construction operations within ten (10) days after the date of such notice and following a preconstruction conference. The contract time shall begin ten (10) days after the date of the Notice to Proceed.

PAYMENTS TO THE CONTRACTOR

(a) Monthly Payments to the Contractor

The Contractor shall plan work for construction based on the provisions of the Contract. The Contractor will, make an approximate estimate, in writing on a form (Application and Certificate for

Payment) approved by the Designee, of the proportionate value of the work done, items and locations of the work performed. The Designee will then review said estimate and make necessary revisions so that the estimate can receive his approval. The Contractor shall invoice and be paid by the Owner in accordance with Section 10 (Project Invoicing Procedure) of the SOW attached as Attachment A.

(b) Correction of Work Before Final Payment

The Contractor shall promptly remove from the premises all material condemned by the Designee as failing to conform to the Contract, whether incorporated in the work or not, and the Contractor shall promptly replace and re-execute his own work in accord with the Contract and without expense to the Owner, and shall bear the expense of making good all work of other contractors destroyed or damaged by such removal or replacement.

If the Contractor does not remove such condemned work and materials within a reasonable time, fixed by written notice, the Owner may remove them and may store the materials at the expense of the Contractor. If the contractor does not pay the expense of such removal within ten (10) days thereafter, the Owner may, upon ten (10) days written notice, sell such materials at auction thereof, deduct all the cost and expenses that should have been borne by the Contractor, storage fees and other costs from payment, if any, to the Contractor.

(c) Liens

Neither the final payment shall become due until the Contractor shall deliver to the Owner a complete release of all liens arising out of this Contract or receipts in full in lieu thereof and, in addition thereto in either case, an affidavit that, so far as he has knowledge or information, the release and receipts include all the labor and material for which a lien could be filed, but the Contractor may, if any subcontractor refuses to furnish a release or receipt in full, furnish a bond satisfactory to the Designee to indemnify the Owner against any lien. If any lien remains unsatisfied after all payments are made, the Contractor shall refund to the Owner all money payments that the Owner may pay in discharging such a lien, including all costs, interest and a reasonable attorney's fee.

(d) Final Inspection

When the Contractor has completed work in compliance with the terms of the Contract Documents, he shall notify the Designee in writing that the project is ready for final inspection. Pursuant to Attachment 1 (Scope of Work), installation acceptance will by completed pursuant to Sections 6.4.5 and 6.5.10 as the project is being deployed. Prior to Final Acceptance of the Project, as described in Section (e) below, the Designee may perform final inspection on any installations that have not been previously accepted pursuant to the installation acceptance process within Attachment 1 as well as final inspection on any remaining accounts designated as UIR that have not moved to an RTU designation.

(e) Final Acceptance

When the Designee shall certify completion of the final inspection to the Owner, the Contractor may make request for final payment. With the request for final payment, the Contractor shall furnish evidence, satisfactory to the Owner's legal advisors, that the Contractor has fully paid all debts for labor, materials, and equipment incurred in connection with the work. The Contractor must provide all evidence required by the Contract to assure the Owner of complete compliance with all terms of the Contract. When the Owner has satisfaction as to compliance with the terms of the Contract and has received certification of final inspection, Owner will notify the Contractor of final acceptance by

the Owner.

(f) Final Payment

When final acceptance has been made by the Owner, the Designee will then review the amount of final request for payment and certify the amount of this approval. The Owner will then make final payment of the Contract amount, plus all approved additions, less approved deductions and previous payments made.

The Contract will be considered complete when all work has been finished, the project finally accepted in writing by the Owner, and final payment approved by the Owner.

(g) Completion of Contract

The Contract will be considered complete when all work has been finished, the final inspection certified by the Engineer, the project finally accepted in writing by the Owner, and final payment approved by the Owner.

PERFORMANCE/DAMAGES

Subject to the Scope of Work, Contractor shall carry out the work with such care and methods as not to result in damage to public or private property. Should any public or private property be damaged or destroyed, Contractor, at its expense shall repair or make restoration as is practical and acceptable to the City and/or designee and the Owners of destroyed or damaged property within a reasonable period of time not to exceed thirty (30) days from the date of damage.

Contractor will be responsible for performing the work necessary to meet City standards in a safe, neat, and good workman like manner, using only generally accepted methods in carrying out the work, and complying with all City of Pinellas Park ordinances and codes and federal and state laws relating to such work.

PRECONSTRUCTION CONFERENCE

Prior to starting the work, a preconstruction conference will be held to review the work schedules, to establish procedures for handling drawings and other submissions, for processing Periodic Pay Estimates, and such other matters as may be pertinent to the Project.

PROGRESS, REPORTS, AND CONTROL OF THE WORK

The Contractor must submit a proposed schedule of the work at the preconstruction conference. The proposed schedule shall be submitted in an Owner approved electronic file format, and shall include a schedule and charts of work to be performed. The purpose of this schedule is to enable the Owner and the Designee to govern the work, to protect the functions of the City and its citizens, and to aid in providing appropriate supervision.

PROHIBITED TELECOMMUNICATIONS EQUIPMENT

Contractor represents and certifies that it and its applicable subcontractors do not and will not use any equipment, system, or service that uses covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology as part of any system, as such terms are used in 48 CFR §§ 52.204-24 through 52.204-26. By executing this Agreement, Contractor represents and certifies that Contractor and its applicable subcontractors must not provide or use such covered telecommunications equipment, system, or services for any scope of work performed for the City for the entire duration of this Agreement. If Contractor is notified of any use or provisions of such covered telecommunications equipment, system, or services by a subcontractor at any tier or by any other source, Contractor must promptly report the information in 48 CFR § 52.204-25(d)(2) to City.

PROHIBITION ON GRATUITIES AND KICKBACKS

It is unethical for any person to offer, give, or agree to give any employee or for any employee to solicit, demand, accept or agree to accept from another person, a gratuity or an offer of employment in connection with any decision, approval, disapproval, recommendation, preparation of any part of program requirement or a purchase request, influencing the content of any specification or procurement standard, rendering of advice, investigation, audit, or in any other advisory capacity in any proceeding or application, request for ruling, determination claim or controversy, or other particular matter, pertaining to any program requirement or an Agreement or subcontract, or any solicitation or proposal thereof. It shall be unethical for any payment, gratuity, or offer of employment to be made by or on behalf of a Sub-contractor under a Contract to Contractor or higher tier sub-contractor or any person associated therewith, as an inducement of the award of a subcontract or order. The prohibition against gratuities and kickbacks prescribed in this section shall be conspicuously set forth in every Contract and subcontract and solicitation therefore. The Contractor hereby certifies that prices the city agreed to are fair and proper and are not tainted by any collusion, conspiracy, or unlawful agreement on the part of the Contractor or any other parties and interest.

PROSECUTION OF WORK

The work shall be executed at such time and in or on such part or parts of the project with such forces of workers, materials, and equipment as may be ordered by the Designee, in writing, to complete the project as contemplated in the drawings, specifications, contract, and schedules, including such detailed drawings as may be furnished by the Designee from time to time during the prosecution of the work in explanation of said drawings. If, at any time, the materials and appliances to be used appear to the Designee as insufficient or improper for securing the quality of work required, or the required rate of progress, he may order the Contractor to increase his efficiency or to improve the character of his work, and the Contractor shall conform to such an order, but the failure of the Designee to demand any increase of such efficiency of any improvement shall not release the Contractor from his obligation to secure the quality of work or the rate of progress necessary to complete the work within the limits imposed by the Contract. The Contractor shall perform the work and take such precautions as he may deem necessary to complete the project so all work will be in first class and acceptable condition within the Contract time according to the schedule.

If the Contractor desires to carry on work at night or outside the regular hours, he shall submit application to the Designee, but he shall allow ample time to enable satisfactory arrangements to be made for inspecting the work in progress. The Designee may grant permission unless local regulations prohibit such work. If granted permission, the Contractor shall comply with all regulations and legal requirements.

RIGHTS AND RESPONSIBILITIES OF THE CONTRACTOR

(a) Contractor's Representative
The Contractor shall keep a Designee-approved superintendent and any necessary assistants present at the work site throughout the project. The Contractor shall provide efficient supervision to the work, using their best skill and attention.

(b) Contractor's Understanding
The undersigned Contractor agrees that he has carefully inspected all Contract Documents and is familiar with and will adhere to same.

(c) Quality of Material, Equipment, or Work
When any material or equipment not conforming to the requirements of the specifications and

drawings has been delivered to the Project or incorporated in the work of the Project, or whenever any work performed is of inferior quality, then such material, equipment, or work shall be considered defective and shall be removed and replaced, or made satisfactory to the Owner or the Designee, at no cost to the Owner.

(d) Permits, Licenses, And Regulations

City of Pinellas Park permits necessary for the prosecution of the work shall be paid for by the City. Contractor shall secure all permits necessary for the prosecution of the work not previously secured by or upon behalf of the City. The Contractor will be responsible for all licenses required to perform necessary work. Easements for permanent structures or utilities shall be secured and paid for by the Owner. The Contractor shall give all notices and comply with all laws, ordinances, rules, and regulations bearing on the conduct of the work as drawn and specified. If the Contractor observes that the drawings and specifications are at variance therewith, he shall promptly notify the Designee in writing and any necessary change shall be adjusted as provided in the Contract under Changes in the Work. If the Contractor performs any work contrary to such law, ordinances, rules, and regulations and does not comply with the aforesaid procedure, he shall bear all cost incident to such violation.

(e) Protection of Work, Persons, and Property

The Contractor shall continuously maintain adequate protection of all his work from damage and shall protect all property from injury or loss arising in connection with the Contract. He shall adequately protect adjacent property as provided by law and the Contract documents.

Subject to the Scope of Work, in case of failure on the part of the Contractor to promptly restore damaged property or make good such damage or injury, the Owner may, after seven (7) calendar days notice in writing to the Contractor, proceed to repair, rebuild, or otherwise restore such property as may be deemed necessary and the cost thereof will be deducted from any monies due, or which may become due, the Contractor under this Contract.

(f) Scope of the Contractor's Service

Subject to the Scope of Work, the Contractor shall provide and pay for all bonds, insurance, materials, labor, tools, equipment, electrical power, water, transportation, and other facilities necessary for the execution and completion of the work. In the event the Contractor shall fail at any time to pay for any of the above, the Owner may, at his option, pay for same and charge same to the Contractor.

(g) Responsibility for the Work

Prior to the completion of all the work by the Contractor and the acceptance thereof by the Owner, the work shall remain the responsibility of the Contractor, and said Contractor shall be required to repair, replace, renew, and make good at his own expense all damages caused by force, or violence of the elements, or any cause whatsoever, provided, however, that in such cases the Contractor shall be entitled to a reasonable extension of time within which to complete said work. If the cause of the delay shall be due to the negligence, fault, or omission of the Contractor, the Contractor shall not be entitled to the extension of time mentioned above.

(h) Contractor's Right to Terminate Contract

If the work should be stopped for a period of three (3) months, under an order of any court, or public authority, other than by the Owner, through no act or fault of the Contractor or of anyone employed by the Contractor, the Contractor may, upon thirty (30) days written notice to the Owner, terminate his contract and recover from the Owner payment for all work executed and

any expense sustained, plus a reasonable profit and damages not to exceed five percent (5%) over cost incurred.

(i) Removal of Equipment

In the case of annulment of this Contract before completion from any cause except as stated above in Contractor's Right to Terminate Contract, the Contractor, if notified to do so by the Owner, shall promptly remove any or all its equipment and supplies at his own expense.

(j) Traffic Control

The Contractor shall be responsible for the proper maintenance, control, and detour of traffic in the area of construction, during construction. All traffic control and maintenance procedures for streets open to the public shall be in accordance with the requirements of the Manual of Uniform Traffic Control Devices (MUTCD) as published by the United States Department of Transportation. Appropriate work-zone traffic control devices shall be used for construction activities within City rights-of-way. All traffic control devices shall be designed, placed, operated, and maintained according to MUTCD Standards. When work ceases or is interrupted during non-working hours, such as at night or on weekends or holidays, inappropriate signs shall be removed or covered. Contractor shall inspect and maintain work zone traffic control devices on a regular basis. This work shall also be performed during non-working hours such as at night, on weekends and on holidays. It shall be the Contractor's responsibility to determine these requirements prior to submitting a response so the response reflects all costs to be incurred. No claims for additional payment will be considered for costs incurred in the proper maintenance, control, detour, and protection of traffic.

RIGHTS AND RESPONSIBILITIES OF THE OWNER

(a) Surveys and Lands for Work

Pursuant to the Scope of Work, the Owner shall provide the lands upon which the work under this Contract is to be done. The Owner shall furnish all survey data available for this project.

(b) Use of Completed Portions

The Owner shall have the right to take possession of and use any completed portions of the work, although the time for completing the entire work or such portions may not have expired, but such taking possession and use shall not be deemed an acceptance of any work, even if possessed or used by Owner, not completed in accordance with the Contract Documents.

(c) The Owner's Right to Do Work

If the Contractor should neglect to prosecute the work that is included as part of the Scope of Work properly or fail to perform any provision of this Contract, the Owner, after seven (7) days written notice to the Contractor, may, without prejudice to any other remedy he may have, make good such deficiencies, and may deduct the cost thereof from the payment then or thereafter due the Contractor.

(d) Defective Materials and Work

All materials not conforming to the requirements of these specifications shall be considered as defective, and all such materials whether in place or not, shall be rejected and condemned and shall be immediately removed from the work, unless otherwise permitted. No material, which has been rejected, the defects of which have been corrected or removed, shall be used until written approval has been given by the Designee. All work, which has been rejected or condemned, shall be remedied or, if deemed necessary, shall be removed or replaced in an acceptable manner by the Contractor at his own expense. Should the Contractor fail to remove

rejected materials, or fail or refuse to remedy or replace defective work, the Designee may withhold all payments, which are due or will become due, and suspend the work until such orders are complied with.

(e) No Waiver of Rights

No inspection, orders, measurements, or certificates made by the Designee, nor any payment or acceptance in whole or in part, nor extension of time, nor taking of possession by the Owner shall operate as a waiver of the conditions of this contract, or of any right to damages herein provided. No waiver of one breach of the contract shall be construed as a waiver of another breach. Should an error be discovered in the partial or final estimates, or proof of defective work or materials used by the Contractor be discovered after the final payment has been made, the Owner reserves the right to claim and recover, by process of law, such sums as may be sufficient to correct the error or make good the defect in the work and materials.

(f) Suspension of Work

If the work is defective, or the Contractor fails to supply sufficient skilled workmen or suitable materials or equipment, or the Contractor fails to make prompt payments to Subcontractors for labor, materials or equipment, or the Contractor fails to comply with work schedules, the Designee may, by written notice to the Contractor, allow the Contractor thirty (30) days from the date of the notice to cure the cause for such notice. If the cause is not cured within thirty (30) days, the Designee may order the Contractor to stop all work or any portion thereof and terminate payments to the Contractor until the cause for such order has been eliminated. No extension of Contract time will be allowed for this suspension.

(g) Termination of the Contract

If the Contractor is adjudged bankrupt or insolvent, or a trustee or receiver is appointed for the Contractor or for any of his property, or he files a petition to take advantage of any debtors act or to reorganize under the bankruptcy or similar laws, or he repeatedly fails to supply sufficient skilled workmen or suitable materials or equipment for labor, materials or equipment, or he disregards laws, ordinances, rules, regulations, or orders of any public body having jurisdiction, or he disregards the authority of the Designee, or, in the Owner's sole discretion, he otherwise violates any provision of the Contract Documents, then Owner may, without prejudice to any other right or remedy and after giving the Contractor thirty (30) days prior written notice, and Badger Meter fails to cure any defects stated in such notice, terminate the services of the Contractor and take possession of the Project and of all materials, equipment, tools, construction equipment and machinery thereon owned, leased, possessed or used by the Contractor that remain on site, and finish the work by whatever method he may deem expedient. If the Owner takes possession of materials, equipment, tools, construction equipment and/or machinery in order to complete the Project, the Owner will be liable to the Contractor for the reasonable use of such items. If the direct and indirect costs of completing the Project, including compensation for additional professional services, exceeds the unpaid balance of the contract price, the Contractor will pay the difference to the Owner. Such costs incurred by the Owner will be determined by the Designee and incorporated in a Change Order.

Where the Contractor's services have been terminated by the Owner, said termination shall not affect any rights of the Owner against the Contractor then existing or which may thereafter accrue. Any retention or payment of monies by the Owner due the Contractor, will not release the Contractor from liability.

In the event the Owner employs an attorney to enforce or construe any provision of the contract documents or to collect damages for Contractor's breach of the contract documents or to recover on the BOND provided in the contract documents, the Contractor and his surety agree to pay the Owner such reasonable attorney's fees, including appellate fees, and costs as the Owner may expend therein. The Contractor and his SURETY, for a specific consideration the receipt and sufficiency of which is hereby acknowledged, expressly waive any rights or entitlements they may have under Florida Statutes, Section 57.105 (2) pertaining to mutuality of attorney's fees, as it may be amended or replaced, or any similar statute or law. As against the obligations herein contained, the Contractor and his SURETY waive all rights of exemption.

Upon thirty (30) days written notice to the Contractor, the Owner, may, without cause and without prejudice to any other right or remedy, elect to abandon the Project and terminate the Agreement. In such case, the Contractor shall be paid for all work executed and any expense sustained plus a reasonable profit not to exceed five percent (5%) over cost incurred.

The City shall not be required to perform any covenant or obligation in this contract, or be liable in damages to any party hereto, so long as the performance or non-performance of the covenant or obligation is delayed, caused or prevented by an act of God or force majeure. An "act of God" or "force majeure" is defined for the purposes of this contract as strikes, lockouts, sit-downs, material or labor restrictions by any governmental authority, unusual transportation delays, riots, floods, washouts, explosions, earthquakes, fire, storms, weather (including wet grounds or inclement weather which prevents service), acts of the public enemy, wars insurrections and any other cause not reasonably within the control of the City and which by the exercise of due diligence the City is unable, wholly or in part, to prevent or overcome.

ROYALTIES AND PATENTS

The Contractor shall pay all royalties and license fees for equipment or processes in conjunction with the equipment he is furnishing. He shall defend all suits or claims for infringement of any patent right, and shall save the Owner harmless from loss on account thereof and cost and attorney's fees incurred therefore.

SAFETY AND HEALTH REGULATIONS

The Contractor shall comply with the Department of Labor Safety and Health Regulations for construction promulgated under the Occupational Safety and Health Act of 1970 (PL 91-596) and under Section 107 of the Contract Work Hours and Safety Standards Act (PL 91-54). The Contractor shall allow representatives of the Department of Labor full access to the project for inspection.

SALVAGED EQUIPMENT AND MATERIALS

In the absence of special provisions to the Contract, salvaged materials, equipment, or supplies that occur are the property of the Owner and shall be cleaned and stored as directed by the Designee. Surplus suitable excavated materials remain the property of the Owner and shall be stored in an area designated by the Designee, but not to exceed (4) miles from the job site.

SCRUTINIZED COMPANIES PURSUANT TO SECTIONS 287.135 AND 215.473, FLORIDA STATUTES

Contractor hereby certifies that it: a) has not been placed on the Scrutinized Companies that Boycott Israel List, nor is engaged in a boycott of Israel; b) has not been placed on the Scrutinized Companies with Activities in Sudan List nor the Scrutinized Companies with Activities in the Iran Petroleum Energy Sector List; and c) has not been engaged in business operations in Cuba or Syria. If City determines that Contractor has falsely certified facts under this paragraph or if Contractor is found to have been placed on the Scrutinized Companies lists or is engaged in a boycott of Israel after the execution of this

Agreement, City will have all rights and remedies to terminate this Agreement consistent with Section 287.135, Florida Statutes, as amended. The City reserves all rights to waive the certifications required by this paragraph on a case-by-case exception basis pursuant to Section 287.135, Florida Statutes, as amended.

SUSPENSION AND DEBARMENT

The City of Pinellas Park will not make award to parties listed on the government-wide exclusions in the System for Award Management (SAM). Contractors agree to comply with the requirements of 2 C.F.R. pt. 180, subpart C, and 2 C.F.R. pt. 3000, subpart C, while this offer is valid and throughout the period of any contract that may arise from this offer. Contractor further agrees to include a provision requiring such compliance in its lower tier covered transactions.

TERMINATION FOR NON-APPROPRIATION

This Contract is expressly conditioned upon the availability of funds lawfully appropriated and available for the purposes set out herein as determined in the sole discretion of the Owner. If funding for the Contract is in multiple fiscal years, funds must be appropriated each year prior to costs being incurred. Nothing in this paragraph shall prevent the making of contracts with a term of more than one year, but any contract so made shall be executory only for the value of the work or services to be rendered or paid for in succeeding fiscal years. In the event funds to finance the Contract become unavailable, the Owner may terminate the Contract on the last day of the fiscal period for which funds were legally available. The Owner shall be the sole and final authority as to the availability of funds.

WARRANTY AND GUARANTEE PROVISIONS

All construction work and workmanship related to the installation of products involved in this contract shall be, and the same is hereby, guaranteed and warranted by the Contractor for a period of two (2) year from completion of the Contract, as defined in Completion of Contract, to be free from defects due to faulty installation, and performed by the Contractor and is warranted and guaranteed by the contractor to the Owner to be such as to meet the required standards and accomplish the purposes and functions of the Project as defined, detailed, and specified in these Contract Documents. The Owner shall give written notice to the Contractor of faulty workmanship for installation within a period of one (1) year following completion of the contract. Any workmanship which does not comply with the warranty and guarantee shall be promptly addressed by the Contractor at his own cost and without cost to the Owner as to any claims or actions for breach of guarantee or breach of warranty that the Owner might have against parties other than the Contractor, and do not constitute exclusive remedies of the Owner against the Contractor and are not intended to and shall not limit any other rights, remedies, or courses of action which the Owner might exercise against the Contractor, and shall not alter nor modify the application of the Statutes of the State of Florida. Materials and equipment provided by Contractor for the Project will be warranted in accordance with the standard manufacture's warranties for such products as stated in Attachment B attached hereto.

WORKMANSHIP, MATERIALS, AND WORKERS

Unless otherwise stated in the detailed specifications, all workmanship, materials, and articles incorporated in the work covered by this Contract shall be of the most suitable grade of their respective kinds for the purpose, and acceptable to the Designee. The Designee shall decide the question of equality where the expression "or approved equal" is used in the specifications following reference to a specific manufacturer of equipment or materials. To the extent required by the specifications or by the Designee, the Contractor shall furnish the Designee, for approval, full information concerning the materials or articles or methods of work which he contemplates incorporating in the work, including samples of

materials. Articles installed or used or unusual methods of work used without such approval shall be at the risk of subsequent rejection.

The Designee or the Owner may require the contractor to remove from the work such employees as the Designee or the Owner deems incompetent, careless, insubordinate, or otherwise objectionable, or whose continued employment of the work is deemed to be contrary to the Owner's interest.

CONSTRUCTION BOND

OWNER:

City of Pinellas Park, FL

5141 78th Avenue North

Pinellas Park, FL 33781

727.369.7700

PRINCIPAL:

Badger Meter, Inc.

4545 West Brown Deer Road

Milwaukee, WI 53223

800.876.3837

SURETY:

Name: Travelers Casualty and Surety Company of America

Address: One Tower Square, Hartford, CT 06183

Phone Number: 262-825-9069

Bond No. 108000159

BY THIS BOND, we, Principal and Surety, duly authorized to conduct business in the State of Florida, are bound to the **City of Pinellas Park, Florida**, a municipal corporation, herein called Owner, in the sum of **Nine Million Two Hundred Seventy-Nine Thousand Six Hundred Fifty-Seven Dollars and Fifty-Nine Cents ($9,279,657.59)**, for payment of which we bind ourselves, our heirs, personal representatives, successors, and assigns, jointly and severally.

THE CONDITION OF THIS BOND is that if Principal:

Performs the contract between Principal and Owner for of Project and all appurtenant work thereto, said contract/purchase order being made a part of this bond by reference, at the times and in the manner prescribed in the contract/purchase order, together with any modifications of said contract/purchase order that may hereafter be made, notice of which modifications to the Surety being hereby waived; and

Promptly makes payments to all claimants, as defined in Section 255.05(1), Florida Statutes, supplying Principal with labor, materials, or supplies, used directly or indirectly by Principal in the prosecution of the work provided for in the contract/purchase order; and

Pays Owner all losses, damages, expenses, costs and attorney's fees, including appellate proceedings, that Owner sustains because of a default by Principal under the contract/purchase order; and

Performs the guarantee of all work and materials furnished under the contract/purchase order for the time specified in the contract/purchase order; then this bond is void; otherwise it remains in full force.

Any action instituted by claimant under this bond for payment must be in accordance with the notice and time limitation provisions in Section 255.05(2), Florida Statutes.

Any changes in or under the contract/purchase order documents and compliance or noncompliance with any formalities connected with the contract /purchase order or the changes does not affect Surety's obligation under this bond.

Principal: BADGER METER, INC.

BY William R. A. Bergum

William R. A. Bergum
Vice President - General Counsel & Secretary

(SEAL)

BADGER METER, INC. CORPORATE SEAL 1905

(Print or Type Signature)

Surety: TRAVELERS CASUALTY AND SURETY COMPANY OF AMERICA

BY Cathy Hutson

Attorney-in-Fact Cathy Hutson

TRAVELERS CASUALTY AND SURETY COMPANY OF AMERICA HARTFORD, CONN.

(SEAL)

Ann Higgins

Florida Licensed Agent Ann Higgins, Non-Resident License #: P034911

Dated this 19th day of November, 2024.

THE BOND MUST BE ATTACHED TO THIS FORM

TRAVELERS

Travelers Casualty and Surety Company of America
Travelers Casualty and Surety Company
St. Paul Fire and Marine Insurance Company
Farmington Casualty Company

POWER OF ATTORNEY

Travelers Casualty and Surety Company of America, Travelers Casualty and Surety Company, St. Paul Fire and Marine Insurance Company, and Farmington Casualty Company are corporations duly organized under the laws of the State of Connecticut (herein collectively called the "Companies"), and the Companies do hereby make, constitute and appoint Cathy Hutson of Milwaukee, WI, their true and lawful Attorney(s)-in-Fact to sign, execute, seal and acknowledge any and all bonds, recognizances, conditional undertakings and other writings obligatory in the nature thereof on behalf of the Companies in their business of guaranteeing the fidelity of persons, guaranteeing the performance of contracts and executing or guaranteeing bonds and undertakings required or permitted in any actions or proceedings allowed by law.

IN WITNESS WHEREOF, the Companies have caused this instrument to be signed, and their corporate seals to be hereto affixed, this **4th** day of **March, 2024**.

SEAL SEAL SEAL SEAL

State of Connecticut

City of Hartford ss.

By: _____
Bryce Grissom, Senior Vice President

On this the **4th** day of **March, 2024**, before me personally appeared **Bryce Grissom**, who acknowledged himself to be the Senior Vice President of each of the Companies, and that he, as such, being authorized so to do, executed the foregoing instrument for the purposes therein contained by signing on behalf of said Companies by himself as a duly authorized officer.

IN WITNESS WHEREOF, I hereunto set my hand and official seal.

My Commission expires the **30th** day of **June, 2026**

NOTARY PUBLIC

_____
Anna P. Nowik, Notary Public

This Power of Attorney is granted under and by the authority of the following resolutions adopted by the Boards of Directors of each of the Companies, which resolutions are now in full force and effect, reading as follows:

RESOLVED, that the Chairman, the President, any Vice Chairman, any Executive Vice President, any Senior Vice President, any Vice President, any Second Vice President, the Treasurer, any Assistant Treasurer, the Corporate Secretary or any Assistant Secretary may appoint Attorneys-in-Fact and Agents to act for and on behalf of the Company and may give such appointee such authority as his or her certificate of authority may prescribe to sign with the Company's name and seal with the Company's seal bonds, recognizances, contracts of indemnity, and other writings obligatory in the nature of a bond, recognizance, or conditional undertaking, and any of said officers or the Board of Directors at any time may remove any such appointee and revoke the power given him or her; and it is

FURTHER RESOLVED, that the Chairman, the President, any Vice Chairman, any Executive Vice President, any Senior Vice President or any Vice President may delegate all or any part of the foregoing authority to one or more officers or employees of this Company, provided that each such delegation is in writing and a copy thereof is filed in the office of the Secretary; and it is

FURTHER RESOLVED, that any bond, recognizance, contract of indemnity, or writing obligatory in the nature of a bond, recognizance, or conditional undertaking shall be valid and binding upon the Company when (a) signed by the President, any Vice Chairman, any Executive Vice President, any Senior Vice President or any Vice President, any Second Vice President, the Treasurer, any Assistant Treasurer, the Corporate Secretary or any Assistant Secretary and duly attested and sealed with the Company's seal by a Secretary or Assistant Secretary, or (b) duly executed (under seal, if required) by one or more Attorneys-in-Fact and Agents pursuant to the power prescribed in his or her certificate or their certificates of authority or by one or more Company officers pursuant to a written delegation of authority, and it is

FURTHER RESOLVED, that the signature of each of the following officers: President, any Executive Vice President, any Senior Vice President, any Vice President, any Assistant Vice President, any Secretary, any Assistant Secretary, and the seal of the Company may be affixed by facsimile to any Power of Attorney or to any certificate relating thereto appointing Resident Vice Presidents, Resident Assistant Secretaries or Attorneys-in-Fact for purposes only of executing and attesting bonds and undertakings and other writings obligatory in the nature thereof, and any such Power of Attorney or certificate bearing such facsimile signature or facsimile seal shall be valid and binding upon the Company and any such power so executed and certified by such facsimile signature and facsimile seal shall be valid and binding on the Company in the future with respect to any bond or understanding to which it is attached.

I, **Kevin E. Hughes**, the undersigned, Assistant Secretary of each of the Companies, do hereby certify that the above and foregoing is a true and correct copy of the Power of Attorney executed by said Companies, which remains in full force and effect.

Dated this November 19, 2024

SEAL SEAL SEAL SEAL

_____
Kevin E. Hughes, Assistant Secretary

To verify the authenticity of this Power of Attorney, please call us at 1-800-421-3880.
Please refer to the above-named Attorney(s)-in-Fact and the details of the bond to which this Power of Attorney is attached.

FINAL PAYMENT AFFIDAVIT

Before me, the undersigned authority, personally appeared _____(Contractor) who was sworn and says that he is the Contractor who has contracted with the City of Pinellas Park (Owner) to provide improvements on real property in Pinellas County, Florida, described as:_____

_____

The Contractor has completed construction in accordance with the contract documents. The balance of the contract price of **$**_____ is now due to the Contractor. The Contractor has not signed, pledged or hypothecated the contract, or any part of it, or any payment due or to become due under it, and has not assigned any of the Contractor's lien rights resulting from the contract. The Contractor has executed no security agreement for any part of the material furnished under the contract. All lienors under the above-described contract have been paid in full, except the undersigned Contractor.

_____ **(CORPORATE SEAL)**

Contractor

STATE OF _____

COUNTY OF _____

The foregoing instrument was acknowledged before me by means of ☐ physical presence or ☐ online

notarization, this _____day of _____, 2024, by _____,
(Name of person acknowledging)

Who is personally known to me or who has produced _____
(Type of Identification)

as identification.

NOTARY PUBLIC_____ **(NOTARY SEAL)**

MY COMMISSION EXPIRES_____

SAMPLE

FINAL RELEASE

KNOW ALL MEN BY THESE PRESENTS that_____,(Contractor) County of_____, City of _____, and State of_____, do hereby acknowledge that (Contractor), _____ _____, this day has had and received of and from the (Owner) the sum of One Dollar ($1.00) and other valuable consideration in full satisfaction and payment of all sums of money owing, payable and belonging to the Contractor by any means whatsoever, for or on account of a certain agreement between the said Owner and Contractor dated _____/_____/2024.

NOW THEREFORE, the said Contractor for myself, my heirs, executors and administrators (for itself, its successors and assigns) do by these presents remise, release, quitclaim and forever discharge the said Owner its successors and assigns, of and from all claims and demands arising from or in connection with the said agreement dated / /2024, and all manner of action and actions, cause and causes of action and actions, suits, debts, dues, sums and sums of money, accounts, reckonings, bonds, bills, specialties, covenants, contracts, agreements, promises, variances, damages, judgments, extents, executions, claims and demand, whatsoever in law or equity, or otherwise which against the said Owner its heirs, successors or assigns, the Contractor its heirs, successors and assigns ever had, now have, or which (I, my heirs, executors, or administrators)(it, its successors and assigns) hereafter can, shall or may have, for, upon or by reason of any matter cause or thing whatsoever, from the beginning of the world to the date of these presents.

_____ **(CORPORATE SEAL)**

Contractor

STATE OF FLORIDA

COUNTY OF PINELLAS

The foregoing instrument was acknowledged before me by means of ☐ physical presence or ☐ online

notarization, this _____day of _____, 2024, by _____,
(Name of person acknowledging)

Who is personally known to me or who has produced _____as identification.
(Type of Identification)

NOTARY PUBLIC_____ **(NOTARY SEAL)**

MY COMMISSION EXPIRES_____

SAMPLE

STATEMENT OF SURETY

In accordance with the provisions of the contract dated _____, 2024, between the City of Pinellas Park (Owner) of _____ and _____ _____ (Contractor) of _____, the _____ _____ (Surety) Surety on the bond of Contractor after a careful examination of the books and records of said Contractor or after receipt of an affidavit from Contractor, which examination or affidavit satisfies this company that all claims for labor and materials have been satisfactorily settled, hereby approves of final payment of the said _____ (Contractor), Contractor, and by these presents witnessed that payment to the Contractor of the final estimates shall not relieve the Surety Company of any of its obligations to the Owner, as set forth in the said Surety Company's Bond.

IN WITNESSETH WHEREOF, the said Surety Company has hereunto set its hand and seal

this _____ day of _____, 2024.

Attest:_____ _____

(SEAL)

_____ By_____

(President, Vice President)

Note: This statement, if executed by any person other than the President or Vice President of the Company, must be accompanied by a certificate of even date showing authority conferred upon the person so signing to execute such instruments on behalf of the Company represented.

NOTE: TO BE COMPLETED BY THE CONTRACTOR'S SURETY COMPANY AND SUBMITTED WITH CONTRACTOR'S FINAL INVOICE

SAMPLE

CITY OF PINELLAS PARK, FLORIDA
CONSTRUCTION CONTRACT NO. 24.001
AMI WATER METERS

This Agreement dated this_____day of _____, 2024, by and between the **City of Pinellas Park, Florida**, a municipal corporation, hereinafter called the Owner, and **Badger Meter, Inc.** a corporation organized and existing under the laws of the State of **Wisconsin** and hereinafter called the Contractor. WITNESSETH, the Owner and the Contractor, for the consideration stated herein, agree as follows:

ARTICLE I: SCOPE OF WORK

The Contractor shall perform all required work as set forth in the Statement of Work attached in Attachment A and shall provide and furnish all labor, materials, necessary tools, expendable equipment, and all utility and transportation service required to complete the construction all in strict compliance with the plans and specifications, including any and all Addenda, and together with all contract Documents hereinafter enumerated and made a part thereof.

It is understood and agreed that said labor, materials, tools, equipment, and service shall be furnished and said work performed and completed subject to the satisfaction of the City and subject to the final approval of the City and its authorized representative.

ARTICLE II: CONTRACT PRICE

The Owner shall pay the Contractor as just compensation for the performance of this Agreement, subject to any addition or deductions as provided in the Contract Documents, the following price:

The total Contract amount is **Nine Million Two Hundred Seventy-Nine Thousand Six Hundred Fifty-Seven Dollars and Fifty-Nine Cents ($9,279,657.59)**, payable in accordance with the applicable provisions of the Contract Documents and as set forth on Attachment C. Badger Meter reserves the right to increase pricing for all its products in accordance with the Consumer Price Index (CPI) for All Urban Consumers, with a base index from April 2024, on an annual basis beginning twenty-four (24) months after the effective date of this Agreement, not to exceed three percent (3%) over the immediately preceding year.

ARTICLE III: CONDITIONS

a) All decisions of the City Engineer and/or designee as to the true construction and meaning of the drawings and specifications shall be final. Contractor shall conform to and abide by any additional specifications, drawings, or explanations furnished by the Engineer/Designee to illustrate the work to be done.

b) Should the Contractor be delayed in his work by the Owner, then Owner shall owe the Contractor therefore only for an extension of time for completion equal to the delay caused and then only if a written claim for delay is made to the Owner within seven (7) business days from the time of the beginning of the delay.

c) Contractor shall at all times supply adequate tools, appliances and equipment, a sufficient number of properly skilled workmen, and a sufficient amount of materials and supplies of proper quality to efficiently and promptly prosecute said work, and shall promptly pay for all material purchased and shall pay all workmen.

d) Contractor shall, as often as requested by the Owner, furnish a sworn statement showing all parties who furnish labor or materials to the Contractor, with their names and addresses and the amount due or to become due each. Like statement may be required from any subcontractor of the Contractor.

ARTICLE IV: INSPECTION BY CONTRACTOR

The undersigned Contractor agrees that he has carefully inspected all Contract Documents and is familiar with and will adhere to them.

ARTICLE V: COMPLIANCE WITH PUBLIC RECORDS LAWS

The City is a public agency subject to Chapter 119, Florida Statutes, as amended from time to time. To the extent Contractor is a Contractor acting on behalf of the City pursuant to Section 119.0701, Florida Statutes, as amended from time to time, Contractor must comply with all public records laws in accordance with Chapter 119, Florida Statutes. In accordance with state law, Contractor agrees to:

a) Keep and maintain all records that ordinarily and necessarily would be required by the City in order to perform the services.

b) Upon request from the City's custodian of public records, provide the City with a copy of the requested records or allow the records to be inspected or copies within a reasonable time at a cost that does not exceed the costs provided in Chapter 119, Florida Statutes, or as otherwise provided by law.

c) Ensure that public records that are exempt, or confidential and exempt, from public records disclosure are not disclosed except as authorized by law for the duration of the Agreement term and following completion of the Agreement if the Contractor does not transfer the records to the City.

d) Upon completion of the services within this Agreement, at no cost, either transfer to the City all public records in possession of the Contractor or keep and maintain public records required by the City to perform the services. If the Contractor transfers all public records to the City upon completion of the services, the Contractor must destroy any duplicate public records that are exempt, or confidential and exempt, from public records disclosure requirements. If the Contractor keeps and maintains public records upon completion of the services, the Contractor must meet all applicable requirements for retaining public records. All records stored electronically must be provided to the City, upon request from the City's custodian of public records, in a format that is compatible with the information technology systems of the City.

e) **IT IS CONTRACTOR'S DUTY TO PROVIDE PUBLIC RECORDS RELATING TO THIS CONTRACT PURSUANT TO CHAPTER 119, FLORIDA STATUTES; IF THE CONTRACTOR HAS ANY QUESTIONS RELATED TO THIS DUTY, THE CONTRACTOR SHALL CONTACT THE CUSTODIAN OF PUBLIC RECORDS AT:**

City of Pinellas Park City Clerk's Office
P.O. Box 1100
Pinellas Park, Florida 33780-1100
727.369.0616
CityClerk@Pinellas-Park.com

If Contractor does not comply with this section, the City will enforce the Agreement provisions in accordance herewith and may unilaterally cancel this Agreement in accordance with state law.

ARTICLE VI: COMPONENT PARTS OF CONTRACT

This Contract consists of the following Contract Documents, all of which are hereby made a part hereof and are incorporated herein by reference and all of which are familiar to the Contractor:

Notice of Bid, Information for Bidders, General Conditions, Insurance Requirements, Hold Harmless Agreement, Bid Form(s), Acknowledgement of Addendum, E-Verify Requirements, Public Construction Bond, Public Entity Crime Statement, Contractor's Affidavit, Contractor's Final Release of Lien, Statement of Surety, RPF 24.001 AMI Water Meters, Pinellas Park Agreement, Badger Meter, Inc. Statement of Work (Attachment A), Badger Meter Warranty Documentation (Attachment B), Pricing Details, Cellular Coverage Analysis, Badger Meter Beacon SAAS Managed Solution Master Agreement, Badger Meter, Inc. Proposal Response and Badger Meter Documentation.

ARTICLE VII: CONTRACTOR'S AFFIDAVIT

When all work contemplated by the Contract has been completed, inspected and approved by the City or its duly authorized agent, the Contractor shall furnish to the City the Contractor's Affidavit in a form approved by the City. Release(s) of Lien may also be required by the City.

ARTICLE VIII: GOVERNING LAW AND VENUE

The laws of the State of Florida govern the rights, obligations, and remedies of the parties under this Contract. The exclusive venues for any legal or judicial proceedings in conjunction with the enforcement or interpretation of this Contract are the Circuit Court of the Sixth Judicial Circuit In and For Pinellas County, Florida, and the United States District Court For The Middle District of Florida.

ARTICLE IX: SEVERABILITY: WAIVER OF PROVISIONS

Any provision in this Agreement that is prohibited or unenforceable in any jurisdiction will, as to that jurisdiction, be ineffective to the extent of such prohibition or unenforceability without invalidating the remaining provisions hereof or affecting the validity or enforceability of such provisions in any other jurisdiction. The non-enforcement of any provision by either party will not constitute a waiver of that provision nor will it affect the enforceability of that provision or of the remainder of this Agreement.

ARTICLE X: INTERPRETATION

In the event of an ambiguity or a conflict between or among any of the provisions of the Contract Documents, then the interpretation, construction, or provision which is most favorable to the Owner shall be deemed to have superseded and will take precedence over any other construction, interpretation and/or the other provision or provisions in conflict therewith, and shall be binding upon the parties in the same manner as if there were no such ambiguity and/or conflicting provision or

provisions.

The titles and headings contained in this Agreement are for reference purposes only and will not in any way affect the meaning or interpretation of this Agreement. All personal pronouns used in this Agreement include the other gender, and the singular includes the plural, and vice versa, unless the context otherwise requires. Terms such as "herein" refer to this Agreement as a whole and not to any particular sentence, paragraph, or section where they appear, unless the context otherwise requires. Whenever reference is made to a section or article of this Agreement, such reference is to the section or article as a whole, including all subsections thereof, unless the reference is made to a particular subsection or subparagraph of such section or article. Any reference to "days" means calendar days, unless otherwise expressly stated.

ARTICLE XI: NOTICE

Whenever either party desires or is required under this Agreement to give notice to any other party, it must be given by written notice, sent by registered United States mail, with return receipt requested, addressed to the party for whom it is intended at the following addresses. Notice will be deemed received by the party for whom it is intended after the USPS certified mail process is completed.

CITY
City of Pinellas Park
Attn: City Manager
P.O. Box 1100
Pinellas Park, Florida 33780-1100

With a copy to the City Attorney at:
James Denhardt, City Attorney
Law Offices of James W. Denhardt
2700 First Avenue North
St. Petersburg, Florida 33713-8724

CONTRACTOR
Badger Meter, Inc.
Attn: Badger Meter Legal Department
4545 West Brown Deer Road
Milwaukee, WI 53223
800.876.3837

ARTICLE XII: TERM OF AGREEMENT

The Contractor further agrees upon the same considerations and inspections herein above enumerated, to commence work within ten **(10)** calendar days after date of Notice to Proceed.

A. Initial Term.

The term of this Agreement shall commence on the effective date as follows or until termination of the Agreement, whichever occurs first:

i. Proof of Concept services shall commence upon notice to proceed; all installation and operational functionality shall be completed within **one hundred and eighty (180)** calendar days after start date as stipulated in the notice to proceed.

ii. Advanced Metering Infrastructure Implementation services shall commence upon successful completion and The City of Pinellas Park acceptance of Proof of Concept, and upon notice to proceed; and continue for an initial **three hundred and sixty-five (365)** calendar days period.

iii. System Support Services through the BEACON Master Agreement shall commence upon successful communication of the first ORION endpoint to BEACON installed under the project and will continue for an initial ten (10) year period.

B. Term Extension.

The Parties may extend the term of this Agreement for one (1) additional ten (10) year period(s) pursuant to the same terms, conditions, and pricing set forth in the Agreement by mutually executing an amendment to this Agreement, as provided herein. The extension shall be exercised only if all prices, terms and conditions remain the same and approval is granted by the County Administrator or Director of Administrative Services.

ARTICLE XIII: NO THIRD PARTY BENEFICIARY

The Parties hereto acknowledge and agree that there are no third party beneficiaries to this Agreement. Persons or entities not a party to this Agreement may not claim any benefit from this Agreement or as third party beneficiaries hereto.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed as of the day and year first above written, in **five (5) counterparts**, each of which shall for all purposes be deemed an original.

Badger Meter, Inc.

By _____
Signature of Authorized Officer

Kim K. Stoll
Type or Print Signature

ATTEST:

_____
Contractor's Attestor

Rachel J. Meyer
Type or Print Signature

BADGER METER INC CORPORATE SEAL 1905 WISCONSIN

_____
Corporate Seal

City of Pinellas Park
Pinellas County, Florida

CITY OF PINELLAS PARK SEAL FLORIDA

By _____
Sandra L. Bradbury, Mayor

ATTEST:

By _____
Jennifer R. Carfagno, City Clerk, MMC

Approved as to form and correctness:

_____
City Attorney
City of Pinellas Park

11/26/2024
_____
City Council Approved

ATTACHMENT A

BADGER METER STATEMENT OF WORK

AMI WATER METERS

RFP 24.001

Turnkey Project Approach and Proposed Statement of Work
City of Pinellas Park

Prepared By: Badger Meter, Inc – Turnkey Operations (TK-Ops)

Badger Meter

Prepared: Monday, April 15, 2024
Revised: Tuesday, July 23, 2024

All information herein is proprietary to Badger Meter, Inc. and is disclosed in confidence to recipient only for evaluation purposes approved in advance by Badger Meter, Inc. Recipient agrees not to (1) use such information for any other purpose, (2) disclose any of such information to others, (3) reproduce this document in whole or part and (4) transfer such information to other documentation.

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Document Revision Log

Revision	Summary	Revision By	Date
1.0	Original Document Creation	J. Morrison	04.15.2024
2.0	• Revised scope to remove reclaimed meters smaller than 2” • Revised warehousing plan to reflect space provided by the utility and conex containers furnished by PVI • Added procedural language for scratch/magnet testing of service lines • Added assumptions that Pinellas Park will drill lids as may be possible prior to mobilization in a given route	J. Morrison	07.23.2024

1 Introduction

1.1 Document Introduction

This document is a preliminary project plan which constitutes the Statement of Work (SOW) that will be undertaken by Badger Meter's Turnkey Operations (TK-Ops) team to deliver the services and deliverables relating to City of Pinellas Park (the "City") as released and dated March 18, 2024. This document has been prepared by Badger Meter based on the aforementioned RFP document and seven Q&A documents that have been provided to Badger Meter as of Friday, April 12, 2024.

This document has been revised based on a series of post-award requests by the City as enumerated in the revision log.

This document will discuss the project process that Badger Meter proposes, requirements that may exist, project assumptions, processes and procedures, preliminary timelines, and other pertinent information to demonstrate the approach to be undertaken and Badger Meter's understanding of the project.

1.2 Document Definitions

In addition to the definitions listed below, any terms defined throughout this document shall have the meaning as defined therein.

Term	Definition
AMI	Advanced Metering Infrastructure – the system to be deployed as part of the project to collect, communicate, and analyze the data from water meters and other devices under the umbrella of the system
Billing Vendor/CIS System	The provider of customer information (CIS) and billing software used by the City, in this case Tyler Technologies – Munis
Business Day	City of Pinellas Park working days, Monday to Friday, excluding Federal or City holidays.
Calendar Day	One day (24 hours) as measured from one midnight to the next midnight on a given date.
Cycle	A geographic grouping of routes within the City's service territory. One cycle comprises multiple routes
Definition of Time	For all milestone and schedule time scales, calendar days will be used to facilitate use across project scheduling software. For all expectations of communication or responsiveness, business days are used.

IDA	Initial Deployment Area. This term may be used within this document interchangeably with the phrase 'proof of concept'. A small, defined set of accounts on which product will be installed for evaluative purposes.
IP	Installation Partner – a subcontractor retained by Badger Meter to perform installation work relating to the project. Badger Meter thoroughly vets its installation partners in order to provide the highest possible degree of service to utility customers.
MMCO	Mass Meter Change Out – a file generated by the installation partner's WOMS (work order management system – see below) to update the City's operational and billing software with new meter information. Typically, although not exclusively, transmitted as a flat file or .csv.
NTP	Notice To Proceed – a formal document that forms one of the contract milestones and directs Badger Meter to begin performing work.
PVI	Pedal Valves, Inc – the installation partner selected by Badger Meter for this project.
RFP	Request for Proposals – used herein as shorthand for the elements released by the City to request these proposals for services.
Route	A group of accounts in close proximity to one another within a cycle. Generally, these routes are created to support meter reading operations. Installations on the project will typically proceed route-by-route for coordination and sequencing purposes.
RTU	Return To Utility – a reporting status that indicates an installation has been removed from the project scope of Badger Meter and its IP. RTU status can be triggered by (but is not limited to) the following: customer refusal, expiration of the UIR designation period, diversion/tamper identified, etc. No further work will be attempted by Badger Meter or its IP on an account that has been set to RTU and will be removed from the project scope.
SOW	Statement of Work – the work to be performed by Badger Meter and/or its partners as specified in this document.
UIR	Utility Intervention Required – a reporting status that indicates action from the utility and/or homeowner is required to remove obstructions and/or resolve issues to permit the successful installation of a new meter. Accounts designated this status by Badger Meter will remain as a UIR for ten (10) business days, at which point this account will automatically be designated an RTU.

WOMS	Work Order Management System – the software platform used by the installation partner to plan and manage the work on the project. the City will have access to the WOMS and will be able to view completion progress as well as installation information for accounts (including photos).

1.3 Turnkey Project Background

Badger Meter has a history of successful project delivery for utilities that encompasses both advanced meter reading ("AMR") and AMI projects. This history dates back to the initial emergence of these technologies, as Badger Meter has been an industry leader in the development and deployment of both AMR and AMI. To date, Badger Meter has delivered turnkey deployments to utility customers that range in size from only a few hundred services to over 400,000. A point of pride in this history is that Badger Meter has delivered all its turnkey deployments within the contracted time and budget, and not once has invoked Force Majeure.

To maintain this history of project success and deliver this proposed project, Badger Meter uses a customer-focused project management methodology that draws on principles in the Project Management Institute standard for Project Management[1]. Due to the nature of AMI deployments, no one single management framework is used. Instead, Badger Meter's TK-Ops has developed a bespoke project approach that incorporates traditional (or waterfall) project management, agile, lean, and iterative project management to ensure a successful deployment for its customers.

This project forms but one part of Badger Meter's ongoing relationship with the City. Historical results have shown that utilities who engage in long-term strategic partnerships beyond a single project effort are better able to realize success from their AMI/AMR project due to the heightened level of understanding between the utility and its solution supplier.

As a result of these methods and practices, Badger Meter has helped utilities worldwide realize lasting and transformative benefits through AMI projects.

1.4 Introduction to Products and Projects

Badger Meter will deploy its BEACON® Software as a Service (SaaS) with ORION® Cellular endpoints in an implementation that will cover approximately 16,255 services across the City's service territory. Based on Badger Meter's experience managing deployments of comparable size, and in compliance with the City's expectations laid out in RFP event, a project duration of approximately 18 months (540 calendar days[2]) is estimated. This timeline includes an IDA prior to full deployment to evaluate the products supplied and procedures implemented, as well as an

[1] Standard ANSI/PMI 99-001-2021

[2] For purposes of estimation, 30-day months are used. Actual duration may vary based on timing of notice to proceed.

allotment of time for pre-construction planning and integration to be performed. Section 3.0 details this proposed project timeline in greater detail.

Badger Meter will supply the following equipment in support of the project. This list does not comprise an exhaustive list of all equipment that may be supplied as part of Badger Meter's solution, but rather provides an overview of the scope of the proposal. Products marked with a quantity of zero (0) are alternates at this time based on the requested scope reduction in July 2024 to remove reclaimed services smaller than 2" from the project scope. For detailed specifications on these products refer to the included Badger Meter product documentation.

Table 1: High-Level Overview of Badger Meter Products

Product	Approximate Quantity (IDA)	Approximate Quantity (Full Deployment)	Approximate Total
M25 5/8'' Disc Meter	50	14,956	15,006
M55 1'' Disc Meter	20	653	673
M120 1-1/2'' Disc Meter	8	102	110
M170 2'' Disc Meter	10	219	229
E-Series 3" Ultrasonic Meter	3	28	31
E-Series 4" Ultrasonic Meter	3	27	30
E-Series 6"x18" Ultrasonic Meter	3	23	26
E-Series 8"x20" Ultrasonic Meter	3	13	16
M25 5/8'' Disc Meter - Reclaimed	0	0	0
M55 1'' Disc Meter - Reclaimed	0	0	0
M120 1-1/2'' Disc Meter - Reclaimed	0	0	0
M170 2'' Disc Meter - Reclaimed	0	122	122

E-Series 3" Ultrasonic Meter - Reclaimed	0	1	1
E-Series 4" Ultrasonic Meter - Reclaimed	0	10	10
E-Series 6"x18" Ultrasonic Meter - Reclaimed	0	1	1
ORION Cellular C Endpoint	100	16,155	16,255

Badger Meter has chosen, via a rigorous evaluation process, to partner with PVI.

Badger Meter acknowledges the City's stated preference to reuse existing meter pit boxes and lids by drilling the lid whenever possible. This will be the principal plan of action for this project. During the preinstallation survey, an estimate will be generated of lids and boxes needing replacement. Badger Meter will procure on the City's behalf meter boxes and lids suitable for the project requirements. For more details on this process, consult Section 6.1 of this SOW.

By electing to use of the BEACON cellular solution, the City will realize time and cost savings over both the installation and life of the system as compared to a conventional fixed-network deployment, since no additional infrastructure (i.e. data collectors or gateways) need be installed or maintained over time. It is the experience of Badger Meter that one of the largest impediments to AMI project schedules can be the permitting process for installation of collectors/gateways on suitable vertical assets within the service territory. The BEACON cellular solution eliminates this schedule risk. Additionally, given the previously completed pilot with BEACON, early-stage system configuration is already complete for this solution, providing additional schedule savings.

As an additional benefit, the BEACON platform natively includes the EyeOnWater customer portal, which may be opted into at the City's discretion. If opted for, this value-adding portal will make usage information available to the City's customers via both a web interface and mobile application without any additional integration effort required.

Badger Meter's product offerings are not limited to AMI metering and endpoints. If the City elects to utilize Badger Meter's AMI system and BEACON platform, future expansion and scale is native and straightforward – including both growth accounts and potential add-on services such as water quality, leak detection, pressure monitoring, and now, remote telemetry units with software, all from the same manufacturer.

1.5 Project Objectives

Badger Meter and its IP are committed to helping the City realize its goals and the benefits of an AMI system. Accordingly, Badger Meter puts forth the following specific list of project objectives:

Table 2: Strategic Project Objectives Supporting Key Project Objectives

Badger Meter Strategic Project Objective
1. Timely installations
2. Timely communication
3. Support of Billing Integration
4. Marketing and Communications Planning
5. Robust Training Plan for the City staff

Each of these strategic objectives is detailed in the subsequent list.

Timeliness of Installations

- The project duration specified by the City will be 30-months (installation to complete before the end of 2026). In order to support that requirement while delivering this objective, Badger Meter's lead project manager will coordinate with the City's project manager(s) on projected deployment timelines and schedules to create the product ordering and supply schedule for the Project.
- The tentative schedule presented in the RFP indicated an IDA of at minimum two (2) months. Badger Meter's project team will provide consultative support in identifying the accounts to comprise this period and securing the products to support it.
- Final completion date(s) for all phases of the project will be commensurate with activity start date, which shall be defined by the date that a NTP is received and acknowledged by Badger Meter.

Timely Communication

- As prescribed in Section 5 of this SOW, a centralized digital project library shall be maintained. This can be maintained by the City if the utility wishes, or it can be maintained by Badger Meter and its IP. The project library shall allow for pull communication between the project parties and shall host project documentation and records.
- Refer to Section 1.6.1 for the mutual expectation of communication timeliness.

Billing Integration

- Badger Meter shall provide consultative support in the integration of the BEACON software to the City's Billing Vendor. For full details on this effort, refer to Section 7of this SOW.

Marketing and Communications Planning

- Badger Meter will leverage its extensive experience with AMI projects to assist with the marketing and communications elements of this project, building support and coalition among the City's customers.
- Elements of the plan may include a produced public-service announcement (PSA) video, web content (e.g., for FAQ pages), and printed materials such as door hangers, bill stuffers, and mailers.
- The plan itself is detailed in Section 6 of this SOW and meets or exceeds the industry standard for customer notification on AMI deployments.

Robust Training Plan for the City staff

- To build enthusiasm and awareness of the project among utility staff, a training plan is provided. The training provided will detail the various new functionalities that the BEACON platform brings, and for maximum applicability will be co-developed by Badger Meters and leadership from the City's relevant functional groups. The training plan will be detailed in Section 9 of this SOW.

1.6 Project Assumptions

Based on the information presented to Badger Meter, the following logical assumptions are made about project conditions and constraints that may occur. These assumptions are the foundation of both this SOW and any pricing provided by Badger Meter. Any subsequent changes to or failures of these assumptions may cause required alterations to either or both the project schedule and milestones under Section 3.0 or the pricing provided for the project[3].

1.6.1 General Project Assumptions

1. All resources assigned to the project by Badger Meter, IP, and the City will be suitably skilled and trained to perform the task(s) assigned to them within the expected timeframe. The expectation is that the City's technical and business staff are familiar with their present operations as they relate to the project's components.
2. The overall project management responsibility for the project, specifically coordination of service, deployment of product and integration rests with Badger Meter TK-Ops. The lead project manager assigned to this project will be Jenn Rittmann, PMP. Project managers and/or construction managers from IP will report through the lead project manager. The lead project manager will be supported in their management of the project by the project teams as detailed in Section 2 of this SOW.
3. The Badger Meter team will conduct the majority of their project work off-site. However, specific project activities (including but not limited to, the project kickoff event, training, and closeout event) will be performed in person. Additionally, the Badger Meter lead project manager shall visit the project site in person approximately quarterly unless otherwise agreed or warranted. During both the IDA and the full deployment phase of the project, full-time staff from IP will be on-site to manage the installation process.

[3] Changes to pricing and/or schedule will be administered per the change management plan in Section 8

4. Badger Meter has identified its project support team and intended subcontractors. At this time, Badger Meter does not anticipate additional third-party contractors will be required to successfully deliver Badger Meter's scope of work on this project. However, should such entities become necessary due to a change in scope or project conditions that would warrant it, Badger Meter will have the responsibility for the engagement and deliverables of such an entity.
5. Pricing for additional testing of new or removed meters is not included. Badger Meter provides certified test result files for all meters that it manufactures at the time of shipment. Should the City desire such additional testing, pricing for testing can be provided upon request.
6. Subject to scheduling constraints, all project-related meetings are expected to have representatives from the Badger Meter project team, the City, and any consultant(s) (if applicable).
7. As collaboration and effective communication is a key element of any successful project, the parties mutually agree that they will use good faith efforts to provide approvals and/or responses on key project artifacts that require them within five (5) business days. If a response within that time frame is not possible, the responding party shall provide a reasonable alternative timeline in which to provide a response. Such artifacts may include requests for information (RFI), change orders, pay requests, etc. On rare occasions due to other time constraints, a more urgent approval timeline may be necessary and will be clearly marked as such on the request. In such circumstances, the shorter duration shall take precedence unless the responding party indicates that a response in such a time frame is not possible. In that instance, the responding party shall provide a response within five (5) business days.

1.6.2 Assumed Project Conditions

1. The quantities and sizes of meters upon which this SOW is based are acknowledged as the best available estimate. Should the quantities encountered in the field differ, the unit prices for additional products shall remain as presented in the contractual schedule of values ("SOV"), subject to escalation as prescribed in the response to the RFP and/or pricing assumptions in the pricing pages submitted for the RFP (as applicable).
2. It is assumed that the City both maintains and will provide to Badger Meter the complete and accurate 911-registered address information for metered accounts. It is further assumed that this data will be provided at one time, prior to mobilization.
3. It is assumed that the route-read sequence and schedule, as well as blackout periods required for accounts will be provided prior to the installation schedule being finalized.
4. As of July 2024, the City has agreed to provide PVI access to and use of a storage area, located at 6201 80th Avenue, Pinellas Park, FL, 33781, at no cost. This space is assumed to be available not later than sixty (60) calendar days from the contract execution date. Line 103 of the SOV provides the monthly rate for PVI to outfit this site with up to four (4) conex containers, one (1) forklift, and warehouse operations or the anticipated duration of full deployment.

1.6.3 Installation Assumptions

1. The pricing for installation services that has been provided assumes that all meters that are to be exchanged are 'like-for-like', with the same lay length and size, and without major plumbing or excavation work necessary to accomplish the change. Should such work be required, the procedure for its approval shall be as described in Section 6.5.11 of this SOW.
2. Badger Meter will thoroughly examine the existing meter conditions prior to commencing installation work. Per the procedures set forth in Section 6, work will not proceed in situations where it is reasonable to believe that performing such work will lead to further damage to plumbing or infrastructure and the account will be designated UIR. Any damage caused by Badger Meter or IP while performing installations will be repaired by Badger Meter if the damage is directly the result of negligence. Damage resulting from latently defective infrastructure may be repaired at the provided hourly rate for plumbing repairs, if mutually agreed upon.
    - Badger Meter has included a recommended allowance for plumbing components and labor to assist in managing these repairs.
    2. Based on the City's stated preferences, it is assumed that lids will be reused-in-place whenever possible. The City permits Badger Meter and PVI to perform alterations (e.g. drilling, shaving, etc.) of lids to accommodate the installation of an endpoint and top nut.
        - If Badger Meter determines that a box or lid is damaged such as to prevent the lid from being reused or replaced, the account will be designated UIR for the City to replace the box or lid or direct Badger Meter to replace at the provided unit price.
            - If Badger Meter is directed to replace a box, the City permits Badger Meter and PVI to modify the box to accommodate the installation, if needed.
        - The City has indicated its plan to pre-drill lids in routes prior to PVI working in that route. If PVI encounters a lid that has not been pre-drilled, it is assumed that PVI is authorized to replace the lid and bill the replacement rates enumerated in the SOV without requesting case-by-case approvals from the City.
    3. The installation of any meter in an OSHA-defined confined space will require additional safety resources, billed at the provided hourly rate.
    4. All meters in the project scope are assumed to be in a City right-of-way or in a location to which the City is able to assist Badger Meter in obtaining access. As such, any landscaping impediments not placed by the City are assumed to be legal to remove/remediate without the need for extensive replacement.
        - To the extent commercially viable, Badger Meter and PVI will restore landscaping to its original appearance by replacing removed sod and dirt only. However, pricing is not included to procure or lay new sod or otherwise replant removed landscaping.
        - Any account where impeding landscaping originates from or encroaches onto private property will be designated as RTU. The extent of landscaping work

performed on private property will be strictly limited to the removal and replacement of sod/earth in the normal course of meter replacement.
    - For any account impeded by concrete, an area not to exceed 3' x 3' will be cut out for access to the meter box and repoured level to the existing surface. This limited concrete replacement work includes the use of sack concrete which shall be mixed onsite. Decorative, patterned, or other specialty concrete elements are not included.
5. The pricing for installation services assumes a logical sequence of routes and/or cycles is continuously available for work, and that work can be performed in a logical, efficient, and sequenced manner (exclusive of scheduled appointments, revisits, and completing utility-assisted accounts) as prescribed in Section 6. If for any reason beyond the control of Badger Meter, installations are not able to be performed in such a fashion, all work that is impacted and performed 'out of sequence' may be billed at the hourly time and materials rate provided until work can recommence in a logical and sequenced manner.
    - The proposal as furnished is based on a five (5) day work week, with daily operations conducted from 8:00 AM to 5:00 PM local time, unless otherwise agreed ("Business Hours"). However, it is assumed that in the event of lost workdays (e.g., due to weather delays), or to accommodate customer appointment requests, Saturday and/or evening work may be performed to accommodate.
    - Other than the City's and Federal holidays and/or weather delays, it is assumed that work will continue in a seamless fashion from initial mobilization. If work is substantially interrupted due to circumstances beyond the control of Badger Meter, a demobilization/remobilization fee may be assessed.
6. Installation services to be rendered will be managed and controlled via Trackpoint-NIMS ("NIMS"), which provides handheld device functionality, GPS coordinate collection, photograph capture capabilities, data management, and work order reporting.
    - Sub-Meter GPS coordinates are included in Badger Meter's proposal, but will be captured by a separate team due to the specialty equipment required. As such, these coordinates may not be collected contemporaneously with installation.
    - While the phrase sub-meter GPS is used, and reasonable commercial efforts will be made to collect at this accuracy, some accounts may still collect at +/- 1 meter. This is due to the impact that atmospheric conditions, multipath, and satellite geometry can have on GPS coordinate capture.
    - NIMS will also capture information on pipe type investigation, including photos of the scratch and/or magnet test.
        - Pipe type investigation shall be limited only to the portion of the pipe readily accessible within the meter pit. No excavation or potholing beyond the meter pit will be performed. As such, Badger Meter cannot guarantee that there are no changes to pipe type between the point of investigation and the end of the line.

- Pipe type investigation will be performed at the time of meter exchange. If the investigation is directed to be performed at another time, the pricing at line 89 of the SOV will apply.
- Scratch and/or magnet testing will be conducted in accordance with AWWA procedures for same.

7. Removed meters, endpoints and other items that may be agreed upon (the "Removed Materials") will remain the property of the City. PVI will quarantine the Removed Materials within the project storage area for a period not to exceed thirty (30) calendar days. If the City requires storage of the Removed Materials for longer durations, Badger Meter may request the City, at its sole cost, to move the Removed Materials to a separate area within fourteen (14) calendar days if the storage of such Removed Materials in the project storage area begins to impede on PVI's normal operations.
8. In accordance with the installation practices set forth in Section 6 of this SOW, PVI will make good-faith efforts to locate an external spigot/hose bib/faucet to flush air and sediment from the water line after a meter exchange. If such an exterior tap is not available to the installer, or if the account's water is to be left off, Badger Meter and PVI are freed from any liability for damage caused to resident appliances/fittings caused by sediment that cannot be flushed from the line.
9. Based on information released by the City to-date, it is assumed that the majority of installations will be performed on residential streets. Traffic cones will be deployed to the front and rear of a vehicle that is parked on the residential street during the installation. All installation vehicles will follow parking regulations and posted signs. In the event that an account is identified in the preinstallation survey as requiring additional traffic control procedures, these plans will be mutually developed at the time of identification.

1.6.4 Customer Contact and Utility Assistance Assumptions

1. It is assumed that customer contact information will be provided no later than thirty (30) days prior to the earliest date a customer would need to be notified.
    - One pre-installation mailer will be sent per account, approximately one (1) week prior to that account being dispatched.
    - For commercial accounts, the preinstallation mailer will include instructions to contact PVI to schedule an appointment.
    - A post-installation door hanger will be left after a completed installation with common questions and a follow-up number for issues.
2. PVI will operate a dedicated contact phone number during the project for the City's customers. Customer calls to this number will be fielded by a PVI employee local to the project, with 24-hour availability. Calls or messages to this number will be acknowledged within thirty (30) minutes. A physical response, when warranted, will be provided within a further thirty (30) minutes (net one hour) during Business Hours and a further one (1) hour outside of Business Hours (net 90 minutes).
3. It is assumed that less than one (1) percent of residential (<2") meters are either 'hard to access' or would otherwise require an appointment. Hard to access meters could include, for example, meters locked behind gates, indoor-set meters, or meters obstructed by vehicles whose owners are seasonal residents and not available to provide access.

- It is assumed that the City will provide keys or access assistance to locked gates where possible.

4. The UIR process exists to identify and remediate accounts where conditions prevent an installation being completed. Accounts that cannot be installed by PVI will be designated accordingly and the City will be notified of the designation. Examples of situations that may cause a UIR designation include: the customer contact plan has been completed but no appointment can be confirmed, a customer refusal of installation, damaged plumbing where PVI determines a meter exchange would risk additional damage, a hazardous condition, or other factors as further described in Section 6 of this SOW.
    - The City will address and assist with any account designated as UIR within ten (10) business days of the request.
    - Accounts which are not addressed within this time frame, or accounts where it is not possible to resolve the UIR situation within an appropriate amount of time will be designated as RTU by Badger Meter and are removed from the project scope.
    - Pricing allows for up to five percent (5%) of the total accounts to be designated as RTU at no additional cost. For accounts designated as RTU in excess of 5%, the applicable unit installation rate will be charged, less a fifteen percent (15%) discount, to cover the labor costs of the attempts made.
5. Pricing includes revisits to accounts post-installation acceptance of up to one percent (1%) to troubleshoot non-responsive meters and modules. Any revisits to accepted accounts in excess of 1% that are, upon review, found to not be a defective installation will be billed at the provided hourly rate.

1.6.5 Project Integration Assumptions

1. To facilitate the requisite integration work and BEACON onboarding, the following requirements must be met by the City.
    - A project purchase order (PO) of appropriate value must be prepared and provided to Badger Meter's project manager.
    - If not included in the PO, a formal NTP, must be provided that specifies the project start date.
    - The BEACON onboarding information form must be complete and provided to Badger Meter
    - At a minimum, 10-20 meters and endpoints must be installed.[4]
2. The process, responsiveness, scope of specific services, and general expectations of software interface design, build, and testing are detailed in Section 7 of this SOW.
3. Integration pricing provided in this SOW and as expanded upon in Section 7 does not include any costs assessed by any of the City's vendors (lump sum, per meter, and/or otherwise) that may be incurred to support integrating the Billing Vendor and/or BEACON

[4] Typically, these are installed at the homes of utility employees so as to facilitate follow-up visits or testing. If the utility has an active BEACON portfolio and has ORION endpoints installed, this requirement can be eliminated upon discussion with the Badger Meter project manager.

with the City's system(s). Any fees assessed to Badger Meter or its partners for such integration will be passed through to the City.

2 Project Resources & Stakeholders

Badger Meter proposes the following project team to support the AMI deployment for the City. Biographical information for key personnel may be found in Section 2.4 and resumes for all personnel are appended in our Resume section of the response.

2.1 Badger Meter

Table 3: Badger Meter Proposed Project Team

Contact	Title	Department
Shauna Griffin	Sr. Director, Utility Sales	Sales
Colin Middaugh	Regional Sales Manager (East)	Sales
Mark McMillen	Sr. Manager - Utility Solutions	Sales
Mark Wright	Sales Manager	Sales
Patrick Williamson, PMP	Solution Architect	Sales
Brad Lowe	Account Manager	Sales
Jessica O'Malley	Director, Turnkey Operations	TK-Ops
Jack Morrison, PMP	Manager, Turnkey Operations	TK-Ops
Jenn Rittmann, PMP	Lead Project Manager	TK-Ops
Joe Lucia	Manager, Field Sales Support	FSSS
Bradley Pace	Field Sales Support Specialist	FSSS
Rachel Meyer	Contract Manager	Proposals
Matthew Schuette	Manager, Technical Support	Technical Support
Steven Thompson	Strategic Software Manager	Software

2.1.1 Apportionment of Badger Meter Team Responsibilities

The project team from Badger Meter will be cross-functional in nature, supporting the City's project as a unit as follows:

Project Sponsors include the Sr. Director, Utility Sales, the Regional Sales Manager, the Sales Manager, and the Director of Turnkey Operations. They are accountable for the overall success of the project and the overall experience of the City.

The **Utility Solutions Team** includes the Sr. Manager of Utility Solutions, the Sales Manager, the Solution Architect, and the Account Manager. Generally, this team will assist the City in their specification and selection of elements of the AMI solution and will ensure that the solution as deployed meets or exceeds the customer's expectations.

The Turnkey Operations (**TK-Ops)** team includes the TK-Ops manager, the lead project manager, and the associate project manager. The lead project manager will be the City's *primary point of contact* during the project and will interface with other elements of the Badger Meter team. The lead project manager is responsible for managing the delivery of this SOW. The TK-Ops manager will support the lead project manager, assist in resolving issues that may arise, coordinate interdepartmental responses, and ensure best-in-class customer support. The associate project manager is responsible for assisting the lead project manager with project administration, including for example monthly invoicing and schedule updates.

The **Field Services Sales Support (FSSS)** team consists of the Field Sales Support Specialist, Supervisor, and Manager, and works closely with the TK-Ops team to deliver the project goals and ensure a smooth operational transition for the City to AMI by conducting training sessions and facilitating technical discussion.

The **Software Integration** team consists of the BEACON Interface Analyst, the Strategic Software Manager, the Solution Architect, and the Badger Meter lead project manager. These individuals will work with the City and the Billing Vendor, to define and deploy BEACON software billing integrations as prescribed in Section 7.

The **Contract Management** team consists of the contract manager, the TK-Ops manager, the lead project manager, the account manager, and the sales manager. Their role is to ensure that the deliverables of this SOW and the objectives of the project are met, and that any changes to the contract that may be required are administered expediently and accurately.

The **Material Coordination** team consists of the Sr. Manager of Customer Care, the lead project manager, and the account manager. These individuals ensure that all products furnished by Badger Meter are available, ordered, and invoiced in an appropriate window of timeliness.

2.2 Installation Partner

Badger Meter's best practice for delivering turnkey projects includes a partnership with an experienced installation partner who will be the responsible entity for certain elements of the project. The installation partner selected for this project is PVI, as defined previously.

PVI will employ appropriate full-time onsite project staff to support their installation crews and execute the daily logistical management of the project installation and inventory, as well as to supervise and coordinate the meter installation technicians. However, there is more to an AMI deployment than the actual installation. As part of their services to the City, the installation partner will capture accurate project change-out data through their WOMS, NIMS. To provide continuity of data and simplicity of access to the City, all installation data, including work order status, route saturation, installation photographs, work schedules, and last read before change-out will be available to the City via this platform. Additionally, PVI will perform installation data quality control as specified in Section 4.2 of this document to ensure that only high-quality data is passed to the City. Most importantly, PVI will perform their tasks on this project without interfering with the City's ability to conduct meter reading and billing operations during the project period.

2.2.1 Installation Partner Project Teams

Table 4: Installation Partner Proposed Project Teams

Contact	Title	Department	Partner
Robby Gilbert	Vice President	Executive	PVI
Andrew Suffrin	Director, Sales	Sales	PVI
Jason Wilkie	VP – Operations & Safety Manager	Construction	PVI
Chad Nuccio	Construction Manager	Construction	PVI
Donnie Matthews	IT and Quality Manager	Quality	PVI

2.3 Proposed Team Organization Chart

As is evident from the organization chart below, the City will be well supported by Badger Meter and its IP. Badger Meter's Project Manager will coordinate directly with the City's project manager and will supervise the project's operations through the safety manager, installation manager, and quality manager. Badger Meter's Contract Manager, Integration Lead, Lead Trainer, and Solution Architect will report through the lead project manager. Additionally, and characteristic of Badger Meter's approach to this project as a partnership, the extended Badger Meter sales team will continue to liaise with and support the City's executive leadership to ensure the solution delivered by the Project Team is exceeding the City's expectations.

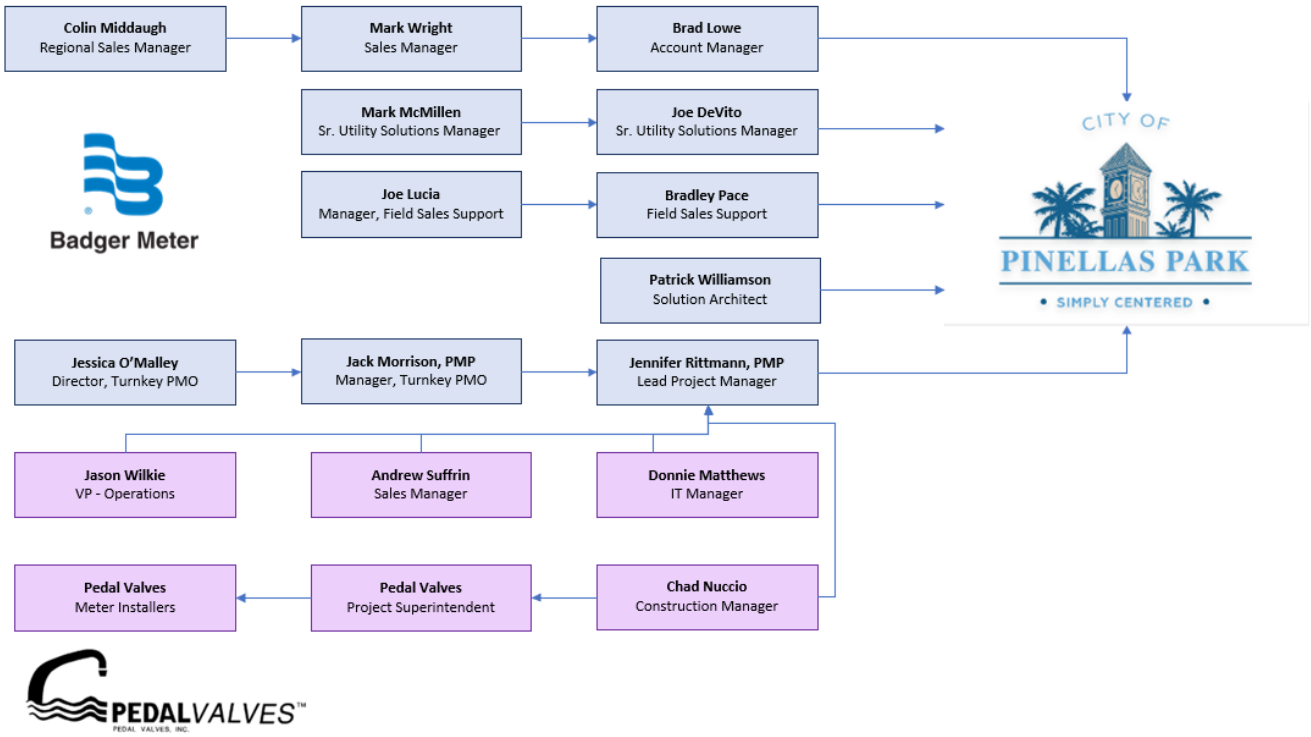


Figure 1: Proposed Team Organizational Chart

2.4 Key Team Members

Pursuant to RFP, the following roles are specifically identified as key personnel. The individuals filling these roles are identified here with short biographies. Full resumes for these individuals are included in the Resumes section of this proposal.

Program Manager: Jack Morrison, PMP – Badger Meter

As a manager of the turnkey operations group at Badger Meter, Jack leverages years of project management and consulting experience to support the turnkey team in delivering best-in-class AMI solutions to utilities. His experience crosses the sectors of live events, performing arts, construction management and litigation, aircraft maintenance/MRO, and themed experiences. Jack has a demonstrated history of delivering time-critical and highly visible projects, building lasting customer relationships and meeting time and cost objectives. His broad array of experience and exceptional interpersonal skills make him an integral part of the Badger Meter PMO.

Project Manager: Jenn Rittmann, PMP – Badger Meter

For over thirteen years, Jenn has been a key part of Badger Meter's support of utilities nationwide. Prior to Badger Meter, Jenn was an applications engineer for a medical-device supply company and an AV director for conventions, conferences and other live events. At

Badger Meter, she has spent stints in technical support, interface analysis/integration, and now the Turnkey Operations group, Jenn has a deep and well-rounded understanding of Badger Meter's product and solutions that she leverages to deliver successful AMI deployments. Jenn has supported turnkey installations ranging in size from 2,000 to 86,000 as a project manager, and in other roles has supported projects with over 150,000 installations. Jenn has a track record of successfully supporting utilities during deployments, ensuring high-level understanding of the system's capabilities and fluently addressing technical concerns.

Subcontractor Project Manager – Chad Nuccio, Pedal Valves Inc

Chad has served as the Construction Manager for the Water Meter Division of Pedal Valves Inc. for the past 12 years, including at scale (125,000 units in Pinellas County, Florida). He oversees all critical construction and project management facets of water meter installations. He supervises material acquisition, coordination efforts for material storage, installation management, QC, and inventory control. Chad monitors daily progress of the installations and adjust procedures to maximize efficiency of the installation process. He also manages project budgets and finance reports. He is experienced in the installation of all types and sizes of meters during the testing phase of water meter projects.

Integration Lead – Steven Thompson, Badger Meter

Steven manages his team, resources, and processes that are crucial in the development of new software or the enhancement of existing products at Badger Meter. He maintains close collaboration with business managers and marketing professionals to assess the progress of ongoing projects and identify potential barriers that could impede completion. Steven diligently monitors the quality of our products to ensure alignment with our customers' technical and business requirements. Steven and his team remain steadfast in their commitment to aiding Badger Meter in delivering top-notch products and differentiated software offerings that provide our customers with real-time, actionable insights into their operations, regardless of their location.

Trainer – Bradley Pace, Badger Meter

Bradley Pace brings a wealth of experience in customer service and sales support to his role as a Field Sales Support Specialist at Badger Meter. With a strong foundation in customer relations, Bradley has demonstrated his ability to ensure utmost satisfaction in various capacities. As the Director of Dining Services at Windsor in Celebration, FL, he managed multiple dining facilities, collaborating with department heads to maximize operational efficiency and profits. Bradley's leadership was evident as he oversaw the hiring, training, and scheduling of over 50 employees, ensuring they were well-equipped to deliver exemplary customer service.

2.5 Communications Partner

In order to support the City's project undertaking, it is essential that enthusiasm and consensus be built among the City's residents of the project's significance and importance. To provide the requisite support, Badger Meter has engaged Rogue Monkey Media (RMM), an Oklahoma-based public relations and marketing firm with extensive water-industry experience and diverse functional expertise in video production, graphic design, social media content and management, content writing, marketing consultation, and digital/print media.

Badger Meter and RMM have worked collaboratively on utility public relations support programs for turnkey projects for several years, successfully developing messaging materials, strategies, and ensuring a smooth flow from concept to deployment.

2.6 Stakeholder Change Management

Over the course of the project, there may occur a circumstance where a stakeholder will depart the project, or where a new stakeholder will join the project mid-stream. This is not unexpected of projects with this number of stakeholders. However, a change in the stakeholders of a project can cause disruption, so a plan to manage the change and to effectively on- and off-board stakeholders is necessary.

What follows in this section is the proposed stakeholder change management plan, which generally takes the form shown in Figure 2.

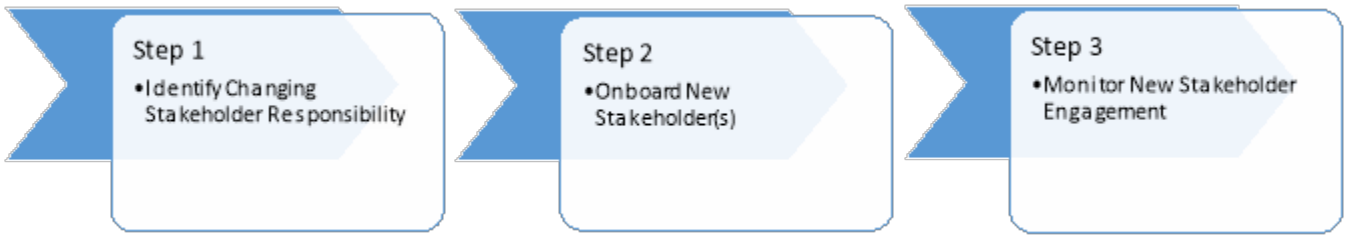


Figure 2: Stakeholder Change Management Process

2.6.1 Identify Changing Stakeholder Responsibility

There are two principal types of stakeholder change: temporary (such as a vacation or other leave of absence from the project) and permanent. In either case, the project team will review the changing stakeholder's open project action items in the project Risk, Action, Issues, and Decisions (RAID)[1] log and ensure all are reassigned and accounted for.

While a one-for-one exchange of stakeholders may be preferred, it may not always be possible, and the responsibilities of the changing stakeholder may need to be distributed to several

individuals. The purpose of the RAID review is to ensure all those assuming new responsibilities are aware of and accountable for their tasks.

2.6.2 Onboard New Stakeholder(s)

In some cases, a new stakeholder may come to the project having not previously been a part of the project team. In this scenario, it is both practical and necessary to hold a stakeholder transition session. This can take the form of an item on a larger meeting agenda, a dedicated meeting, or an asynchronous document exchange (though asynchronous onboarding is the least preferred). Upon identification of a new stakeholder, the project team, facilitated by the Badger Meter lead project manager, will hold a transition session to bring the new stakeholder up to speed on project developments and milestones both upcoming and previously achieved.

2.6.3 Monitor New Stakeholder Engagement

The new stakeholder will be monitored by the project team to ensure that they are able to engage with and successfully deliver their portion(s) of the project. If issues are identified, they will be resolved through additional stakeholder management.

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[11] Refer to Section 5.3 of this SOW for additional information about the project RAID log and its role in the project approach.

2.7 Project Communication Plan

The project the City proposes to undertake is of key importance and high visibility. Accordingly, there is a need to define the project communication plan to support the project over its lifecycle. This plan is detailed in the table below.

Table 5: Proposed Project Communication Plan

Communication	Audience	Purpose	Timing	Method
Initiation Meeting	All primary stakeholders, project executives	Gather information for project plan	Before project start date	Meeting(s)
Kickoff Event	All stakeholders	Communicate project plans and stakeholder responsibilities	At beginning of project	On-Site
Project Management Meeting	Project Managers, identified stakeholders	Review project progress, tasks, and action items	Biweekly	Meeting

Project Team Meeting	Core Project Team	Provide update on project team efforts, issues, and make necessary decisions	Biweekly[5]	Meeting
Executive Report-Out	Project Executives and Sponsors	Provide high-level project updates and communicate progress to leaders	Monthly/Quarterly	Meeting
Closeout Meeting	Project team, identified stakeholders, executives, sponsors	Review accomplishments and lessons learned, formally close project	At end of project	On-Site
Installation Summary	Project Team	Update completed accounts, RTU accounts, and detail any additional work performed	Weekly	Report
Schedule Updates	Project Team	Update progress against plan, report milestones	As needed or requested	Report
Live Installation Data	Relevant Stakeholders	Detail which accounts have been worked in a given day	Available via WOMS web portal	Report
BEACON Status Reporting	Relevant Stakeholders	Detail communication and read performance of BEACON system	Available via the BEACON platform	Report

Beyond the planned communication laid out in the preceding table, Badger Meter's lead project manager shall provide the City with other periodic additional reporting as requested by the City. The precise content, audience, format, and frequency of said additional reporting shall be agreed at the time of request.

[5] The structure of the Project Management meeting and the Project Team Meeting is that they alternate weekly.

3 Proposed Project Timeline & Milestones

3.1 Project Schedule

Based upon the scope of work laid out in the RFP event , Badger Meter and its IP are confident that this project can be completed within the 18-month (540 calendar days) duration alluded to previously. In order to achieve this timeline, the support and sponsorship of the City will be needed.

To that end, Badger Meter and its IP have prepared a preliminary project schedule and milestone list, as enumerated subsequently in this Section. These are based on the project team's understanding of the work to be completed, forecast resource and material availability, and projected installation rates. However, the project schedule is and will remain a living document. It will be reviewed by the Badger Meter project manager with the City's project manager at intervals suitable to the project's phase and progress and updated regularly. Please see the below Figure 3 for a depiction of the proposed project schedule.

Task Name	Duration	Start Date	End Date
Phase I: Preconstruction	**92d**	**09/03/24**	**01/08/25**
Award and Execute Contract (assumed date)	1d	09/03/24	09/03/24
Notice To Proceed #1	1d	09/04/24	09/04/24
Preconstruction Meeting	2d	09/09/24	09/10/24
IA: Proof of Concept Planning	86d	09/11/24	01/08/25
Complete BEACON Onboarding Paperwork	2d	09/11/24	09/12/24
Identify target IDA accounts	5d	09/11/24	09/17/24
Place order for Proof of Concept Materials	1d	09/11/24	09/11/24
Preinstallation Survey	80d	09/19/24	01/08/25
Iterate Customer Communication Materials for POC	10d	09/11/24	09/24/24
Phase II: Proof-of-Concept	**94d**	**09/12/24**	**01/21/25**
II A: Installation and Implementation	63d	09/12/24	12/09/24
BEACON System Configuration	3d	09/12/24	09/16/24
Integrate BEACON software with billing system	60d	09/17/24	12/09/24
Receive Proof-of-Concept Materials	0	10/01/24	10/01/24
Training Phase 1	1d	10/02/24	10/02/24
Install Proof-of-Concept Accounts	25d	10/03/24	11/06/24
II B: Demonstration and Evaluation	79d	10/03/24	01/21/25
Evaluate Proof of Concept Deployment	60d	10/03/24	12/25/24
Training Phase 2	1d	11/07/24	11/07/24
Proof of Concept Closeout Meeting	1d	01/21/25	01/21/25
Notice To Proceed #2	0	01/21/25	01/21/25
Phase III: Preinstallation	**381d**	**09/11/24**	**02/25/26**
III A: Customer Communications/PR	71d	09/11/24	12/18/24
Develop Customer Communications/PR Strategy	20d	09/11/24	10/08/24
PSA Video Pre-Production	15d	10/09/24	10/29/24
PSA Packets (Mailers, Hangers, Bill Stuffers) Drafting	15d	10/09/24	10/29/24
PSA Video Production	30d	10/30/24	12/10/24
Approval of Customer Communication Materials	0	12/18/24	12/18/24
III B: Installation Planning	5d	10/14/24	10/18/24
Place orders for Full Deployment Materials (Meters, En	5d	10/14/24	10/18/24
Installations	265d	01/06/25	01/09/26
Deployment Planning	2d	01/17/25	01/21/25
Full Deployment Endpoint Installation Training	2d	01/22/25	01/23/25
BEACON Training	2d	04/18/25	04/21/25
Installations	284d	01/24/25	02/25/26
Phase IV: Project Completion and Closeout	**44d**	**12/19/25**	**02/18/26**
Substantial Completion Achieved	1d	12/19/25	12/19/25
Installation Punch-List and RTU Cleanup	23d	12/22/25	01/21/26
Final AMI System Cleanup	10d	01/22/26	02/04/26
System Validation and Final Acceptance	10d	02/05/26	02/18/26
Completion Date	**0**	**02/18/26**	**02/18/26**

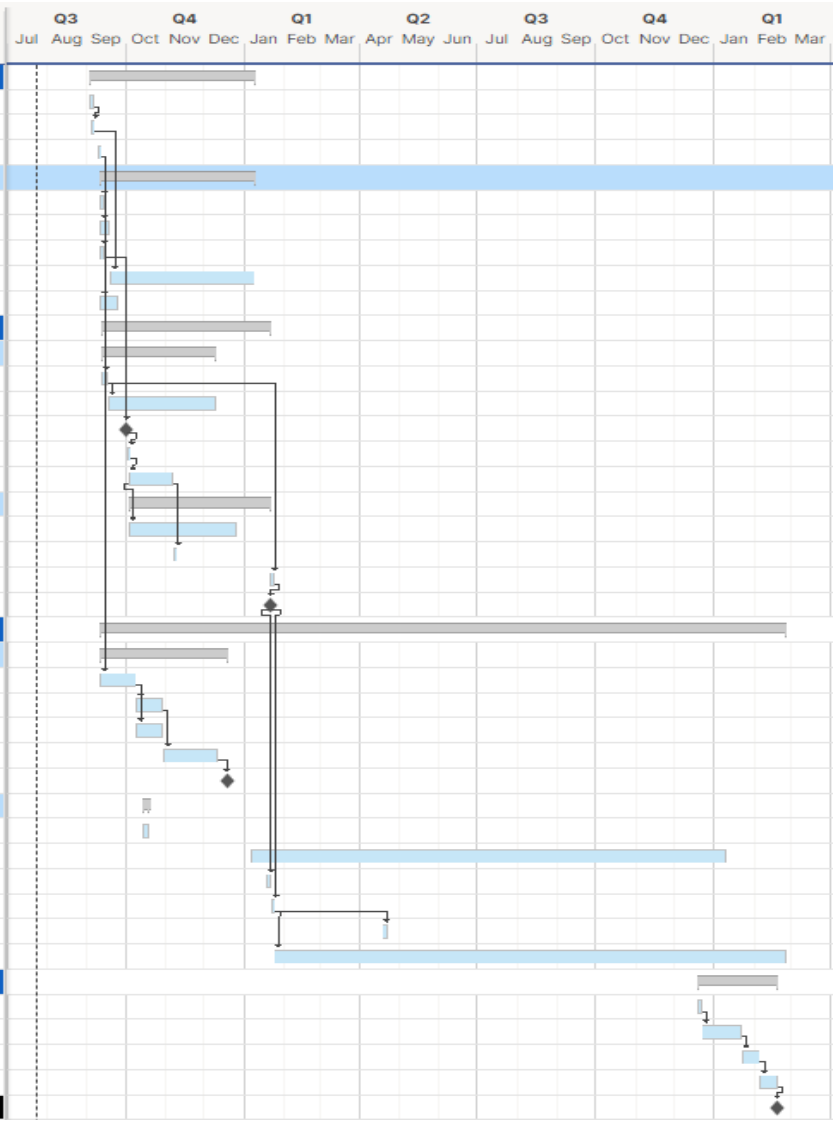


Figure 3: Preliminary Project Schedule

3.2 Project Milestones

Within the Proposed Project Schedule presented in Section 3.1 are the following key milestones listed below. The list presented here is neither exhaustive nor final but serves to highlight the milestones that Badger Meter and its IP have identified based on experience as key in the progress of the schedule. Specific timing thereof will be agreed in the non- schedule refinement process post-award. Some of these milestones are tied to specific billing for services per the schedule of values bid by Badger Meter and are marked accordingly.

Table 6: Proposed Project Milestones

Milestone	Type	Summary	Related Billing
Kickoff Event	Meeting	Multi-day event with workshops and breakout sessions to review scope, educate stakeholders, introduce key personnel, plan for next steps, and build enthusiasm for the project.	Bonding, first month of project management, any mobilization fees, etc.
NTP1	Milestone	Formal notice to proceed with project work issued by the City.	
Interface Design	Workshop	Badger Meter-facilitated workshop to review data requirements for integration between BEACON and the Billing Vendor's system.	BEACON Engagement Fee & Billing Integration Costs
MMCO Design	Workshop	PVI and Badger Meter-facilitated workshop with the City to review interface between WOMS MMCO data and the City applicable Systems (which may include GIS, MDM, etc.). This session is not intended to review billing integration.	
Interface Test Planning	Workshop	Badger Meter-facilitated workshop to iterate use/test cases and other requirements for testing	
Deployment Planning	Workshop	Badger Meter and PVI facilitated workshop to review schedule, tools and procedures, QA/QC processes, installer training and identification processes, and outreach support during deployment	
Communication Planning	Workshop	Badger Meter-led workshop to review customer communication strategy and content. Can be conducted in tandem with the deployment planning workshop.	
Training	Training Sessions	Training sessions will be delivered based on the schedule and content agreed between the City and Badger Meter. Refer to Section 9 of this SOW for details.	Training sessions are billable upon delivery

Billing Integration Complete	Milestone	Defined by two (2) successful billing cycles with the BEACON system	
IDA Completion	Milestone	Completion of installations on specified accounts for the IDA and associated testing thereof	
NTP2	Milestone	Notice of acceptance of IDA deployment and authorization to proceed with full deployment	
Substantial Completion	Milestone	Given by the substantial completion of the full deployment activity and relevant testing	
Project Completion	Milestone	Realized upon completion of the project with system sign-off by the City	

3.3 Schedule Review and Update Plan

As noted in Section 3.1, the project schedule will be a living document. It will live in the project's document repository[6] and form a key project artifact as the project progresses. At a minimum, the schedule will be reviewed every thirty (30) calendar days or upon a milestone being reached (whichever is more regular) by project management personnel from Badger Meter, IP and the City. Should more frequent review and/or updating be required based on project conditions or by request of the City, this will be accommodated as is possible.

As a result of each schedule update session, the Badger Meter lead project manager will ensure the necessary amendments to the schedule are made and published to the project document repository.

[6] Refer to Section 5 for proposed project document control plan.

4 Project Quality Control Plan

4.1 Badger Meter Product and Processes

Badger Meter prides itself on delivering the highest possible degree of project quality. For Badger Meter, quality begins in the factory where the meters and endpoints will be manufactured. These facilities are all International Standards Organization (ISO) certified to ISO 9001 standards. Each meter manufactured by Badger Meter is tested before shipment for accuracy, and these test results will be provided upon shipment to the City via a meter certification file.

To ensure that installation conditions of the product(s) to be deployed are within expected tolerances and that the product(s) can perform to their standards, training will be offered to installers as part of the Project. Refer to Section 9 for a detailed training plan.

4.2 Installation Data

PVI will be responsible for the proactive management of all project installation data via an electronic management system with automated error-checking. The installation partner is also responsible for the prevention, identification and/or remediation of any data errors that do occur. As such, there will be a quarantine period for installation data to permit QC work to be performed before said data is passed via the MMCO process to the City's systems. The installation data reported for this project will include (but is not limited to):

1. Serial Number of removed meter (in replacement scenario) or verification of existing serial number (in a retrofit situation).
2. Serial numbers for new meter and/or endpoint.
3. GPS coordinates of installation location[7].
4. Account information (the City's account number, address, account name, etc).
5. Time of installation.
6. Final read of old meter (including image).
7. Any installation notes.
8. If skipped or returned to utility, documentation of reason for incomplete installation.

If any of this data is corrupt, incomplete, or inaccurate, it will be identified by PVI in their QC process and will be corrected before the data is accepted and the installation can be approved.

4.3 Installation Work

The priority of the IP and Badger Meter in the execution of all project installations is a minimal disruption to the customers of the City. To achieve this goal and deliver quality installations, the following steps will be taken.

1. All Badger Meter products will be installed according to their respective installation manual, which will be provided to the installers.

[7] GPS capture included in this scope of work is sub-meter in accuracy.

2. All meter installation crews will be trained on the products to be installed prior to installation commencing.
3. New installers will have their work 100% physically audited for the first three (3) days after their training is complete. All installers will have a percentage of their work physically audited during the project (typically one to five percent)
4. 100% of installations will be audited via review of the photographs taken during installation.
5. Customers to receive an installation will be notified per the customer communication plan laid out in Section 6.
6. The installers will reasonably restore the customer's property to its original appearance after work is complete and will document the restoration with before and after photos.
7. Installation contractors will verify communication between an installed endpoint and the BEACON system during their quality control checks, and endpoints that fail to communicate will be remediated as part of the standard QC procedure.
    i) The City BEACON administrator will grant access to Badger Meter installation and quality control personnel to BEACON during the deployment period to facilitate this quality check.

4.3.1 Customer Complaint and Support Procedure

During the course of the project, PVI will make available a dedicated phone number, which will be included on customer notification and communication materials. This service is not intended to, nor will it, supplant any existing customer service infrastructure the City may have in place. This phone number will be available 24 hours per day. Response times to customer issues will be completed pursuant to Assumption 2 in Section 1.6.4. Customer issues will be classified into two principal categories.

- High Urgency (e.g. No Water). The expectation for a high-urgency issue is that an on-site response will be provided within one hour during business hours and as soon as possible in off hours.
- Low Urgency (e.g. issues with landscape restoration). Low urgency issues will be resolved on the next installation day.

If a customer is not satisfied with the service provided by an installer or the resolution of an identified issue, the following escalation path is proposed:

- PVI On-Site Superintendent
- PVI Construction/Project Manager
- Badger Meter Project Manager
- Badger Meter TK-Ops Manager
- Badger Meter Project Sponsors

A log of all customer complaints and their resolutions will be kept by PVI and made available to the City.

4.4 Professional Services

Similarly, the professional services (e.g. project management, training, software integration, etc.) proposed by Badger Meter to support the City's project will be of the highest quality. Badger

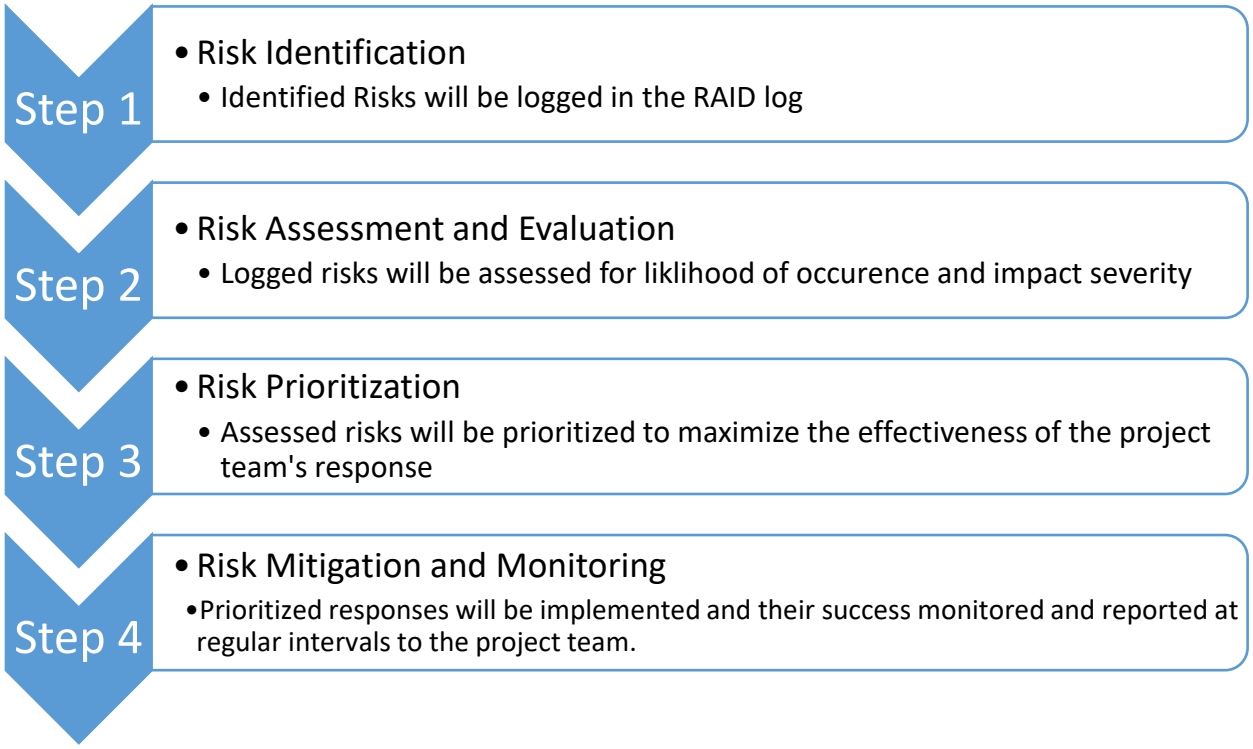
Meter will supply suitably trained and qualified staff for the project. However, if the City is unsatisfied with the services rendered, the following escalation path is proposed to facilitate a resolution.

- Badger Meter Project Manager
- Badger Meter TK-Ops Manager
- Badger Meter Functional/Area Manager
- Badger Meter Project Sponsors

5 Risk Management Plan

All projects are subject to some risk. These risks are events or conditions whose occurrence has the potential to impact a project (that impact could be positive or negative). Risk management is the process by which these risks are identified, logged, assessed, and responded to. The risk management plan that Badger Meter's lead project manager will follow on this project is presented in the figure below, and generally takes the format outlined in the following subsections.

Figure 4: Proposed Risk Management Plan



5.1 Risk Identification

All project team members are empowered to identify potential risks and are in fact encouraged to air concerns about potential risks as early as possible to allow maximum runway for mitigation. Once a potential risk is identified, it will be evaluated by the project team and any other appropriate stakeholders to determine if it is indeed a risk. The evaluation will consider environmental factors, organizational factors and culture, and the project plan. The risk's impact on deliverables, assumptions, constraints, cost, time, resources, and other factors will be considered.

Identified risks will be housed in the project RAID log[8], which will in turn be housed in the project information repository. The RAID log will be reviewed at regular intervals to monitor the progress of risks and/or risk mitigation efforts.

Some risks to a project are inherently impossible to predict with accuracy. These risks may include acts of God, war or conflict, natural disaster, acts of terrorism, third-party criminal acts, riot or civil disturbance, labor disruptions, healthcare emergency; operation or change of statutes, laws, rules, regulations, codes, or rulings of court or governmental agency, or other such causes that are beyond the control of Badger Meter. Neither Badger Meter nor its partners shall be responsible for default in the performance of their obligations under this contract that are caused by these risks herein enumerated.

5.2 Risk Analysis and Prioritization

All risks that are identified will be analyzed based on likelihood of occurrence and significance of impact. Those risks which are the highest on the likelihood/impact scale will be addressed first, while less likely and/or less impactful risks will be prioritized accordingly.

5.3 Project RAID Log

The RAID (Risk, Actions, Issues, and Decisions) log is an essential project management artifact. It will be housed in the project document repository and, like the project schedule, will be a living document that is reviewed and updated consistently. The level of detail for the RAID log will be agreed to by the project parties during its initial implementation.

The general scope of the RAID log in the context of risk management is to identify and centralize the following information:

- Identified Risks
- Triggers of said risks
- Probability of risk occurrence
- Impact of a risk upon occurrence
- Prioritization of risks
- Mitigation strategies
- Owner/Responsible party

If a risk that was identified in the risk log does occur, it is transferred to the issue log with an accountable party and monitored as an issue to be resolved through the project's execution.

The RAID log will be reviewed at regular intervals to ensure that its information is current and applicable. A final review will be conducted at project close to both document lessons learned

[8] See Section 5.3

(for risks that occurred or were successfully prevented from occurring) and to accurately transfer outstanding issues and risks to the operations team.

5.4 Project Document Control

Given the importance of this project to the City, a logical and functional document control plan will be in place. In the experience of Badger Meter, it is most beneficial when the project document repository is owned by the utility. Microsoft SharePoint, Dropbox, or any other widely used cloud storage platform have been adopted with success in AMI deployments. Badger Meter will maintain and administer the project library during project execution and will coordinate the turnover of that data at project closeout.

The precise document control plan will be agreed to during pre-construction. Some key elements of this plan may include:

1. Document-level revision and versioning logs to indicate the time of update, updating party, and notes on content changes.
2. Defining a list of document templates and making them available on the project library to increase cohesiveness of project documentation.
3. Defining and enforcing naming conventions for documents.
4. Defining and enforcing user roles on document storage sites to restrict editing permissions to only those who need them.
5. Use of a system that is backed up regularly to prevent document data loss.
6. Preferring static document sharing (such as via SharePoint shareable links) to emailing documents.

6 Project Deployment Plan

6.1 Ordering of Equipment and Materials

Badger Meter will be primarily responsible for monitoring lead times and the ordering strategy for certain materials for the Project, in conjunction with the City project manager(s). These materials include: (i) meters, (ii) endpoints, (iii) meter pit lids, and (iv) certain other ancillary equipment that may be needed as agreed to in writing between Badger Meter and the City (the "Materials"). After the project schedule is agreed to, Badger Meter and its IP will analyze projected installation rates and survey data (see Section 6.3) to determine quantities of Materials that will be needed for the project and the material ordering plan. Sufficient materials will be ordered to facilitate the agreed installation rates. As a best practice, the parties will attempt to maintain sufficient inventory on hand based on actual production rates. The parties will agree to the specific threshold during preconstruction planning – generally, Badger Meter sees at least thirty (30) calendar days as a threshold for appropriateness. Based on the projected timeline of installations, roughly 1,160 installations per month during the full deployment period will be the expected production rate. Badger Meter will consult the City and the City shall have approval over the ordering plan before orders are placed. The material ordering plan will be subject to price escalations in line with the escalation laid out in Badger Meter's response to the proposal.

Monthly, or at an alternate frequency mutually agreed upon, the plan shall be reviewed by the City's project manager(s) and Badger Meter to ensure that it remains on schedule and adequate for project needs.

6.2 Inventory Management Plan

Badger Meter shall invoice for product upon shipment, whereupon the title for said product will be passed to the City. Product will be received and stored at the project warehouse facility, operated by PVI at the site made available by the City, subject to Assumption 4 in Section 1.6.2 previously. Badger Meter will direct PVI to implement an inventory management plan that aligns with best practices, which may include:

1. Operate a warehouse of suitable size to house the project's inventory needs, and with appropriate security features to ensure inventory control.
2. Receive, count, and quarantine deliveries of Badger Meter product as necessary.
3. Record serial numbers of received inventory into the WOMS upon delivery to permit the City to access inventory records via the digital WOMS platform.
4. Verify the count and condition of deliveries against the packing slip/bill of lading and promptly report variance or damage to Badger Meter for remediation.
5. Utilize barcode scanning to prevent data entry errors in serial numbers.
6. Issue stock of product daily to field installation technicians (logging product out) in a "first-in, first-out" fashion.
7. Reconcile inventory returned to the warehouse nightly against installation records to ensure no inventory is lost in the field.

8. Perform a weekly physical count and reconciliation of warehouse stock against receiving records and installation records.
9. Maintain inventory of removed meters and materials from installations in a secure and quarantined location for return pursuant to an agreed schedule with the City. All Removed Materials will remain property of the City.
    i) The City may designate an alternate area for storage of the Removed Materials.

6.3 Pre-installation Service Area Survey

In the experience of Badger Meter, one of the most advantageous actions to take during an AMI deployment is a pre-installation survey. This is a crucial step that is often not considered when planning a project, but which has immense benefit. The purpose of the pre-installation survey is to capitalize on the opportunity to gather actionable data of the City's service footprint. This data will examine the accounts in the City's territory, locate the meters within the project scope, and gather information about the installation conditions that will be encountered. Performing the survey as laid out in this Section significantly reduces the number of accounts designated RTU due to location issues and can allow for proactive remediation of plumbing, landscaping, access constraints, or other issues that could delay installation work. Pricing for the Pre-installation Service Area Survey is included in the proposal.

The survey will be approached as follows:

1. Survey crews will deploy to the City's service territory between 30 and 45 days from the first NTP.
2. The specific cycles and/or routes to be surveyed can be coordinated with the City's read schedule to minimize disruption to operations.
3. Surveyors will spend no more than five (5) minutes at an address attempting to locate a meter. Accounts that are unable to be located within that timeframe will be returned to the City for assistance with locations. For these returned accounts, a surveyor will be made available to return to the location and complete the survey after location.
4. The data collected during the survey shall include the following items:
    - Identification (manufacturer and material) and dimensionality of existing boxes and lids
    - Condition and substrate of existing boxes and lid
    - Identification (manufacturer, model, and serial) of existing meter (and endpoint if present)
    - Assessment of installation-impacting conditions (e.g. overgrown roots in meter box, flooded meter box, visible leak, or plumbing irregularity)
5. If the meter pit is filled with soil, sand, or water upon arrival, it will be marked as such. The meter installation team will remediate the situation contemporaneously with the installation or retrofit of the meter.

6. During the course of the survey, up to six (6) photos may be taken of the box, lid, meter, and immediate surroundings. If additional photos are desired, they can be taken for an additional fee (an estimate for which can be provided upon request).
    - Survey photos will be provided to the City at a cadence agreed to post-award.
7. Survey data will be aggregated into an excel or similar format and provided to the City at regular intervals. The final compilation of survey data will be provided at the conclusion of the survey.

6.4 Initial Deployment Area (IDA)

As a functional test of the system, procedures, and other elements of the project plan, an initial deployment area will be defined and installed. This installation will serve as a 'dry run' of the planned procedures for the full deployment, and as such will substantially mirror the full deployment plan.

6.4.1 IDA Scope of Work

The IDA for the City will encompass a minimum of 100 meters. These meters will be identified with the assistance and collaboration of the City so as to provide a representative sample of the meter sizes and locations in the service territory. These installations will follow the same procedures laid out in Section 6.5 below as pertain to customer notification and installation procedures. However, as the IDA installations may not be confined to a single route, they by necessity may not follow the planned route release and completion structure prescribed for full deployment.

Additionally, the requisite integrations between and among the WOMS, BEACON and the City's Billing Vendor will be workshopped, deployed, and tested during this phase so as to prove their concept. For details on the proposed software integrations, refer to Section 7 of this SOW.

Certain key elements of the system may require initial training sessions be provided to the City personnel in order to facilitate their use and evaluation of the system. These sessions will be agreed to as to timing and content between Badger Meter and the City in compliance with the overall training plan for this project as laid out in Section 9 of this SOW.

6.4.2 IDA Procurement

Once the approximately 100 accounts comprising the IDA are identified, they will be prioritized for surveying (refer to the preceding Section 6.3). Once the survey information is gathered, the requisite Materials will be placed on order in accordance with the material ordering plan and their estimated lead times advised. The delivery schedule for these products will be monitored and presented in the fashion prescribed previously in Section 6.1.

6.4.3 IDA Material Handling and Storage

Materials for the IDA will be stored and staged at an existing PVI facility. At this facility, the inventory will be held in compliance with the inventory management plan laid out in Section 6.2.

Removed Materials during the IDA will be returned to the City at a location to be identified by the City prior to mobilization for the IDA.

6.4.4 IDA Evaluation Period

The 100 installations are estimated to take approximately thirty (30) calendar days The overall IDA period will include ninety (90) to one hundred and twenty (120) calendar days for integration work, communications planning, and other such necessary precursor elements to evaluate the full deployment plan during the IDA. For more details, refer to the tentative schedule presented previously in Section 3.

6.4.5 IDA Acceptance Criteria

The IDA is intended to serve as a demonstration of system functionality. The following objectives of the IDA shall serve as evaluation criteria for the conclusion of the IDA and progression to full deployment:

1. Verification of all installations completed and inspected by the City
2. Verification of all endpoints communicating within the agreed performance margin
3. Completion of required software integrations and associated testing plans, as specified in Section 7
4. Completion of the training sessions designated in Section 9 to be performed during the IDA
5. Successful execution of a billing process using the system by the City
6. Other criteria as mutually agreed

6.5 Full Deployment

Full deployment will substantially mirror the IDA, as the latter is a test of the former's planned procedures. The procedures herein will detail the expected approach for the meter and endpoint installations necessary to complete the project. Deployment planning workshops during the pre-construction phase will allow the City to review and become familiar with these procedures and provide an opportunity to make reasonable alterations thereto to best suit the needs of the project.

The number of crews deployed for installation will be reported by Badger Meter and its IP to the City as part of the planning process and will be monitored on an ongoing basis to ensure appropriate staffing levels are maintained throughout the project.

6.5.1 Outdoor-Set Meter Installation

For meters less than or equal to 2" in size, outdoor set meter installations will follow the following procedure.

1. All Badger Meter products will be installed in accordance with the appropriate installation manual.

2. For any meter exchange where water service to a resident may be interrupted, the installation crew will knock on the resident's door prior to beginning work to provide them notice that their water service may be interrupted for a brief period.
    i) Should the resident be actively using water (e.g. running the dishwasher or washing machine), the installers shall set a time to return to that resident and complete the installation in a manner that minimizes impact to the resident.
    ii) If the resident does not answer the door, the installer shall approach the meter pit and examine the register to determine if it shows consumption.
    iii) If consumption is found, the resident is assumed to be using water or have an active upstream leak. A door hanger will be left that an attempt was made but the installation could not be completed, and the installers will make another attempt at a later date.
    iv) If no consumption is found, then the installer will proceed.
    v) If the meter pit is inaccessible (e.g. in a scenario where a vehicle is parked over the pit), a door hanger will be left indicating the attempt was made and the installer will come back at another time.
3. The installer will examine the meter pit to determine if installation can be completed.
4. Survey data gathered in the pre-installation survey will help minimize RTU accounts during full deployment but cannot eliminate it entirely.
5. If the meter box is damaged, work will not proceed and the account will be designated as UIR. The City will be notified of the damage and provided photos documenting the situation.
    i) The City may, at its option, direct Badger Meter to replace the box for the price proposed on Line 83 of the SOV, or opt to replace the box itself.
6. If the meter pit was identified as flooded or covered by dirt, such obstacles will be removed during installation.
7. If the meter setting and surrounding plumbing/valves is visibly defective or damaged such that there is reasonable confidence that damage will be exacerbated by an installation, work will not proceed. Photos will be taken to document the condition, and the account will be designated UIR.
8. If there are plumbing irregularities (e.g. meter installed backwards, disconnected, by-passed, etc.), work will not proceed, and the account will be designated UIR.
9. In such cases where deliberate tamper or intentional theft of service is identified, pictures will be taken and the account will be designated RTU.
10. The installer will locate a shut-off valve (curb stop) to temporarily turn off service for the installation. If no curb-stop can be located, work will not proceed. If the curb-stop is nonfunctional or broken, work will not proceed and the account will be designated UIR.
    i) If the installer finds that an account is in an off state at the curb stop upon arrival, work will proceed. The account will be left in the same state it was found (i.e., water will be left off if it was found off). This may preclude a line from being flushed.
11. The installer will perform scratch or magnet testing of the service lines within the meter pit and log the results in NIMS.
12. The existing meter will be removed and replaced with a new meter. Consumable items, such as washers, gaskets, nuts and bolts, are included in the meter exchange pricing. Additional plumbing components will be priced and included as needed.

i) Any ancillary parts furnished to complete an installation are subject to approval by the City. Post-award, specifications for same will be provided.

13. The new endpoint will be connected to the meter and mounted per the procedure for endpoint installation laid out in Section 6.5.2.
14. Photographs will be taken during this process, which will include:

- Preinstall condition.
- Post-install condition.
- Old meter reading.
- Preinstall valve position.
- Post-install valve position.
- Flow direction indicator (arrow) on new meter.
- Barcode labels (for serial number capture).
- Restoration of area to original state.

15. The installer will restore water service (if service was on upon arrival) by opening the curb-stop. Upon restoration of service, the installer will attempt to flush the service line using an external hose bib or spigot to remove air and incidental debris.
    i) If no such device exists, the installer will knock on the door and ask the resident to open the bathtub tap to flush the line.
    ii) If the resident is not home, the line will not be flushed, and water will be left off. A note will be made on the door hanger indicating that water is off with instructions to call the installation partner for restoration of service upon the resident's return.
16. A door hanger will be left notifying the resident that the exchange has been completed. The door hanger will have contact information should the customer have questions or concerns about their installation.

6.5.2 Outdoor-Set Endpoint Installation Procedure

All Badger Meter products will be installed in accordance with Badger Meter's installation manuals. These manuals will be provided to all installers prior to commencing installation work in addition to any installation training that is to be provided. For endpoint installation, best practices include the following:

1. Work orders for endpoint installation will be dispatched via NIMS to ensure the work is performed at the correct account and to facilitate tracking of installation records.
2. Endpoints will be mounted through a composite, RF-friendly pit lid (in outdoor applications). This may necessitate a lid change-out in some scenarios.
    i) The endpoint will be mounted using Badger Meter's top cap and lock nut to ensure a secure fit.
    ii) Where possible, holes will be drilled in existing lids to permit the endpoint to be installed.
3. In outdoor applications without a pit lid (generally for larger meters), the endpoint shall be installed using a mounting bracket.

4. Endpoints should be installed away from large metal objects to maximize radio-frequency (RF) signal propagation. In vault applications, a non-metal vault lid kit may be installed through a hole drilled by the installation partner, or a 'buddy box' may be used.
5. Endpoints will be activated using the ORION Activation Tool to verify their function and communication with the network.
6. Endpoint serial numbers will be recorded electronically into the WOMS.
7. After installation, the endpoint will be monitored to confirm communication to BEACON.

6.5.3 Retrofit Installation Procedure

In a scenario where a register is to be retrofitted onto an existing meter to permit its communication with the AMI system without a full meter exchange being performed, the same provisions from Section 6.5.2 apply to the endpoint installation. Additionally, the following steps will be taken as part of a retrofit.

1. All Badger Meter products will be installed in accordance with their installation manual(s).
2. Work orders for retrofits will be dispatched via an electronic WOMS to ensure work is performed at the correct location and to facilitate tracking of installation records.
3. Upon arrival, installation crews will validate that the serial number and address of the meter in place match the expected meter serial number and address on the work order.
    i) Serial number data will be gathered as part of the pre-installation survey (refer to 6.3)
    ii) If the meter on location differs from the specification expected and the provided retrofit encoder is incompatible with it, the account will be designed UIR.
4. The following digital photographs will be taken as part of the retrofit:

    - Old meter in place
    - Surrounding area of original meter
    - Old register reading.
    - Old register serial number.
    - New register installed.
    - New register serial number.
    - New register start read.
    - New endpoint serial number.
    - Photo post-installation indicating site restoration to original state.

5. The existing register will be removed and the new register will be installed.
6. The installer will perform scratch and/or magnet testing of the service lines accessible within the meter pit and log results in NIMS.
7. The new register will be connected to the endpoint.
8. The endpoint will be activated using the ORION activation tool

6.5.4 Large Meter (>2") Installation Procedure

Generally, large meters are associated with commercial accounts that have water usage needs that differ from residential accounts. As such, all large meters will be contacted directly by the installer to schedule an appointment for the meter exchange to prevent water-service interruption

from disrupting commercial operations. At times, this may necessitate after-hours or weekend work, which will be provided at no additional cost for these appointments. Larger meters that have bypass functionality set up such that they can be exchanged without interrupting service may not have the same appointment requirements. The large meter installation procedure is as follows:

1. All Badger Meter products will be installed in compliance with the relevant installation manual(s).
2. Given that all commercial customers will be scheduled, the installer will reach out to the identified point of contact for the account to confirm that the scheduled change-out appointment is still suitable via the call center and/or in person visits as applicable.
3. Upon arrival, the installers will inspect the pipe condition of the installation and determine if installation can proceed.

    - If the meter setting and surrounding plumbing/valves is visibly defective or damaged such that there is reasonable confidence that damage will be exacerbated by an installation, work will not proceed. Photos will be taken to document the condition, and the account will be designated UIR.

4. If a by-pass is present, it will be utilized to permit water service to continue for the customer during the exchange.

    - If no by-pass is present, water service will be shut off using the appropriate valve. If the valve is damaged to the point where water cannot safely be shut off without damaging the valve, piping, or meter, work will not proceed and the account will be designated UIR.

5. The meter will be exchanged. Ancillary items such as bolts and gaskets will be exchanged for new material. If additional material (i.e. ground clamps, support brackets, or large valves) are required for the successful completion of an exchange, the City may provide and install these materials, or the procedure in Section 6.5.11 will be followed to agree a price for them.
6. The endpoint will be installed per the endpoint installation procedure specified in Section 6.5.2
7. Photographs will be taken during this process, which will include:

    - Preinstall condition.
    - Post-install condition.
    - Old meter reading
    - Preinstall valve position.
    - Post-install valve position.
    - Flow direction indicator (arrow) on new meter.
    - Barcode labels (for serial number capture).
    - Restoration of area to original state.

8. The installer will coordinate flushing the line with the point of contact on the account.

6.5.5 Vault-Set Meter Installation

It is assumed that only large (3" and larger) meters will be in vaults. Work in vaults that are not classified as an OSHA-defined confined space is included in the proposal and will follow the procedure in 6.5.4. Any defined, permit-required confined space will be evaluated on a case-by-case basis and will be priced in accordance with Section 6.5.11.

6.5.6 Installation Data Collection

The installer will use NIMS both to dispatch and manage work orders and to record the data. Each procedure laid out in the preceding sections details the specific photographs which will be captured for readings and serial numbers of both new and old meters and endpoints. Additional data collected will include:

1. Material number of the City for installed materials (if provided/required)
2. Installation notes
3. GPS coordinates
4. Installation time
5. Pipe type information
6. Any reason that an account was returned to the utility or otherwise not completed.

All installation data collected will be subject to the quality control plan detailed previously in Section 4 of this document. Installation data that passes quality control will be reported in a file format compatible with automatic ingestion for the City billing software at a frequency agreed by the project parties.

Installation data will be compiled and sent as a backup copy to the City upon project completion and will be retained by the installer for an agreed period for additional redundancy.

6.5.7 Installer Identification and Qualification

All installation technicians shall be suitably skilled and experienced with AMI deployments to support the project. A roster of installers shall be maintained by Badger Meter and PVI which shall include:

1. Name.
2. Copies of photo identification.
3. Copies of relevant background check information[9].
4. Vehicle information (Make/Model/Plate).
5. Other information required by the City.

[9] Background check information will detail what was checked and cleared, not the full details of the background check for privacy.

Installers will wear a branded, standardized uniform making it easy to identify the installers as part of the project. At the request of the City, badge hangers or other identification of the installers as authorized contractors can be included.

The opportunity for the City to review and recommend changes to dress codes, badging, vehicle tags, and other installer identification prior to deployment will be available.

6.5.8 Route/Cycle Release Procedure

To meet the schedule expectations of the project, the procedure to release routes for production needs to be agreed to and upheld. It is a requirement that multiple routes be worked simultaneously (at minimum, two (2) routes) so that the installation teams may operate efficiently. To support this objective, the following steps will be taken.

1. The first routes for work shall be released a minimum of thirty (30) calendar days prior to work commencing. Subsequent route releases should be scheduled and planned in advance such that they can be immediately or near-immediately available upon the substantial completion of a preceding route.
2. Installation progress and percentage complete within a route shall be available via the WOMS portal for the City and all project parties to monitor.
3. When a cycle or route reaches 85% completion, a summary of the open work on that cycle or route will be presented at the next team meeting. Accounts designated UIR will be reviewed and a plan for their remediation agreed, otherwise they will be removed from scope.
4. Once the open accounts are reviewed, the estimated date of substantial completion for the route/cycle will be identified based on installation rates and project conditions.
5. This procedure will be evaluated regularly and may be modified by the project team to better suit project conditions if necessary.

6.5.9 Customer Notification Procedure

Customer notification for all in-scope accounts will be managed in the following manner:

1. Based on the route/cycle release procedure defined above, the route schedule will be identified.
2. At least one (1) week prior to work commencing on a route, a notification will be sent to the customers on that route informing them of the upcoming change-out.
    i) The form and content of this notification will be agreed to during the communication development phase of the project and will be approved by the City before use
3. The notification will include a request to contact the installer to schedule an appointment if the customer has an indoor-set meter, access constraints, or special needs for uninterrupted water service.
    i) When possible and reasonable, appointments shall be made within a 2-hour window for customer convenience.
    ii) Changes to scheduled appointments will be communicated, when possible, at least one (1) day prior.

4. All contact with the customer will be documented, including customer name, account number, address, time of communication, method of communication, contacting party, returned mail (if applicable), and the name of the customer spoken to (if applicable).
5. If a customer refuses an installation, the account will be designated UIR
6. When installers arrive at a customer's location for a change out, they will knock on the door to inform the customer the work will be occurring, following the procedures laid out previously in this SOW.
7. A door hanger will also be left upon an attempt indicating successful completion or requesting follow up from the customer.

6.5.10 Conditional Acceptance

To facilitate timely invoicing and payment of installation work on the project, the procedure below for conditional acceptance of installations will be followed. Conditional acceptance is solely an administrative and procedural step to permit the flow of invoicing processes to proceed. It does not relieve Badger Meter or its IP from their responsibility to correct deficiencies if they are identified within the warranty period of that installation.

Installation labor will only be invoiced to the City for completed installations that have been inspected and accepted. If, however, after a period of five (5) business days from the completion of an installation and the transmission of the installation data to the City to inspect and/or test installations, no results are communicated to Badger Meter due to delay in performing the testing by parties other than Badger Meter and its IP, the account(s) in question will be deemed 'conditionally accepted' and submitted for payment pursuant to the process laid out in Section 10 of this SOW.

6.5.11 Additional Work

Installations of new meters and endpoints in support of the project are assumed to be like-for-like and are thus assumed not to require substantial ancillary work. However, situations may arise where such work is necessary, for example, upon inspection of a meter, either during the pre-installation survey or while performing installation work (e.g., the curb stop is broken). Prior to any such work being performed, the following procedure will be followed.

1. The technician will photograph the conditions that require the corrective work and transmit them via the foreman/supervisor for the installers to the Badger Meter project management team.
2. The Badger Meter lead project manager will review the additional items included in the contract and determine if a price for the work has previously been agreed.

If a price has been agreed, the Badger Meter lead project manager will solicit approval in writing from the City project manager to execute the work at the approved price.
If no price has been agreed, the Badger Meter lead project manager will prepare an estimate for the work and submit it to the City project manager for review and approval pursuant to the change management process laid out in Section 8 of this SOW.

3. The project manager for the City will review the documentation and approve or reject the additional work. In situations where the work is approved, it will be performed and submitted for payment when the relevant installation labor is approved. In situations where it is rejected, the account will be designated as UIR or RTU as appropriate for the City to correct or self-perform the additional work.

7 Project Software Deployment and Integration

As part of the preparation for both the IDA and full deployment, the initial setup and testing of the software interfaces that will support the project must be iterated, tested, and aligned on by the project parties. As specified previously, there are certain key precursors that the City must meet in order to facilitate the work characterized in this section proceeding. Refer to Section 1.6.5, previously, for these details. Related to this interface development may be training of City staff – this will be characterized subsequent in Section 9 of this document. For purposes of this section, references to "BEACON customer" means the City.

7.1 BEACON and EyeOnWater Customer Portal

The BEACON software platform, as a native part of its functionality, provides our customer engagement portal, EyeOnWater. This portal includes online access via a web portal as well as a smartphone application for both iOS and Android that provides usage information to the water utility customer. Given that EyeOnWater is a native element of the BEACON platform, no additional integration is required to deploy it.

7.2 Facilitated Interfaces

7.2.1 Mass-Meter Change Out (MMCO) File

The MMCO file is a file that is generated by the installation partner that is provided to the City and its billing vendor, Tyler Munis, in a format agreed upon in the relevant workshop (refer to the milestone chart in Section 3.2). It is imperative for successful system integration that the data passed in this file is accurate both at the time of transmission (the responsibility for which rests with the installation partner subject to the QC plan in Section 4 of this SOW), and at the time of ingestion (the responsibility for which rests with Tyler Munis). The Badger Meter interface team and project management team will facilitate the interface workshop to develop the MMCO file and provide guidance where necessary, but the ultimate responsibility for completing this interface rests with PVI, Tyler Munis, and the City.

7.2.1.1 MMCO Assumptions and Services Not Included

- Badger Meter is only responsible for assistance in scheduling the interface workshop and for providing guidance to the parties related to the MMCO file. The ultimate responsibility for completing this interface rests with the IP, the Billing Vendor, and the City.
- Badger Meter will not be creating the file and will not be responsible for ensuring correct formatting for ingestion by the Billing Vendor.

7.2.2 Standard Billing Integration

A billing integration is necessary for any BEACON customer to configure the data transfer between BEACON and the BEACON customer's billing system to support meter-to-cash operations. This is the effort to load the "Accounts and Assets" data into BEACON and provide the BEACON customer or BEACON customer's billing vendor with the billing reads information.

7.2.2.1 Services Included in Standard Billing Integration

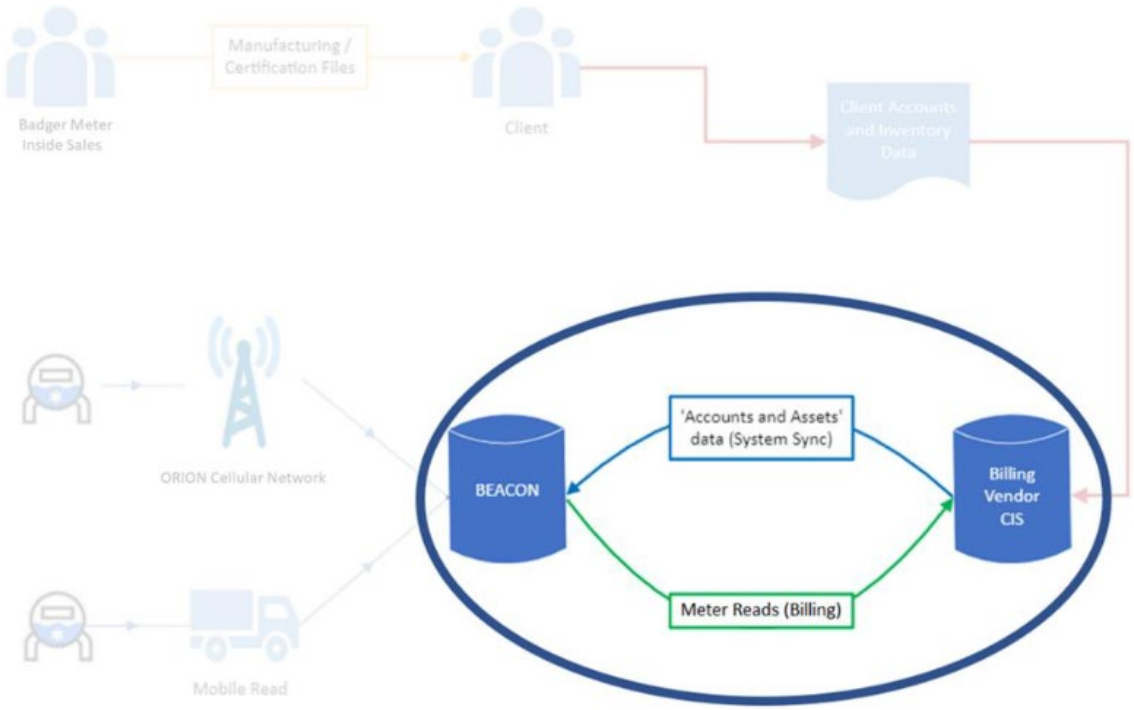


Figure 5: Standard Billing Integration Scope

- Iterative review and troubleshooting of the "Accounts and Assets" file (a/k/a the BEACON Import file, System Sync File, or Meter Provisioning File). The process of iterative review and troubleshooting as applied to this file is considered a fixed bid amount.
- Formatting of the Billing Reads data to fit the BEACON customer's billing system requirements. This process may also be iterative and is also considered a fixed bid.
- API Request configuration assistance for development of requests to *only* the BEACON ../import and ../read API endpoints. Assistance with other API requests is not in the scope of standard billing integrations.

7.2.2.2 Standard Billing Integration Assumptions and Services Not Included

- The BEACON customer or BEACON customer's billing vendor must provide a delimited file with headers matching the latest BEACON billing integration specification file.
- Upon receipt of the "Accounts and Assets" file, the Badger Meter BEACON interface analyst will review the file and detail any corrections which need to be made. The Badger Meter BEACON interface analyst will normally detail any required corrections within 1-2 business days but must communicate required corrections within ten (10) business days of receiving the "Accounts and Assets" file.

    - The BEACON customer or BEACON customer's billing vendor must make these corrections and provide a new file within ten (10) business days of being notified.
    - This is expected to be an iterative process.
    - Once all corrections are made, the Badger Meter BEACON interface analyst will approve the file.
- After the "Accounts and Assets" file is approved, the Badger Meter BEACON interface analyst will create a billing reads file and provide it to the BEACON customer or the BEACON customer's billing vendor for review.
    - Both BEACON reports and the BEACON ../read API have robust capabilities to choose and order fields within the report. However, the billing reads report must fit a possible specification in the publicly documented BEACON help wiki. Any changes necessary within the billing system to import the billing reads data outside the capabilities in the BEACON public help website will be the responsibility of the BEACON customer or BEACON customer's billing vendor.
    - As with the "Accounts and Assets" file, an iterative review process can be expected. The BEACON customer or BEACON customer's billing vendor has two (2) weeks to review and provide feedback or change requests. The Badger Meter BEACON interface team will make these changes and provide a new file, normally within 1-2 business days but absolutely within ten (10) business days of being notified of changes requested. After each billing reads file iteration, the BEACON customer or BEACON customer's billing vendor will have a chance to review.
- Fifteen (15) business days after the Badger Meter BEACON interface team provides the last file iteration, the billing reads file is assumed to be correct and the interface project will be closed.
    - Further changes to the billing reads file after the interface project is closed may incur additional fees for interface modification.
- Upon the BEACON interface team's approval of the BEACON customer's "Account and Assets" file, the BEACON customer has ten (10) business days to complete the API Request Configuration. After that, another purchase order must be submitted for the BEACON team to assist with API Request Configuration. For this included "API Request Configuration Assistance", or for any separately purchased "API Request Configuration Assistance", these terms apply:
    - Data transfer methodology must adhere to publicly documented BEACON APIs. No other forms of data transfer are supported.
    - The BEACON customer must provide knowledgeable resources to build the BEACON API requests. Training on web service fundamentals is not in scope for the API Request Configuration Assistance Professional Services hours.
    - The BEACON customer is expected to understand hardware and environment requirements for making API requests. If the BEACON customer or BEACON customer's billing vendor does not have the capability to make such requests, any charges associated with adding this capability will be the responsibility of the BEACON customer.

    - The Badger Meter BEACON interface team will help the BEACON customer troubleshoot the requests and understand the API responses, interpret datasets, and explain BEACON functionality, but cannot assist with or describe the functionality of any non-BEACON systems.
    - The BEACON interface team cannot assist with loading data into a non-BEACON system.
    - Maintenance is not included after the ten (10) business day period. Support for API requests is not provided by the BEACON helpdesk. If something changes on the side of the BEACON customer and the request fails, a new “API Request Configuration Assistance” order must be made to engage the Badger Meter BEACON interface team.
    - Prior to the order being placed, a 30-minute discovery call may be provided to diagnose the issue and expedite resolution.
    - Only the BEACON ../import and ../read API endpoints are in scope for a billing integration. Discussion of other endpoints requires a different purchase order.
- Data must be transferred in one of the formats supported by BEACON as defined in the publicly available BEACON help documentation.
    - Data transfer methodology is either a manual “drag-and-drop" file transfer between BEACON and the billing system or implementation of the publicly documented BEACON APIs.
    - If the BEACON customer would like to implement an alternate data transfer methodology, the Badger Meter BEACON software services team may facilitate one or more discovery calls. Additional scope and effort will be identified in these discovery calls and priced accordingly.
- Any data transfer or functionality configuration outside of the “Accounts and Assets” and billing reads data is not in the scope of a billing integration.
- Assistance retrieving and/or understanding interval read data (the BEACON ../range or ../flow APIs) is out of scope for any billing integration. BEACON customers are welcome to retrieve data from these endpoints, but the Badger Meter BEACON interface analyst will require an additional purchase order to engage.
- Throughout the course of the integration, the Badger Meter BEACON interface team will describe the interface functionality and BEACON functionality. The BEACON help documentation also provides complete system use detail. However, follow-up on use-case or user acceptance testing—such as meter change-outs or hardware decommissioning—is not part of a billing integration. The billing integration ensures that the file structure is correct. Additional support for user acceptance testing can be quoted as a separate scope of work.
- The BEACON interface team will not backload meter reads from previous systems. This can be done but must be a separate scope of work.
- If there is a change in a BEACON customer’s external system and an API request fails or the dataset needs to be updated, a new scope of work may be required.
- Support of non-BEACON systems is not provided by the Badger Meter BEACON helpdesk.

7.3 Interface Testing

The objective of testing is to prove end-to-end functionality across all in-scope software functionality. This may include but is not limited to applications of field devices through the communications network to BEACON, WOMS to Tyler Munis integration, and Tyler Munis to and from BEACON data flows. This ensures that the specified integration requirements are met and that data is accurate and timely. This phase of testing is best executed in a 'sandbox' testing environment to test the MMCO interface, BEACON, customer portal, and billing system hardware and software components.

The table below outlines the high-level responsibilities and objectives for Badger Meter and the project parties to test the various integrations that may be developed over the course of the project. Badger Meter, in many cases, will have frameworks or sample test cases that it can supply as a starting point upon request; however, Badger Meter does not maintain such sample test cases for third-party software that Badger Meter does not develop or maintain. For those instances, Badger Meter will collaboratively develop test cases and/or frameworks with the City and Tyler Munis.

Table 7: High-Level Testing Responsibilities

Badger Meter	Utility and Billing Vendor
• BEACON billing interface requirements and specifications • Review and analyze requested field data. • Work Utility and Billing Vendor on data setup and questions • Help troubleshoot BEACON-related issues and questions. • Provide a sample test plan. • Support test case execution and validation for BEACON	• Billing system test environment and support • Develop test cases for BEACON integrations and use cases (e.g., meter changeout, deactivations) • Verification of physical meter and endpoints • Test case execution and validation of BEACON integrations and use cases. • Execute test cases. • Validate results

7.4 Integration Assumptions and Out-of-Scope Services for Billing Integration

- The BEACON interface team will assist the City or third-party implementation team troubleshoot BEACON API requests and responses, interpret datasets, and explain BEACON functionality, but cannot assist with or describe the functionality of any non-BEACON systems.
- If there is a change in the customer system and a request fails or the dataset needs to be updated, a new scope of work may be required.
- Support for functionality troubleshooting of non-BEACON systems is not provided by the BEACON helpdesk.

- The total work time required for all project software deployment and integration services as detailed in this Section 7 is expected not to exceed eighty (80) hours. If this threshold is reached, Badger Meter will provide the City with a detailed hours log of all work performed, which will include root cause(s) for exceeding the threshold. Subsequently, Badger Meter will work with the City to identify any remaining work outstanding and an applicable hourly rate to complete the remaining work.

7.5 BEACON UAT Environment

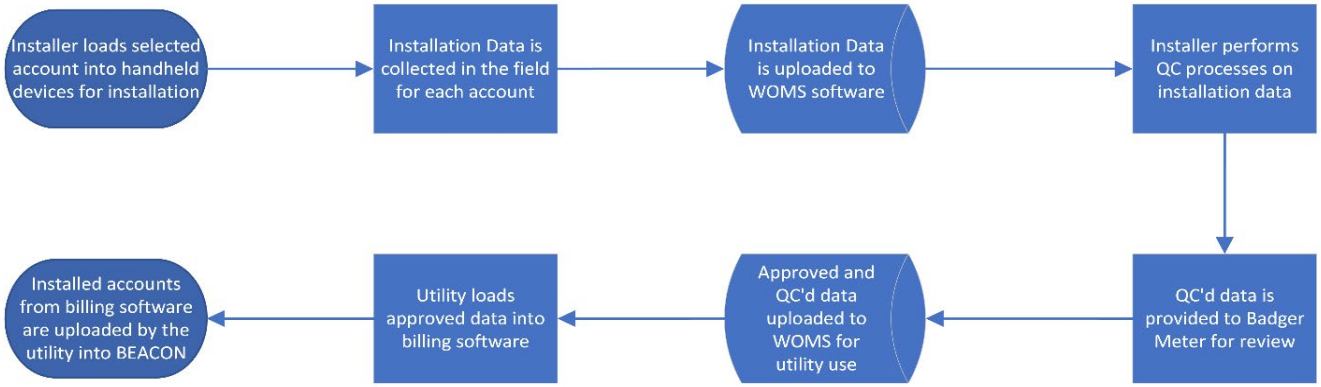
BEACON has a User Acceptance Testing (UAT) or sandbox environment available to clients during the development and implementation phase of the project. There are several caveats to this availability, as follows:

- BEACON UAT is synchronized with production roughly once a quarter. This sync will overwrite any change in UAT that is not also made in production. Clients may or may not be notified of sync dates.
- BEACON's internal interface and development teams will also be contemporaneously using UAT for testing. Data stability is not guaranteed in this environment.
- BEACON UAT's system uptime is not guaranteed or beholden to the BEACON SLA as BEACON production is.
- BEACON UAT is not intended for parallel use with production.
- Excessive continued use of UAT after development and implementation may warrant use-case discovery and further negotiation if appropriate.
- If the City would like to run tests in UAT, this can generally be accommodated. Please make the Badger Meter technical support team aware of the testing goals and expected duration and the interface and development teams will endeavor to avoid making changes during the time.

7.6 Project Data Workflow

The figure below details the method by which the City will be provided installation data to upload into its billing system at a mutually agreed frequency. There is a slight lag from when a meter is installed to the installation data being available, which generally does not exceed three (3) days. The reason for this delay is to permit the quality control procedures to be applied and to ensure the most accurate data possible is transmitted.

Figure 6: Installation Data Workflow - Standard Operating Procedure



7.7 Transition to Badger Meter Technical Support

The 'Billing Integration' portion of this project is complete when the following three milestones are complete:

1. The 'Accounts and Assets' file is approved by the BEACON interface analyst.
2. The billing reads data is approved by Tyler Munis.
3. If in scope, the APIs are in place to automate these two dataflows (or the time limit to implement APIs has expired).

After the billing integration is complete, the Badger Meter interface analyst will remain available for projects for approximately one (1) billing cycle, unless otherwise agreed. Once this additional availability expires, subsequent questions and answers must be directed to Badger Meter's technical support group as prescribed in the BEACON Service-Level Agreement (SLA).

8 Change Management Plan

Change is somewhat of an inevitability on projects of the size and duration of AMI deployments. Changes in scope require careful management to avoid disrupting the project. Should a situation arise that begets a change on the project, the following change management procedure will be followed.

8.1 Change Management Team

If a change is identified, it will be reviewed by the following personnel: the TK-Ops Manager, the lead project manager, the account manager, the sales manager, the contract manager, and relevant installation partner and the City's personnel. These individuals will follow a change management workflow as follows:

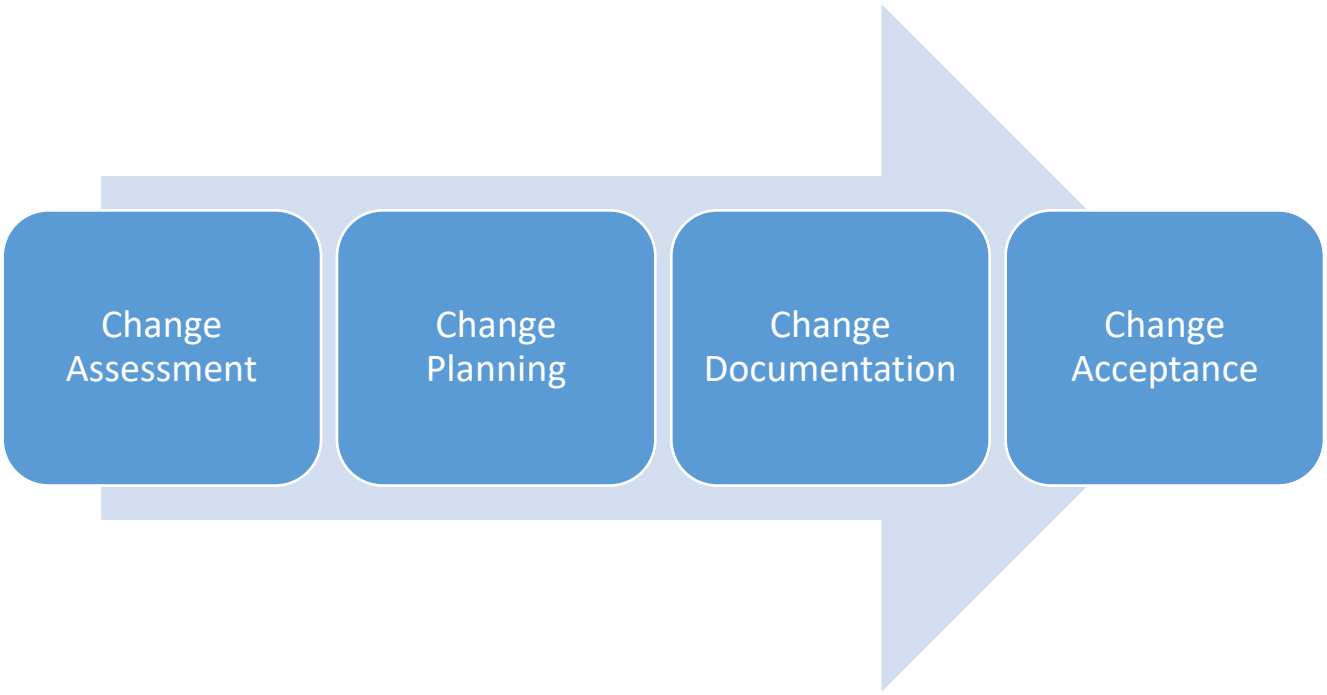


Figure 7: Change Management Plan

- The change will be assessed to determine its impact in terms of cost, schedule, and risk. If the change is within the capacity of the project to absorb, either due to available contingency funds, low to no cost impact, or other project-specific factors, and if the change management team agrees to do so, the change will be absorbed and documented in the project RAID log as a decision.
- If the change cannot be absorbed, a change order will be prepared. A change memo will be prepared first that characterizes cost and time impact for review. If the solution is acceptable, the memo will form an exhibit to the formal change order. This preliminary review helps clearly document and manage the change process.

- If a proposed change memo is not acceptable in terms of its impact, the change management team will return to the assessment phase and attempt to arrive at alternate solutions that can be planned, documented, and accepted.
- If the change memo is acceptable, the change will be documented by means of a change order signed by the appropriate parties.
- Part of the documentation process will include an assessment of other project artifacts (such as the installation schedule and/or project ordering plan) that may be impacted and the assignment of responsible parties to update them.

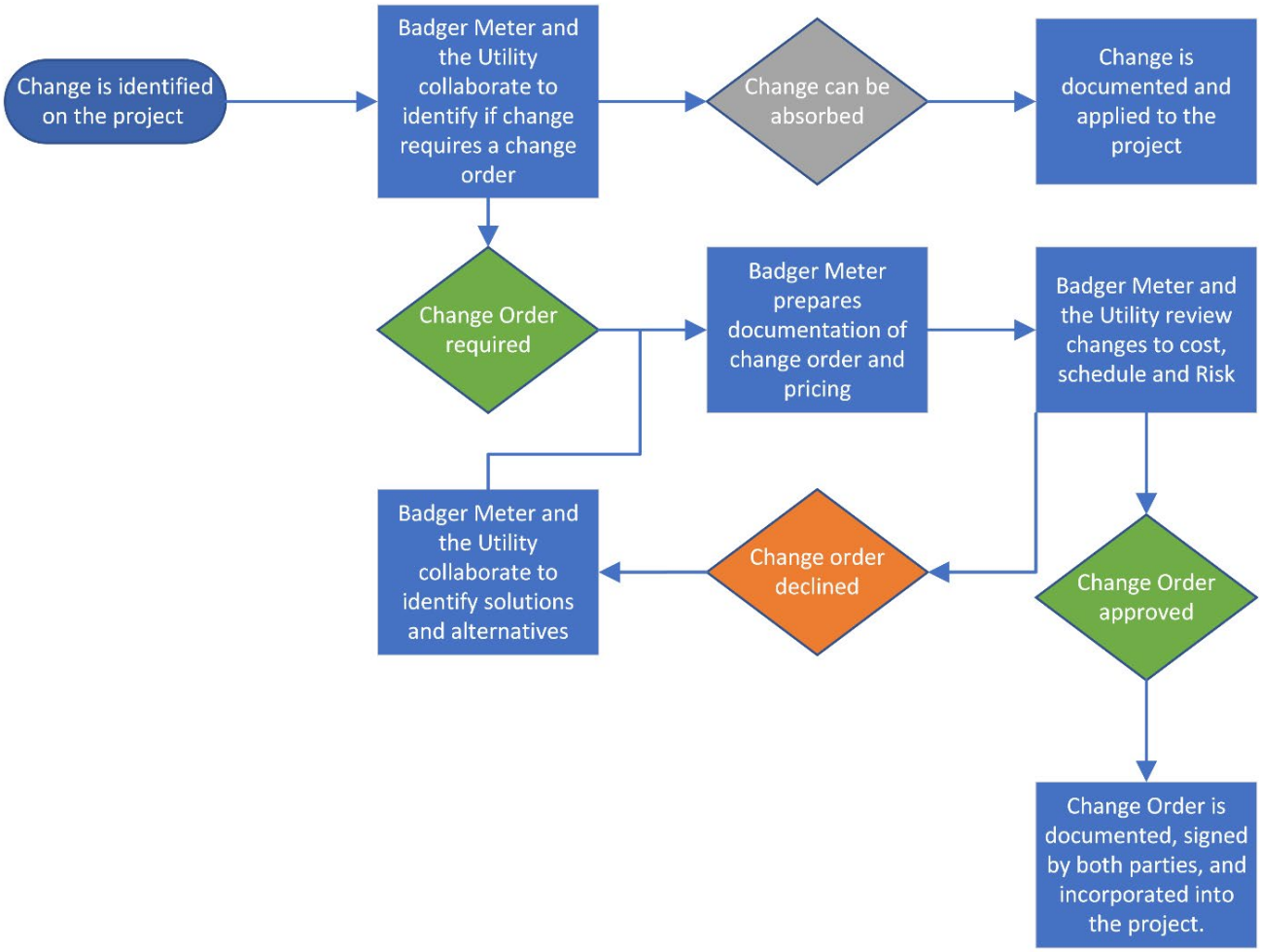


Figure 8: Change Management Workflow Diagram

9 Project Training Plan

Badger Meter's approach to training is one that is highly tailored to the specific needs of its individual utility customers. To that end, the methodology for training is best understood as "demonstrate, perform, and practice." Trainees can expect to have the first part of a given training session to consist of demonstrations, lectures, and walkthroughs of the product or solution being taught. The second portion of a given session will consist of more hands-on work with the product or solution to better impart the lesson(s) to be learned.

From experience, Badger Meter has found that structuring training around the message of 'a day in the life' is the most effective way to impart the information on trainees. To facilitate this, Badger Meter will engage functional managers of the City's relevant departments to be trained in planning workshops prior to the curriculum for that training session being finalized. In this way, the users being trained are readily able to relate the training to their day-to-day job duties and will typically demonstrate higher retention.

While Badger Meter does not provide training sessions as prerecorded videos (given the preference for highly tailored, 1-of-1 trainings), Badger Meter has no objection to the City recording the training sessions delivered as part of this project for future in-house training sessions.

9.1 General Training Notes

- All training will be conducted on the City's BEACON portfolio and with the City's hardware.
- Training can be conducted in person or via videoconference. Some training (for example, installation training) is best delivered in person, while software-focused training can be more effective over videoconference to allow trainees to participate on their own copy of the software.
- Training sessions can, at the City's discretion, include verbal or written tests to assess the success of the training at imparting knowledge to the trainees. The exact content of these tests will be created by Badger Meter and approved by the City.
    - the City and Badger Meter will determine the course of action if a trainee fails the test.
- Class sizes for training are generally capped at 25-30 attendees to ensure personal attention from the instructor and to permit all attendees the opportunity to ask and have questions answered.
- Training documentation, where applicable, will be provided by Badger Meter. All product literature, manuals, and installation documentation are available online at either www.badgermeter.com for product, or www.beaconama.net for the BEACON software platform.
- Training for this project is proposed in the following general phases.

Table 8: Proposed Training Types and Timings

Training Name	Training Type	General Timing in Project
Installation and Product SME Training	Train-the-Trainer	In preparation for IDA
BEACON SME Training	Train-the-Trainer	In preparation for IDA
BEACON Technical Staff Training	Technical Training	After IDA is complete
BEACON Billing Training	Technical Training	Prior to first billing cycle using AMI system
BEACON Operations Training (Incl. EyeOnWater)	Technical Training	After ~30% of installations are complete or prior to EyeOnWater roll-out, whichever is earlier
BEACON Operational Transition Preparedness	Review and Assignment of Handoff Readiness	After ~75% of installations are complete, or prior to the commencement of project closeout activities, whichever is earlier.
Refresher Training	Technical Training	As needed within project duration

9.2 Installation and Product SME Training

This session's target audience is leaders from meter installation and field operations personnel from the City who will be responsible for AMI meter installations and maintenance in support of the system's operations. This training is broken into three parts, each of which has a proposed agenda as follows. As previously mentioned, these agendas are illustrative of general concepts and elements. The City will have final approval of training agendas and materials prior to course administration.

9.2.1 Installation and Product SME Training: Part 1 - Meter School

Introduction to Meter School:

1. Overview of BEACON solution for utilities
    - A high-level overview of BEACON and the entire solution being deployed.
2. Endpoint Installation and Activation – Best Practices and Demonstration
    - Demonstration of process to connect, mount, and activate an endpoint.
3. Understanding Meter Application Criteria and Key Terms
    - Review of general meter application and sizing theory.
    - Review of key terminology in use to ensure understanding.

4. Small Meter Technology Options
    - Discussion of the various small meters (<2”) that form the solution and their technologies and differences.
5. Small Meter Breakdown and Reassembly Demo
    - Live breakdown and reassembly of a small meter to demonstrate its construction and components.
6. Understanding Ultrasonic Metering Technology
    - Review of ultrasonic metering technology and its application in the solution.
7. Understanding Fire Service Metering Technology
    - Review of how fire service metering can be incorporated into the system.

The approximate duration of this session is four (4) hours but will vary depending on the exact agenda determined by Badger Meter and the City.

9.2.2 Installation and Product SME Training: Part 2 – BEACON Introduction for Operations

Introduction to BEACON for Operations:

1. Overview of ORION Cellular Technology
    - General explanation and demonstration of how endpoints function and interact with the BEACON platform.
2. BEACON Roles
3. The At-A-Glance Page
    - Modules
    - Configuration
4. The Assets Page
    - Review of the various statuses endpoints can have in BEACON, their meaning, and how they move between them.
    - Demonstration of how to track assets as they are added to the system.
5. The Monitor Page
    - Usage and Consumption Graphs
    - Overlays for Temperature and Precipitation data
    - Alarms
    - Account Lookup
    - Favorites and Tags
    - Exporting Data

The approximate duration of this session is three (3) hours, but will vary depending on the exact agenda determined by Badger Meter and the City.

9.2.3 Installation and Product SME Training: Part 3 – Practical Installation (Optional)

Practical Installations

1. Classroom installation practice
    - Demonstrate correct technique and have trainees practice working with the tools and products.
2. In-Field installation practice
    - At appropriate locations, apply installation best practices and install meters/endpoints in the ground.

Depending on the number of installations to be performed as part of this training, the duration can vary significantly. A more refined plan for this session will be presented after it is workshopped with the City.

9.3 BEACON Technical Staff Training

This session builds upon the concepts in Section 9.2. With the SME trained on the system, they will help lead this session with the Badger Meter trainers. This will also help the SME become more confident in their knowledge and become more effective trainers for the City going forward. The target audience of this session is IT personnel, technical problem solvers, and other similar individuals who are expected to have a high level of command of the BEACON software.

9.3.1 Sample Agenda

The BEACON Technical Staff Training includes:

1. Introduction to BEACON Software
2. Steps of a Billing Cycle in BEACON
    i) Data import
    ii) Data export
3. The At-A-Glance Page
    i) Modules and their features
    ii) User-level personalization
4. Users and Roles
    i) Administrators
    ii) Permissions
    iii) Assigning roles
    iv) Creating new users
5. The Monitor Page
    i) Usage and Consumption Graphs
    ii) Overlays for Temperature and Precipitation data
    iii) Alarms
    iv) Account Lookup

v) Favorites and Tags
vi) Exporting Data

6. The Assets Page
    i) Endpoint status
    ii) Utility Settings
    iii) Asset Lookup
7. EyeOnWater Overview
8. BEACON Integrations on this project
9. Open discussion with BEACON staff on technical questions.

This training will require a high degree of care in curating the agenda to ensure that the technical staff derive value from the session. The estimated duration of this training is four (4) hours but could vary depending not only on the agreed agenda but also on the number of questions asked.

9.4 BEACON Billing Training

This session is a focused training session on the role of BEACON within the billing cycle. By necessity, it cannot be conducted until after billing integration is complete. It should, however, be conducted prior to the first billing cycle with BEACON. The audience here is intended to be billing clerks or other office personnel who will be interfacing with the system in a billing capacity. Customer service representatives may also find value in this session.

9.4.1 Sample Agenda

The BEACON Billing Training includes:

1. Introduction to BEACON Software
2. The At-A-Glance Page
    i) Modules and their features
    ii) How to personalize by user
3. Users and Roles
    i) Staff
    ii) Customers
        (1) EyeOnWater Users
4. The Monitor Page
    i) Usage and Consumption Graphs
    ii) Overlays for Temperature and Precipitation data
    iii) Alarms
    iv) Account Lookup
    v) Favorites and Tags
    vi) Exporting Data
5. The Assets Page
    i) Endpoint status
    ii) Utility Settings
    iii) Asset Lookup
6. Walk through of a billing cycle.

i) Data flow from billing to BEACON and back

The total duration of this session is typically between two (2) and three (3) hours, depending on the agreed agenda.

9.5 BEACON Operations Training

This session covers nearly the same agenda as the session characterized in Section 9.3, but its target audience is the day-to-day operators of the system in customer service and billing. SMEs that were created in the earlier training will again participate and help lead the course to instill in the other trainees that they are a resource to whom questions can be brought. This training will focus more on the 'day in the life' model prescribed earlier and will prepare staff to work with the system.

9.5.1 Sample Agenda

The BEACON Operations Training includes:

1. Introduction to BEACON Software
2. Steps of a Billing Cycle in BEACON
    i) Data import
    ii) Data export
3. The At-A-Glance Page
    i) Modules and their features
4. Users and Roles
    i) Staff
    ii) Customers
    iii) EyeOnWater Users
    iv) Creating a new user
5. The Monitor Page
    i) Usage and Consumption Graphs
    ii) Overlays for Temperature and Precipitation data
    iii) Alarms
    iv) Account Lookup
    v) Favorites and Tags
    vi) Filters
    vii) Exporting Data
6. The Assets Page
    i) Endpoint status
    ii) Utility Settings
    iii) Asset Lookup
7. EyeOnWater Overview

The total duration of this session is typically between three (3) and four (4) hours, depending on the agreed agenda.

9.6 BEACON Operational Transition Preparedness

The purpose of this session differs from the previous sessions in that it is less of a structured training and more of a working session and evaluation of the City's understanding and usage of the BEACON platform. Specific topics on the agenda for this session will include:

1. Review of Badger Meter Technical Support Procedures and Processes
2. Review of the RMA (Return Material Authorization) Process
3. Review of Portfolio Management Best Practices
4. Controlling Provisioned/Pre-Provisioned Endpoints
5. General BEACON operations and maintenance best practices.

9.7 Refresher Training

Within the project term, should the City decide that additional training would be beneficial, it can be arranged. The form, content, and timing of said refresher training will be agreed to at the time it is requested. Refresher training will be billable at the agreed training rate in the contract unless otherwise agreed.

10 Project Invoicing Procedure

The project shall be invoiced as laid out in this Section.

10.1 Project Invoicing

All Materials supplied as part of the project will be invoiced upon shipment from Badger Meter, and at that time, ownership of the products shall pass to the City. This includes meter pit lids and/or boxes (if applicable), as well as plumbing components supplied. PVI will hold and maintain such Materials in their respective warehouse in accordance with Section 6 prior to their installation to alleviate the need for the City to allocate warehouse space and inventory management resources to the Project.

10.2 Service Invoicing

Installation labor will be invoiced upon acceptance subject to the procedures in Section 6 of this SOW. Additional work approved via the procedure in Section 6.5.11 will similarly be invoiced upon acceptance.

Non-installation services (such as project management fees and/or software integration costs that may be included) will be invoiced upon agreed milestones. Such milestones will be agreed during pre-construction and documented within a billing milestone schedule.

10.3 Invoice/Pay Request Procedure

Monthly, a pay request detailing the installation services accepted and other non-installation services performed in accordance with the agreed upon milestones will be prepared by the Badger Meter project manager and submitted to the City. Supporting documentation will be furnished by Badger Meter alongside the pay request. the City will have five (5) business days to review the pay request and provide acceptance of the pay request to the Badger Meter project manager in writing. Upon receipt of that approval, the Badger Meter lead project manager shall have an invoice automatically generated and submitted to the City.

10.4 Conditional Approval of Pay Request

If no objection is provided by the City to the Badger Meter lead project manager within five (5) business days of the submission of the pay request from the Badger Meter lead project manager to the City, the pay request will be deemed conditionally accepted by the City and an invoice will be generated and submitted. Like the installation conditional acceptance procedure laid out in Section 6, this does not alleviate Badger Meter's obligation to provide accurate invoicing but allows for administrative processes to proceed in a timely fashion.

If a conditionally accepted pay request and subsequent invoice is found to be inaccurate, it will be edited, re-issued, or otherwise updated as necessary by Badger Meter upon such notification from the City with any incorrect payments remitted by the City to Badger Meter to be credited towards future invoices.

11 Project Acceptance and Closeout Plan

11.1 Project Closeout Plan

Once the scope of installations reaches 85% complete, preparation for the project closeout and turnover meeting will begin. Steps included in this plan will include:

- Agreement on a target completion percentage and date.
    - The target completion percentage will factor in any accounts designated as RTU or otherwise removed from scope.
- The deliverables specified in this SOW and any other deliverables identified and agreed to by the project parties will be evaluated for completeness.
- Acceptance of all installed accounts will be confirmed by the City.
- Review any open UIR accounts and arrange for remediation.
- Review any pending action items assigned and determine their completion timeline.
- Review financial performance against budget and discuss any discrepancies, including any unpaid invoices.
- All installation data, including photos, will be turned over to the City.

11.2 Closeout Meeting

Once the project installations and items identified in Section 11.1 are complete, the closeout meeting will be held. This will consist of input and discussion from project parties to identify and document lessons learned, present project performance and/or KPI, and review highlights of the project. The agenda of the closeout meeting prepared by Badger Meter will be informed by the planning performed in Section 11.1, but will generally include the following items:

- Review of project scope and milestones
- Review of budget and schedule performance
- Review of other project metrics
- Review of UIR/RTU list
- Review of action items
- Turnover of project documentation
- Turnover of installation data
- Plan for notification of final acceptance by the City

11.3 Project Acceptance Criteria

Sample project acceptance criteria may include:

1. Verification that all uninstalled inventory housed in the IP warehouse is turned over to the City.
2. Confirmation of all removed items that were to remain the property of the City have been satisfactorily returned to the City.
3. Confirmation that all installation and project data has been passed from the document control system to the City's operational systems.

4. Other criteria as mutually agreed.

11.4 Project Inventory Reconciliation

Throughout the project, Badger Meter will, in its capacity as project installation and quality manager, audit the warehouses operated by PVI to ensure that the inventory management plan laid out in Section 6.2 is being observed. During preparation for the closeout, Badger Meter will perform a final audit of the warehouses and ensure that any inventory not to be installed is correctly transferred back to the City. Serial number-level verification will be performed for serialized products.

11.5 Project Closeout Notification

Once the criteria in Section 11.3 are satisfied, and any other criteria agreed by Badger Meter and the City are similarly satisfied, the Badger Meter lead project manager will request a formal notice of project completion from the City's project manager. Upon receipt of such notice, the Project will be complete.

***SMART WATER IS** BADGER METER*

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ATTACHMENT B

BADGER METER WARRANTY DOCUMENTATION

AMI WATER METERS

RFP 24.001

WARRANTY DOCUMENTATION

Badger Meter

Lead-Free Bronze Disc Meters

PRODUCTS COVERED

This warranty shall apply to all Recordall® Lead-Free Bronze Disc Meters, models 25 through 170, when used to measure potable water, including the registers used with these meters (collectively "Product") sold on or after January 25, 2019. This warranty is extended only to utilities, municipalities, other commercial users and authorized Badger Meter, Inc. distributors, hereafter referred to as "Customer" and does NOT apply to consumers or any person or entity who is not an original customer of Badger Meter or its authorized distributors.

MATERIALS AND WORKMANSHIP

Badger Meter warrants Product to be free from defects in materials and workmanship appearing within the following time frames and those listed in the table below:

Housings
Twenty-five (25) years and six (6) months after shipment from Badger Meter.

Local Registers Supplied with the Meters Listed Herein
Twenty-five (25) years and six (6) months after shipment from Badger Meter.

	AWWA New Meter Accuracy	AWWA Repaired Meter Accuracy (AWWA M6 Manual)	Badger Meter Extended Low Flow Meter Accuracy
Recordall Meter Model, Size	*The meter product will meet or exceed new meter accuracy standards set forth in AWWA Standard C700 for the following periods:*	*The meter product will meet or exceed repaired meter accuracy standards set forth in AWWA Manual M-6, Chapter 5, Table 5.3 for the following periods:*	*Badger Meter further warrants the meter product to meet or exceed the following extended low flow accuracies in excess of AWWA standard:*
Model 25, 5/8 in. and 5/8 x 3/4 in.	Five (5) years from date of shipment or registration of 750,000 gallons, whichever occurs first.	Fifteen (15) years from date of shipment or registration of 2,500,000 gallons, whichever occurs first, with a 25 gpm safe maximum operating capacity and a 15 gpm maximum rate for continuous operation.	Badger Meter warrants Product low flow accuracy of 98.5% at a rate of 1/4 gpm and low flow accuracy of 95.0% at a rate of 1/8 gpm for five (5) years from date of shipment or registration of 675,000 gallons, whichever occurs first.
Model 35, 3/4 in.	Five (5) years from date of shipment or registration of 750,000 gallons, whichever occurs first.	Fifteen (15) years from date of shipment or registration of 2,500,000 gallons, whichever occurs first, with a 35 gpm safe maximum operating capacity and a 25 gpm maximum rate for continuous operation.	Badger Meter warrants Product low flow accuracy of 97% at a rate of 3/8 gpm for five (5) years from date of shipment or registration of 675,000 gallons, whichever occurs first.
Model 55, 1 in.	Five (5) years from date of shipment or registration of 1,000,000 gallons, whichever occurs first.	Fifteen (15) years from date of shipment or registration of 3,000,000 gallons, whichever occurs first, with a 55 gpm safe maximum operating capacity and a 40 gpm maximum rate for continuous operation.	Badger Meter warrants Product low flow accuracy of 95% at a rate of 1/2 gpm for three (3) years from date of shipment or registration of 575,000 gallons, whichever occurs first.
Model 70, 1 in.	Five (5) years from date of shipment or registration of 1,100,000 gallons, whichever occurs first.	Fifteen (15) years from date of shipment or registration of 3,250,000 gallons, whichever occurs first, with a 70 gpm safe maximum operating capacity and a 50 gpm maximum rate for continuous operation.	Badger Meter warrants Product low flow accuracy of 95% at a rate of 3/4 gpm for three (3) years from date of shipment or registration of 1,100,000 gallons, whichever occurs first.
Model 120, 1-1/2 in.	Two (2) years from date of shipment or registration of 1,600,000 gallons, whichever occurs first.	Fifteen (15) years from date of shipment or registration of 5,600,000 gallons, whichever occurs first, with a 120 gpm safe maximum operating capacity and a 80 gpm maximum rate for continuous operation.	Badger Meter warrants Product low flow accuracy of 95% at a rate of 1-1/4 gpm for two (2) years from date of shipment or registration of 1,440,000 gallons, whichever occurs first.
Model 170, 2 in.	Two (2) years from date of shipment or registration of 2,100,000 gallons, whichever occurs first.	Fifteen (15) years from date of shipment or registration of 10,400,000 gallons, whichever occurs first, with a 170 gpm safe maximum operating capacity and a 100 gpm maximum rate for continuous operation.	Badger Meter warrants Product low flow accuracy of 95% at a rate of 1-1/2 gpm for two (2) years from date of shipment or registration of 1,890,000 gallons, whichever occurs first.

PRODUCT RETURNS

Any Product proved to the satisfaction of Badger Meter to have failed the foregoing warranties will, at the option of Badger Meter, be repaired or replaced without charge to the Customer. Any eligible Product repaired or replaced by Badger Meter will retain the original Product's warranty based on the original Product purchase date, at Badger Meter's sole discretion. The Badger Meter obligation hereunder shall be limited to such repair and replacement and shall be conditioned upon Badger Meter receiving written notice of any alleged defect within ten (10) days after its discovery. This exclusive remedy shall not be deemed to have failed its essential purpose so long as Badger Meter is willing and able to replace defective products or issue a credit to purchaser within a reasonable time of proof to Badger Meter that a defect is involved. Product returns must be shipped by the Customer prepaid F.O.B. to the nearest Badger Meter factory or distribution center. The Customer shall be responsible for all direct and indirect costs associated with removing the original Product and reinstalling the repaired or replacement Product.

LIMITS OF LIABILITY

This warranty shall not apply to Product repaired or altered by parties other than Badger Meter. The foregoing warranty applies only to the extent that the Product is installed, serviced and operated strictly in accordance with AWWA Standard C700 and AWWA M6 Manual, as applicable. The warranty shall not apply and shall be void with respect to Product exposed to conditions other than those detailed in the Badger Meter Product technical and/or operational literature, or which have been exposed to adverse installation conditions, damaged by any water conditions and/or water quality, including but not limited to foreign matter in the water such as dirt, sand, minerals, debris, deposits, biofilms, extreme corrosivity, or other impurities, or which have been subject to passage of high-speed air slugs, vandalism, negligence, accident, acts of God, alteration, improper installation, operation or repair, or other circumstances which are beyond the reasonable control of Badger Meter. With respect to Product not manufactured by Badger Meter, the warranty obligations of Badger Meter shall in all respects conform and be limited to the warranty extended to Badger Meter by the supplier.

THE FOREGOING WARRANTIES ARE EXCLUSIVE AND IN LIEU OF ALL OTHER EXPRESS AND IMPLIED WARRANTIES WHATSOEVER, INCLUDING BUT NOT LIMITED TO IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE (except warranties of Title).

Any description of Product, whether in writing or made orally by Badger Meter or its agents, specifications, samples, models, bulletins, drawings, diagrams, engineering sheets, or similar materials used in connection with any Customer's order are for the sole purpose of identifying Product and shall not be construed as an express warranty. Any suggestions by Badger Meter or its agents regarding use, application or suitability of Product shall not be construed as an express warranty unless confirmed to be such in writing by Badger Meter.

Exclusion of Consequential Damages and Disclaimer of Other Liability

Badger Meter liability with respect to breaches of the foregoing warranty shall be limited as stated therein. Badger Meter liability shall in no event exceed the contract price.
BADGER METER SHALL NOT BE SUBJECT TO AND DISCLAIMS: (1) ANY OTHER OBLIGATIONS OR LIABILITIES ARISING OUT OF BREACH OF CONTRACT OR OF WARRANTY (2) ANY OBLIGATIONS WHATSOEVER ARISING FROM TORT CLAIMS (INCLUDING NEGLIGENCE AND STRICT LIABILITY) OR ARISING UNDER OTHER THEORIES OF LAW WITH RESPECT TO PRODUCTS SOLD OR SERVICES RENDERED BY BADGER METER, OR ANY UNDERTAKINGS, ACTS OR OMISSIONS RELATING THERETO, AND (3) ALL CONSEQUENTIAL, INCIDENTAL AND CONTINGENT DAMAGES WHATSOEVER.

Making Water Visible®

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Legacy Document Number: RD-W-4-AWWA-EN

Badger Meter

E-Series G2® Ultrasonic Meter

Lead-Free Bronze Alloy Meters, 3, 4, 6, 8 inch

PRODUCTS

This warranty shall apply to all Badger Meter E-Series G2® Ultrasonic lead-free meters, sizes 3 inch, 4 inch, 6 inch and 8 inch, when used to measure potable cold water, and the internal encoder and battery used with these meters (collectively "Product"), sold on or after December 15, 2021. This warranty is not transferable and is extended only to utilities, municipalities, other commercial users and authorized distributors, hereafter referred to as "Customer" and does NOT apply to consumers or any person or entity who is not an original customer of Badger Meter or its authorized distributors.

MATERIALS AND WORKMANSHIP

Badger Meter, Inc. ("Badger Meter") warrants Product to be free from defects in materials and workmanship appearing within the following time frames.

Housing

Ten (10) years and six (6) months after shipment from Badger Meter.

Electronics (Battery, Registration, Transducer)

Ten (10) years and six (6) months after shipment from Badger Meter.

Pressure Sensor

Five (5) years and six (6) months after shipment from Badger Meter.

METER ACCURACY

The Product will meet or exceed all applicable specifications outlined in AWWA Standard C715 in addition to meeting meter accuracy of ±1.5% for the published ranges set forth in Badger Meter's current published product data sheet for ten (10) years from the date of shipment from Badger Meter.

EXTENDED LOW-FLOW METER ACCURACY

Badger Meter further warrants the Product will meet extended minimum test flow accuracy of ± 3% for the published ranges set forth in Badger Meter's current published data sheet for ten (10) years from date of shipment from Badger Meter.

PRODUCT RETURNS

Any Product proved to the satisfaction of Badger Meter to have failed the foregoing warranties will, at the option of Badger Meter, be repaired or replaced without charge to the Customer. Any eligible Product repaired or replaced by Badger Meter will retain the original Product's warranty based on the original Product purchase date, at Badger Meter's sole discretion. The Badger Meter obligation hereunder shall be limited to such repair and replacement and shall be conditioned upon Badger Meter receiving written notice of any alleged defect within ten (10) days after its discovery. This exclusive remedy shall not be deemed to have failed its essential purpose so long as Badger Meter is willing and able to replace defective products or issue a credit to purchaser within a reasonable time of proof to Badger Meter that a defect is involved. Product returns must be shipped by the Customer prepaid F.O.B. to the nearest Badger Meter factory or distribution center. The Customer shall be responsible for all direct and indirect costs associated with removing the original Product and reinstalling the repaired or replacement Product.

LIMITS OF LIABILITY

This warranty shall not apply to Product repaired or altered by parties other than Badger Meter, or read by equipment not explicitly approved or licensed by Badger Meter. The foregoing warranty applies only to the extent that the Product is installed, serviced and operated strictly in accordance with AWWA Standard C715 and AWWA M6 Manual, as applicable. The warranty shall not apply and shall be void with respect to Product exposed to conditions other than those detailed in the Badger Meter Product technical and/or operational literature, or which, as determined at Badger Meter's sole discretion, have affected the ability of the Product to perform, including, but not limited to: exposure to adverse installation conditions; misuse; vandalism; negligence; accident; acts of God; alteration; improper installation, operation or repair; damage from passage of high-speed air slugs; damage by water quality conditions, including but not limited to: aggressive water, foreign matter, biofilms, or extreme corrosivity; damage caused by actions not in accordance with the intended use; or other circumstances which are beyond the reasonable control of Badger Meter, as determined at Badger Meter's sole discretion. With respect to product not manufactured by Badger Meter, the warranty obligations of Badger Meter shall in all respects conform and be limited to the warranty extended to Badger Meter by the supplier of product.

THE FOREGOING WARRANTIES ARE EXCLUSIVE AND IN LIEU OF ALL OTHER EXPRESS AND IMPLIED WARRANTIES WHATSOEVER, INCLUDING BUT NOT LIMITED TO IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE (except warranties of Title).

Any description of Product, whether in writing or made orally by Badger Meter or its agents, specifications, samples, models, bulletins, drawings, diagrams, engineering sheets, or similar materials used in connection with any Customer's order are for the sole purpose of identifying Product and shall not be construed as an express warranty. Any suggestions by Badger Meter or its agents regarding use, application or suitability of Product shall not be construed as an express warranty unless confirmed to be such in writing by Badger Meter.

Exclusion of Consequential Damages and Disclaimer of Other Liability

Badger Meter liability with respect to breaches of the foregoing warranty shall be limited as stated therein. Badger Meter liability shall in no event exceed the contract price. BADGER METER SHALL NOT BE SUBJECT TO AND DISCLAIMS: (1) ANY OTHER OBLIGATIONS OR LIABILITIES ARISING OUT OF BREACH OF CONTRACT OR OF WARRANTY (2) ANY OBLIGATIONS WHATSOEVER ARISING FROM TORT CLAIMS (INCLUDING NEGLIGENCE AND STRICT LIABILITY) OR ARISING UNDER OTHER THEORIES OF LAW WITH RESPECT TO PRODUCTS SOLD OR SERVICES RENDERED BY BADGER METER, OR ANY UNDERTAKINGS, ACTS OR OMISSIONS RELATING THERETO, AND (3) ALL CONSEQUENTIAL, INCIDENTAL AND CONTINGENT DAMAGES WHATSOEVER.

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Badger Meter

Recordall® Disc and Turbo Series Meters for Reclaimed Water

PRODUCTS COVERED

This warranty shall apply to all Recordall® bronze disc meters, models 25 through 170, and Turbo Series meters, 1-1/2 inch through 12 inch, when used to measure non-potable water, and the local registers used with these meters (collectively "Product") sold on or after September 15, 2014. This warranty is extended only to utilities, municipalities, other commercial users and authorized Badger Meter, Inc. distributors, hereafter referred to as "Customer" and does NOT apply to consumers or any person or entity who is not an original customer of Badger Meter or its authorized distributors.

MATERIALS AND WORKMANSHIP

Badger Meter warrants Product to be free from defects in materials and workmanship for one (1) year and six (6) months after shipment from Badger Meter.

PRODUCT RETURNS

Any Product proved to the satisfaction of Badger Meter to have failed the foregoing warranties will, at the option of Badger Meter, be repaired or replaced without charge to the Customer. The obligation hereunder of Badger Meter shall be limited to such repair and replacement and shall be conditioned upon Badger Meter receiving written notice of any alleged defect within ten (10) days after its discovery. This exclusive remedy shall not be deemed to have failed its essential purpose so long as Badger Meter is willing and able to replace defective products or issue a credit to purchaser within a reasonable time of proof to Badger Meter that a defect is involved. Product returns must be shipped by the Customer prepaid F.O.B. to the nearest Badger Meter factory or distribution center. The Customer shall be responsible for all direct and indirect costs associated with removing original product and reinstalling the repaired or replacement Product.

LIMITS OF LIABILITY

This warranty shall not apply to Product repaired or altered by any party other than Badger Meter. The foregoing warranty applies only to the extent that the Product is installed, serviced and operated strictly in accordance with AWWA Standards C700 or C701 as applicable, except the requirements relating to potable water.

The warranty shall not apply and shall be void with respect to Product exposed to conditions other than those detailed in Badger Meter Product technical literature, or which have been subject to vandalism, negligence, accident, acts of God, improper installation, operation or repair, alteration, or other circumstances which are beyond the reasonable control of Badger Meter. With respect to Product not manufactured by Badger Meter, the warranty obligations of Badger Meter shall in all respects conform and be limited to the warranty extended to Badger Meter by the supplier.

THE FOREGOING WARRANTIES ARE EXCLUSIVE AND IN LIEU OF ALL OTHER EXPRESS AND IMPLIED WARRANTIES WHATSOEVER, INCLUDING BUT NOT LIMITED TO IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE (except warranties of title).

Any description of the Product, whether in writing or made orally by Badger Meter or Badger Meter agents, specifications, samples, models, bulletins, drawings, diagrams, engineering sheets or similar materials used in connection with any Customer's order are for the sole purpose of identifying the Product and shall not be construed as an express warranty. Any suggestions by Badger Meter or agents of Badger Meter regarding use, application, or suitability of the Product shall not be construed as an express warranty unless confirmed to be such in writing by Badger Meter.

Exclusion of Consequential Damages and Disclaimer of Other Liability. The liability of Badger Meter with respect to breaches of the foregoing warranty shall be limited as stated herein. The liability of Badger Meter shall in no event exceed the contract price. **BADGER METER SHALL NOT BE SUBJECT TO AND DISCLAIMS: (1) ANY OTHER OBLIGATIONS OR LIABILITIES ARISING OUT OF BREACH OF CONTRACT OR OF WARRANTY, (2) ANY OBLIGATIONS WHATSOEVER ARISING FROM TORT CLAIMS (INCLUDING NEGLIGENCE AND STRICT LIABILITY) OR ARISING UNDER OTHER THEORIES OF LAW WITH RESPECT TO PRODUCTS SOLD OR SERVICES RENDERED BY BADGER METER, OR ANY UNDERTAKINGS, ACTS OR OMISSIONS RELATING THERETO, AND (3) ALL CONSEQUENTIAL, INCIDENTAL, AND CONTINGENT DAMAGES WHATSOEVER**.

Badger Meter Warranty

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Legacy Document Number: RR-W-01

Badger Meter

E-Series® Ultrasonic Meter

Cold Water Lead-Free Meters
5/8, 5/8 x 3/4, 3/4, 1 inch

PRODUCTS

This warranty shall apply to all Badger Meter E-Series® Ultrasonic lead-free meters (stainless steel, bronze alloy or engineered polymer), sizes 5/8 inch, 5/8 × 3/4 inch, 3/4 inch, and 1 inch, when used to measure potable water and the internal register/encoder and battery used with these meters (collectively "Product"), sold on or after June 28, 2021. This warranty is not transferable and is extended only to utilities, municipalities, other commercial users and authorized distributors, hereafter referred to as "Customer" and does NOT apply to consumers or any person or entity who is not an original customer of Badger Meter or its authorized distributors.

MATERIALS AND WORKMANSHIP

Badger Meter, Inc. ("Badger Meter") warrants Product to be free from defects in materials and workmanship appearing within the earlier of the following time frames.

Lead-Free Housings

Twenty (20) years and six (6) months after shipment from Badger Meter.

Electronics, Battery, Transducers, and Register/Encoder Supplied with the Meters Listed Herein

Twenty (20) years and six (6) months, prorated, after shipment from Badger Meter.

This warranty is prorated as follows: For the first ten (10) years of the warranty the Product is replaced at no charge, and the warranty is prorated at price discounts during the last ten (10) years of the warranty.

Specifically, Badger Meter will repair or replace, at its discretion, a non-performing Product at no cost during the first ten (10) years of the warranty and at prorated price discounts during the last ten (10) years of the warranty. Badger Meter will apply these prorated price discounts to the Product list prices in effect at the time of Product return and according to the following prorated price discount schedule:

- Years 11 through 12—75% discount
- Years 13 through 15—50% discount
- Year 16—40% discount
- Year 17—30% discount
- Year 18—20% discount
- Years 19 through 20—10% discount

Replacement Products are warranted for and under the balance of the original applicable Product warranty.

Pressure Sensor

Five (5) years and six (6) months after shipment from Badger Meter.

This warranty is only applicable for the bronze E-Series G2® Ultrasonic meter with the optional pressure sensor installed.

METER ACCURACY

The Product will meet or exceed all applicable specifications outlined in AWWA Standard C715 in addition to meeting meter accuracy of ±1.5% for the published ranges set forth in Badger Meter's current published product data sheet for twenty (20) years from the date of shipment from Badger Meter.

EXTENDED LOW-FLOW METER ACCURACY

Badger Meter further warrants the Product will meet extended minimum test flow accuracy of ±3% for the published ranges set forth in Badger Meter's current published product data sheet for twenty (20) years from the date of shipment from Badger Meter.

PRODUCT RETURNS

Any Product proved to the satisfaction of Badger Meter to have failed the foregoing warranties will, at the option of Badger Meter, be repaired or replaced without charge to the Customer. Any eligible Product repaired or replaced by Badger Meter will retain the original Product's warranty based on the original Product purchase date, at Badger Meter's sole discretion. The Badger Meter obligation hereunder shall be limited to such repair and replacement and shall be conditioned upon Badger Meter receiving written notice of any alleged defect within ten (10) days after its discovery. This exclusive remedy shall not be deemed to have failed its essential purpose so long as Badger Meter is willing and able to replace defective products or issue a credit to purchaser within a reasonable time of proof to Badger Meter that a defect is involved. Product returns must be shipped by the Customer prepaid F.O.B. to the nearest Badger Meter factory or distribution center. The Customer shall be responsible for all direct and indirect costs associated with removing the original Product and reinstalling the repaired or replacement Product.

LIMITS OF LIABILITY

This warranty shall not apply to Product repaired or altered by parties other than Badger Meter, or read by equipment not explicitly approved or licensed by Badger Meter. The foregoing warranty applies only to the extent that the Product is installed, serviced and operated strictly in accordance with AWWA Standard C715 and AWWA M6 Manual, as applicable. The warranty shall not apply and shall be void with respect to Product exposed to conditions other than those detailed in the Badger Meter Product

technical and/or operational literature, or which, as determined at Badger Meter's sole discretion, have affected the ability of the Product to perform, including, but not limited to: exposure to adverse installation conditions; misuse; vandalism; negligence; accident; acts of God; alteration; improper installation, operation or repair; damage from passage of high-speed air slugs; damage by water quality conditions, including but not limited to: aggressive water, foreign matter, biofilms, or extreme corrosivity; damage caused by actions not in accordance with the intended use; or other circumstances which are beyond the reasonable control of Badger Meter, as determined at Badger Meter's sole discretion. With respect to product not manufactured by Badger Meter, the warranty obligations of Badger Meter shall in all respects conform and be limited to the warranty extended to Badger Meter by the supplier of product.

THE FOREGOING WARRANTIES ARE EXCLUSIVE AND IN LIEU OF ALL OTHER EXPRESS AND IMPLIED WARRANTIES WHATSOEVER, INCLUDING BUT NOT LIMITED TO IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE (except warranties of Title).

Any description of Product, whether in writing or made orally by Badger Meter or its agents, specifications, samples, models, bulletins, drawings, diagrams, engineering sheets, or similar materials used in connection with any Customer's order are for the sole purpose of identifying Product and shall not be construed as an express warranty. Any suggestions by Badger Meter or its agents regarding use, application or suitability of Product shall not be construed as an express warranty unless confirmed to be such in writing by Badger Meter.

Exclusion of Consequential Damages and Disclaimer of Other Liability

Badger Meter liability with respect to breaches of the foregoing warranty shall be limited as stated therein. Badger Meter liability shall in no event exceed the contract price. BADGER METER SHALL NOT BE SUBJECT TO AND DISCLAIMS: (1) ANY OTHER OBLIGATIONS OR LIABILITIES ARISING OUT OF BREACH OF CONTRACT OR OF WARRANTY (2) ANY OBLIGATIONS WHATSOEVER ARISING FROM TORT CLAIMS (INCLUDING NEGLIGENCE AND STRICT LIABILITY) OR ARISING UNDER OTHER THEORIES OF LAW WITH RESPECT TO PRODUCTS SOLD OR SERVICES RENDERED BY BADGER METER, OR ANY UNDERTAKINGS, ACTS OR OMISSIONS RELATING THERETO, AND (3) ALL CONSEQUENTIAL, INCIDENTAL AND CONTINGENT DAMAGES WHATSOEVER.

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Badger Meter

E-Series® Ultrasonic Meters

Lead-Free Meters

DN15, DN20, DN25, DN32, DN40, DN50

PRODUCTS

This warranty shall apply to all Badger Meter E-Series® Ultrasonic lead-free meters, sizes DN15, DN20, DN25, DN32, DN40 and DN50, used to measure potable water, and the internal register/encoder and battery used with these meters (collectively "Product"), sold on or after June 6, 2022. This warranty is not transferable and is extended only to utilities, municipalities, other commercial users and authorized distributors, hereafter referred to as "Customer" and does NOT apply to consumers or any person or entity who is not an original customer of Badger Meter or its authorized distributors.

MATERIALS AND WORKMANSHIP

Badger Meter, Inc. ("Badger Meter") warrants Product to be free from defects in materials and workmanship appearing within the earlier of the following time frames.

Lead-Free Housings, Electronics, Battery, Transducers, and Register/Encoder Supplied with the Meters Listed Herein

Warranty shall commence the earlier of ten (10) years from the date of installment documented in BEACON® or ten (10) years and six (6) months after shipment from Badger Meter.

METER ACCURACY

The Product will meet or exceed meter accuracy of ±2% from Q2 to Q4 for the published ranges set forth in Badger Meter's current published product data sheet. Warranty shall commence the earlier of ten (10) years from the date of installment documented in BEACON or ten (10) years and six (6) months after shipment from Badger Meter.

EXTENDED LOW-FLOW METER ACCURACY

Badger Meter further warrants the Product will meet or exceed extended minimum test flow accuracy of ±5% from Q1 to Q2 for the published ranges set forth in Badger Meter's current published product data sheet. Warranty shall commence the earlier of ten (10) years from the date of installment documented in BEACON or ten (10) years and six (6) months after shipment from Badger Meter.

PRODUCT RETURNS

Any Product proved to the satisfaction of Badger Meter to have failed the foregoing warranties will, at the option of Badger Meter, be repaired or replaced without charge to the Customer. Any eligible Product repaired or replaced by Badger Meter will retain the original Product's warranty based on the original Product purchase date, at Badger Meter's sole discretion. The Badger Meter obligation hereunder shall be limited to such repair and replacement and shall be conditioned upon Badger Meter receiving written notice of any alleged defect within ten (10) days after its discovery. This exclusive remedy shall not be deemed to have failed its essential purpose so long as Badger Meter is willing and able to replace defective products or issue a credit to purchaser within a reasonable time of proof to Badger Meter that a defect is involved. Product returns must be shipped by the Customer prepaid F.O.B. to the nearest Badger Meter factory or distribution center. The Customer shall be responsible for all direct and indirect costs associated with removing the original Product and reinstalling the repaired or replacement Product.

LIMITS OF LIABILITY

This warranty shall not apply to Product repaired or altered by parties other than Badger Meter. The foregoing warranty applies only to the extent that the Product is installed, serviced and operated strictly in accordance with OIML R49 standards and MID approval, as applicable. The warranty shall not apply and shall be void with respect to Product exposed to conditions other than those detailed in the Badger Meter Product technical and/or operational literature, or which, as determined at Badger Meter's sole discretion, have affected the ability of the Product to perform, including, but not limited to: exposure to adverse installation conditions; misuse; vandalism; negligence; accident; acts of God; alteration; improper installation, operation or repair; damage from passage of high-speed air slugs; damage by water quality conditions, including but not limited to: aggressive water, foreign matter, biofilms, or extreme corrosivity; damage caused by actions not in accordance with the intended use; or other circumstances which are beyond the reasonable control of Badger Meter, as determined at Badger Meter's sole discretion. With respect to product not manufactured by Badger Meter, the warranty obligations of Badger Meter shall in all respects conform and be limited to the warranty extended to Badger Meter by the supplier of product.

THE FOREGOING WARRANTIES ARE EXCLUSIVE AND IN LIEU OF ALL OTHER EXPRESS AND IMPLIED WARRANTIES WHATSOEVER,INCLUDING BUT NOT LIMITED TO IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE (except warranties of Title).

Any description of Product, whether in writing or made orally by Badger Meter or its agents, specifications, samples, models,bulletins, drawings, diagrams, engineering sheets, or similar materials used in connection with any Customer's order are for the sole purpose of identifying Product and shall not be construed as an express warranty. Any suggestions by Badger Meter or its agents regarding use, application or suitability of Product shall not be construed as an express warranty unless confirmed to be such in writing by Badger Meter.

Exclusion of Consequential Damages and Disclaimer of Other Liability

Badger Meter liability with respect to breaches of the foregoing warranty shall be limited as stated therein. Badger Meter liability shall in no event exceed the contract price. BADGER METER SHALL NOT BE SUBJECT TO AND DISCLAIMS: (1) ANY OTHER OBLIGATIONS

OR LIABILITIES ARISING OUT OF BREACH OF CONTRACT OR OF WARRANTY (2) ANY OBLIGATIONS WHATSOEVER ARISING FROM TORT CLAIMS (INCLUDING NEGLIGENCE AND STRICT LIABILITY) OR ARISING UNDER OTHER THEORIES OF LAW WITH RESPECT TO PRODUCTS SOLD OR SERVICES RENDERED BY BADGER METER, OR ANY UNDERTAKINGS, ACTS OR OMISSIONS RELATING THERETO, AND (3) ALL CONSEQUENTIAL, INCIDENTAL AND CONTINGENT DAMAGES WHATSOEVER.

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Badger Meter

E-Series® Ultrasonic Plus Meter

with Integrated Valve

5/8 x 3/4 in., 3/4 in.

PRODUCTS

This warranty shall apply to all Badger Meter E-Series® Ultrasonic Plus lead-free meters with integrated valve, sizes 5/8 × 3/4 inch and 3/4 inch, when used to measure potable water, and the internal register/encoder and battery used with these meters (collectively "Product"), sold on or after October 2, 2023. This warranty is not transferable and is extended only to utilities, municipalities, other commercial users and authorized distributors, hereafter referred to as "Customer," and does NOT apply to consumers or any person or entity who is not an original customer of Badger Meter or its authorized distributors.

MATERIALS AND WORKMANSHIP

Badger Meter, Inc. ("Badger Meter") warrants Product to be free from defects in materials and workmanship for the time period stated.

Lead-Free Housing	20 years and 6 months after shipment
Battery[1]	20 years and 6 months after shipment (prorated)
Transducers[1]	20 years and 6 months after shipment (prorated)
Encoder Register[1]	20 years and 6 months after shipment (prorated)
Meter Accuracy[1, 2]	20 years and 6 months after shipment (prorated)
Valve and Valve Power Module[1]	20 years and 6 months after shipment (prorated) or a maximum of 240 valve actuation cycles,* whichever comes first

*A cycle is defined as the valve going from the unactuated state to the actuated state and returning to the unactuated state.

[1] Badger Meter will repair or replace, at its discretion, a non-performing Product at no cost during the first ten (10) years, and at a prorated price during the last ten (10) years of the warranty. Badger Meter will apply these prorated price discounts to the Product list prices at the time of Product return and according to the following prorated price discount schedule: Years 11 through 12 - 75% discount; Years 13 through 15 - 50% discount; Year 16 - 40% discount; Year 17 - 30% discount; Year 18 - 20% discount; and Years 19 through 20 - 10% discount. Replacement Products are warranted for and under the balance of the original applicable Product warranty.

[2] The Product will meet or exceed all applicable specifications outlined in AWWA Standard C715 in addition to meeting the meter accuracy as set forth in the Operating Performance Specifications of the Badger Meter current published product data sheet (*ESM-DS-02022-EN*).

PRODUCT RETURNS

Any Product proved to the satisfaction of Badger Meter to have failed the foregoing warranties will, at the option of Badger Meter, be repaired or replaced without charge to the Customer. Any eligible Product repaired or replaced by Badger Meter will retain the original Product's warranty based on the original Product purchase date, at Badger Meter's sole discretion. The Badger Meter obligation hereunder shall be limited to such repair and replacement and shall be conditioned upon Badger Meter receiving written notice of any alleged defect within ten (10) days after its discovery. This exclusive remedy shall not be deemed to have failed its essential purpose so long as Badger Meter is willing and able to replace defective products or issue a credit to purchaser within a reasonable time of proof to Badger Meter that a defect is involved. Product returns must be shipped by the Customer prepaid F.O.B. to the nearest Badger Meter factory or distribution center. The Customer shall be responsible for all direct and indirect costs associated with removing the original Product and reinstalling the repaired or replacement Product.

LIMITS OF LIABILITY

This warranty shall not apply to Product repaired or altered by parties other than Badger Meter, or read by equipment not explicitly approved or licensed by Badger Meter. The foregoing warranty applies only to the extent that the Product is installed, serviced and operated strictly in accordance with AWWA Standard C715 and AWWA M6 Manual, as applicable. The warranty shall not apply and shall be void with respect to Product exposed to conditions other than those detailed in the Badger Meter Product technical and/or operational literature, or which, as determined at Badger Meter's sole discretion, have affected the ability of the Product to perform, including, but not limited to: exposure to adverse installation conditions; misuse; vandalism; negligence; accident; acts of God; alteration; improper installation, operation or repair; damage from passage of high-speed air slugs; damage by water quality conditions, including but not limited to: aggressive water, foreign matter, biofilms, or extreme corrosivity; damage caused by actions not in accordance with the intended use; or other circumstances which are beyond the reasonable control of Badger Meter, as determined at Badger Meter's sole discretion. With respect to product not manufactured by Badger Meter, the warranty obligations of Badger Meter shall in all respects conform and be limited to the warranty extended to Badger Meter by the supplier of product.

THE FOREGOING WARRANTIES ARE EXCLUSIVE AND IN LIEU OF ALL OTHER EXPRESS AND IMPLIED WARRANTIES WHATSOEVER, INCLUDING BUT NOT LIMITED TO IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE (except warranties of Title).

Any description of Product, whether in writing or made orally by Badger Meter or its agents, specifications, samples, models, bulletins, drawings, diagrams, engineering sheets, or similar materials used in connection with any Customer's order are for the sole purpose of identifying Product and shall not be construed as an express warranty. Any suggestions by Badger Meter or its agents regarding use, application or suitability of Product shall not be construed as an express warranty unless confirmed to be such in writing by Badger Meter.

Exclusion of Consequential Damages and Disclaimer of Other Liability

Badger Meter liability with respect to breaches of the foregoing warranty shall be limited as stated therein. Badger Meter liability shall in no event exceed the contract price. BADGER METER SHALL NOT BE SUBJECT TO AND DISCLAIMS: (1) ANY OTHER OBLIGATIONS OR LIABILITIES ARISING OUT OF BREACH OF CONTRACT OR OF WARRANTY (2) ANY OBLIGATIONS WHATSOEVER ARISING FROM TORT CLAIMS (INCLUDING NEGLIGENCE AND STRICT LIABILITY) OR ARISING UNDER OTHER THEORIES OF LAW WITH RESPECT TO PRODUCTS SOLD OR SERVICES RENDERED BY BADGER METER, OR ANY UNDERTAKINGS, ACTS OR OMISSIONS RELATING THERETO, AND (3) ALL CONSEQUENTIAL, INCIDENTAL AND CONTINGENT DAMAGES WHATSOEVER.

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Badger Meter

HR-E®

High Resolution Encoder

PRODUCTS COVERED

This Badger Meter warranty shall apply to the High Resolution Encoder (HR-E®) ("Product"), sold on or after June 18, 2021. This warranty is not transferable and is extended only to utilities, municipalities, other commercial users and authorized distributors, hereafter referred to as "Customer" and does NOT apply to consumers or any person or entity who is not an original customer of Badger Meter or its authorized distributors.

MATERIALS AND WORKMANSHIP

Badger Meter warrants the Product to be free from defects in materials and workmanship appearing within twenty (20) years and six (6) months after shipment from Badger Meter.

This warranty is prorated as follows: For the first ten (10) years of the warranty the Product is replaced at no charge, and the warranty is prorated at price discounts during the last ten (10) years of the warranty.

Specifically, Badger Meter will repair or replace, at its discretion, a non-performing Product at no cost during the first ten (10) years of the warranty and at prorated price discounts during the last ten (10) years of the warranty. Badger Meter will apply these prorated price discounts to the Product list prices in effect at the time of Product return and according to the following prorated price discount schedule:

- Years 11 through 12—75% discount
- Years 13 through 15—50% discount
- Year 16—40% discount
- Year 17—30% discount
- Year 18—20% discount
- Years 19 through 20—10% discount

Replacement Products are warranted for and under the balance of the original applicable Product warranty.

PRODUCT RETURNS

Any Product proved to the satisfaction of Badger Meter to have failed the foregoing warranties will, at the option of Badger Meter, be repaired or replaced without charge to the Customer. The Badger Meter obligation hereunder shall be limited to such repair and replacement and shall be conditioned upon Badger Meter receiving written notice of any alleged defect within ten (10) days after its discovery. This exclusive remedy shall not be deemed to have failed its essential purpose so long as Badger Meter is willing and able to replace defective products or issue a credit to purchaser within a reasonable time of proof to Badger Meter that a defect is involved. Product returns must be shipped by the Customer prepaid F.O.B. to the nearest Badger Meter factory or distribution center. The Customer shall be responsible for all direct and indirect costs associated with removing the original Product and reinstalling the repaired or replacement Product.

LIMITS OF LIABILITY

This warranty shall not apply to Product repaired or altered by parties other than Badger Meter. The foregoing warranty applies only to the extent that the Product is installed, serviced and operated strictly in accordance with Badger Meter instructions. The warranty shall not apply and shall be void with respect to Product exposed to conditions other than those detailed in the Badger Meter Product technical literature or which have been subject to vandalism, negligence, accident, acts of God, alteration, improper installation, operation or repair, or other circumstances which are beyond the reasonable control of Badger Meter. With respect to Product not manufactured by Badger Meter, the warranty obligations of Badger Meter shall in all respects conform and be limited to the warranty extended to Badger Meter by the supplier.

THE FOREGOING WARRANTIES ARE EXCLUSIVE AND IN LIEU OF ALL OTHER EXPRESS AND IMPLIED WARRANTIES WHATSOEVER, INCLUDING BUT NOT LIMITED TO IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE **(except warranties of Title).**

Any description of Product, whether in writing or made orally by Badger Meter or its agents, specifications, samples, models, bulletins, drawings, diagrams, engineering sheets or similar materials used in connection with any Customer's order are for the sole purpose of identifying Product and shall not be construed as an express warranty. Any suggestions by Badger Meter or its agents regarding use, application or suitability of Product shall not be construed as an express warranty unless confirmed to be such in writing by Badger Meter.

Exclusion of Consequential Damages and Disclaimer of Other Liability

Badger Meter liability with respect to breaches of the foregoing warranty shall be limited as stated therein. Badger Meter liability shall in no event exceed the contract price. BADGER METER SHALL NOT BE SUBJECT TO AND DISCLAIMS: (1) ANY OTHER OBLIGATIONS OR LIABILITIES ARISING OUT OF BREACH OF CONTRACT OR OF WARRANTY (2) ANY OBLIGATIONS WHATSOEVER ARISING FROM TORT CLAIMS (INCLUDING NEGLIGENCE AND STRICT LIABILITY) OR ARISING UNDER OTHER THEORIES OF LAW WITH RESPECT TO PRODUCTS SOLD OR SERVICES RENDERED BY BADGER METER, OR ANY UNDERTAKINGS, ACTS OR OMISSIONS RELATING THERETO, AND (3) ALL CONSEQUENTIAL, INCIDENTAL AND CONTINGENT DAMAGES WHATSOEVER.

SMART WATER IS *BADGER METER*

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Badger Meter

ORION® Water Products

with BEACON® Software as a Service (SaaS)

PRODUCTS

This warranty shall apply to Badger Meter ORION® series AMR/AMI Water Endpoints, reading hardware and software for a BEACON® system, sold on or after April 11, 2024.

ORION series AMR/AMI Water Endpoints include Fixed Network (SE), ME and Mobile M endpoints.

This warranty is not transferable and is extended only to utilities, municipalities, other commercial users and authorized distributors, hereafter referred to as "Customer" and does NOT apply to consumers or any person or entity who is not an original Customer of Badger Meter or its authorized distributors.

MATERIAL AND WORKMANSHIP

Badger Meter warrants all ORION series AMR/AMI Water Endpoints including battery, reading hardware and software, hereafter referred to as "Product(s)" as listed below, to be free from defects in material and workmanship for the time period stated.

ORION SE, ORION ME[3] and ORION Mobile M Water Endpoints[1]	20 years and 6 months after shipment
ORION Cellular LTE-MP Endpoints	10 years and 6 months after shipment
Trimble® T10 Tablet[2]	3 years after shipment
Dell® Latitude 5430 Laptop[2] and Latitude 7230 Tablet[2]	3 years after shipment
Panasonic Toughbook® Laptop for BEACON Mobile Solution[2]	3 years after shipment
Trimble® Ranger 7 Handheld[2]	3 years after shipment
Trimble Yuma 7 Tablet[2]	3 years after shipment
ORION ME Modules[2] for Trimble Yuma 7 Tablet and Trimble Ranger 7 Handheld	3 years after shipment
Microsoft® Surface Go 3 Tablet[2]	1 year after shipment
ORION Mobile (ME) Transceiver[2]	3 years after shipment
ORION Mobile Integrated Receiver[2]	1 year after shipment
ORION Fixed Network (SE) Gateway Transceiver	1 year after shipment

[1] Water Endpoints and Endpoint batteries—collectively ORION Water Endpoint Products—are warranted to be free from defects in material and workmanship for twenty (20) years and six (6) months after shipment from Badger Meter. Badger Meter will repair or replace, at its discretion, a non-performing ORION Water Endpoint Product at no cost during the first ten (10) years, and at a prorated price during the last ten (10) years of the warranty. Badger Meter will apply these prorated price discounts to the ORION Water Endpoint Product list prices at the time of ORION Water Endpoint Product return and according to the following prorated price discount schedule: Years 11 through 12 - 75% discount; Years 13 through 15 - 50% discount; Year 16 - 40% discount; Year 17 - 30% discount; Year 18 - 20% discount; and Years 19 through 20 - 10% discount. Replacement Products are warranted for and under the balance of the original.

[2] Batteries, antennas, cables and accessories warranty is limited to 12 months from the date of shipment.

[3] Mobile solutions deployed prior to February 1, 2023 include ORION ME endpoints that are migratable to fixed network. BEACON SaaS mobile solutions deployed on or after February 1, 2023 include ORION ME endpoints that operate in mobile mode only.

PRODUCT RETURNS

Product failures must be proven and verified to the satisfaction of Badger Meter. The Badger Meter obligation hereunder shall be limited to such repair and replacement and shall be conditioned upon Badger Meter receiving written notice of any asserted defect within 10 (ten) days after its discovery. This exclusive remedy shall not be deemed to have failed its essential purpose so long as Badger Meter is willing and able to replace the defective Product for the Customer within a reasonable time, after receipt of proof that a defect is involved. Product returns must be shipped by the Customer prepaid F.O.B. to the nearest Badger Meter factory or distribution center. The Customer shall be responsible for all direct and indirect costs associated with removing the Product and reinstalling the repaired or replacement Product.

LIMITS OF LIABILITY

This warranty shall not apply to any Product repaired or altered by any Party other than Badger Meter. The foregoing warranty applies only to the extent that the Product is installed, serviced and operated strictly in accordance with Badger Meter instructions. The warranty shall not apply and shall be void with respect to Products exposed to conditions other than those detailed in Product technical literature or which have been subject to vandalism, negligence, accident, acts of God, improper installation, operation or repair, alteration or other circumstances which are beyond the reasonable control of Badger Meter. With respect to products not manufactured by Badger Meter, the warranty obligations of Badger Meter shall in all respects conform and be limited to the warranty extended to Badger Meter by the supplier.

THE FOREGOING WARRANTIES ARE EXCLUSIVE AND IN LIEU OF ALL OTHER EXPRESS AND IMPLIED WARRANTIES WHATSOEVER, INCLUDING BUT NOT LIMITED TO IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE (except warranties of Title).

Any description of the Product, whether in writing or made orally by Badger Meter or its agents, specifications, samples, models, bulletins, drawings, diagrams, engineering sheets or similar materials used in connection with any Customer's order are for the sole purpose of identifying the Product and shall not be construed as an express warranty. Any suggestions by Badger Meter or its agents regarding use, application or suitability of the Product shall not be construed as an express warranty unless confirmed to be such, in writing, by Badger Meter.

Exclusion of Consequential Damages and Disclaimer of Other Liability

The liability of Badger Meter with respect to breaches of the foregoing warranty shall be limited as stated herein. Badger Meter's liability shall in no event exceed the contract price. BADGER METER SHALL NOT BE SUBJECT TO AND DISCLAIMS: (1) ANY OTHER OBLIGATIONS OR LIABILITIES ARISING OUT OF BREACH OF CONTRACT OR OF WARRANTY, (2) ANY OBLIGATIONS WHATSOEVER ARISING FROM TORT CLAIMS (INCLUDING NEGLIGENCE AND STRICT LIABILITY) OR ARISING UNDER OTHER THEORIES OF LAW WITH RESPECT TO PRODUCTS SOLD OR SERVICES RENDERED BY BADGER METER, OR ANY UNDERTAKINGS, ACTS OR OMISSIONS RELATING THERETO, AND (3) ALL CONSEQUENTIAL, INCIDENTAL AND CONTINGENT DAMAGES WHATSOEVER.

Badger Meter Warranty

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BEACON and ORION are registered trademarks of Badger Meter, Inc. Other trademarks appearing in this document are the property of their respective entities. Due to continuous research, product improvements and enhancements, Badger Meter reserves the right to change product or system specifications without notice, except to the extent an outstanding contractual obligation exists. © 2024 Badger Meter, Inc. All rights reserved.

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ATTACHMENT C

PRICING DETAILS

AMI WATER METERS

RFP 24.001

Pinellas Park, FL

Statement of Values (SOV)

ITEM	BMI Description	Badger Part Number	QUANTITY PER CONTRACT	TOTAL UNIT PRICE IN CONTRACT	ORIGINAL TOTAL EXT PRICE IN CONTRACT
	Badger Product (Billed Upon Shipment) - IDA Phase				
1	Disc, M25 5/8"(3/4x7-1/2), PL Btm 430SS-1, PL, Th k Wshr, (TS-135, SN Yr 9D & PBB, HR-E, ORION CELL C, PL Lid/Shrd-GRY, Trx	112-8781	50	$ 220.00	$ 11,000.00
2	Disc, M55 1"(10-3/4), Brz Btm 430SS-1, PL, Thk Ws hr, (TS-135, SN Yr 9D & PBB, HR-E, ORION CELL C, P L Lid/Shrd-GRY, Trx Scrv	112-8782	20	$ 315.00	$ 6,300.00
3	Disc, M120 1-1/2"-ELL Dr w/TP, 430SS, SS, Std Gsk t, , (TS-135, SN Yr 9D & PBB, HR-E, ORION CELL C, PL Lid/Shrd-GRY, Trx Scrw	112-8783	8	$ 610.00	$ 4,880.00
4	Disc, M170 2"-ELL Dr w/TP, 430SS, SS, Std Gskt, , (TS-135, SN Yr 9D & PBB, HR-E, ORION CELL C, PL L id/Shrd-GRY, Trx Scrw, Sid	112-8784	10	$ 739.00	$ 7,390.00
5	E-Series B-Alloy, 3" RND(12), TP Std Gskt, , Prsr , Enc, ORION CELL C, 9D-0.1 Gal, SN Yr 9D & PBB , Thru Ld Instl Kit, TT-10', BMI S	112-8789	3	$ 1,945.00	$ 5,835.00
6	E-Series B-Alloy, 4" RND(14), TP Std Gskt, , Prsr , Enc, ORION CELL C, 9D-0.1 Gal, SN Yr 9D & PBB , Thru Ld Instl Kit, TT-10', BMI S	112-8790	3	$ 2,394.00	$ 7,182.00
7	E-Series B-Alloy, 6"x18" RND Std Gskt, , Prsr, En c, ORION CELL C, 9D-1 Gal, SN Yr 9D & PBB, Thru Ld Instl Kit, TT-10', BMI STD	108-5976	3	$ 3,540.00	$ 10,620.00
8	E-Series B-Alloy, 8"x20" RND, TP Std Gskt, , Prsr , Enc, ORION CELL C, 9D-1 Gal, SN Yr 9D & PBB, Thru Ld Instl Kit, TT-10', BMI ST	108-5977	3	$ 4,293.00	$ 12,879.00
9	IR COMMUMNICATION DEVICE KIT - LTE	68891-001	10	$ 150.00	$ 1,500.00
	Badger Product (Billed Upon Shipment) - Full Deployment				
10	Disc, M25 5/8"(3/4x7-1/2), PL Btm 430SS-1, PL, Th k Wshr, (TS-135, SN Yr 9D & PBB, HR-E, ORION CELL C, PL Lid/Shrd-GRY, Trx	112-8781	14,956	$ 220.00	$ 3,290,320.00
11	Disc, M55 1"(10-3/4), Brz Btm 430SS-1, PL, Thk Ws hr, (TS-135, SN Yr 9D & PBB, HR-E, ORION CELL C, P L Lid/Shrd-GRY, Trx Scrv	112-8782	653	$ 315.00	$ 205,695.00
12	Disc, M120 1-1/2"-ELL Dr w/TP, 430SS, SS, Std Gsk t, , (TS-135, SN Yr 9D & PBB, HR-E, ORION CELL C, PL Lid/Shrd-GRY, Trx Scrw	112-8783	102	$ 610.00	$ 62,220.00
13	Disc, M170 2"-ELL Dr w/TP, 430SS, SS, Std Gskt, , (TS-135, SN Yr 9D & PBB, HR-E, ORION CELL C, PL L id/Shrd-GRY, Trx Scrw, Sid	112-8784	219	$ 739.00	$ 161,841.00
14	E-Series B-Alloy, 3" RND(12), TP Std Gskt, , Prsr , Enc, ORION CELL C, 9D-0.1 Gal, SN Yr 9D & PBB , Thru Ld Instl Kit, TT-10', BMI S	112-8789	28	$ 1,945.00	$ 54,460.00
15	E-Series B-Alloy, 4" RND(14), TP Std Gskt, , Prsr , Enc, ORION CELL C, 9D-0.1 Gal, SN Yr 9D & PBB , Thru Ld Instl Kit, TT-10', BMI S	112-8790	27	$ 2,394.00	$ 64,638.00
16	E-Series B-Alloy, 6"x18" RND Std Gskt, , Prsr, En c, ORION CELL C, 9D-1 Gal, SN Yr 9D & PBB, Thru Ld Instl Kit, TT-10', BMI STD	108-5976	23	$ 3,540.00	$ 81,420.00
17	E-Series B-Alloy, 8"x20" RND, TP Std Gskt, , Prsr , Enc, ORION CELL C, 9D-1 Gal, SN Yr 9D & PBB, Thru Ld Instl Kit, TT-10', BMI ST	108-5977	13	$ 4,293.00	$ 55,809.00
18	Disc, M170 2"-ELL Dr w/TP, Rclmd, 430SS, SS, Std G skt, , (TS-135, SN Yr 9D & PBB, HR-E, ORION CELL C , PL Lid/Shrd-Rclmd, Trx	112-8798	122	$ 773.00	$ 94,306.00
19	E-Series B-Alloy, 3" RND(12), TP Rclmd, Std Gskt, , Prsr, Enc, ORION CELL C, 9D-0.1 Gal, SN Yr 9D & PBB, Thru Ld Instl Kit, TT-10'	112-8801	1	$ 1,945.00	$ 1,945.00
20	E-Series B-Alloy, 4" RND(14), TP Rclmd, Std Gskt, , Prsr, Enc, ORION CELL C, 9D-0.1 Gal, SN Yr 9D & PBB, Thru Ld Instl Kit, TT-10'	112-8803	10	$ 2,394.00	$ 23,940.00
21	E-Series B-Alloy, 6"x18" RND Rclmd, Std Gskt, , Pr sr, Enc, ORION CELL C, 9D-1 Gal, SN Yr 9D & PBB , Thru Ld Instl Kit, TT-10', BM	112-8805	1	$ 3,540.00	$ 3,540.00
	Alternate / Optional Pricing				
22	REG 4, M25, HR-E, 4CXN2 ORION, PL Lid/Shrd-GRY, Tr x Scrw, 8D-0.1 Gal, SN YR 9D in, TT-5', BMI ST D, 24 PACK	100-6192	0	$ 60.00	$ -
23	EP Only, For Enc, ORION CELL C, Thru Ld Instl Kit, TT-8in, BMI STD	103-6671	0	$ 110.00	$ -
24	EP Only, For Enc, ORION CELL HLD, Thru Ld Instl Ki t, TT-8in, Grnd/Ocean-Pause, BMI STD, 24 PACK	111-3248	0	$ 110.00	$ -
25	E-Series B-Alloy, 5/8"x3/4"(7-1/2), Thk Wshr, En c, ORION CELL C, 9D-0.01 Gal, TS-568, SN Yr 9D & PBB, Thru Ld Instl Kit, TT-5',	105-6957	0	$ 263.62	$ -
26	E-Series B-Alloy, 1"(10-3/4), Thk Wshr, Enc, ORI ON CELL C, 9D-0.01 Gal, TS-766, SN Yr 9D & PBB, Thru Ld Instl Kit, TT-5', BMI ST	109-1893	0	$ 309.18	$ -
27	E-Series SS, 1-1/2" EL(13), Std Gskt, , Enc, ORI ON CELL C, 9D-0.1 Gal, SN Yr 9D & PBB, Thru Ld Instl Kit, TT-5', BMI STD	110-4970	0	$ 586.42	$ -
28	E-Series SS, 2" EL(17), Std Gskt, , Enc, ORION C ELL C, 9D-0.1 Gal, SN Yr 9D & PBB, Thru Ld Inst l Kit, TT-5', BMI STD	110-4971	0	$ 752.30	$ -
29	E-Series B-Alloy, 5/8"x3/4"(7-1/2), Rclmd, Thk Wsh r, Enc, ORION CELL C, 9D-0.01 Gal, TS-568, SN Y r 9D & PBB, Thru Ld Instl Ki	109-3312	0	$ 263.62	$ -
30	E-Series B-Alloy, 1"(10-3/4), Rclmd, Thk Wshr, En c, ORION CELL C, 9D-0.01 Gal, TS-766, SN Yr 9D & PBB, Thru Ld Instl Kit, TT-5',	109-3315	0	$ 309.18	$ -
31	E-Series SS, 1-1/2" EL(13), Rclmd, Std Gskt, , En c, ORION CELL C, 9D-0.1 Gal, SN Yr 9D & PBB, Th ru Ld Instl Kit, TT-5', BMI STD	112-8806	0	$ 586.42	$ -
32	E-Series SS, 2" EL(17), Rclmd, Std Gskt, , Enc, O RION CELL C, 9D-0.1 Gal, SN Yr 9D & PBB, Thru L d Instl Kit, TT-5', BMI STD	112-8808	0	$ 752.30	$ -
33	E-SERIES PLUS BRZ, 5/8"X3/4"(7-1/2), THK WSHR, E	103-9490	0	$ 515.00	$ -
34	Disc, M25 5/8"(3/4x7-1/2), Rclmd, Brz Btm 430SS-1, PL, Thk Wshr, (TS-135, SN Yr 9D & PBB, HR-E, ORIO N CELL C, PL Lid/Shrd-I	112-8792	0	$ 225.00	$ -
35	Disc, M55 1"(10-3/4), Rclmd, Brz Btm 430SS-1, PL, Thk Wshr, (TS-135, SN Yr 9D & PBB, HR-E, ORION CEL L C, PL Lid/Shrd-Rclmd	112-8795	0	$ 320.00	$ -
36	Disc, M120 1-1/2"-ELL Dr w/TP, Rclmd, 430SS, SS, S td Gskt, , (TS-135, SN Yr 9D & PBB, HR-E, ORION CE LL C, PL Lid/Shrd-Rclmd	112-8797	0	$ 635.00	$ -
37	Nicor B12 (11"x18") Purple (RCW) Lid, Tier 15 w/Recessed Hole		0	$ 49.68	$ -
38	Install 5/8" Meter - RCW	PRIME-286PP01	0	$ 67.85	$ -
39	Install 1" Meter - RCW	PRIME-281PP01	0	$ 67.85	$ -
40	Install 1.5" Meter - RCW	PRIME-332PP01	0	$ 276.00	$ -
	Third Party Product (Billed Upon Shipment)				
41	Nicor B12 (11"x18") Grey Lid, Tier 15 w/Recessed Hole	PRIME-218PP01	1	$ 49.44	$ 49.44
42	Nicor 11"x18" Meter Box	PRIME-294PP01	1	$ 59.47	$ 59.47
43	Nicor 11"x32" Grey Lid, Tier 15 w/Recessed Hole	PRIME-218PP02	1	$ 63.27	$ 63.27
44	Nicor 11"x32" Meter Box	PRIME-294PP02	1	$ 88.50	$ 88.50
45	Nicor B13 (13"x20") Grey Lid, Tier 15 w/Recessed Hole	PRIME-218PP03	1	$ 66.67	$ 66.67
46	Nicor D1500 Meter Box	PRIME-294PP03	1	$ 37.24	$ 37.24
47	Nicor B36 (17.5"x30.5") Grey Lid, Tier 15 w/Recessed Hole	PRIME-218PP04	1	$ 125.43	$ 125.43
48	Nicor 17"x30" Meter Box	PRIME-294PP04	1	$ 102.42	$ 102.42
49	Nicor Read-Rite Vault Retrofit Kit, 9.5" OD, Black	PRIME-294PP05	1	$ 100.30	$ 100.30
	Installation Labor (IDA Phase)				
50	Install 5/8"x3/4" Meter	PRIME-286PP	50	$ 67.85	$ 3,392.50
51	Install 1" Meter	PRIME-281PP	20	$ 67.85	$ 1,357.00
52	Install 1.5" Meter	PRIME-332PP	8	$ 276.00	$ 2,208.00
53	Install 2" Meter	PRIME-287PP	10	$ 276.00	$ 2,760.00
54	Install 3" Meter	PRIME-303PP	3	$ 828.00	$ 2,484.00
55	Install 4" Meter	PRIME-304PP	3	$ 1,035.00	$ 3,105.00
56	Install 6" Meter	PRIME-322PP	3	$ 1,236.25	$ 3,708.75
57	Install 8" Meter	PRIME-323PP	3	$ 1,646.80	$ 4,940.40
58	Drill Existing AMI Friendly Plastic Lid	PRIME-148PP	88	$ 11.50	$ 1,012.00
59	Replace Meter Pit Lid (Up to 17"x30")	PRIME-288PP	1	$ 11.50	$ 11.50
60	Replace Meter Box (Up to 17"x30")	PRIME-297PP	1	$ 63.25	$ 63.25
61	Install Buddy Box for Vault-Set Meters	PRIME-297PP01	1	$ 63.25	$ 63.25
62	Install AMI-Friendly Vault Lid Kit	PRIME-288PP01	1	$ 63.25	$ 63.25
63	Preinstallation Survey - POC Accounts Only	PRIME-250PP	100	$ 16.88	$ 1,688.00
64	Submeter GPS Coordinate Capture - POC Accounts Only	PRIME-345PP	100	$ 13.50	$ 1,350.00
65	Scratch and/or Magnet Testing of Pipe Type - Customer & Utility Side - 2" Meters and Smaller - Performed with Meter Exchange	PRIME-344PP	88	$ 16.87	$ 1,484.56
66	Scratch and/or Magnet Testing of Pipe Type - Customer & Utility Side - 2" Meters and Smaller - Performed Independently of Meter Exchange	PRIME-344PP01	1	$ 33.75	$ 33.75
67	Print and Mail Customer Notification (1/Account)	PRIME-094PP01	100	$ 3.38	$ 338.00
68	Post-Installation Door Hanger (1/Account)	PRIME-094PP02	100	$ 2.25	$ 225.00
	Installation Labor (Full Deployment)				
69	Install 5/8" x 3/4" Meter	PRIME-286PP	14,956	$ 67.85	$ 1,014,764.60
70	Install 1" Meter	PRIME-281PP	653	$ 67.85	$ 44,306.05
71	Install 1.5" Meter	PRIME-332PP	102	$ 276.00	$ 28,152.00
72	Install 2" Meter	PRIME-287PP	219	$ 276.00	$ 60,444.00
73	Install 3" Meter	PRIME-303PP	28	$ 828.00	$ 23,184.00

Pinellas Park, FL

Statement of Values (SOV)

ITEM	BMI Description	Badger Part Number	QUANTITY PER CONTRACT	TOTAL UNIT PRICE IN CONTRACT	ORIGINAL TOTAL EXT PRICE IN CONTRACT
74	Install 4" Meter	PRIME-304PP	27	$ 1,035.00	$ 27,945.00
75	Install 6" Meter	PRIME-322PP	23	$ 1,236.25	$ 28,433.75
76	Install 8" Meter	PRIME-323PP	13	$ 1,646.80	$ 21,408.40
77	Install 2" Meter - RCW	PRIME-287PP01	122	$ 276.00	$ 33,672.00
78	Install 3" Meter - RCW	PRIME-303PP01	1	$ 828.00	$ 828.00
79	Install 4"Meter - RCW	PRIME-304PP01	10	$ 1,035.00	$ 10,350.00
80	Install 6" Meter - RCW	PRIME-322PP01	1	$ 1,236.25	$ 1,236.25
81	Drill Existing AMI Friendly Plastic Lid	PRIME-148PP	16,052	$ 11.50	$ 184,598.00
82	Replace Meter Pit Lid (Up to 17"x30")	PRIME-288PP	1	$ 11.50	$ 11.50
83	Replace Meter Box (Up to 17"x30")	PRIME-297PP	1	$ 63.25	$ 63.25
84	Install Buddy Box for Vault-Set Meters	PRIME-297PP01	1	$ 63.25	$ 63.25
85	Install AMI-Friendly Vault Lid Kit	PRIME-288PP01	1	$ 63.25	$ 63.25
86	Preinstallation Survey	PRIME-250PP	16,158	$ 16.88	$ 272,747.04
87	Submeter GPS Coordinate Capture	PRIME-345PP	16,158	$ 13.50	$ 218,133.00
88	Scratch and/or Magnet Testing of Pipe Type - Customer & Utility Side - 2" Meters and Smaller - Performed with Meter Exchange	PRIME-344PP	16,052	$ 16.87	$ 270,797.24
89	Scratch and/or Magnet Testing of Pipe Type - Customer & Utility Side - 2" Meters and Smaller - Performed Independently of Meter Exchange	PRIME-344PP01	1	$ 33.75	$ 33.75
90	Print and Mail Customer Notification (1/Account)	PRIME-094PP01	16,158	$ 3.38	$ 54,614.04
91	Post-Installation Door Hanger (1/Account)	PRIME-094PP02	16,158	$ 2.25	$ 36,355.50
92	Allowance for Plumbing Repairs (Components/Labor)	TBD	1	$ 393,750.00	$ 393,750.00
93	Concrete Work	PRIME-298PP	1	$ 230.00	$ 230.00
94	Retrofit Any Size Meter with New Register and Endpoint	PRIME-077PP	1	$ 36.80	$ 36.80
95	Hourly Rate for Additional Work	PRIME-101PP	1	$ 101.25	$ 101.25
	Other Services				
96	BEACON ENGAGEMENT FEE	EACON-ENGAGEMEN	1	$ 38,000.00	$ 38,000.00
97	STANDARD BILLING INTEGRATION	66220-201	1	$ 20,000.00	$ 20,000.00
98	ON-SITE, GETTING STARTED W/BEACON AMA	69328-202	2	$ 3,000.00	$ 6,000.00
99	ON-SITE TRAINING,CUSTOM, ADDIT CONSECUTIVE DAY	69328-912	1	$ 3,000.00	$ 3,000.00
100	WOMS Setup and Integration with CIS	PRIME-186PP	1	$ 28,125.00	$ 28,125.00
101	Mobilization (IDA Phase)	PRIME-185PP	1	$ 22,500.00	$ 22,500.00
102	Mobilization (Full Deployment)	PRIME-185PP01	1	$ 56,250.00	$ 56,250.00
103	Connex Boxes, Forklift, and Warehouse Operations at City Owned Facility (Full Deployment)	PRIME-188PP	14	$ 11,250.00	$ 157,500.00
104	Project Management	PRIME-237	18	$ 36,763.58	$ 661,744.44
105	Bonding	PRIME-184PP	1	$ 114,691.76	$ 114,691.76
	Service Units				
106	BEACON Managed Solution Service Unit Pricing - Year 1	68886-104	78,024	$ 0.68	$ 53,056.32
107	BEACON Managed Solution Service Unit Pricing - Year 2	68886-104	195,060	$ 0.68	$ 132,640.80
108	BEACON Managed Solution Service Unit Pricing - Year 3	68886-104	195,060	$ 0.68	$ 132,640.80
109	BEACON Managed Solution Service Unit Pricing - Year 4	68886-104	195,060	$ 0.68	$ 132,640.80
110	BEACON Managed Solution Service Unit Pricing - Year 5	68886-104	195,060	$ 0.68	$ 132,640.80
111	BEACON Managed Solution Service Unit Pricing - Year 6	68886-104	195,060	$ 0.68	$ 132,640.80
112	BEACON Managed Solution Service Unit Pricing - Year 7	68886-104	195,060	$ 0.68	$ 132,640.80
113	BEACON Managed Solution Service Unit Pricing - Year 8	68886-104	195,060	$ 0.68	$ 132,640.80
114	BEACON Managed Solution Service Unit Pricing - Year 9	68886-104	195,060	$ 0.68	$ 132,640.80
115	BEACON Managed Solution Service Unit Pricing - Year 10	68886-104	195,060	$ 0.68	$ 132,640.80
	Total			**Total Sell Price**	**$ 9,279,657.59**

CELLULAR COVERAGE ANALYSIS

AMI WATER METERS

RFP 24.001

Badger Meter

BEACON® AMA Solution

ORION® Cellular Coverage Analysis (CCA)

Customer: City of Pinellas Park, FL

Project: City of Pinellas Park, FL

Date Issued: 4/4/2024

Revision: 1.0

SUMMARY INFORMATION

Endpoint Type: ORION Cellular Endpoint with connectivity to M2M cellular networks

Service Area (square miles): 25

Total Endpoints: 26,315

REQUEST INFORMATION

Solution Architect: Patrick Williamson

Account Manager: Brad Lowe

INFORMATION PROVIDED

	FILE NAME	DATE RECEIVED
Coverage Request Form:	CCA_CITY OF PINELLAS PARK(PINELLAS PARK, FL) _3-29-2024.pdf	3/29/2024
Endpoint Locations:	Pinellas Park (FL) Service Addresses.xlsx	3/29/2024

ANALYSIS COVERAGE AREA

Analysis is based on service location addresses provided by City of Pinellas Park, FL , with 26,286 out of 26,315 (99.9%) successfully geocoded. A map of the geocoded endpoint locations is shown below. Addresses unable to be geocoded are in the Not Found tab of the Endpoint Type spreadsheet.

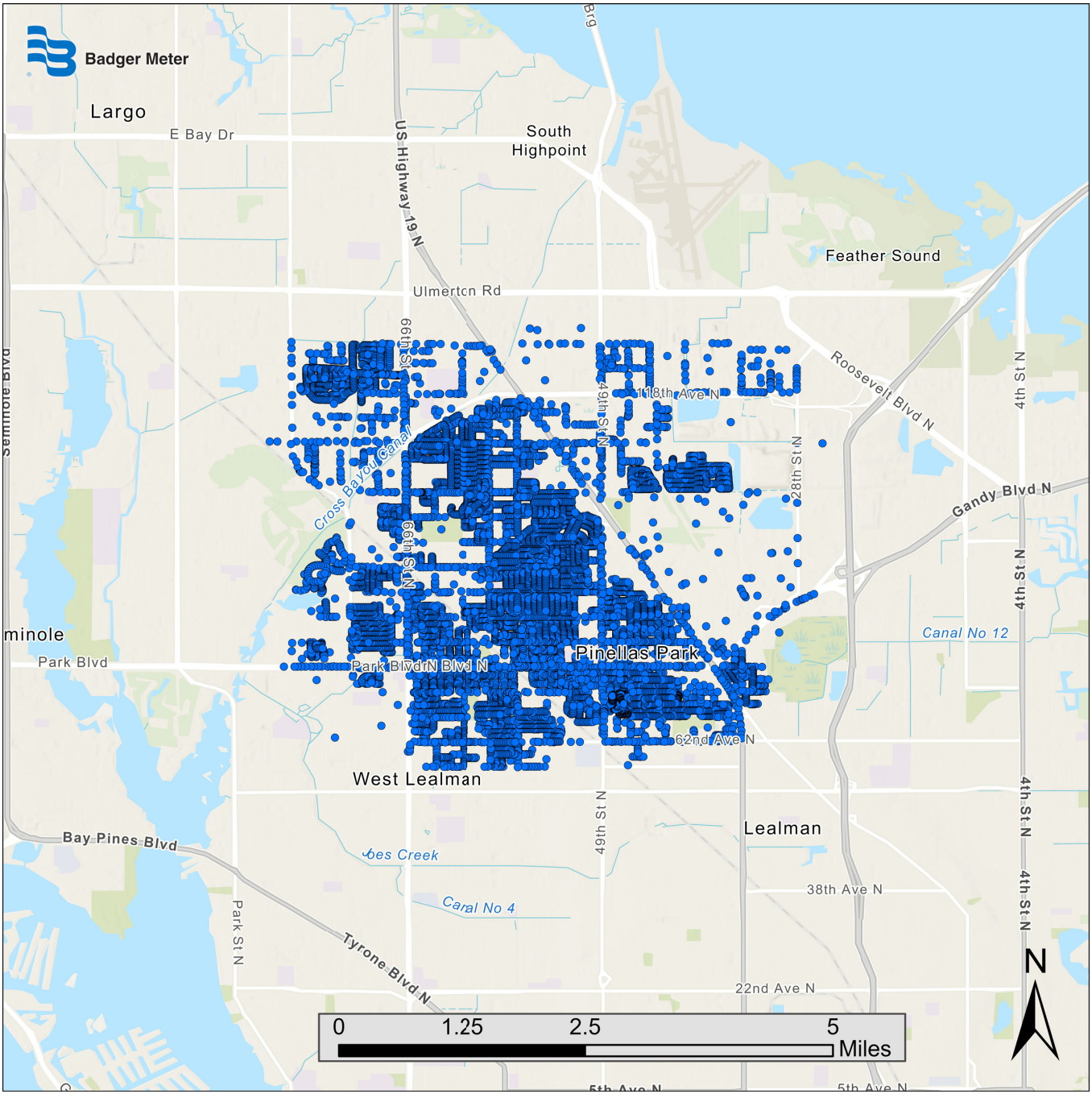
Badger Meter

BEACON® AMA Solution

ORION® Cellular Coverage Analysis (CCA)

Customer:	City of Pinellas Park, FL	**Date Issued:**	4/4/2024
Project:	City of Pinellas Park, FL	**Revision:**	1.0

ENDPOINT LOCATIONS MAP



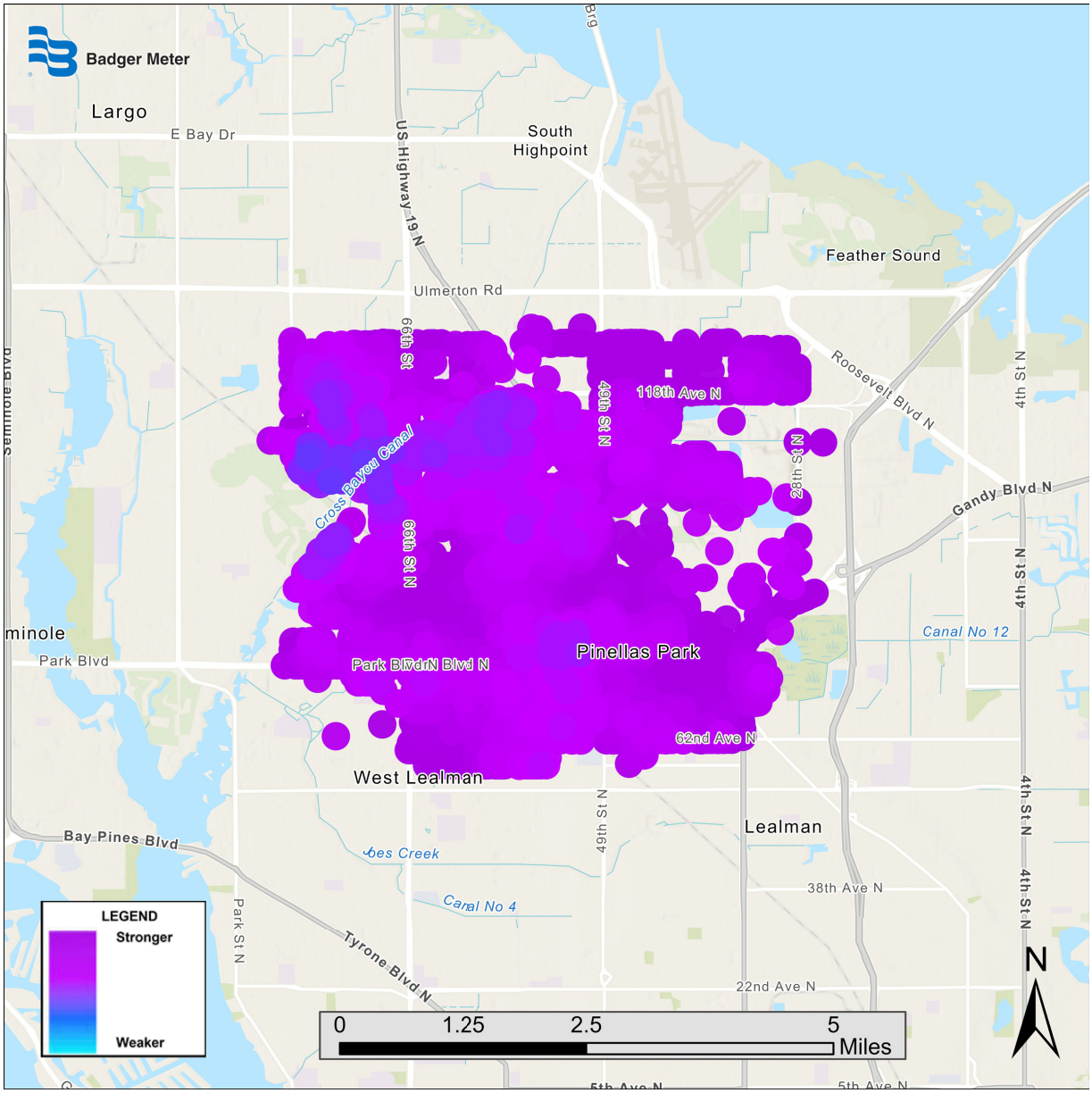
BEACON® AMA Solution

ORION® Cellular Coverage Analysis (CCA)

Customer:	City of Pinellas Park, FL	**Date Issued:**	4/4/2024
Project:	City of Pinellas Park, FL	**Revision:**	1.0

CELLULAR COVERAGE ANALYSIS

• This cellular coverage analysis has been run to determine connectivity of our providers M2M solutions which include both LTE-M and NB IoT networks. ORION Cellular Endpoints provide connectivity to both LTE-M and NB IoT networks.
• Using information provided from our carrier partners, this service area has M2M network coverage that will support our ORION Cellular endpoints.
• The map below provides an illustration of that coverage. Further guidance as to the placement of endpoints by type will be provided as deployment plans are refined.



Customer:	City of Pinellas Park, FL	**Date Issued:**	4/4/2024
Project:	City of Pinellas Park, FL	**Revision:**	1.0

ASSUMPTIONS MADE

- Submitted information including but not limited to street addresses, service area, GPS coordinates, and meter locations are accurate.
- If GPS coordinates or a GIS shapefile are not provided for endpoint locations, street addresses are geocoded into decimal-degree latitude and longitude using ESRI's StreetMap Premium for ArcGIS North America HERE address locaters.
- Data from third party providers such as USGS National Elevation Dataset (NED), USGS National Land Cover Database (NLCD), Tele-Atlas municipal boundaries, cellular providers, and the RF propagation software used by Badger Meter is accurate.
- ORION endpoints are installed and maintained according to "ORI-UM-00025 ORION Water Endpoint Installation Manual" using a Badger Meter approved endpoint installation kit in a location that allows two-way communication between the endpoint and the cellular network.
    - Pit or vault installations are through a non-metal pit lid and the pit or vault lid is at or above grade
    - Indoor installations are mounted as high as possible in the floor joists above grade on an exterior wall

CLARIFICATIONS

- The ORION cellular coverage analysis is subject to change for reasons which may include but are not limited to; consultation with the customer, site visit by Badger Meter authorized personnel, and the availability of new or updated information.
- Cellular coverage within the utility service area is required to deploy ORION cellular endpoints.
- Review the cellular coverage analysis with your Badger Meter representative in order to understand how it may be used by the utility as a tool to deploy the system.
- All endpoints are to be installed in compliance with the published ORION installation guidelines which can be found at www.badgermeter.com
- Cellular endpoint type recommended is specific to the latitude and longitude for each location.

SMART WATER IS *BADGER METER*

BEACON and ORION are registered trademarks of Badger Meter, Inc. Other trademarks appearing in this document are the property of their respective entities. Due to continuous research, product improvements and enhancements, Badger Meter reserves the right to change product or system specifications without notice, except to the extent an outstanding contractual obligation exists. © 2019 Badger Meter, Inc. All rights reserved.

www.badgermeter.com

BADGER METER

BEACON SAAS MANAGED SOLUTION

MASTER AGREEMENT

AMI WATER METERS

RFP 24.001

This BEACON SAAS MANAGED SOLUTION MASTER AGREEMENT ("**Agreement**") is entered into as of the _____ day of _____, 2024 (the "**Effective Date**") by and between Badger Meter, Inc. , a Wisconsin corporation with offices located at 4545 W. Brown Deer Road, Milwaukee, Wisconsin 53223 ("**Badger Meter**") , and City of Pinellas Park, with offices located at 8000 60th Street North, Pinellas Park, FL 33781 and as applicable its officers, directors, members, board members, governing members, trustees, commissioners, elected and appointed officials, employees, agents, consultants and other representatives ("**Customer**").

(1) SERVICE. Badger Meter and its cellular service aggregator and data-hosting service providers ("**Suppliers**") have developed a hosted, on-demand, web-based service website ("**Portal**") accessible to its customers to provide metering and water usage service information, communicated through a cellular network, for its customers ("**Service**"), and documentation to assist customers in using the Portal and the Service ("**Documentation**").

(2) RIGHT TO ACCESS AND USE THE PORTAL AND SERVICE. In consideration of the payment of the Service Fees as set forth in Section (5), Badger Meter grants to Customer, its employees and contractors that Customer approves as users of the Service ("**Authorized User**") and Customer's approved end-user water customers ("**Authorized Consumer**") the right to remotely access and use the Service from the Portal (as currently configured) for Customer's internal business use and for the benefit of its Authorized Consumers in accordance with this Agreement. Any rights and obligations in this Agreement relative to Customer and its Authorized Consumers will only be in effect when Customer affirmatively enables the EyeOnWater Service.

(3) OWNERSHIP OF PORTAL AND SERVICE.

(a) Badger Meter Service. Badger Meter owns all rights, title and interest in the Portal, Service and Documentation, including all associated intellectual property rights. Neither Customer, nor its Authorized Users or Authorized Consumers will obtain any rights, title or interest in the Portal, Service, or Documentation or any associated intellectual property rights, other than the right to access and use the Portal, Service and Documentation, subject to the terms of this Agreement.

(b) Suggestions. If Customer provides Badger Meter any suggested improvements (**"Suggestions"**) to the Portal, Service or Documentation, Customer agrees that Badger Meter will own all rights, title and interest in and to the Suggestions, even if Customer has designated the Suggestions as confidential. Badger Meter will be entitled to use the Suggestions without restriction. By entering into this Agreement, Customer irrevocably assigns, conveys and transfers to Badger Meter all right, title and interest in and to the Suggestions and agrees to provide Badger Meter with commercially reasonable assistance to document, perfect and maintain Badger Meter's rights in the Suggestions.

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(4) TERM. The term of this Agreement begins on the Effective Date and continues for a ten (10) year term unless earlier terminated in accordance with Section (16) of the Agreement (the "**Term**").

(5) FEES.

(a) Service Fees. In consideration for the right to access and use the Portal, Service and Documentation, Customer agrees to pay Badger Meter certain fees ("**Service Fees**") to obtain enterprise-wide access to the Portal, Service and Documentation, authorizing all of its Authorized Users and Authorized Consumers to use the Portal and Service and Documentation in accordance with the terms of this Agreement, pursuant to the pricing set forth in **Exhibit 1 - Fees**.

(b) Taxes All prices are exclusive of all sales, use, value added, customs and excise taxes, and any other taxes, duties, fees and charges of any kind imposed by any governmental authority in connection with this Agreement. Buyer shall pay or reimburse Badger Meter on demand for all such taxes, duties, fees and charges but Buyer shall not be responsible for any taxes imposed on, or with respect to, Badger Meter's income.

(c) Updated Schedule of Fees. At least ninety (90) days prior to the expiration date of the Term ("**Anniversary Date**"), Badger Meter will provide Customer with an updated Schedule of Fees for the Service for the upcoming contract term.

(6) RESTRICTIONS ON RIGHT TO USE. Customer agrees that Customer, its Authorized Users and Authorized Consumers will not use or permit or assist another to use the Portal, Service or Documentation in violation of this Agreement and will not:

(a) Sell, license, resell, sublicense, or otherwise permit any third parties other than Authorized Users or Authorized Consumers to access or use the Portal, Service, or Documentation.

(b) Remove patent, copyright, trademark or other intellectual property markings from the Portal, Service or Documentation.

(c) Modify, alter, tamper with, repair or otherwise create derivatives from the Portal, Service or Documentation.

(d) Copy, reverse engineer, disassemble or decompile the Portal, Service or Documentation or apply any other process or procedure to derive the source code from any software included in the Portal or Service.

(e) Use the Portal or Service in a manner that violates any applicable international, federal, state or local laws, rules or regulations.

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(f) Assert or authorize, assist or encourage any third party to assert against Badger Meter, its affiliates, customers, vendors, business partners, Servicers or licensors any intellectual property infringement Claim regarding the Portal, Service or Documentation.

(g) Transmit content or messages that are illegal, fraudulent, threatening, abusive, defamatory, or obscene.

(h) Make any unauthorized connection to Badger Meter's information technology architecture ("**Network**")

(i) Communicate any unsolicited commercial, voice, SMS, or other message.

(j) Upload or transmit any "virus," "worm," or malicious code or access, alter, or interfere with the communications of and/or information about another customer.

(k) Take actions that could cause damage to or adversely affect Badger Meter, the Service, Portal, Suppliers, Network or the property or reputation of Badger Meter or its Suppliers.

Customer and Badger Meter agree to make good faith efforts to minimize abuse or fraudulent use of the Portal and Service, to promptly report to each other any such abuse or fraudulent use of which they become aware, and to fully cooperate in any investigation or prosecution initiated by Badger Meter, its Suppliers or Customer related to abuse or fraudulent use of the Portal and Service.

(7) CUSTOMER SUPPORT. Badger Meter will provide Customer the support services described in **Exhibit 2 - Service Level Agreement.**

(8) CUSTOMER DATA.

(a) Customer Data Defined. Customer, its Authorized Users and Authorized Consumers may provide Badger Meter and its Suppliers certain, customer billing information, personally identifiable information or other content ("**Customer Data**").

(b) Ownership. The Parties agree that the Customer Data is and shall remain the sole and exclusive property of Customer and/or its licensors or Authorized Consumers, including but not limited to any intellectual rights in the Customer Data.

(c) Use of Customer Data by Badger Meter. Customer, its Authorized Users and Authorized Consumers consent to Badger Meter and its Suppliers' right to host, access, store, copy and use the Customer Data as reasonably necessary to provide, maintain, repair and enhance the Portal, Service and Documentation. Badger Meter may disclose certain Customer Data only to provide the Service to Customer, its Authorized Users and Authorized Consumers or to comply with the law or request of a governmental or regulatory body (including subpoenas or court orders as described in Section 9.) .

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(d) Customer Responsibilities. Customer is solely responsible for the development, content, operation and maintenance of the Customer Data, including but not limited to the technical operation of the Customer Data, and ensuring that calls made to the Service from Customer's network are compatible with then-current API's for the Service. Customer is responsible to ensure that Customer, its Authorized Users and Authorized Consumers comply with the Badger Meter Terms of Use Policy, the Badger Meter Privacy Policy or any other policies referenced in this Agreement and the law.

(9) CONFIDENTIALITY.

(a) Confidential Information Defined. For purposes of this Agreement, Confidential Information means all nonpublic information disclosed by one party to the other that is designated as confidential or that given the nature of the information or circumstances surrounding its disclosure, reasonably should be understood to be confidential, including but not limited to: (a) nonpublic information related to Badger Meter or its affiliates, Suppliers, business partners, technology, customers, business plans, intellectual property, promotional and marketing activities, finances and other business affairs; (b) third party information Badger Meter is obligated to keep confidential; (c) the content and existence of any discussions or negotiations between the parties; (d) Badger Meter's intellectual property used in providing the Portal, Service or Documentation; (e) Customer Data); and (f) Traffic Data, as defined below.

(b) Protection of Confidential Information. To the extent permitted by law, the parties agree to hold the other party's Confidential Information in strict confidence and will not copy, reproduce, give, sell, assign, license, market, transfer or otherwise dispose of the Confidential Information of the other party to any third parties or use the Confidential Information for any purposes whatsoever other than as contemplated by this Agreement. The Parties will take commercially reasonable steps to avoid disclosure, dissemination or unauthorized access to or use of the Confidential Information during the Term and for a period of five (5) years after the end of the Term, except that Confidential Information which is designated as a trade secret which shall continue to be subject to these confidentiality obligations in perpetuity. Customer agrees it will not misrepresent or embellish the relationship between the Parties (including by expressing or implying that Badger Meter supports, sponsors, endorses or contributes to Customer or its business endeavors) or express or imply any relationship or affiliation between Badger Meter and Customer or any other person or entity except as expressly permitted by this Agreement.

(c) Traffic Information. All de-identified data (generally, aggregated system data stripped of PII) generated or collected by Badger Meter through operation of the Portal and Service is referred to as the "**Traffic Data**." All Traffic Data shall be the Confidential Information of and owned exclusively by Badger Meter.

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(d) Third Party Requests for Confidential Information. Neither party may disclose the other party's Confidential Information except to a Supplier subject to the restrictions in this Agreement or an Authorized User or Authorized Consumer except as otherwise required by law. If a party receives a request for access to the other party's Confidential Information from a third party, the receiving party agrees to inform the disclosing party in writing within three (3) business days of receipt of the request unless prohibited by law.

(e) Exclusions from Confidential Information. Confidential Information of a party shall not include information which: (i) is in or becomes part of the public domain through no fault of the receiving party; (ii) the receiving party can prove was known to it prior to its receipt from the disclosing party without reference to the Confidential Information; (iii) is independently developed by the receiving party outside of this Agreement without use of the disclosing party's Confidential Information; or (iv) is obtained by the receiving party from a third party which had no obligation of confidentiality to the disclosing party.

(10) CUSTOMER'S REPRESENTATIONS AND WARRANTIES. Customer represents and warrants to Badger Meter that:

(a) Authority. Customer has the right and authority to enter into this Agreement and to meet its financial and legal obligations under this Agreement.

(b) Ownership. Customer, its licensors or its Authorized Consumers, own all rights, title and interest in and to the Customer Data. Customer has all rights in the Customer Data necessary to grant the rights to Badger Meter contemplated under this Agreement.

(c) Compliance with Badger Meter Policies. None of the Customer Data or the use of the Customer Data, the Portal or Service by Customer, its Authorized Users or its Authorized Consumers will violate Badger Meter's BEACON Terms of Use https://beaconama.net/termsofuse.html or Privacy Policy https://beaconama.net/privacy/privacy.html.

(d) Compliance with the Law. Neither Customer, the Authorized Users nor the Authorized Consumers will access or use the Portal, Service or Documentation in any manner that violates any applicable international, federal, state or local laws and/or regulations, including but not limited to all applicable data protection, intellectual property and privacy laws.

(11) REPRESENTATIONS AND WARRANTIES OF BADGER METER.

(a) Authority. Badger Meter represents and warrants to Customer that it has the right and authority to enter into this Agreement and to perform its obligations under this Agreement.

(b) Service Warranty. Badger Meter represents and warrants to Customer that the Portal and Service will be provided pursuant to **Exhibit 2 – Service Level Agreement**. In providing the

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Portal and Service, Badger Meter will maintain sufficient data storage capacity to satisfy the technical requirements and required storage capacity to host the Portal and Service, in its reasonable discretion. If Customer allows unauthorized users to access the Portal, Service or Documentation, this express limited warranty will immediately become null and void.

(c) Remedy for Breach of the Express Limited Warranty. If the Portal, Service or Documentation fail to meet the terms of the express limited warranty set forth in Section 11(b), Customer is required to notify Badger Meter promptly as defined in **Exhibit 2 – Service Level Agreement**. Customer's exclusive remedy for a breach of the express limited warranty is a Service credit to be calculated in accordance with **Exhibit 2 – Service Level Agreement**.

(d) DISCLAIMER OF IMPLIED WARRANTIES. EXCEPT FOR THE EXPRESS LIMITED WARRANTY SET FORTH IN SECTION 11(b), BADGER METER MAKES NO OTHER EXPRESS OR IMPLIED REPRESENTATIONS OR WARRANTIES AS TO THE PORTAL, SERVICE OR DOCUMENTATION. BADGER METER EXPRESSLY DISCLAIMS ANY OTHER EXPRESS OR IMPLIED WARRANTIES WITH REGARD TO THE PORTAL, SERVICE OR DOCUMENTATION, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY, TITLE, NON-INFRINGEMENT, FITNESS FOR A PARTICULAR PURPOSE, QUIET ENJOYMENT, OR IMPLIED WARRANTIES ARISING FROM A COURSE OF DEALING, INDUSTRY PRACTICE OR USAGE OF TRADE.

BADGER METER EXPRESSLY DISCLAIMS THAT THE PORTAL AND SERVICE WILL BE UNINTERRUPTED, ERROR FREE OR FREE OF HARMFUL COMPONENTS, AND EXPRESSLY DISCLAIMS ANY WARRANTIES AS TO THE RELIABILITY, QUALITY, SECURITY, CONDITION, DESIGN, SUITABILITY, INTER-OPERABILITY, AVAILABILITY, COMPLETENESS OF THE PORTAL OR SERVICE OR THAT ANY DATA, INCLUDING THE CUSTOMER DATA, WILL BE SECURE OR NOT OTHERWISE LOST OR DAMAGED.

(e) ESSENTIAL TERMS. THE ENFORCEABILITY OF THIS SECTION (11) IS ESSENTIAL TO BADGER METER'S WILLINGNESS TO ENTER INTO THIS AGREEMENT WITH CUSTOMER.

(12) LIMITATION OF LIABILITY

(a) DIRECT DAMAGES. IF ANY PARTY DEFAULTS IN ITS OBLIGATIONS UNDER THIS AGREEMENT, :THE NON-BREACHING PARTY WILL BE ENTITLED TO RECOVER FROM THE BREACHING PARTY ONLY THE ACTUAL AND DIRECT DAMAGES THAT THE NON-BREACHING PARTY MAY INCUR AS A RESULT OF SUCH BREACH.

(b) CAP ON DAMAGES. NEITHER PARTY'S NOR ANY OF ITS RESPECTIVE AFFILIATES ANNUAL LIABILITY UNDER THIS AGREEMENT WILL EXCEED THE LESSER OF (A) THE AMOUNTS THE CUSTOMER ACTUALLY PAYS BADGER METER UNDER THIS AGREEMENT FOR THE SERVICE THAT GAVE RISE TO THE CLAIM

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DURING THE 12 MONTHS PRECEDING THE CLAIM, OR (B) US $250,000. NOTHING IN THIS SECTION 12 WILL LIMIT CUSTOMER'S OBLIGATION TO PAY BADGER METER FOR USE OF THE SERVICES PURSUANT TO SECTION 5.

(c) LIMITS ON DAMAGES. EXCEPT FOR PAYMENT OBLIGATIONS ARISING UNDER SECTIONS (13) AND (14) (INDEMNIFICATION), NEITHER PARTY NOR ANY OF ITS RESPECTIVE AFFILIATES, SUPPLIERS OR LICENSORS WILL BE LIABLE TO THE OTHER PARTY, AN AUTHORIZED USER, AUTHORIZED CONSUMER OR ANY THIRD PARTY FOR ANY CLAIMS, DEMANDS, ACTIONS, LOSSES, DAMAGES, FINES, JUDGMENTS SETTLEMENTS, COSTS, EXPENSES, ATTORNEY'S FEES, AND COURT COSTS OR ANY OTHER LIABILITIES OF ANY NATURE WHATSOEVER, INCLUDING BUT NOT LIMITED TO THE PORTAL, SERVICE, DOCUMENTATION, OR THE SUBJECT MATTER OF THIS AGREEMENT ("CLAIM").

FURTHER, NEITHER PARTY NOR ANY OF EITHER PARTY'S RESPECTIVE AFFILIATES, SUPPLIERS OR LICENSORS SHALL BE LIABLE TO THE OTHER PARTY, AN AUTHORIZED CONSUMER OR ANY THIRD PARTY FOR ANY SPECIAL, INDIRECT, INCIDENTAL, CONSEQUENTIAL, EXEMPLARY, PUNITIVE OR ENHANCED DAMAGES, LOST REVENUE OR PROFITS OR DIMINUTION OF VALUE, OR OTHER ECONOMIC ADVERSITY, CLAIMS RESULTING FROM LOSS OF CUSTOMER DATA, OR BREACH OF CONFIDENTIALITY, ARISING OUT OF, OR RELATING TO, AND/OR IN CONNECTION WITH ANY BREACH OF THIS AGREEMENT, REGARDLESS OF WHETHER SUCH DAMAGES WERE FORESEEABLE, WHETHER OR NOT THE PARTY WAS ADVISED OF THE POSSIBILITY OF SUCH DAMAGES, AND THE LEGAL OR EQUITABLE THEORY (CONTRACT, TORT OR OTHERWISE) UPON WHICH THE CLAIM IS BASED.

NEITHER BADGER METER NOR ANY OF ITS AFFILIATES, SUPPLIERS OR LICENSORS WILL BE RESPONSIBLE FOR ANY COMPENSATION, REIMBURSEMENT OR DAMAGES ARISING IN CONNECTION WITH: (A) CUSTOMER'S INABILITY TO USE THE PORTAL OR SERVICE, INCLUDING AS A RESULT OF ANY: (i) TERMINATION OR SUSPENSION OF THIS AGREEMENT OR CUSTOMER'S USE OF OR ACCESS TO THE SERVICE ; OR (ii) WITHOUT LIMITING ANY OBLIGATIONS UNDER THE SERVICE LEVEL AGREEMENT, ANY UNANTICIPATED OR UNSCHEDULED DOWNTIME OF ALL OR A PORTION OF THE SERVICE FOR ANY REASON, INCLUDING BUT NOT LIMITED TO AS A RESULT OF A POWER OUTAGE, SYSTEM FAILURE OR OTHER INTERRUPTION; (B) THE COST OF PROCUREMENT OF SUBSTITUTE SERVICES; (C) ANY INVESTMENTS, EXPENDITURES OR COMMITMENTS MADE BY CUSTOMER IN CONNECTION WITH THIS AGREEMENT OR CUSTOMER'S USE OF OR ACCESS TO THE SERVICE OR (D) ANY UNAUTHORIZED ACCESS TO, ALTERATION OR THE DELETION, DESTRUCTION, DAMAGE, LOSS OR FAILURE TO STORE ANY OF CUSTOMER'S DATA.

(13) CUSTOMER'S INDEMNIFICATION OBLIGATIONS.

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(a) Generally. Customer agrees to defend, indemnify, and hold harmless Badger Meter as well as its parents, subsidiaries, affiliates, officers, employees, agents, licensors, Suppliers, representatives and customers and each of their respective employees, officers, directors, members and representatives (the "**Badger Meter Parties**"), against any and all Claims made against the Badger Meter Parties by any third party arising out of or related to: (i) Customers, Authorized Users or Authorized Consumers access and use of the Portal, Service, or Documentation; (ii) the subject matter of this Agreement ; (iii) violation of applicable law by Customer, its Authorized Users or Authorized Consumers; or (iv) a dispute between Customer and any Authorized User or Authorized Consumer.

(b) Procedure for Indemnification. Upon receipt of a Claim, Badger Meter will provide prompt written notice to Customer of the Claim for which the Badger Meter Parties seek indemnification. Badger Meter's failure to promptly notify Customer will only affect Customer's obligation to indemnify the Badger Meter Parties to the extent such failure causes actual prejudice to Customer's ability to defend the Claim. The notice must include a description of the Claim with reasonable detail of the facts giving rise to the Claim. Upon receipt of notice of a Claim, Customer shall be obligated to assume and control the defense of such Claim at its own expense. The Badger Meter Parties may retain their own counsel to cooperate in defending the Claim, at their own expense. The Badger Meter Parties agree to cooperate with Customer in defending the Claim and in making available to Customer all witnesses, records, materials and information in their possession or control to assist in the defense of the Claim, as is reasonably requested by Customer. Customer may not settle or compromise any Claim or consent to the entry of any judgment unless Badger Meter provides prior written consent and the Badger Meter Parties are given an unconditional written release from Customer with respect to the Claim. In the event Customer fails to defend, indemnify, and hold the Badger Meter Parties harmless, after notice of a request for indemnification, the Badger Meter Parties shall be entitled to assume the defense and seek reimbursement from Customer for all losses with regard to the Claim and all attorneys' fees and litigation costs expended by the Badger Meter Parties in defending the Claim.

(14) BADGER METER'S INDEMNIFICATION OBLIGATIONS.

(a) Generally. Subject to the limitations of liability provisions set forth in Section (12) of this Agreement, Badger Meter agrees to indemnify, defend and hold harmless Customer, and as applicable its officers, directors, members, board members, governing members, trustees, commissioners, elected and appointed officials, employees, agents, consultants and other representatives ("**Customer Parties**") from and against any legal proceedings filed against the Customer Parties by a third party based upon the allegations that the Portal, Service or Documentation infringes or violates a third party's patent, copyright or other intellectual property rights ("**Intellectual Property Dispute**").

(b) Mitigation. If the Portal, Service or Documentation becomes the subject of an Intellectual Property Dispute and is enjoined, Badger Meter will have the right to (i) procure for Customer

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the right to continue using the Portal and Service; (ii) modify the Portal and Service to avoid allegations of infringement, provided the modification does not materially change the functionality of the Portal and Service; (iii) replace the Portal and Service with an equally suitable, functionally equivalent, non-infringing Portal and Service; or (iv) immediately terminate this Agreement and provide Customer with a refund of any unused pre-paid portion of the Service Fees.

(c) Exclusions. Badger Meter assumes no liability for and Customer will not be entitled to receive indemnification from Badger Meter for any Intellectual Property Dispute which results directly and solely from (i) Customer's failure to use the Portal or Service in conformity with the Documentation; (ii) Customer's actions in combining the Service with any third party software, technology, hardware or data; or (iii) Customer's violation of access granted in Section (2).

(d) Procedure for Indemnification. Upon receipt of an Intellectual Property Dispute, Customer will provide prompt written notice to Badger Meter of the Intellectual Property Dispute for which the Customer Parties seek indemnification. Customer's failure to promptly notify Badger Meter will only affect Badger Meter's obligation to indemnify the Customer Parties to the extent such failure causes actual prejudice to Badger Meter's ability to defend the Claim. The notice must include a description of the Intellectual Property Dispute with reasonable detail of the facts giving rise to the Intellectual Property Dispute. Upon receipt of notice of an Intellectual Property Dispute, Badger Meter shall be obligated to assume and control the defense of such Intellectual Property Dispute at its own expense. Customer may retain its own counsel to cooperate in defending the Intellectual Property Dispute, at its own expense. Customer agrees to cooperate with Badger Meter in defending the Intellectual Property Dispute and in making available to Badger Meter all witnesses, records, materials and information in Customer's possession or control to assist in the defense of the Intellectual Property Dispute as is reasonably requested by Badger Meter. Badger Meter may not settle or compromise any Intellectual Property Dispute or consent to the entry of any judgment unless Customer provides prior written consent and the Customer is given an unconditional written release from Badger Meter with respect to the Intellectual Property Dispute. In the event Badger Meter fails to defend, indemnify, and hold the Customer Parties harmless, after notice of a request for indemnification, Customer shall be entitled to assume the defense and seek reimbursement from Badger Meter for all losses with regard to the Intellectual Property Dispute and all attorneys' fees and litigation costs expended by Customer in defending the Intellectual Property Dispute.

(15) TERMINATION.

(a) Termination for Convenience. Customer may terminate this Agreement for any reason by providing Badger Meter written notice of termination at least ninety (90) days in advance of the effective date of such termination. Badger Meter shall be entitled to receive just and equitable compensation for any services performed hereunder through the date of the termination. After receipt of a notice of termination for convenience, Badger Meter will exercise reasonable

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diligence to accomplish the cancellation or diversion of related services and settle all outstanding liabilities associated with the cancellation of such commitments.

(b) Termination for Cause. A party is in default under this Agreement if it materially breaches or materially fails to perform its obligations under this Agreement, which includes any failure to make undisputed payments pursuant to Section (5) ("**Event of Default**").

(c) Opportunity to Cure. Upon the occurrence of an Event of Default, the non-defaulting party shall deliver a written notice describing the Event of Default (the "**Cure Notice**"). If the receiving party has not cured the Event of Default within thirty (30) days after receipt of the Cure Notice, then the non-defaulting party shall have the right to terminate this Agreement, at its option, by delivering to the defaulting party a written notice of termination (the "**Termination Notice**").

(d) Immediate Right to Terminate. Badger Meter shall have the right to immediately terminate this Agreement: (i) in order to protect its Confidential Information, or its Intellectual Property Rights in the Portal or Service; (ii) in order to comply with applicable law (iii) if Customer makes any representation or warranty which is materially untrue as of the Effective Date or at any time during the Term; or (iv) upon an assignment for the benefit of creditors, if Customer suffers or permits the appointment of a receiver for its business or assets, or avails itself of, or becomes subject to, any proceeding under any statute relating to insolvency or for the protection of creditor rights or if a party becomes insolvent or technically bankrupt.

(e) Termination. Upon delivery of the Termination Notice to Customer by Badger Meter: (i) Badger Meter may cease providing Services to Customer, its Authorized Users and Authorized Consumers; (ii) Customer, its Authorized Users and Authorized Consumers will have no further right to use the Portal, Service or Documentation, will immediately cease using the Portal, Service and Documentation, and will receive no further Service; (iii) Customer will deliver to Badger Meter any Confidential Information of Badger Meter's in its possession or control, and (iv) Badger Meter may cease gathering data from Customer's endpoints, within a reasonable time, up to one hundred twenty (120) days after termination. Within a reasonable time after termination, at Badger Meter's discretion, Badger Meter will scrub the personally identifiable information from the Customer Data. Customer must immediately return, or at Badger Meter's option, destroy all Documentation provided to Customer by Badger Meter. Customer will remain liable for any Service Fees incurred prior to termination.

(f) Post – Termination Assistance. At either the expiration of the Term without renewal, or upon a default by Customer and subsequent termination, Badger Meter will provide post-termination data retrieval assistance to Customer for an additional fee, which shall be invoiced at the rate of $200/hour, with the number of hours required determined by the amount of data Customer wishes to extract from the Service. Any additional post-termination assistance from Badger Meter is subject to mutual agreement by the parties.

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(g) Reinstatement Fee. If Customer desires to reinstate access to the Portal and Service after termination, a reinstatement fee of $7.50 per endpoint reinstated will apply.

(16) SUSPENSION OF SERVICES.

(a) Nonpayment. Badger Meter may suspend the Service and access to the Portal and shall not be obligated to provide access to the Portal and Service to Customer, its Authorized Users or Authorized Consumers until all outstanding undisputed invoices for the Service have been paid in full, including any fees associated with suspension of the Service.

(b) Network Protection. Customer acknowledges that Badger Meter (and any of its Suppliers) may restrict, or suspend all or a portion of the Service or limit the Service as may be reasonably necessary to prevent or limit suspected fraud or any problem that materially and adversely affects the performance of the Service and/or is likely to do substantial damage to Badger Meter, Badger Meter's customers or Suppliers. Some of these actions may interrupt or prevent legitimate communications and usage. Such situations may arise: (a) if a device deployed on the Service is materially out of compliance with the technical requirements; (b) in case of actual or suspected fraudulent use; or (c) in case of disruptive or damaging operation.

(c) Notification. In the event that Badger Meter or one of its Suppliers restricts, suspends or cancels any portion of the Service or limits the operation of the Service, Badger Meter shall use reasonable efforts to (i) promptly notify Customer in advance; (ii) provide reasonable information regarding its identification of the issue that resulted in the actions taken; and (iii) reinstate Service upon resolution of the issue as soon as practicable and in any case within a reasonable timeframe.

(d) Immediate Suspension. Badger Meter may suspend Customer's or an Authorized Users or Authorized Consumers right to access or use the Service immediately upon notice to Customer if Badger Meter determines:

(i) Use of the Service poses a security risk to the Service, the Network or any third party, adversely impacts the Service, the Network or data of any other Badger Meter customer, or subjects Badger Meter or any third party to liability or fraud.

(ii) Customer or one of its Authorized Users or Authorized Customers is in breach of this Agreement or is delinquent on its payments for more than fifteen (15) days.

(iii) Badger Meter ceases to operate in the ordinary course, has an assignment for the benefit of creditors or similar disposition of its assets or becomes the subject of any bankruptcy, reorganization, liquidation dissolution or similar proceeding.

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(e) Reinstatement. Badger Meter will use commercially reasonable efforts to restore Customer's rights to use and access those portions of the Service or accounts that gave rise to the suspension promptly after Customer has resolved the problem giving rise to the suspension.

(f) Effect of Suspension. If Badger Meter suspends Customer's right to access or use all or any portion of the Service or the Portal:

(i) Customer remains responsible for all Service Fees and undisputed charges incurred through the date of suspension.

(ii) Customer remains responsible for any applicable Service Fees and charges for any Services to which Customer has continued access as well as applicable fees and charges.

(iii) Customer will not be entitled to any service credits under the Service Level Agreement for any period of suspension.

(iv) Badger Meter's right to suspend the Services is in addition to Badger Meter's right to terminate this Agreement.

(17) COMPLIANCE WITH REGULATIONS; DATA PRIVACY. Each party is responsible for complying with industry standards and such applicable laws and regulations, including, but not limited to, the generally accepted practices in the information technology service management industry for providing secure data handling and management, including meeting or exceeding Information Technology Infrastructure Library (ITIL) standards for logical and physical security and all requirements regarding the protection of data in its possession or under its control. A party will not be liable for any failure of the other party to comply with this requirement.

(18) DATA SECURITY AND RECOVERY.

(a) Data Security. In order to protect the Customer Data and prevent unauthorized access to or use of the Customer Data, Portal or Service, Badger Meter has implemented commercially reasonable internal procedures and systems designed to protect the privacy and security according to the requirements set forth in **Exhibit 3 – BEACON SaaS Managed Solution Security Policy** ("**Security Standards**"), consistent with applicable international, federal, state and local laws**.** The purpose of the security policy is to identify reasonably foreseeable and internal risks to security and unauthorized access to Badger Meter's Network and minimize security risks, including through risk assessment and regular testing. Badger Meter will designate one or more employees to coordinate and be accountable for the security program.

(b) Protection of Customer Data. Badger Meter will implement reasonable and appropriate measures for the Badger Meter Network designed to help Customer secure the Customer Data against accidental or unlawful loss, access or disclosure in accordance with Badger Meter's Security Standards. Badger Meter may modify its Security Standards from time to time but will

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continue to provide at least the same level of security as described in the Security Standards as of the Effective Date. The security and data privacy provisions in this Section contain Badger Meter, and its Suppliers entire obligation regarding the security, privacy and confidentiality of the Customer Data.

(c) Data Storage. Badger Meter will employ commercially reasonable storage (including backup, archive and redundant data storage) and commercially reasonable precautions to prevent the loss of or alteration of Customer Data, but does not guarantee against any such loss or alteration. Badger Meter will not serve as Customer's official record keeper. Customer will maintain source documents of the Confidential Information (such as billing information) hosted by Badger Meter under this Agreement.

(d) Customer Responsibilities. Customer is responsible for properly configuring and using the Service and taking steps to maintain appropriate security, protection and backup of the Customer Data, including but not limited to the use of encryption technology to protect Customer Data from unauthorized access and will perform routine archiving of the Customer Data. Further, Customer is responsible for regularly auditing its Authorized Users, and will enact internal procedures to remove Authorized Users from the Service if their job duties change and access is no longer appropriate, or if an Authorized User separates from Customer.

(e) Data Transmission Risks.

(i) Cellular Transmissions. Communication between the endpoint and cell tower is 128 bit encrypted. Customer acknowledges that neither Badger Meter nor its Suppliers can guarantee the privacy or security of any cellular transmissions as part of the Service. Customer acknowledges that cellular transmissions are capable of being intercepted by third parties without the knowledge or permission of Badger Meter or its Suppliers. Badger Meter and its Suppliers shall not be liable to Customer, the Authorized Users, the Authorized Consumers or any third party for interception or unauthorized use of any data transmitted through the cellular network, as part of the Service.

(ii) Internet Transmissions. Customer acknowledges that security of transmissions over the Internet cannot be guaranteed. Badger Meter is not responsible for: (i) Customer's access to the Internet; (ii) interception, unauthorized use or interruptions of communications through the Internet; or (iii) changes or losses of data through the Internet, in each case other than to the extent caused solely by Badger Meter. In order to protect Customer Data, Badger Meter may suspend Customer, Customer's Authorized Users or Authorized Consumers access to or use of the Badger Meter Portal or Service via the Internet immediately, without prior notice, pending an investigation of any potential security breach.

(f) Coverage Availability. The Service is provided using a wireless network. Actual signal availability in the Service Area will depend on the device used to access the Service as well as

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coverage for the applicable wireless network provided in specific geographic regions. Coverage may be refused, interrupted or limited by environmental factors such as signal strength, buildings, weather, geography, topography, or by factors affecting the Suppliers, such as usage concentration or by facilities changes, modifications, updates, relocations, repairs, maintenance or other similar activities necessary for the proper or improved operation of the Supplier's facilities. Any such factors may result in dropped and blocked connections or slower data speeds. Neither Badger Meter nor any of its Suppliers will be responsible to Customer or any of Customer's Authorized Users or Authorized Consumers for any such lapses in or obstructions to coverage. The Service Area is subject to change from time to time. Should Badger Meter receive notice from its Supplier that such Supplier intends to discontinue its support for the Badger Meter Service in all or part of the Service Area, Badger Meter will provide Customer with as much advance notice as practicable under the circumstances.

(g) Password Protection. Customer, its Authorized Users and Authorized Consumers will be required to select and use certain user names, passwords or codes to access and use the Service and Portal. Customer assumes sole responsibility for the selection, management and use of any codes or passwords as may be permitted or required for the access to and use of the Portal and Service by Customer, its Authorized Users and its Authorized Consumers. Customer agrees to maintain the privacy of usernames and passwords associated with the Badger Meter Portal and Service. Customer shall remain responsible for all activities that occur under Customer's password or Internet account. Customer will immediately notify Badger Meter of any unauthorized use of Customer's password or Internet account or any other breach of security, and ensure that Customer exits from Customer's Internet account at the end of each session. Badger Meter shall not be liable for any damages incurred by Customer or any third party arising from Customer's failure to comply with this Section.

(h) Third Party Access. To the extent that Customer requests that Badger Meter provide any Customer Data to Authorized Users, Authorized Consumers or third parties or any non-U.S. location, Customer represents that it has acquired any consents or provided any notices required to transfer such content or information and that such transfer does not violate any applicable international, federal, state or local laws and/or regulations.

(i) Security Breach. If Badger Meter becomes aware of a security breach or that compromises the security, confidentiality or integrity of the Customer Data ("Breach"), Badger Meter will promptly notify Customer in writing and take appropriate actions to resolve the Breach. Badger Meter will reasonably cooperate with Customer to investigate the nature and scope of any Breach. In its initial notification to Customer, Badger Meter will provide Customer with: (i) a description of the Breach; (ii) the estimated impact of the Breach on Customer's Data; (iii) the name and contact information of the person at Badger Meter who will be primarily responsible for resolving the issues for Customer; and (iv) the investigation taken and the suggested corrective action. Badger Meter will provide commercially reasonable cooperation to Customer in investigating, assisting with notification of the Breach and taking corrective action as requested by Customer.

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(j) Notification of Breach. In the event that applicable law requires notification to individuals of an Breach or if requested by Customer, Badger Meter will take additional mitigation steps for the benefit of Customer, including, but not limited to, providing reasonable assistance with drafting and sending of required notifications.

(19) CHANGES.

(a) Right to Make Changes. Badger Meter may from time to time make changes, without Customer's approval, to the Terms of Use, the Privacy policies, the Portal, Service or Documentation, provided that such changes: (i) do not increase Customer's total costs of accessing and using the Portal and Service during the Term of this Agreement ; (ii) do not require Customer to make any material changes to its systems, software, equipment, policies or procedures ; (iii) do not have a material adverse impact on the functionality, interoperability, performance, reliability, security or resource efficiency of the Portal and Service ; (iv) do not materially reduce the scope of the Portal and Service; and (v) are otherwise consistent with this Agreement. Badger Meter will publicize any changes by a notice given to Customer or by a prominent announcement on the Portal. Any such changes will not take effect until thirty (30) days after posting of notice on the Portal. By continuing to use the Service after the effective date of the modification to a policy, Customer agrees to be bound by the modified policies. It is Customer's responsibility to check the Badger Meter site regularly for modifications to the policies.

(b) Emergency Changes; System Improvement. Notwithstanding the foregoing, Badger Meter and its Suppliers may make temporary changes to the Portal and Service required by an emergency or threat to the security or integrity of the Portal or Service, to respond to Claims, litigation or loss of license rights related to third party intellectual property rights or to comply with the law or requests of a government entity, as well as take actions deemed reasonably necessary to protect or optimize the Service. Some of these actions may interrupt or prevent legitimate communications and usage, including, for example, use of message filtering/blocking software to prevent SPAM or viruses, limitations on throughput, and scheduled maintenance. Badger Meter will provide notice by sending a message to the email address then associated with Customer's account and by posting it on Badger Meter's Portal. Badger Meter will provide Customer with: (i) at least thirty (30) days' advance notice of planned maintenance by Badger Meter; and (ii) as much advance notice as reasonably possible of emergency changes or maintenance by Badger Meter or its Suppliers. Any actions resulting in permanent changes shall only be made in compliance with Section (19) (a).

(20) RIGHT TO SUBCONTRACT. Badger Meter may subcontract the performance of any of its cellular or web-services duties or obligations under this Agreement, and will use commercially reasonable efforts to subcontract only with subcontractors that have the requisite skills to perform any subcontracted obligations in accordance with the terms of this Agreement.

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(21) GENERAL.

(a) Binding Agreement. This Agreement is binding upon and will inure to the benefit of the parties and their respective successors and assigns.

(b) Affiliates. This Agreement covers only the employees and agents of Customer. If Customer wishes to have any entity that directly or indirectly controls, is controlled by or is in common control with Customer to access the Portal and use the Service, Customer's Affiliate must execute a separate agreement with Badger Meter.

(c) Assignment. Either party may assign its rights and obligations under this Agreement with the express written consent of the other party, which consent will not be unreasonably withheld or delayed. Any purported assignment or transfer in violation of this Section will be null and void. Notwithstanding the foregoing, Badger Meter may assign its rights and obligations under this Agreement without the consent of Customer: (i) upon a sale of a majority of its outstanding capital stock to an affiliate or third party; (ii) if it sells all or substantially all of its assets; (iii) in the event of a merger; or (iv) in the event of a similar change of control.

(d) No Waiver. The waiver or failure of either party to exercise any right or remedy provided under this Agreement will not be deemed a waiver of any further right or remedy. All waivers must be in writing to be effective.

(e) Severability. If any portion of this Agreement is held to be invalid or unenforceable, the remaining portions of this Agreement will remain in full force and effect. Any invalid or unenforceable portions of this Agreement will be interpreted to effectuate the intent of the original Agreement. If such construction is not possible, the invalid or unenforceable portion of the Agreement will be severed from this Agreement, and the remainder of the Agreement will remain in full force and effect.

(f) Independent Contractors. The Parties agree that they are independent contractors and that neither party nor any of their respective affiliates, is an agent of the other for any purpose or has the authority to bind the other.

(g) Savings Clause. The invalidity of any provision of this Agreement shall not affect the validity and binding effect of the remaining provisions.

(h) No Third Party Beneficiaries. Nothing express or implied in this Agreement shall confer any rights, remedies, obligations or liabilities whatsoever to third parties which are not signatories to this Agreement.

(i) Governing Law. To the extent permitted by law, the terms of this Agreement are governed by the laws of the State of Florida. The United Nations Convention for the International Sale of Goods does not apply to this Agreement.

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(j) No Claims Against or Liability of Badger Meter Suppliers. Customer acknowledges that the Service utilizes services that are furnished to Badger Meter and one or more Suppliers pursuant to agreements between Badger Meter and its Suppliers. Neither Customer nor any Authorized Users or Authorized Consumers has a contractual relationship with Badger Meter's Suppliers and neither Customer nor its Authorized Users or Authorized Consumers is a third party beneficiary of or will have any claim against Badger Meter's Suppliers in the event any such agreement expires or is terminated. Customer further acknowledges that the Suppliers disclaim all liability of any nature, whether legal or equitable, to Customer, its Authorized Users or Authorized Consumers, whether direct, indirect, incidental or consequential, arising out of the use of Badger Meter Portal or Service by Customer, its Authorized Users or Authorized Consumers, including any liability for personal injury or death, failure to be able to use the Service or otherwise. Customer agrees that neither it nor any Authorized Users or Authorized Consumers shall have any Claim against the Supplier of any kind with respect thereto, whether arising out of breach of contract, warranty, negligence, and tort or otherwise.

(k) Resolution Efforts. Any litigation between the parties shall be in the Circuit Court in and for Pinellas County, Florida, including the Mediation and Arbitration procedures provided by such court.

(22) INJUNCTIVE RELIEF: Notwithstanding the provisions of Section 21, to the extent permitted by law, Badger Meter shall have the right to pursue injunctive, declaratory or other relief by the state and federal courts sitting in Milwaukee, Wisconsin and waive any objection that they would otherwise have to venue in such courts.

(23) NOTICES. All notices shall be in writing and delivered to the other party by means of: (a) personal delivery set forth below; (b) courier (signature required upon delivery); (c) recognized overnight courier, at the following address; (d) fax with proof of delivery; or (e) via electronic mail with proof of delivery: Notices sent by email will be effective when sent and notices posted on Badger Meter's Portal will be effective upon posting. All notices must be provided in the English language.

If to Badger Meter:
Legal Department, Attn: Assistant General Counsel
4545 W. Brown Deer Road
Milwaukee, WI 53223

If to Customer:
8000 60th Street North
Pinellas Park, FL 33781

(24) SURVIVABILITY. Any provision of this Agreement which by its nature should survive termination or expiration of this Agreement shall survive its expiration or termination.

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(25) LIMITATION OF CLAIMS. No action arising under or in connection with this Agreement, regardless of the form, may be brought by Customer more than two (2) year after Customer becomes aware of or should reasonably have become aware of the occurrence of events giving rise to the Claim.

(26) FORCE MAJEURE. Neither party shall be liable to the other or any third party by reason of any failure or delay of its obligations under this Agreement where the delay or failure results from any cause beyond its reasonable control, including, but not limited to, acts of God, fires, storms, floods or other acts of nature, explosions, systemic electrical telecommunications or other utility failures, earthquakes, hurricanes, tornados, natural disasters, strikes, shortage of materials, work stoppage or other labor dispute, embargoes, riots, insurrections, acts of war or terrorism, or any action or restraint by court order or public or governmental authority ("**Force Majeure Event**"). The party subject to the Force Majeure Event agrees to use commercially reasonable efforts to minimize the impact of the Force Majeure Event on the other party.

(27) AMENDMENT. This Agreement may only be amended by a written document signed by both parties. Badger Meter will not be bound by and specifically objects to any term, condition or other provision which is different from or in addition to the provisions of this Agreement (whether or not it would materially alter this Agreement) and which is submitted by Customer in any receipt, acceptance, confirmation, agreement, purchase order, correspondence or other documentation. If the terms of this Agreement are not consistent with the terms contained in any policy, the terms contained in this Agreement will control, except that the Service Terms will control over this Agreement.

(28) ENTIRE AGREEMENT. This Agreement, including all applicable Exhibits and policies, constitutes the entire agreement between the parties with regard to its subject matter. This Agreement supersedes all prior or contemporaneous agreements, discussions, negotiations, undertakings, communications, representations or proposals, whether written or oral.

(29) ORIGINALS, COUNTERPARTS. This Agreement may be executed in several counterparts, each of which shall be deemed an original and all of which together will be deemed to constitute one and the same document. This Agreement may be executed and delivered by facsimile signature or portable document format (.pdf) by electronic mail.

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IN WITNESS WHEREOF, the authorized representatives of the parties hereby bind the parties to this BEACON SaaS Managed Solution Master Agreement by signing below:

BADGER METER, INC

Signature

Kim K. Stoll
Printed Name

V.P. - Sales & Marketing
Title

11/20/2024
Date

CITY OF PINELLAS PARK

Signature

Printed Name

Title

Date

ATTEST:
By

Jennifer R. Carfagno, City Clerk, MMC

Approved as to form and correctness:

City Attorney
City of Pinellas Park

City Council Approved

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EXHIBIT 1

FEES

1. **Service Fees.** Customer agrees to pay the following Service Fees, as consideration for the right to access and use the Portal, Service and Documentation during the Term, as well as applicable Taxes.

2. **Invoicing.** Invoicing will require a minimum $100 value and can result in smaller users pre-purchasing for future consumption. Undisputed payments are due within thirty (30) days of the date of the invoice.

3. **Interest and Costs**. Customer agrees that it will be responsible to pay Badger Meter for any collection expenses incurred by Badger Meter, including interest at the highest interest rate permitted by law, and reasonable attorneys' fees and court costs incurred by Badger Meter in enforcing its rights under this Agreement.

BEACON Monthly Endpoint Subscription Fee

Hourly Data, Once Daily Call-in: $0.89 per endpoint per month

Invoicing for monthly endpoint subscription fee starts at time of endpoint activation or 6 months from date of shipment, whichever comes first.

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EXHIBIT 2

SERVICE LEVEL AGREEMENT

This Service Level Agreement ("SLA") will go into effect upon completion of Endpoint Provisioning, which is the point during meter installation when the endpoint is installed and verified to provide data to the BEACON SaaS Managed Solution.

1. CUSTOMER SUPPORT.

Service Levels. Within one (1) hour after a request for Customer Support Services from Customer, Badger Meter will respond to such request in accordance with the procedures set forth below. Customer may report the problem by phone, email or website provided by Badger Meter to Customer. Badger Meter will use commercially reasonable efforts to meet the response and resolution times set forth below:

Severity Level	Response Time	Resolution Time
Level 1 – Service is unavailable	one (1) hour	six (6) hours
Level 2 – certain interruptions but service is still available	twenty-four (24) hours	twenty-four (24) hours
Level 3 – minor intermittent malfunction	twenty-four (24) hours	three (3) days
Level 4 – suggestions for new features or enhancements to BEACON Portal and Service	twenty-four (24) hours	Evaluated, scheduled and prioritized for potential inclusion in upcoming releases.

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2. BEACON PORTAL AND SERVICE AVAILABILITY PROMISE.

Badger Meter will use commercially reasonable efforts to fulfill the following Service Promise:

- BEACON Portal and Service Availability of 99% within each calendar month, excluding any Emergency Downtime, Scheduled Downtime, any unavailability of the Portal and Service due to any Force Majeure Event and any unavailability of the Portal and Service less than fifteen (15) minutes in duration following written notice thereof.

Definitions

"**Availability**" is the monthly uptime percentage with normal functionality of the Portal and the Service, calculated as described below.

"**Emergency Downtime**" means any unavailability of the Portal or Service due to a temporary suspension by Badger Meter to perform maintenance to address any, urgent and unexpected issue with the Portal or Service.

"**Scheduled Downtime**" means any unavailability of the Portal or Service due to scheduled maintenance. Scheduled maintenance may occur between 10:00 p.m. on Saturday to 4:00 a.m. on Sunday (Pacific Time) every week. Badger Meter shall have the right to change the scheduled maintenance times upon notice to Customer posted on the BEACON Portal.

CALCULATION of BEACON Portal and Service Availability:

Availability is measured by Badger Meter through standard monitoring software that tests the application availability at least every five (5) minutes and logs unavailability incidents (date and UTC time) for each monitored component.

Availability is calculated as the percentage of uptime in the applicable calendar month, excluding scheduled downtime:

$$1 - \frac{Total\ Unavailability\ Minutes}{Total\ Minutes\ of\ Service\ Month - Total\ Minutes\ of\ Approved\ Downtime}$$

Where:

"**Total Unavailability Minutes**" is the cumulative unavailability time in minutes in the applicable month where the Portal and Service are not available due to unplanned outages or from systematic errors on the part of Badger Meter,

"**Total Minutes of Service Month**" is the cumulative time in minutes in the month in question, calculated by taking the number of days in month x 24 hours/day x 60 minutes/hour, and

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"**Total Minutes of Approved Downtime**" is the cumulative time in minutes in the applicable month where the Supplier applications are not available due to scheduled downtime ; other planned scheduled outages, or approved exclusion conditions as defined in this Agreement.

In order to be included within the Total Unavailability Minutes: (a) Customer shall notify Badger Meter, in writing, via email(techsupport@badgermeter.com) of the unavailability of the Portal or the Service; (b) such unavailability shall be greater than fifteen (15) minutes in duration following Badger Meter's receipt of such notice; and (c) Customer shall notify Badger Meter, in writing, via email within twenty-four (24) hours of such unavailability that it should be included within the Total Unavailability Minutes unless such unavailability is due to any Emergency Downtime, Scheduled Downtime, or any unavailability of the Services due to any Force Majeure Event.

Service Credits

If Badger Meter fails to meet the BEACON Portal and Service Availability Promise, the following Service Credits will be calculated as follows:

Service Credit = Endpoint Service Units Consumed in the Month * (1 - Availability) rounded to the next whole number

For example;

Availability	**Service Credit** (Service Units per 1,000 Service Units consumed in the month)
95%	50
90%	100
80%	200
70%	300
60%	400
50%	500

Service Credit will be added to Customer's account in the form of pre-paid Service Units for the same endpoint type(s).

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3. **MONTHLY BILLING DATA SERVICE PROMISE.**

Badger Meter will use commercially reasonable efforts to fulfill the following Service Promise:

- The BEACON SaaS Managed Solution will successfully provide Monthly Billing Data for at least 98.5% of provisioned accounts at the time of billing request to the BEACON SaaS Managed Solution.

Definitions

"**Managed Solution**" is a system that consists of a network deployment using fixed network and/or cellular endpoints, where Badger Meter maintains the responsibility for managing the reading hardware and software for system operation over the Term of the Agreement.

"**Provisioned Accounts**" are accounts with cellular or fixed network endpoints that are discovered by the network, fully able to communicate with the network, and completely entered correctly in the BEACON SaaS Managed Solution.

"**Monthly Billing Data**" is a valid meter reading obtained within three (3) days of the billing as performed through the BEACON SaaS Managed Solution to provisioned accounts.

CALCULATION of Monthly Billing Data Service Promise for Provisioned Accounts:

Monthly Billing Data success rate is calculated by the count of accounts in the billing cycle with meter read data within three (3) days ("**Count of Billing Reads**") divided by the number of active and Provisioned Accounts in the billing cycle ("**Count of Total Billing Cycle**").

$$\frac{Count\ of\ Billing\ Reads}{Count\ of\ Total\ Billing\ Cycle}$$

Where:

"Count of Billing Reads" is the total number of accounts in the billing file with valid data that a billing quality reading is supplied for managed solution endpoints.

"Count of Total Billing Cycle" is the total number of accounts with valid data in the billing file being processed for managed solution endpoints.

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If Customer suspects that the Monthly Billing Data Service Promise has not been met for a particular Billing Cycle, (a) Customer shall notify Badger Meter, in writing, within twenty-four (24) hours of the occurrence, via email (techsupport@badgermeter.com) of the Count of Billing Reads and Count of Total Billing Cycle of managed solution endpoints; (b) the specific time and date when the billing read file was generated.

Service Credits
If Badger Meter fails to meet the Monthly Billing Data Service Promise, Service Credits will be calculated as follows:

Service Credit = Managed Solution Endpoint Service Units Consumed in the Month * (1 - Monthly Billing Data Success Rate) rounded to the next whole number

For example;

Monthly Billing Data Success Rate	**Service Credit** (Service Units per 1,000 Service Units consumed in the month)
95%	50
90%	100
80%	200
70%	300
60%	400
50%	500

Service Credit will be added to Customer's account in the form of pre-paid Service Units for the same endpoint type(s).

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4. **MISCELLANEOUS.**

Exclusions

The BEACON Portal and Service Availability Promise and Monthly Billing Data Service Promise do not apply to any of the following performance issues, in addition to other exclusions herein:

(i) Resulting from any actions or inactions of Customer, its Authorized Users or Authorized Consumers in accordance with the restrictions and requirements of this Agreement;

(ii) Resulting from Customer or its suppliers equipment, software, or other technology and/or Customer's third party equipment, software, or other technology outside of Badger Meter's control;

(iii) Caused by failures, including, but not limited to, internet connectivity, port availability, firewall configuration, or cellular networks at Customer's location;

(iv) Resulting from Customer's breach of any term or condition under the Agreement;

(v) Caused by unexpected or unintentional RF interference or signal obstruction caused by sources not present or not in use during endpoint installation;

(vi) Caused by intentional RF interference or signal obstruction not present during endpoint installation, caused by third parties;

(vii) Caused by Customer, an Authorized User's or an Authorized Consumer's misuse or abuse of the Portal or Service;

(viii) During an event triggering a disaster recovery and for a twenty-four (24) hour period after the resumption of the Service following such an event to allow for the system to return to normal operating ranges;

(ix) Arising from Badger Meter's suspension or termination of Customer's right to use the BEACON Managed Solution in accordance with the Agreement;

(x) Arising from failure of Customer to follow Badger Meter's published installation, operation and maintenance instructions and Clarifications from Badger Meter's Preliminary Network Design;

(xi) When outdoor temperatures either exceed or are below the endpoint operating temperature range as described in the applicable product data sheet.

(xii) Accounts read using manual, touch read, handheld and mobile technology are not included as part of the Monthly Billing Data Service Promise, as these reading technologies are outside of Badger Meter's control.

In the event Badger Meter does not meet a Service Promise hereunder, Badger Meter will conduct a commercially reasonable root cause analysis of the Service promise failure. If Badger Meter's analysis is inconclusive, or if Badger Meter concludes that circumstances outside of Badger Meter's control caused the Service promise failure, or if Badger Meter concludes that a failure falls under any other exclusions described hereunder, Customer will not be entitled to a Service Credit. If Badger Meter's analysis is conclusive and that circumstances within Badger Meter's control caused the Service failure, Customer will be eligible to receive a Service Credit as described above.

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EXCEPT AS EXPRESSLY PROVIDED IN THIS SLA, THE SERVICE CREDITS SPECIFIED IN THIS SLA WILL BE CUSTOMER'S SOLE AND EXCLUSIVE REMEDY FOR BADGER METER'S FAILURE TO MEET THE SERVICE PROMISE SPECIFIED IN THIS SLA.

Badger Meter will report Service Promises and applicable Service Credits upon request and upon a commercially reasonable frequency. Following each report, upon Customer request, the parties will discuss such performance and the extent to which any Service Credits either are appropriate or should be modified due to circumstances not captured by the reporting methodology.

Upon agreement concerning the Service Credits due, such Service Credits will be applied against Badger Meter's charges in the months following the month in which the credits were incurred.
.

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EXHIBIT 3

BEACON SaaS MANAGED SOLUTION SECURITY POLICY

1. **BEACON SaaS Portal and Service Information Security Program.** Badger Meter maintains an information security program (including the adoption and enforcement of internal policies and procedures) designed to (a) support the BEACON SaaS Managed Solution, (b) identify reasonably foreseeable and internal risks to the BEACON Portal and Service security and unauthorized access to the Badger Meter Network, and (c) minimize security risks. The BEACON Portal and Service information security program includes the following measures:

   1.1 Network Security. The Badger Meter Network is electronically accessible to employees, and contractors necessary to provide the Portal and Service. Badger Meter maintains access controls and policies to manage what access is allowed to the Badger Meter Network from each network connection and user, including the use of firewalls or functionally equivalent technology and authentication controls. Badger Meter maintains corrective action and incident response plans to respond to potential security threats.

   1.2 Physical Security.

   1.2.1 Physical Access Controls. Physical components of the Badger Meter Network are housed in nondescript facilities (the "**Facilities**"). Physical barrier controls are used to prevent unauthorized entrance to the Facilities both at the perimeter and at building access points. Passage through the physical barriers at the Facilities requires either electronic access control validation (e.g., card access systems, etc.) or validation by human security personnel (e.g., contract or in-house security guard service, receptionist, etc.). Employees and contractors are assigned photo-ID badges that must be worn while the employees and contractors are at any of the Facilities. Visitors are required to sign in with designated personnel, must show appropriate identification, and are assigned a visitor ID badge that must be worn while the visitor is at any of the Facilities, and are continually escorted by authorized employees or contractors while visiting the Facilities.

   1.2.2 Limited Employee and Contractor Access. Badger Meter provides access to the Facilities to those employees and contractors who have a legitimate business need for such access privileges. When an employee or contractor no longer has a business need for access privileges, the access privileges are promptly revoked, even if the employee or contractor continues to be an employee of Badger Meter or its affiliates.

   1.2.3 Physical Security Protections. All major access points (other than main entry doors) are maintained in a secured (locked) state. Access points to the Facilities are monitored by video surveillance cameras designed to record all individuals accessing the Facilities. All physical access to the Facilities by employees and contractors is logged and routinely audited.

   1.2.4 Pre-Employment Screening. Badger Meter conducts criminal background checks, as permitted by applicable law, as part of pre-employment screening practices for

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employees commensurate with the employee's position and level of access to the Facilities. Badger Meter will not permit an employee to have access to the non-public Customer Data or perform material aspects of the Service if such employee has failed to pass such background check.

2. **Continued Evaluation.** Badger Meter will conduct periodic reviews of the security of its Badger Meter Network and adequacy of its information security program as measured against industry security standards and its policies and procedures. Badger Meter will continually evaluate the security of its Badger Meter Network and associated Service to determine whether additional or different security measures are required to respond to new security risks or findings generated by the periodic reviews.

3. **Customer Responsibilities.** System security is a shared responsibility between Badger Meter and Customer. Customer shall assign a systems service administrator to be responsible for establishing access and usage policies. Customer shall develop commercially reasonable policies and procedures to insure physical security, establishing account access approvals and procedures, conduct regular reviews of access rights, and provide security awareness training for staff using the Service. The administrator shall also be responsible for policies and procedures related to Authorized Consumers access to their individual data resident on the Network.

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GENERAL BADGER DOCUMENTATION

AMI WATER METERS

RFP 24.001

Badger Meter

4545 W Brown Deer Road
PO Box 245036
Milwaukee, Wisconsin 53224-9536
414-355-0400 | 800-876-3837
www.badgermeter.com

APPOINTMENT OF ELECTED AND NON-ELECTED OFFICERS

We certify as follows:

Under authority delegated by the Badger Meter, Inc. Board of Directors to Badger Meter, Inc. executive management, the following are appointed:

Non-Elected Officers:

Charla D. Dury	Assistant Secretary	Proposal Lead – Bids and Contract Administration
Wayne Dennis	Assistant Secretary	Senior Director - International Sales & Marketing & Business Development
Nicholas J. Gemmell	Assistant Secretary	Senior Legal Counsel
Matthew B. Gieseke	Assistant Secretary	Proposal Lead – Bids and Contract Administration
Charity D Granberry	Assistant Treasurer	Milwaukee Accounting Manager
Shauna A. Griffin	Assistant Secretary	Sr. Director – Utility Sales
Benjamin E. Loomis	Assistant Secretary	Milwaukee Credit Manager
David A. Miller	Assistant Secretary	Counsel II
Rachel J. Meyer	Assistant Secretary	Proposal Manager – Bids and Contract Administration
Jessica A. O'Malley	Assistant Secretary	Director – Turnkey Operations
Jevgeni Neufeld	Assistant Treasurer	Director – Finance
Michael Steiner	Assistant Secretary	General Manager of Water Quality International
Christie M. Tarantino	Assistant Treasurer	Director - Accounting & External Reporting
Kavin Tedamrongwanish	Assistant Secretary	Counsel III

BY: KRB
Ken Bockhorst (Mar 8, 2024 11:51 CST)

William R. Bergum

Kenneth C. Bockhorst

Chairman, President, and Chief Executive Officer

Badger Meter, Inc.

March 8, 2024

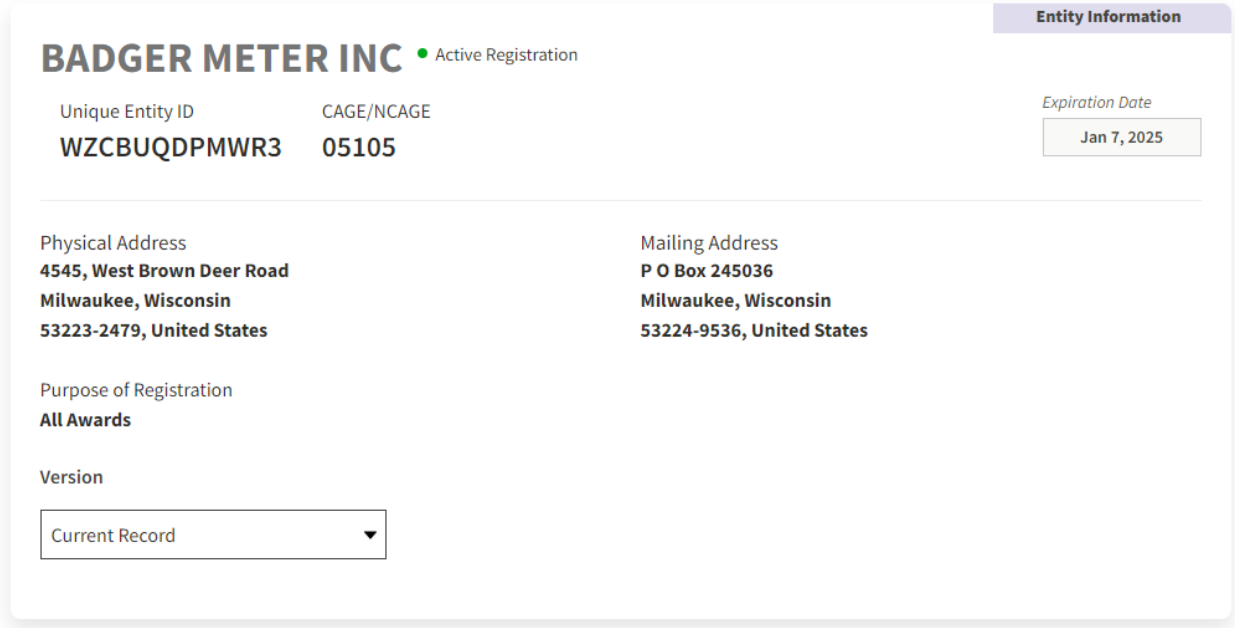
William R. A. Bergum,

Vice President - General Counsel & Secretary

Badger Meter, Inc.

March 8, 2024

DEPARTMENT OF BUSINESS & PROFESSIONAL REGULATION REGISTRATION



Entity Information

BADGER METER INC ● Active Registration

Unique Entity ID
WZCBUQDPMWR3

CAGE/NCAGE
05105

Expiration Date
Jan 7, 2025

Physical Address
4545, West Brown Deer Road
Milwaukee, Wisconsin
53223-2479, United States

Mailing Address
P O Box 245036
Milwaukee, Wisconsin
53224-9536, United States

Purpose of Registration
All Awards

Version

Current Record

may subject the Web Services Employer, its subcontractors, its employees, or its representatives to: (1) prosecution for false statements pursuant to 18 U.S.C. 1001 and/or; (2) immediate termination of its MOU and/or; (3) possible debarment or suspension.

G. The foregoing constitutes the full agreement on this subject between DHS and the Web Services Employer.

Approved by:

Web Services Employer Badger Meter, Inc.	
Name (Please Type or Print) Donna R Koepke	Title
Signature Electronically Signed	Date 08/07/2008
Department of Homeland Security – Verification Division	
Name (Please Type or Print) USCIS Verification Division	Title
Signature Electronically Signed	Date 08/07/2008

Company ID Number: 142953

Information Required for the E-Verify Program **Information relating to your Company:**	
Company Name	Badger Meter, Inc.
Company Facility Address	4545 W. Brown Deer Road Milwaukee, WI 53223
Company Alternate Address	P. O. Box 245036 Milwaukee, WI 53224-9536
County or Parish	MILWAUKEE
Employer Identification Number	390143280
North American Industry Classification Systems Code	332
Parent Company	
Number of Employees	500 to 999
Number of Sites Verified for	5

Company ID Number: 142953

Are you verifying for more than 1 site? If yes, please provide the number of sites verified for in each State:

ARIZONA	1 site(s)
CALIFORNIA	1 site(s)
OKLAHOMA	1 site(s)
WISCONSIN	2 site(s)

2024 FOREIGN PROFIT CORPORATION ANNUAL REPORT

FILED
Mar 15, 2024
Secretary of State
9158284196CC

DOCUMENT# 841521

Entity Name: BADGER METER, INC.

Current Principal Place of Business:

4545 W. BROWN DEER RD.
MILWAUKEE, WI 53223

Current Mailing Address:

4545 W. BROWN DEER RD.
MILWAUKEE, WI 53223 US

FEI Number: 39-0143280

Certificate of Status Desired: No

Name and Address of Current Registered Agent:

CORPORATION SERVICE COMPANY
1201 HAYS STREET
TALLAHASSEE, FL 32301-2525 US

The above named entity submits this statement for the purpose of changing its registered office or registered agent, or both, in the State of Florida.

SIGNATURE:

Electronic Signature of Registered Agent — Date

Officer/Director Detail :

Title	VP, SECRETARY, GENERAL
Name	BERGUM, WILLIAM ROBERT AXEL
Address	N63 W29924 WOODFIELD CT
City-State-Zip:	HARTLAND WI 53029

Title	VP
Name	STOLL, KIMBERLY KVISTAD
Address	W294 N6012 RIVER GROVE LN
City-State-Zip:	HARTLAND WI 53029

Title	DIRECTOR
Name	STERN, JAMES F.
Address	4545 W. BROWN DEER RD.
City-State-Zip:	MILWAUKEE WI 53223

Title	CFO, SVP
Name	WROCKLAGE, ROBERT ALAN
Address	19915 WEST PHEASANT RUN DRIVE
City-State-Zip:	NEW BERLIN WI 53146

Title	VP
Name	BEGALE, FRED JOSEPH
Address	3656 NORTH HICKORY LN
City-State-Zip:	OCONOMOWOC WI 53066

Title	DIRECTOR
Name	TELLOCK, GLEN E.
Address	4545 W. BROWN DEER RD.
City-State-Zip:	MILWAUKEE WI 53223

Title	CEO, PRESIDENT, DIRECTOR
Name	BOCKHORST, KENNETH CHARLES
Address	923 EAST KILBOURN AVENUE UNIT 701
City-State-Zip:	MILWAUKEE WI 53202

Title	TREASURER, VP
Name	BAUER, KAREN M.
Address	150 BUNKER HILL DRIVE
City-State-Zip:	BROOKFIELD WI 53005

Continues on page 2

I hereby certify that the information indicated on this report or supplemental report is true and accurate and that my electronic signature shall have the same legal effect as if made under oath; that I am an officer or director of the corporation or the receiver or trustee empowered to execute this report as required by Chapter 607, Florida Statutes; and that my name appears above, or on an attachment with all other like empowered.

SIGNATURE: DANIEL R WELTZIEN — VP - CONTROLLER — 03/15/2024

Electronic Signature of Signing Officer/Director Detail — Date

Officer/Director Detail Continued :

Title	DIRECTOR
Name	MYERS, TESSA
Address	4545 W. BROWN DEER RD.
City-State-Zip:	MILWAUKEE WI 53223

Title	DIRECTOR
Name	MCGILL, JAMES W.
Address	4545 W. BROWN DEER RD.
City-State-Zip:	MILWAUKEE WI 53223

Title	DIRECTOR
Name	ADAMS, TODD A.
Address	4545 W. BROWN DEER RD.
City-State-Zip:	MILWAUKEE WI 53223

Title	DIRECTOR
Name	BROOKS, HENRY F.
Address	4545 W. BROWN DEER RD.
City-State-Zip:	MILWAUKEE WI 53223

Title	VP
Name	WELTZIEN, DANIEL R.
Address	4545 W. BROWN DEER RD.
City-State-Zip:	MILWAUKEE WI 53223

Title	VP
Name	HOPKINS, SHERYL
Address	4545 W. BROWN DEER RD.
City-State-Zip:	MILWAUKEE WI 53223

Title	VP
Name	PARISEN, WILLIAMS JAMES
Address	4545 W. BROWN DEER RD.
City-State-Zip:	MILWAUKEE WI 53223

Form **W-9**
(Rev. October 2018)
Department of the Treasury
Internal Revenue Service

Request for Taxpayer Identification Number and Certification

▶ **Go to *www.irs.gov/FormW9* for instructions and the latest information.**

Give Form to the requester. Do not send to the IRS.

Print or type. See **Specific Instructions** on page 3.

1 Name (as shown on your income tax return). Name is required on this line; do not leave this line blank.

Badger Meter, Inc.

2 Business name/disregarded entity name, if different from above

3 Check appropriate box for federal tax classification of the person whose name is entered on line 1. Check only **one** of the following seven boxes.

☐ Individual/sole proprietor or single-member LLC ☑ C Corporation ☐ S Corporation ☐ Partnership ☐ Trust/estate

☐ Limited liability company. Enter the tax classification (C=C corporation, S=S corporation, P=Partnership) ▶ _____

Note: Check the appropriate box in the line above for the tax classification of the single-member owner. Do not check LLC if the LLC is classified as a single-member LLC that is disregarded from the owner unless the owner of the LLC is another LLC that is **not** disregarded from the owner for U.S. federal tax purposes. Otherwise, a single-member LLC that is disregarded from the owner should check the appropriate box for the tax classification of its owner.

☐ Other (see instructions) ▶

4 Exemptions (codes apply only to certain entities, not individuals; see instructions on page 3):

Exempt payee code (if any) **5**

Exemption from FATCA reporting code (if any) _____

(Applies to accounts maintained outside the U.S.)

5 Address (number, street, and apt. or suite no.) See instructions.

4545 W Brown Deer Road

Requester's name and address (optional)

6 City, state, and ZIP code

Milwaukee, WI 53223

7 List account number(s) here (optional)

Part I Taxpayer Identification Number (TIN)

Enter your TIN in the appropriate box. The TIN provided must match the name given on line 1 to avoid backup withholding. For individuals, this is generally your social security number (SSN). However, for a resident alien, sole proprietor, or disregarded entity, see the instructions for Part I, later. For other entities, it is your employer identification number (EIN). If you do not have a number, see *How to get a TIN,* later.

Note: If the account is in more than one name, see the instructions for line 1. Also see *What Name and Number To Give the Requester* for guidelines on whose number to enter.

Social security number

			–		–				

or

Employer identification number

3	9	–	0	1	4	3	2	8	0

Part II Certification

Under penalties of perjury, I certify that:

1. The number shown on this form is my correct taxpayer identification number (or I am waiting for a number to be issued to me); and
2. I am not subject to backup withholding because: (a) I am exempt from backup withholding, or (b) I have not been notified by the Internal Revenue Service (IRS) that I am subject to backup withholding as a result of a failure to report all interest or dividends, or (c) the IRS has notified me that I am no longer subject to backup withholding; and
3. I am a U.S. citizen or other U.S. person (defined below); and
4. The FATCA code(s) entered on this form (if any) indicating that I am exempt from FATCA reporting is correct.

Certification instructions. You must cross out item 2 above if you have been notified by the IRS that you are currently subject to backup withholding because you have failed to report all interest and dividends on your tax return. For real estate transactions, item 2 does not apply. For mortgage interest paid, acquisition or abandonment of secured property, cancellation of debt, contributions to an individual retirement arrangement (IRA), and generally, payments other than interest and dividends, you are not required to sign the certification, but you must provide your correct TIN. See the instructions for Part II, later.

Sign Here Signature of U.S. person ▶ *Charity Granberry* Date ▶ 1/3/2024

General Instructions

Section references are to the Internal Revenue Code unless otherwise noted.

Future developments. For the latest information about developments related to Form W-9 and its instructions, such as legislation enacted after they were published, go to *www.irs.gov/FormW9.*

Purpose of Form

An individual or entity (Form W-9 requester) who is required to file an information return with the IRS must obtain your correct taxpayer identification number (TIN) which may be your social security number (SSN), individual taxpayer identification number (ITIN), adoption taxpayer identification number (ATIN), or employer identification number (EIN), to report on an information return the amount paid to you, or other amount reportable on an information return. Examples of information returns include, but are not limited to, the following.

- Form 1099-INT (interest earned or paid)
- Form 1099-DIV (dividends, including those from stocks or mutual funds)
- Form 1099-MISC (various types of income, prizes, awards, or gross proceeds)
- Form 1099-B (stock or mutual fund sales and certain other transactions by brokers)
- Form 1099-S (proceeds from real estate transactions)
- Form 1099-K (merchant card and third party network transactions)
- Form 1098 (home mortgage interest), 1098-E (student loan interest), 1098-T (tuition)
- Form 1099-C (canceled debt)
- Form 1099-A (acquisition or abandonment of secured property)

Use Form W-9 only if you are a U.S. person (including a resident alien), to provide your correct TIN.

If you do not return Form W-9 to the requester with a TIN, you might be subject to backup withholding. See What is backup withholding, *later.*

BADGER METER, INC. PROPOSAL

AMI WATER METERS

RFP 24.001

Badger Meter

ORIGINAL

CITY OF PINELLAS PARK- APPENDIX

Request for Proposal 24.001
Advanced Water Meter Infrastructure (AMI) System
Opening Day: Wednesday, April 17, 2024, at 10:00 a.m. EST

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- Turnkey Project Approach and Proposed Statement of Work
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Nicor Documentation

- Nicor References
- WBE Certification
- Product Documentation

BADGER METER DOCUMENTATION



CELLULAR COVERAGE ANALYSIS

Badger Meter

BEACON® AMA Solution

ORION® Cellular Coverage Analysis (CCA)

Customer: City of Pinellas Park, FL

Date Issued: 4/4/2024

Project: City of Pinellas Park, FL

Revision: 1.0

SUMMARY INFORMATION

Endpoint Type: ORION Cellular Endpoint with connectivity to M2M cellular networks

Service Area (square miles): 25

Total Endpoints: 26,315

REQUEST INFORMATION

Solution Architect: Patrick Williamson

Account Manager: Brad Lowe

INFORMATION PROVIDED

	FILE NAME	DATE RECEIVED
Coverage Request Form:	CCA_CITY OF PINELLAS PARK(PINELLAS PARK, FL) _3-29-2024.pdf	3/29/2024
Endpoint Locations:	Pinellas Park (FL) Service Addresses.xlsx	3/29/2024

ANALYSIS COVERAGE AREA

Analysis is based on service location addresses provided by City of Pinellas Park, FL , with 26,286 out of 26,315 (99.9%) successfully geocoded. A map of the geocoded endpoint locations is shown below. Addresses unable to be geocoded are in the Not Found tab of the Endpoint Type spreadsheet.

Badger Meter

BEACON® AMA Solution

ORION® Cellular Coverage Analysis (CCA)

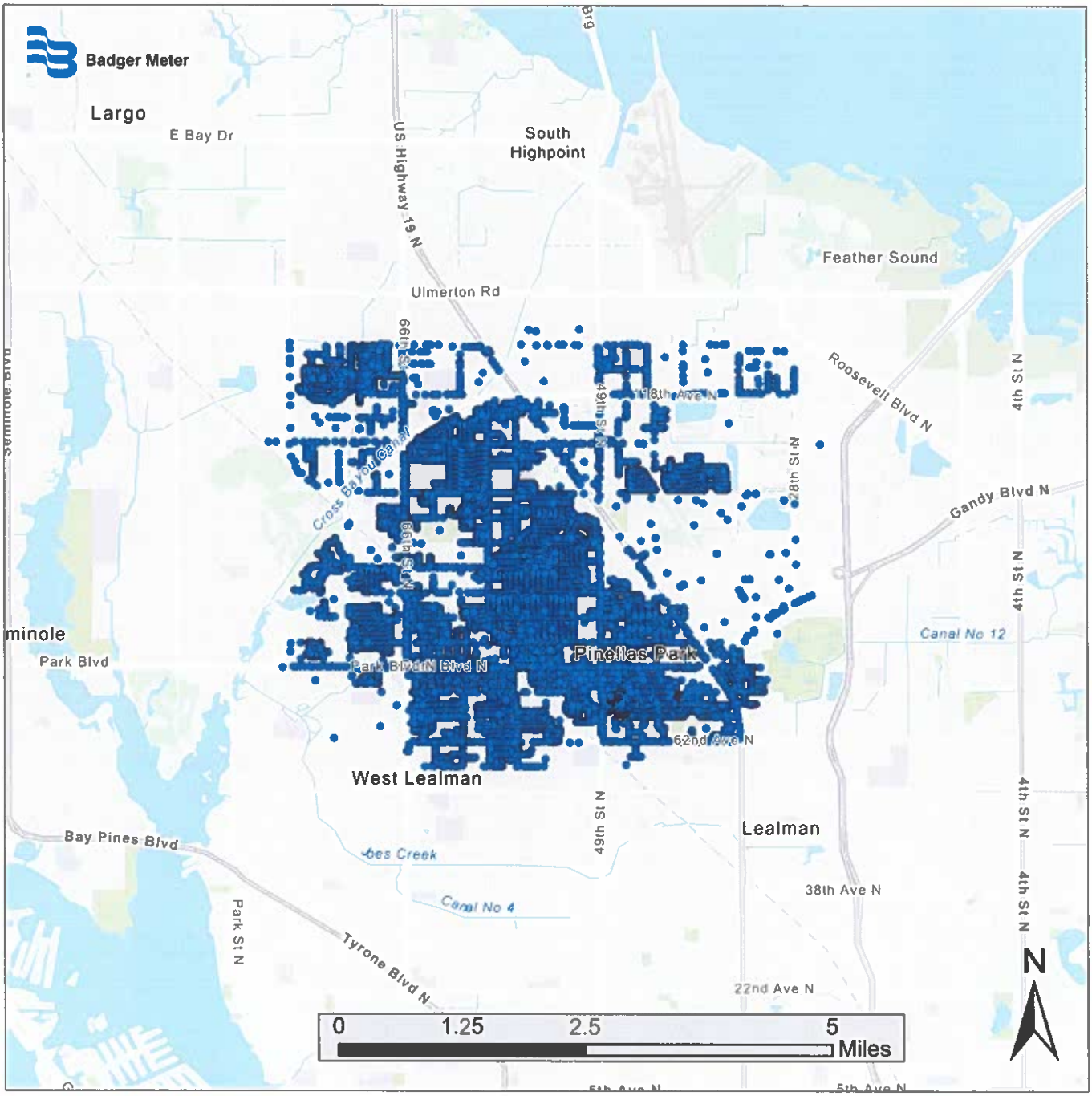
Customer: City of Pinellas Park, FL

Project: City of Pinellas Park, FL

Date Issued: 4/4/2024

Revision: 1.0

ENDPOINT LOCATIONS MAP



BEACON® AMA Solution

ORION® Cellular Coverage Analysis (CCA)

Customer: City of Pinellas Park, FL

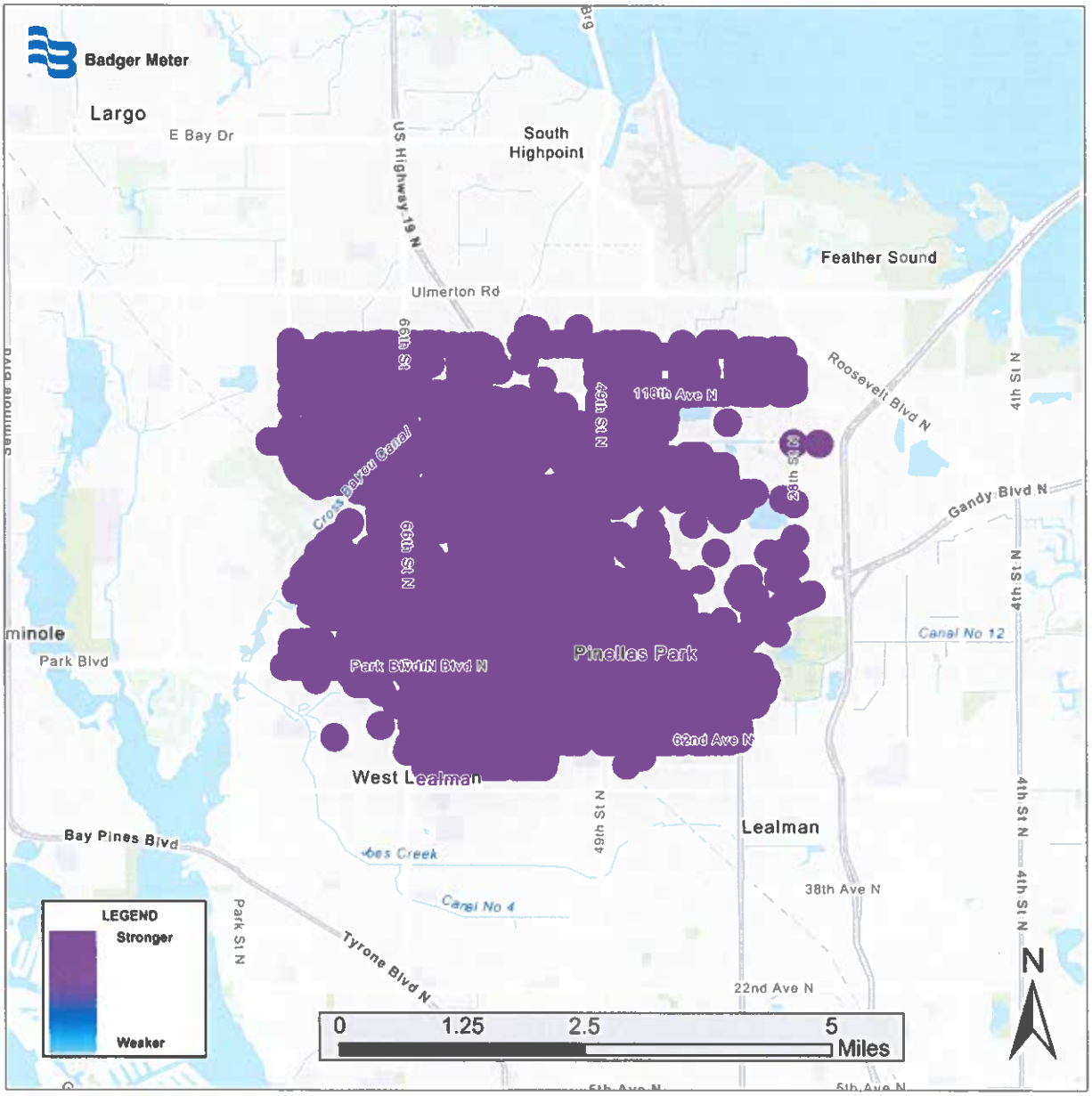
Date Issued: 4/4/2024

Project: City of Pinellas Park, FL

Revision: 1.0

CELLULAR COVERAGE ANALYSIS

- This cellular coverage analysis has been run to determine connectivity of our providers M2M solutions which include both LTE-M and NB IoT networks. ORION Cellular Endpoints provide connectivity to both LTE-M and NB IoT networks.
- Using information provided from our carrier partners, this service area has M2M network coverage that will support our ORION Cellular endpoints.
- The map below provides an illustration of that coverage. Further guidance as to the placement of endpoints by type will be provided as deployment plans are refined.



Customer: City of Pinellas Park, FL

Date Issued: 4/4/2024

Project: City of Pinellas Park, FL

Revision: 1.0

ASSUMPTIONS MADE

- Submitted information including but not limited to street addresses, service area, GPS coordinates, and meter locations are accurate.
- If GPS coordinates or a GIS shapefile are not provided for endpoint locations, street addresses are geocoded into decimal-degree latitude and longitude using ESRI's StreetMap Premium for ArcGIS North America HERE address locaters.
- Data from third party providers such as USGS National Elevation Dataset (NED), USGS National Land Cover Database (NLCD), Tele-Atlas municipal boundaries, cellular providers, and the RF propagation software used by Badger Meter is accurate.
- ORION endpoints are installed and maintained according to "ORI-UM-00025 ORION Water Endpoint Installation Manual" using a Badger Meter approved endpoint installation kit in a location that allows two-way communication between the endpoint and the cellular network.
    - Pit or vault installations are through a non-metal pit lid and the pit or vault lid is at or above grade
    - Indoor installations are mounted as high as possible in the floor joists above grade on an exterior wall

CLARIFICATIONS

- The ORION cellular coverage analysis is subject to change for reasons which may include but are not limited to; consultation with the customer, site visit by Badger Meter authorized personnel, and the availability of new or updated information.
- Cellular coverage within the utility service area is required to deploy ORION cellular endpoints.
- Review the cellular coverage analysis with your Badger Meter representative in order to understand how it may be used by the utility as a tool to deploy the system.
- All endpoints are to be installed in compliance with the published ORION installation guidelines which can be found at www.badgermeter.com
- Cellular endpoint type recommended is specific to the latitude and longitude for each location.

SMART WATER IS *BADGER METER*

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www.badgermeter.com

TURNKEY PROJECT APPROACH AND PROPOSED STATEMENT OF WORK

Turnkey Project Approach and Proposed Statement of Work
City of Pinellas Park

Prepared By: Badger Meter, Inc – Turnkey Operations (TK-Ops)

Badger Meter

Monday, April 15, 2024

All information herein is proprietary to Badger Meter, Inc. and is disclosed in confidence to recipient only for evaluation purposes approved in advance by Badger Meter, Inc. Recipient agrees not to (1) use such information for any other purpose, (2) disclose any of such information to others, (3) reproduce this document in whole or part and (4) transfer such information to other documentation.

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1 Introduction

1.1 Document Introduction

This document is a preliminary project plan which constitutes the Statement of Work (SOW) that will be undertaken by Badger Meter's Turnkey Operations (TK-Ops) team to deliver the services and deliverables relating to City of Pinellas Park (the "City") as released and dated March 18, 2024. This document has been prepared by Badger Meter based on the aforementioned RFP document and seven Q&A documents that have been provided to Badger Meter as of Friday, April 12, 2024.

This document will discuss the project process that Badger Meter proposes, requirements that may exist, project assumptions, processes and procedures, preliminary timelines, and other pertinent information to demonstrate the approach to be undertaken and Badger Meter's understanding of the project.

1.2 Document Definitions

In addition to the definitions listed below, any terms defined throughout this document shall have the meaning as defined therein.

Term	Definition
AMI	Advanced Metering Infrastructure – the system to be deployed as part of the project to collect, communicate, and analyze the data from water meters and other devices under the umbrella of the system
Billing Vendor/CIS System	The provider of customer information (CIS) and billing software used by the City, in this case Tyler Technologies – Munis
Business Day	City of Pinellas Park working days, Monday to Friday, excluding Federal or City holidays.
Calendar Day	One day (24 hours) as measured from one midnight to the next midnight on a given date.
Cycle	A geographic grouping of routes within the City's service territory. One cycle comprises multiple routes
Definition of Time	For all milestone and schedule time scales, calendar days will be used to facilitate use across project scheduling software. For all expectations of communication or responsiveness, business days are used.

IDA	Initial Deployment Area. This term may be used within this document interchangeably with the phrase 'proof of concept'. A small, defined set of accounts on which product will be installed for evaluative purposes.
IP	Installation Partner – a subcontractor retained by Badger Meter to perform installation work relating to the project. Badger Meter thoroughly vets its installation partners in order to provide the highest possible degree of service to utility customers.
MMCO	Mass Meter Change Out – a file generated by the installation partner's WOMS (work order management system – see below) to update the City's operational and billing software with new meter information. Typically, although not exclusively, transmitted as a flat file or .csv.
NTP	Notice To Proceed – a formal document that forms one of the contract milestones and directs Badger Meter to begin performing work.
PVI	Pedal Valves, Inc – the installation partner selected by Badger Meter for this project.
RFP	Request for Proposals – used herein as shorthand for the elements released by the City to request these proposals for services.
Route	A group of accounts in close proximity to one another within a cycle. Generally, these routes are created to support meter reading operations. Installations on the project will typically proceed route-by-route for coordination and sequencing purposes.
RTU	Return To Utility – a reporting status that indicates an installation has been removed from the project scope of Badger Meter and its IP. RTU status can be triggered by (but is not limited to) the following: customer refusal, expiration of the UIR designation period, diversion/tamper identified, etc. No further work will be attempted by Badger Meter or its IP on an account that has been set to RTU and will be removed from the project scope.
SOW	Statement of Work – the work to be performed by Badger Meter and/or its partners as specified in this document.
UIR	Utility Intervention Required – a reporting status that indicates action from the utility and/or homeowner is required to remove obstructions and/or resolve issues to permit the successful installation of a new meter. Accounts designated this status by Badger Meter will remain as a UIR for ten (10) business days, at which point this account will automatically be designated an RTU.

WOMS	Work Order Management System – the software platform used by the installation partner to plan and manage the work on the project. the City will have access to the WOMS and will be able to view completion progress as well as installation information for accounts (including photos).

1.3 Turnkey Project Background

Badger Meter has a history of successful project delivery for utilities that encompasses both advanced meter reading ("AMR") and AMI projects. This history dates back to the initial emergence of these technologies, as Badger Meter has been an industry leader in the development and deployment of both AMR and AMI. To date, Badger Meter has delivered turnkey deployments to utility customers that range in size from only a few hundred services to over 400,000. A point of pride in this history is that Badger Meter has delivered all its turnkey deployments within the contracted time and budget, and not once has invoked Force Majeure.

To maintain this history of project success and deliver this proposed project, Badger Meter uses a customer-focused project management methodology that draws on principles in the Project Management Institute standard for Project Management[1]. Due to the nature of AMI deployments, no one single management framework is used. Instead, Badger Meter's TK-Ops has developed a bespoke project approach that incorporates traditional (or waterfall) project management, agile, lean, and iterative project management to ensure a successful deployment for its customers.

This project forms but one part of Badger Meter's ongoing relationship with the City. Historical results have shown that utilities who engage in long-term strategic partnerships beyond a single project effort are better able to realize success from their AMI/AMR project due to the heightened level of understanding between the utility and its solution supplier.

As a result of these methods and practices, Badger Meter has helped utilities worldwide realize lasting and transformative benefits through AMI projects.

1.4 Introduction to Products and Projects

Badger Meter will deploy its BEACON® Software as a Service (SaaS) with ORION® Cellular endpoints in an implementation that will cover approximately 21,500 services across the City's service territory. Based on Badger Meter's experience managing deployments of comparable size, and in compliance with the City's expectations laid out in RFP event, a project duration of approximately 30 months (942 calendar days) is estimated. This timeline includes an IDA prior to full deployment to evaluate the products supplied and procedures implemented, as well as an allotment of time for pre-construction planning and integration to be performed. Section 3.0 details this proposed project timeline in greater detail.

[1] Standard ANSI/PMI 99-001-2021

Badger Meter will supply the following equipment in support of the project. This list does not comprise an exhaustive list of all equipment that may be supplied as part of Badger Meter's solution, but rather provides an overview of the scope of the proposal. For detailed specifications on these products refer to the included Badger Meter product documentation.

Table 1:: High-Level Overview of Badger Meter Products

Product	Approximate Quantity
M25 5/8" Disc Meter	15,006
M55 1" Disc Meter	673
M120 1-1/2" Disc Meter	262
M170 2" Disc Meter	229
E-Series 3" Ultrasonic Meter	31
E-Series 4" Ultrasonic Meter	30
E-Series 6"x18" Ultrasonic Meter	26
E-Series 8"x20" Ultrasonic Meter	16
M25 5/8" Disc Meter - Reclaimed	9,835
M55 1" Disc Meter - Reclaimed	123
M120 1-1/2" Disc Meter - Reclaimed	1
M170 2" Disc Meter - Reclaimed	122
E-Series 3" Ultrasonic Meter - Reclaimed	1
E-Series 4" Ultrasonic Meter - Reclaimed	10

E-Series 6"x18" Ultrasonic Meter - Reclaimed	1
ORION Cellular C Endpoint	26,137

Badger Meter has chosen, via a rigorous evaluation process, to partner with PVI.

Badger Meter acknowledges the City's stated preference to reuse existing meter pit boxes and lids by drilling the lid whenever possible. This will be the principal plan of action for this project. During the preinstallation survey, an estimate will be generated of lids and boxes needing replacement. Badger Meter will procure on the City's behalf meter boxes and lids suitable for the project requirements. For more details on this process, consult Section 6.1 of this SOW.

By electing to use of the BEACON cellular solution, the City will realize time and cost savings over both the installation and life of the system as compared to a conventional fixed-network deployment, since no additional infrastructure (i.e. data collectors or gateways) need be installed or maintained over time. It is the experience of Badger Meter that one of the largest impediments to AMI project schedules can be the permitting process for installation of collectors/gateways on suitable vertical assets within the service territory. The BEACON cellular solution eliminates this schedule risk. Additionally, given the previously completed pilot with BEACON, early-stage system configuration is already complete for this solution, providing additional schedule savings.

As an additional benefit, the BEACON platform natively includes the EyeOnWater customer portal, which may be opted into at the City's discretion. If opted for, this value-adding portal will make usage information available to the City's customers via both a web interface and mobile application without any additional integration effort required.

Badger Meter's product offerings are not limited to AMI metering and endpoints. If the City elects to utilize Badger Meter's AMI system and BEACON platform, future expansion and scale is native and straightforward – including both growth accounts and potential add-on services such as water quality, leak detection, pressure monitoring, and now, remote telemetry units with software, all from the same manufacturer.

1.5 Project Objectives

Badger Meter and its IP are committed to helping the City realize its goals and the benefits of an AMI system. Accordingly, Badger Meter puts forth the following specific list of project objectives:

Table 2: Strategic Project Objectives Supporting Key Project Objectives

Badger Meter Strategic Project Objective
1. Timely installations

2. Timely communication
3. Support of Billing Integration
4. Marketing and Communications Planning
5. Robust Training Plan for the City staff

Each of these strategic objectives is detailed in the subsequent list.

Timeliness of Installations

- The project duration specified by the City will be 30-months (installation to complete before the end of 2026). In order to support that requirement while delivering this objective, Badger Meter's lead project manager will coordinate with the City's project manager(s) on projected deployment timelines and schedules to create the product ordering and supply schedule for the Project.
- The tentative schedule presented in the RFP indicated an IDA of at minimum two (2) months. Badger Meter's project team will provide consultative support in identifying the accounts to comprise this period and securing the products to support it.
- Final completion date(s) for all phases of the project will be commensurate with activity start date, which shall be defined by the date that a NTP is received and acknowledged by Badger Meter.

Timely Communication

- As prescribed in Section 5 of this SOW, a centralized digital project library shall be maintained. This can be maintained by the City if the utility wishes, or it can be maintained by Badger Meter and its IP. The project library shall allow for pull communication between the project parties and shall host project documentation and records.
- Refer to Section 1.6.1 for the mutual expectation of communication timeliness.

Billing Integration

- Badger Meter shall provide consultative support in the integration of the BEACON software to the City's Billing Vendor. For full details on this effort, refer to Section 7of this SOW.

Marketing and Communications Planning

- Badger Meter will leverage its extensive experience with AMI projects to assist with the marketing and communications elements of this project, building support and coalition among the City's customers.
- Elements of the plan may include a produced public-service announcement (PSA) video, web content (e.g., for FAQ pages), and printed materials such as door hangers, bill stuffers, and mailers.
- The plan itself is detailed in Section 6 of this SOW and meets or exceeds the industry standard for customer notification on AMI deployments.

Robust Training Plan for the City staff

- To build enthusiasm and awareness of the project among utility staff, a training plan is provided. The training provided will detail the various new functionalities that the BEACON platform brings, and for maximum applicability will be co-developed by Badger Meters and leadership from the City's relevant functional groups. The training plan will be detailed in Section 9 of this SOW.

1.6 Project Assumptions

Based on the information presented to Badger Meter, the following logical assumptions are made about project conditions and constraints that may occur. These assumptions are the foundation of both this SOW and any pricing provided by Badger Meter. Any subsequent changes to or failures of these assumptions may cause required alterations to either or both the project schedule and milestones under Section 3.0 or the pricing provided for the project[2].

1.6.1 General Project Assumptions

1. All resources assigned to the project by Badger Meter, IP, and the City will be suitably skilled and trained to perform the task(s) assigned to them within the expected timeframe. The expectation is that the City's technical and business staff are familiar with their present operations as they relate to the project's components.
2. The overall project management responsibility for the project, specifically coordination of service, deployment of product and integration rests with Badger Meter TK-Ops. The lead project manager assigned to this project will be Jenn Rittmann, PMP. Project managers and/or construction managers from IP will report through the lead project manager. The lead project manager will be supported in their management of the project by the project teams as detailed in Section 2 of this SOW.
3. The Badger Meter team will conduct the majority of their project work off-site. However, specific project activities (including but not limited to, the project kickoff event, training, and closeout event) will be performed in person. Additionally, the Badger Meter lead project manager shall visit the project site in person approximately quarterly unless otherwise agreed or warranted. During both the IDA and the full deployment phase of the project, full-time staff from IP will be on-site to manage the installation process.
4. Badger Meter has identified its project support team and intended subcontractors. At this time, Badger Meter does not anticipate additional third-party contractors will be required to successfully deliver Badger Meter's scope of work on this project. However, should such entities become necessary due to a change in scope or project conditions that would warrant it, Badger Meter will have the responsibility for the engagement and deliverables of such an entity.
5. Pricing for additional testing of new or removed meters is not included. Badger Meter provides certified test result files for all meters that it manufactures at the time of shipment.

[2] Changes to pricing and/or schedule will be administered per the change management plan in Section 8

Should the City desire such additional testing, pricing for testing can be provided upon request.

6. Subject to scheduling constraints, all project-related meetings are expected to have representatives from the Badger Meter project team, the City, and any consultant(s) (if applicable).
7. As collaboration and effective communication is a key element of any successful project, the parties mutually agree that they will use good faith efforts to provide approvals and/or responses on key project artifacts that require them within five (5) business days. If a response within that time frame is not possible, the responding party shall provide a reasonable alternative timeline in which to provide a response. Such artifacts may include requests for information (RFI), change orders, pay requests, etc. On rare occasions due to other time constraints, a more urgent approval timeline may be necessary and will be clearly marked as such on the request. In such circumstances, the shorter duration shall take precedence unless the responding party indicates that a response in such a time frame is not possible. In that instance, the responding party shall provide a response within five (5) business days.

1.6.2 Assumed Project Conditions

1. The quantities and sizes of meters upon which this SOW is based are acknowledged as the best available estimate. Should the quantities encountered in the field differ, the unit prices for additional products shall remain as presented in the contractual schedule of values ("SOV"), subject to escalation as prescribed in the response to the RFP and/or pricing assumptions in the pricing pages submitted for the RFP (as applicable).
2. It is assumed that the City both maintains and will provide to Badger Meter the complete and accurate 911-registered address information for metered accounts. It is further assumed that this data will be provided at one time, prior to mobilization.
3. It is assumed that the route-read sequence and schedule, as well as blackout periods required for accounts will be provided prior to the installation schedule being finalized.

1.6.3 Installation Assumptions

1. The pricing for installation services that has been provided assumes that all meters that are to be exchanged are 'like-for-like', with the same lay length and size, and without major plumbing or excavation work necessary to accomplish the change. Should such work be required, the procedure for its approval shall be as described in Section 6.5.11 of this SOW.
2. Badger Meter will thoroughly examine the existing meter conditions prior to commencing installation work. Per the procedures set forth in Section 6, work will not proceed in situations where it is reasonable to believe that performing such work will lead to further damage to plumbing or infrastructure and the account will be designated UIR. Any damage caused by Badger Meter or IP while performing installations will be repaired by Badger Meter if the damage is directly the result of negligence. Damage resulting from latently defective infrastructure may be repaired at the provided hourly rate for plumbing repairs, if mutually agreed upon.

- Badger Meter has included a recommended allowance for plumbing components and labor to assist in managing these repairs.

2. Based on the City's stated preferences, it is assumed that lids will be reused-in-place whenever possible. The City permits Badger Meter and PVI to perform alterations (e.g. drilling, shaving, etc.) of lids to accommodate the installation of an endpoint and top nut.
    - If Badger Meter determines that a box or lid is damaged such as to prevent the lid from being reused or replaced, the account will be designated UIR for the City to replace the box or lid or direct Badger Meter to replace at the provided unit price.
        - If Badger Meter is directed to replace a box, the City permits Badger Meter and PVI to modify the box to accommodate the installation, if needed.
3. The installation of any meter in an OSHA-defined confined space will require additional safety resources, billed at the provided hourly rate.
4. All meters in the project scope are assumed to be in a City right-of-way or in a location to which the City is able to assist Badger Meter in obtaining access. As such, any landscaping impediments not placed by the City are assumed to be legal to remove/remediate without the need for extensive replacement.
    - To the extent commercially viable, Badger Meter and PVI will restore landscaping to its original appearance by replacing removed sod and dirt only. However, pricing is not included to procure or lay new sod or otherwise replant removed landscaping.
    - Any account where impeding landscaping originates from or encroaches onto private property will be designated as RTU. The extent of landscaping work performed on private property will be strictly limited to the removal and replacement of sod/earth in the normal course of meter replacement.
    - Concrete replacement work includes the use of sack concrete mixed onsite. An area not to exceed 3' x 3' will be cut out for access to the meter box and repoured level to the existing surface. Decorative, patterned, or other specialty concrete elements are not included.
5. The pricing for installation services assumes a logical sequence of routes and/or cycles is continuously available for work, and that work can be performed in a logical, efficient, and sequenced manner (exclusive of scheduled appointments, revisits, and completing utility-assisted accounts) as prescribed in Section 6. If for any reason beyond the control of Badger Meter, installations are not able to be performed in such a fashion, all work that is impacted and performed 'out of sequence' may be billed at the hourly time and materials rate provided until work can recommence in a logical and sequenced manner.
    - The proposal as furnished is based on a five (5) day work week, with daily operations conducted from 8:00 AM to 5:00 PM local time, unless otherwise agreed ("Business Hours"). However, it is assumed that in the event of lost workdays (e.g., due to weather delays), or to accommodate customer appointment requests, Saturday and/or evening work may be performed to accommodate.
    - Other than the City's and Federal holidays and/or weather delays, it is assumed that work will continue in a seamless fashion from initial mobilization. If work is

substantially interrupted due to circumstances beyond the control of Badger Meter, a demobilization/remobilization fee may be assessed.

6. Installation services to be rendered will be managed and controlled via Trackpoint-NIMS, which provides handheld device functionality, GPS coordinate collection, photograph capture capabilities, data management, and work order reporting.
    - Sub-Meter GPS coordinates are included in Badger Meter's proposal, but will be captured by a separate team due to the specialty equipment required. As such, these coordinates may not be collected contemporaneously with installation.
    - While the phrase sub-meter GPS is used, and reasonable commercial efforts will be made to collect at this accuracy, some accounts may still collect at +/- 1 meter. This is due to the impact that atmospheric conditions, multipath, and satellite geometry can have on GPS coordinate capture.
7. Removed meters, endpoints and other items that may be agreed (the "Removed Materials") will remain the property of the City. PVI will quarantine the Removed Materials at the project warehouse for a period not to exceed thirty (30) calendar days. If the City requires storage of the Removed Materials for longer durations, additional storage fees may be assessed.
8. In accordance with the installation practices set forth in Section 6 of this SOW, PVI will make good-faith efforts to locate an external spigot/hose bib/faucet to flush air and sediment from the water line after a meter exchange. If such an exterior tap is not available to the installer, or if the account's water is to be left off, Badger Meter and PVI are freed from any liability for damage caused to resident appliances/fittings caused by sediment that cannot be flushed from the line.
9. Based on information released by the City to-date, it is assumed that the majority of installations will be performed on residential streets. Traffic cones will be deployed to the front and rear of a vehicle that is parked on the residential street during the installation. All installation vehicles will follow parking regulations and posted signs. In the event that an account is identified in the preinstallation survey as requiring additional traffic control procedures, these plans will be mutually developed at the time of identification.

1.6.4 Customer Contact and Utility Assistance Assumptions

1. It is assumed that customer contact information will be provided no later than thirty (30) days prior to the earliest date a customer would need to be notified.
    - One pre-installation mailer will be sent per account, approximately one (1) week prior to that account being dispatched.
    - For commercial accounts, the preinstallation mailer will include instructions to contact PVI to schedule an appointment.
    - A post-installation door hanger will be left after a completed installation with common questions and a follow-up number for issues.
2. PVI will operate a dedicated contact phone number during the project for the City's customers. Customer calls to this number will be fielded by a PVI employee local to the project, with 24-hour availability. Calls or messages to this number will be acknowledged within thirty (30) minutes. A physical response, when warranted, will be provided within a

further thirty (30) minutes (net one hour) during Business Hours and a further one (1) hour outside of Business Hours (net 90 minutes).

3. It is assumed that less than one (1) percent of residential (<2") meters are either 'hard to access' or would otherwise require an appointment. Hard to access meters could include, for example, meters locked behind gates, indoor-set meters, or meters obstructed by vehicles whose owners are seasonal residents and not available to provide access.
    - It is assumed that the City will provide keys or access assistance to locked gates where possible.
4. The UIR process exists to identify and remediate accounts where conditions prevent an installation being completed. Accounts that cannot be installed by PVI will be designated accordingly and the City will be notified of the designation. Examples of situations that may cause a UIR designation include: the customer contact plan has been completed but no appointment can be confirmed, a customer refusal of installation, damaged plumbing where PVI determines a meter exchange would risk additional damage, a hazardous condition, or other factors as further described in Section 6 of this SOW.
    - The City will address and assist with any account designated as UIR within ten (10) business days of the request.
    - Accounts which are not addressed within this time frame, or accounts where it is not possible to resolve the UIR situation within an appropriate amount of time will be designated as RTU by Badger Meter and are removed from the project scope.
    - Pricing allows for up to five percent (5%) of the total accounts to be designated as RTU at no additional cost. For accounts designated as RTU in excess of 5%, the applicable unit installation rate will be charged, less a fifteen percent (15%) discount, to cover the labor costs of the attempts made.
5. Pricing includes revisits to accounts post-installation acceptance of up to one percent (1%) to troubleshoot non-responsive meters and modules. Any revisits to accepted accounts in excess of 1% that are, upon review, found to not be a defective installation will be billed at the provided hourly rate.

1.6.5 Project Integration Assumptions

1. To facilitate the requisite integration work and BEACON onboarding, the following requirements must be met by the City.
    - A project purchase order (PO) of appropriate value must be prepared and provided to Badger Meter's project manager.
    - If not included in the PO, a formal NTP, must be provided that specifies the project start date.
    - The BEACON onboarding information form must be complete and provided to Badger Meter

- At a minimum, 10-20 meters and endpoints must be installed.[3]

2. The process, responsiveness, scope of specific services, and general expectations of software interface design, build, and testing are detailed in Section 7 of this SOW.
3. Integration pricing provided in this SOW and as expanded upon in Section 7 does not include any costs assessed by any of the City's vendors (lump sum, per meter, and/or otherwise) that may be incurred to support integrating the Billing Vendor and/or BEACON with the City's system(s). Any fees assessed to Badger Meter or its partners for such integration will be passed through to the City.

[3] Typically, these are installed at the homes of utility employees so as to facilitate follow-up visits or testing. If the utility has an active BEACON portfolio and has ORION endpoints installed, this requirement can be eliminated upon discussion with the Badger Meter project manager.

2 Project Resources & Stakeholders

Badger Meter proposes the following project team to support the AMI deployment for the City. Biographical information for key personnel may be found in Section 2.4 and resumes for all personnel are appended in our Resume section of the response.

2.1 Badger Meter

Table 3: Badger Meter Proposed Project Team

Contact	Title	Department
Shauna Griffin	Sr. Director, Utility Sales	Sales
Colin Middaugh	Regional Sales Manager (East)	Sales
Mark McMillen	Sr. Manager - Utility Solutions	Sales
Mark Wright	Sales Manager	Sales
Patrick Williamson, PMP	Solution Architect	Sales
Brad Lowe	Account Manager	Sales
Jessica O'Malley, PMP	Director, Turnkey Operations	TK-Ops
Jack Morrison, PMP	Manager, Turnkey Operations	TK-Ops
Jenn Rittmann, PMP	Lead Project Manager	TK-Ops
Joe Lucia	Manager, Field Sales Support	FSSS
Bradley Pace	Field Sales Support Specialist	FSSS
Rachel Meyer	Contract Manager	Proposals
Matthew Schuette	Manager, Technical Support	Technical Support
Steven Thompson	Strategic Software Manager	Software

2.1.1 Apportionment of Badger Meter Team Responsibilities

The project team from Badger Meter will be cross-functional in nature, supporting the City's project as a unit as follows:

Project Sponsors include the Sr. Director, Utility Sales, the Regional Sales Manager, the Sales Manager, and the Director of Turnkey Operations. They are accountable for the overall success of the project and the overall experience of the City.

The **Utility Solutions Team** includes the Sr. Manager of Utility Solutions, the Sales Manager, the Solution Architect, and the Account Manager. Generally, this team will assist the City in their specification and selection of elements of the AMI solution and will ensure that the solution as deployed meets or exceeds the customer's expectations.

The Turnkey Operations **(TK-Ops)** team includes the TK-Ops manager, the lead project manager, and the associate project manager. The lead project manager will be the City's *primary point of contact* during the project and will interface with other elements of the Badger Meter team. The lead project manager is responsible for managing the delivery of this SOW. The TK-Ops manager will support the lead project manager, assist in resolving issues that may arise, coordinate interdepartmental responses, and ensure best-in-class customer support. The associate project manager is responsible for assisting the lead project manager with project administration, including for example monthly invoicing and schedule updates.

The **Field Services Sales Support (FSSS)** team consists of the Field Sales Support Specialist, Supervisor, and Manager, and works closely with the TK-Ops team to deliver the project goals and ensure a smooth operational transition for the City to AMI by conducting training sessions and facilitating technical discussion.

The **Software Integration** team consists of the BEACON Interface Analyst, the Strategic Software Manager, the Solution Architect, and the Badger Meter lead project manager. These individuals will work with the City and the Billing Vendor, to define and deploy BEACON software billing integrations as prescribed in Section 7.

The **Contract Management** team consists of the contract manager, the TK-Ops manager, the lead project manager, the account manager, and the sales manager. Their role is to ensure that the deliverables of this SOW and the objectives of the project are met, and that any changes to the contract that may be required are administered expediently and accurately.

The **Material Coordination** team consists of the Sr. Manager of Customer Care, the lead project manager, and the account manager. These individuals ensure that all products furnished by Badger Meter are available, ordered, and invoiced in an appropriate window of timeliness.

2.2 Installation Partner

Badger Meter's best practice for delivering turnkey projects includes a partnership with an experienced installation partner who will be the responsible entity for certain elements of the project. The installation partner selected for this project is PVI, as defined previously.

PVI will employ appropriate full-time onsite project staff to support their installation crews and execute the daily logistical management of the project installation and inventory, as well as to supervise and coordinate the meter installation technicians. However, there is more to an AMI deployment than the actual installation. As part of their services to the City, the installation partner will capture accurate project change-out data through their WOMS, NIMS. To provide continuity of data and simplicity of access to the City, all installation data, including work order status, route saturation, installation photographs, work schedules, and last read before change-out will be available to the City via this platform. Additionally, PVI will perform installation data quality control as specified in Section 4.2 of this document to ensure that only high-quality data is passed to the City. Most importantly, PVI will perform their tasks on this project without interfering with the City's ability to conduct meter reading and billing operations during the project period.

2.2.1 Installation Partner Project Teams

Table 4: Installation Partner Proposed Project Teams

Contact	Title	Department	Partner
Robby Gilbert	Vice President	Executive	PVI
Andrew Suffrin	Director, Sales	Sales	PVI
Jason Wilkie	VP – Operations & Safety Manager	Construction	PVI
Chad Nuccio	Construction Manager	Construction	PVI
Donnie Matthews	IT and Quality Manager	Quality	PVI

2.3 Proposed Team Organization Chart

As is evident from the organization chart below, the City will be well supported by Badger Meter and its IP. Badger Meter's Project Manager will coordinate directly with the City's project manager and will supervise the project's operations through the safety manager, installation manager, and quality manager. Badger Meter's Contract Manager, Integration Lead, Lead Trainer, and Solution Architect will report through the lead project manager. Additionally, and characteristic of Badger Meter's approach to this project as a partnership, the extended Badger Meter sales team will continue to liaise with and support the City's executive leadership to ensure the solution delivered by the Project Team is exceeding the City's expectations.

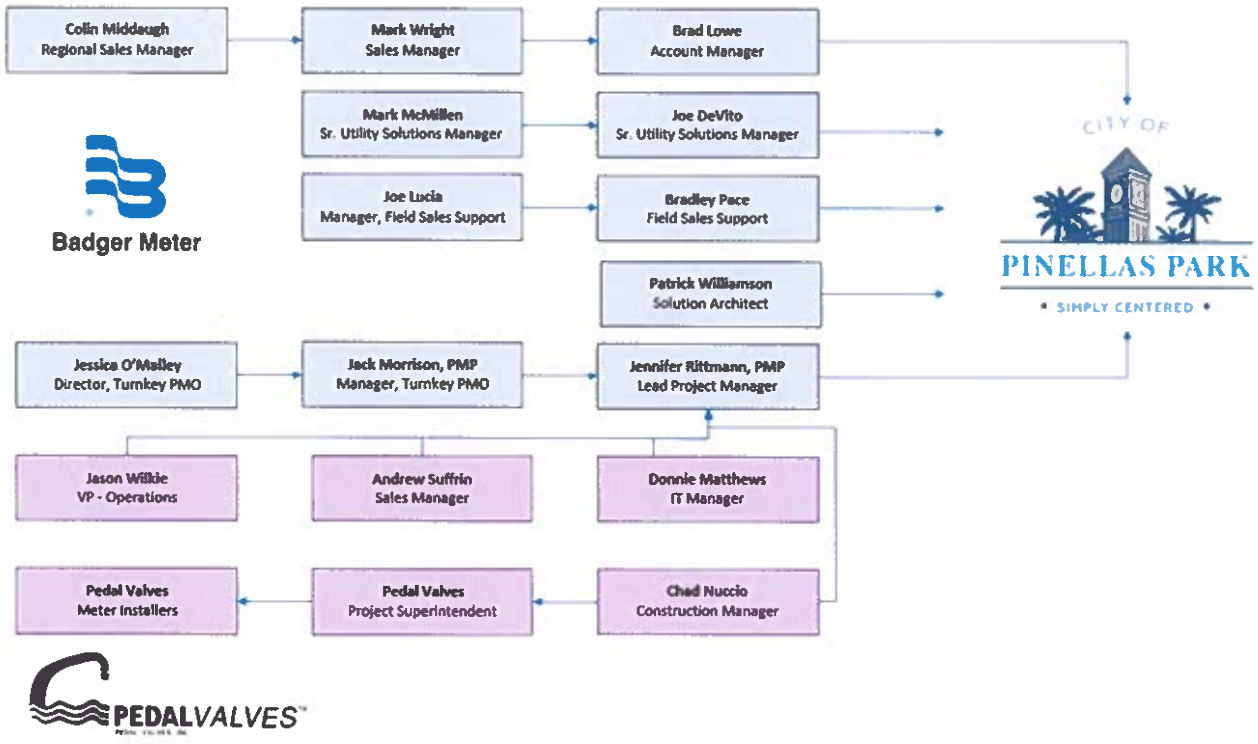


Figure 1: Proposed Team Organizational Chart

2.4 Key Team Members

Pursuant to RFP, the following roles are specifically identified as key personnel. The individuals filling these roles are identified here with short biographies. Full resumes for these individuals are included in the Resumes section of this proposal.

Program Manager: Jack Morrison, PMP – Badger Meter

As a manager of the turnkey operations group at Badger Meter, Jack leverages years of project management and consulting experience to support the turnkey team in delivering best-in-class AMI solutions to utilities. His experience crosses the sectors of live events, performing arts, construction management and litigation, aircraft maintenance/MRO, and themed experiences. Jack has a demonstrated history of delivering time-critical and highly visible projects, building lasting customer relationships and meeting time and cost objectives. His broad array of experience and exceptional interpersonal skills make him an integral part of the Badger Meter PMO.

Project Manager: Jenn Rittmann, PMP – Badger Meter

For over thirteen years, Jenn has been a key part of Badger Meter's support of utilities nationwide. Prior to Badger Meter, Jenn was an applications engineer for a medical-device supply company and an AV director for conventions, conferences and other live events. At

Badger Meter, she has spent stints in technical support, interface analysis/integration, and now the Turnkey Operations group, Jenn has a deep and well-rounded understanding of Badger Meter's product and solutions that she leverages to deliver successful AMI deployments. Jenn has supported turnkey installations ranging in size from 2,000 to 86,000 as a project manager, and in other roles has supported projects with over 150,000 installations. Jenn has a track record of successfully supporting utilities during deployments, ensuring high-level understanding of the system's capabilities and fluently addressing technical concerns.

Subcontractor Project Manager – Chad Nuccio, Pedal Valves Inc

Chad has served as the Construction Manager for the Water Meter Division of Pedal Valves Inc. for the past 12 years, including at scale (125,000 units in Pinellas County, Florida). He oversees all critical construction and project management facets of water meter installations. He supervises material acquisition, coordination efforts for material storage, installation management, QC, and inventory control. Chad monitors daily progress of the installations and adjust procedures to maximize efficiency of the installation process. He also manages project budgets and finance reports. He is experienced in the installation of all types and sizes of meters during the testing phase of water meter projects.

Integration Lead – Steven Thompson, Badger Meter

Steven manages his team, resources, and processes that are crucial in the development of new software or the enhancement of existing products at Badger Meter. He maintains close collaboration with business managers and marketing professionals to assess the progress of ongoing projects and identify potential barriers that could impede completion. Steven diligently monitors the quality of our products to ensure alignment with our customers' technical and business requirements. Steven and his team remain steadfast in their commitment to aiding Badger Meter in delivering top-notch products and differentiated software offerings that provide our customers with real-time, actionable insights into their operations, regardless of their location.

Trainer – Bradley Pace, Badger Meter

Bradley Pace brings a wealth of experience in customer service and sales support to his role as a Field Sales Support Specialist at Badger Meter. With a strong foundation in customer relations, Bradley has demonstrated his ability to ensure utmost satisfaction in various capacities. As the Director of Dining Services at Windsor in Celebration, FL, he managed multiple dining facilities, collaborating with department heads to maximize operational efficiency and profits. Bradley's leadership was evident as he oversaw the hiring, training, and scheduling of over 50 employees, ensuring they were well-equipped to deliver exemplary customer service.

2.5 Communications Partner

In order to support the City's project undertaking, it is essential that enthusiasm and consensus be built among the City's residents of the project's significance and importance. To provide the requisite support, Badger Meter has engaged Rogue Monkey Media (RMM), an Oklahoma-based public relations and marketing firm with extensive water-industry experience and diverse functional expertise in video production, graphic design, social media content and management, content writing, marketing consultation, and digital/print media.

Badger Meter and RMM have worked collaboratively on utility public relations support programs for turnkey projects for several years, successfully developing messaging materials, strategies, and ensuring a smooth flow from concept to deployment.

2.6 Stakeholder Change Management

Over the course of the project, there may occur a circumstance where a stakeholder will depart the project, or where a new stakeholder will join the project mid-stream. This is not unexpected of projects with this number of stakeholders. However, a change in the stakeholders of a project can cause disruption, so a plan to manage the change and to effectively on- and off-board stakeholders is necessary.

What follows in this section is the proposed stakeholder change management plan, which generally takes the form shown in Figure 2.



Figure 2: Stakeholder Change Management Process

2.6.1 Identify Changing Stakeholder Responsibility

There are two principal types of stakeholder change: temporary (such as a vacation or other leave of absence from the project) and permanent. In either case, the project team will review the changing stakeholder's open project action items in the project Risk, Action, Issues, and Decisions (RAID)[1] log and ensure all are reassigned and accounted for.

While a one-for-one exchange of stakeholders may be preferred, it may not always be possible, and the responsibilities of the changing stakeholder may need to be distributed to several

individuals. The purpose of the RAID review is to ensure all those assuming new responsibilities are aware of and accountable for their tasks.

2.6.2 Onboard New Stakeholder(s)

In some cases, a new stakeholder may come to the project having not previously been a part of the project team. In this scenario, it is both practical and necessary to hold a stakeholder transition session. This can take the form of an item on a larger meeting agenda, a dedicated meeting, or an asynchronous document exchange (though asynchronous onboarding is the least preferred). Upon identification of a new stakeholder, the project team, facilitated by the Badger Meter lead project manager, will hold a transition session to bring the new stakeholder up to speed on project developments and milestones both upcoming and previously achieved.

2.6.3 Monitor New Stakeholder Engagement

The new stakeholder will be monitored by the project team to ensure that they are able to engage with and successfully deliver their portion(s) of the project. If issues are identified, they will be resolved through additional stakeholder management.

[iii] Refer to Section 5.3 of this SOW for additional information about the project RAID log and its role in the project approach.

2.7 Project Communication Plan

The project the City proposes to undertake is of key importance and high visibility. Accordingly, there is a need to define the project communication plan to support the project over its lifecycle. This plan is detailed in the table below.

Table 5: Proposed Project Communication Plan

Communication	Audience	Purpose	Timing	Method
Initiation Meeting	All primary stakeholders, project executives	Gather information for project plan	Before project start date	Meeting(s)
Kickoff Event	All stakeholders	Communicate project plans and stakeholder responsibilities	At beginning of project	On-Site
Project Management Meeting	Project Managers, identified stakeholders	Review project progress, tasks, and action items	Biweekly	Meeting

Project Team Meeting	Core Project Team	Provide update on project team efforts, issues, and make necessary decisions	Biweekly[4]	Meeting
Executive Report-Out	Project Executives and Sponsors	Provide high-level project updates and communicate progress to leaders	Monthly/Quarterly	Meeting
Closeout Meeting	Project team, identified stakeholders, executives, sponsors	Review accomplishments and lessons learned, formally close project	At end of project	On-Site
Installation Summary	Project Team	Update completed accounts, RTU accounts, and detail any additional work performed	Weekly	Report
Schedule Updates	Project Team	Update progress against plan, report milestones	As needed or requested	Report
Live Installation Data	Relevant Stakeholders	Detail which accounts have been worked in a given day	Available via WOMS web portal	Report
BEACON Status Reporting	Relevant Stakeholders	Detail communication and read performance of BEACON system	Available via the BEACON platform	Report

Beyond the planned communication laid out in the preceding table, Badger Meter's lead project manager shall provide the City with other periodic additional reporting as requested by the City. The precise content, audience, format, and frequency of said additional reporting shall be agreed at the time of request.

[4] The structure of the Project Management meeting and the Project Team Meeting is that they alternate weekly.

3 Proposed Project Timeline & Milestones

3.1 Project Schedule

Based upon the scope of work laid out in the RFP event , Badger Meter and its IP are confident that this project can be completed within the 30-month (942 calendar days) duration alluded to previously. In order to achieve this timeline, the support and sponsorship of the City will be needed.

To that end, Badger Meter and its IP have prepared a preliminary project schedule and milestone list, as enumerated subsequently in this Section. These are based on the project team's understanding of the work to be completed, forecast resource and material availability, and projected installation rates. However, the project schedule is and will remain a living document. It will be reviewed by the Badger Meter project manager with the City's project manager at intervals suitable to the project's phase and progress and updated regularly. Please see the below Figure 3 for a depiction of the proposed project schedule.

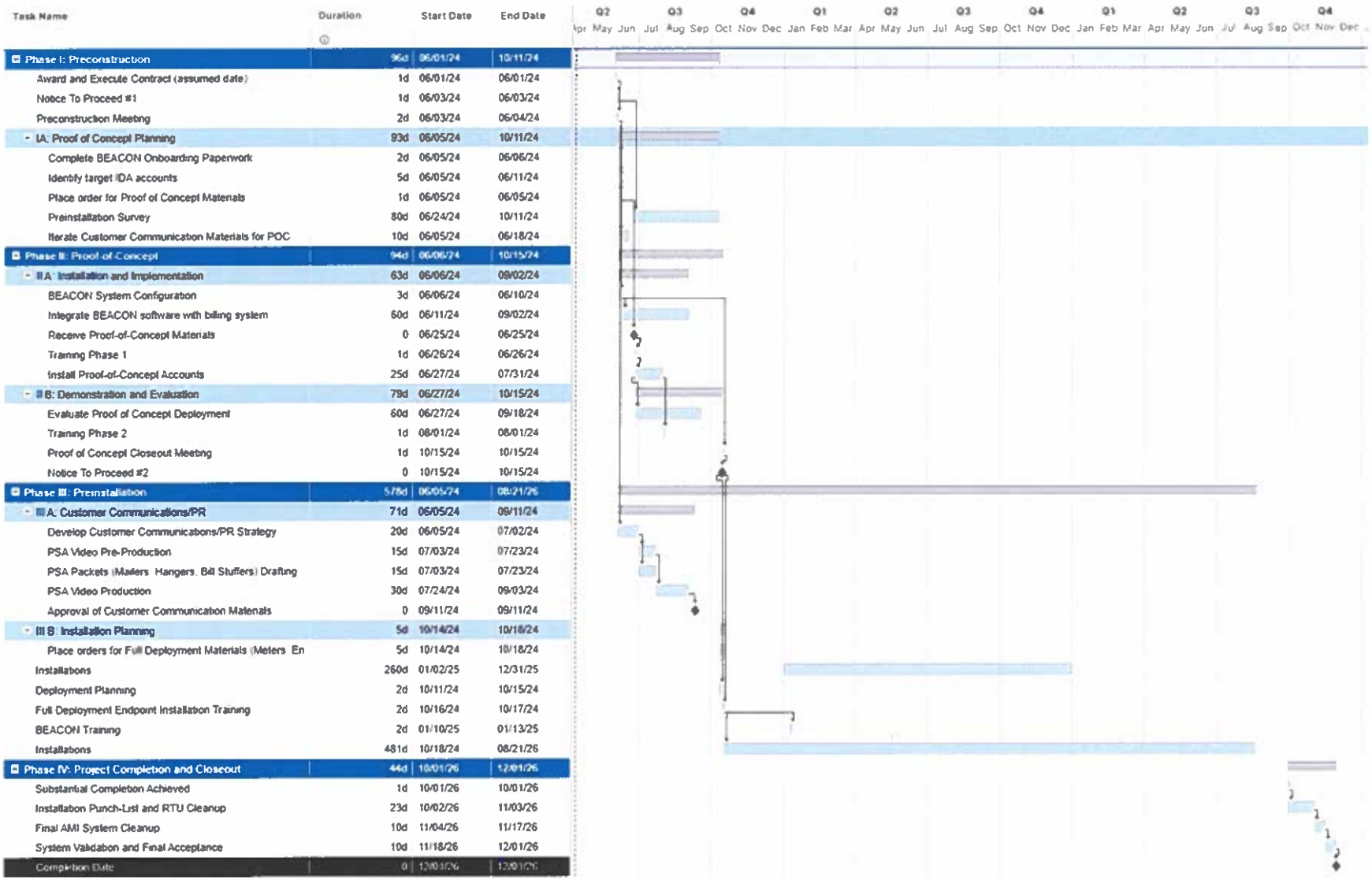


Figure 3: Preliminary Project Schedule

3.2 Project Milestones

Within the Proposed Project Schedule presented in Section 3.1 are the following key milestones listed below. The list presented here is neither exhaustive nor final but serves to highlight the milestones that Badger Meter and its IP have identified based on experience as key in the progress of the schedule. Specific timing thereof will be agreed in the non- schedule refinement process post-award. Some of these milestones are tied to specific billing for services per the schedule of values bid by Badger Meter and are marked accordingly.

Table 6: Proposed Project Milestones

Milestone	Type	Summary	Related Billing
Kickoff Event	Meeting	Multi-day event with workshops and breakout sessions to review scope, educate stakeholders, introduce key personnel, plan for next steps, and build enthusiasm for the project.	Bonding, first month of project management, any mobilization fees, etc.
NTP1	Milestone	Formal notice to proceed with project work issued by the City.	
Interface Design	Workshop	Badger Meter-facilitated workshop to review data requirements for integration between BEACON and the Billing Vendor's system.	BEACON Engagement Fee & Billing Integration Costs
MMCO Design	Workshop	PVI and Badger Meter-facilitated workshop with the City to review interface between WOMS MMCO data and the City applicable Systems (which may include GIS, MDM, etc.). This session is not intended to review billing integration.	
Interface Test Planning	Workshop	Badger Meter-facilitated workshop to iterate use/test cases and other requirements for testing	
Deployment Planning	Workshop	Badger Meter and PVI facilitated workshop to review schedule, tools and procedures, QA/QC processes, installer training and identification processes, and outreach support during deployment	
Communication Planning	Workshop	Badger Meter-led workshop to review customer communication strategy and content. Can be conducted in tandem with the deployment planning workshop.	
Training	Training Sessions	Training sessions will be delivered based on the schedule and content agreed between the City and Badger Meter. Refer to Section 9 of this SOW for details.	Training sessions are billable upon delivery

Billing Integration Complete	Milestone	Defined by two (2) successful billing cycles with the BEACON system	
IDA Completion	Milestone	Completion of installations on specified accounts for the IDA and associated testing thereof	
NTP2	Milestone	Notice of acceptance of IDA deployment and authorization to proceed with full deployment	
Substantial Completion	Milestone	Given by the substantial completion of the full deployment activity and relevant testing	
Project Completion	Milestone	Realized upon completion of the project with system sign-off by the City	

3.3 Schedule Review and Update Plan

As noted in Section 3.1, the project schedule will be a living document. It will live in the project's document repository[5] and form a key project artifact as the project progresses. At a minimum, the schedule will be reviewed every thirty (30) calendar days or upon a milestone being reached (whichever is more regular) by project management personnel from Badger Meter, IP and the City. Should more frequent review and/or updating be required based on project conditions or by request of the City, this will be accommodated as is possible.

As a result of each schedule update session, the Badger Meter lead project manager will ensure the necessary amendments to the schedule are made and published to the project document repository.

[5] Refer to Section 5 for proposed project document control plan.

4 Project Quality Control Plan

4.1 Badger Meter Product and Processes

Badger Meter prides itself on delivering the highest possible degree of project quality. For Badger Meter, quality begins in the factory where the meters and endpoints will be manufactured. These facilities are all International Standards Organization (ISO) certified to ISO 9001 standards. Each meter manufactured by Badger Meter is tested before shipment for accuracy, and these test results will be provided upon shipment to the City via a meter certification file.

To ensure that installation conditions of the product(s) to be deployed are within expected tolerances and that the product(s) can perform to their standards, training will be offered to installers as part of the Project. Refer to Section 9 for a detailed training plan.

4.2 Installation Data

PVI will be responsible for the proactive management of all project installation data via an electronic management system with automated error-checking. The installation partner is also responsible for the prevention, identification and/or remediation of any data errors that do occur. As such, there will be a quarantine period for installation data to permit QC work to be performed before said data is passed via the MMCO process to the City's systems. The installation data reported for this project will include (but is not limited to):

1. Serial Number of removed meter (in replacement scenario) or verification of existing serial number (in a retrofit situation).
2. Serial numbers for new meter and/or endpoint.
3. GPS coordinates of installation location[6].
4. Account information (the City's account number, address, account name, etc).
5. Time of installation.
6. Final read of old meter (including image).
7. Any installation notes.
8. If skipped or returned to utility, documentation of reason for incomplete installation.

If any of this data is corrupt, incomplete, or inaccurate, it will be identified by PVI in their QC process and will be corrected before the data is accepted and the installation can be approved.

4.3 Installation Work

The priority of the IP and Badger Meter in the execution of all project installations is a minimal disruption to the customers of the City. To achieve this goal and deliver quality installations, the following steps will be taken.

1. All Badger Meter products will be installed according to their respective installation manual, which will be provided to the installers.

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[6] GPS capture included in this scope of work is sub-meter in accuracy.

2. All meter installation crews will be trained on the products to be installed prior to installation commencing.
3. New installers will have their work 100% physically audited for the first three (3) days after their training is complete. All installers will have a percentage of their work physically audited during the project (typically one to five percent)
4. 100% of installations will be audited via review of the photographs taken during installation.
5. Customers to receive an installation will be notified per the customer communication plan laid out in Section 6.
6. The installers will reasonably restore the customer's property to its original appearance after work is complete and will document the restoration with before and after photos.
7. Installation contractors will verify communication between an installed endpoint and the BEACON system during their quality control checks, and endpoints that fail to communicate will be remediated as part of the standard QC procedure.
    i) The City BEACON administrator will grant access to Badger Meter installation and quality control personnel to BEACON during the deployment period to facilitate this quality check.

4.3.1 Customer Complaint and Support Procedure

During the course of the project, PVI will make available a dedicated phone number, which will be included on customer notification and communication materials. This service is not intended to, nor will it, supplant any existing customer service infrastructure the City may have in place. This phone number will be available 24 hours per day. Response times to customer issues will be completed pursuant to Assumption 2 in Section 1.6.4. Customer issues will be classified into two principal categories.

- High Urgency (e.g. No Water). The expectation for a high-urgency issue is that an on-site response will be provided within one hour during business hours and as soon as possible in off hours.
- Low Urgency (e.g. issues with landscape restoration). Low urgency issues will be resolved on the next installation day.

If a customer is not satisfied with the service provided by an installer or the resolution of an identified issue, the following escalation path is proposed:

- PVI On-Site Superintendent
- PVI Construction/Project Manager
- Badger Meter Project Manager
- Badger Meter TK-Ops Manager
- Badger Meter Project Sponsors

A log of all customer complaints and their resolutions will be kept by PVI and made available to the City.

4.4 Professional Services

Similarly, the professional services (e.g. project management, training, software integration, etc.) proposed by Badger Meter to support the City's project will be of the highest quality. Badger

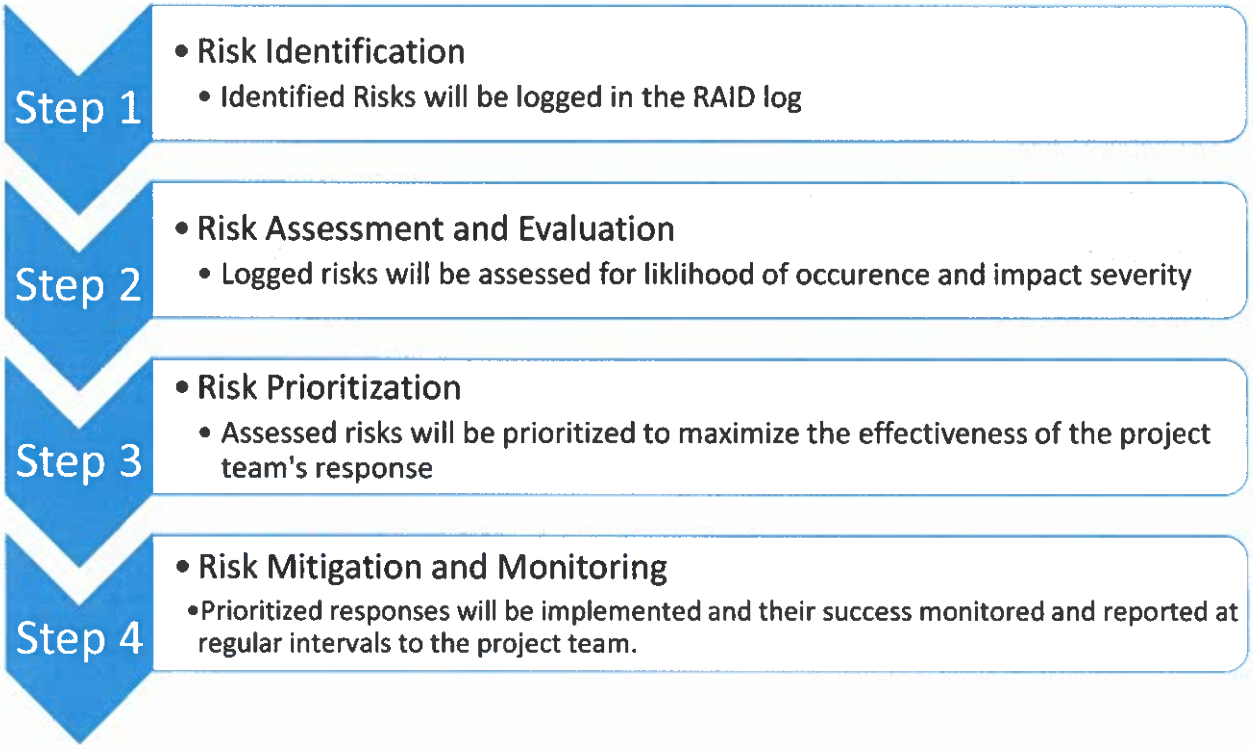
Meter will supply suitably trained and qualified staff for the project. However, if the City is unsatisfied with the services rendered, the following escalation path is proposed to facilitate a resolution.

- Badger Meter Project Manager
- Badger Meter TK-Ops Manager
- Badger Meter Functional/Area Manager
- Badger Meter Project Sponsors

5 Risk Management Plan

All projects are subject to some risk. These risks are events or conditions whose occurrence has the potential to impact a project (that impact could be positive or negative). Risk management is the process by which these risks are identified, logged, assessed, and responded to. The risk management plan that Badger Meter's lead project manager will follow on this project is presented in the figure below, and generally takes the format outlined in the following subsections.

Figure 4: Proposed Risk Management Plan



5.1 Risk Identification

All project team members are empowered to identify potential risks and are in fact encouraged to air concerns about potential risks as early as possible to allow maximum runway for mitigation. Once a potential risk is identified, it will be evaluated by the project team and any other appropriate stakeholders to determine if it is indeed a risk. The evaluation will consider environmental factors, organizational factors and culture, and the project plan. The risk's impact on deliverables, assumptions, constraints, cost, time, resources, and other factors will be considered.

Identified risks will be housed in the project RAID log[7], which will in turn be housed in the project information repository. The RAID log will be reviewed at regular intervals to monitor the progress of risks and/or risk mitigation efforts.

Some risks to a project are inherently impossible to predict with accuracy. These risks may include acts of God, war or conflict, natural disaster, acts of terrorism, third-party criminal acts, riot or civil disturbance, labor disruptions, healthcare emergency; operation or change of statutes, laws, rules, regulations, codes, or rulings of court or governmental agency, or other such causes that are beyond the control of Badger Meter. Neither Badger Meter nor its partners shall be responsible for default in the performance of their obligations under this contract that are caused by these risks herein enumerated.

5.2 Risk Analysis and Prioritization

All risks that are identified will be analyzed based on likelihood of occurrence and significance of impact. Those risks which are the highest on the likelihood/impact scale will be addressed first, while less likely and/or less impactful risks will be prioritized accordingly.

5.3 Project RAID Log

The RAID (Risk, Actions, Issues, and Decisions) log is an essential project management artifact. It will be housed in the project document repository and, like the project schedule, will be a living document that is reviewed and updated consistently. The level of detail for the RAID log will be agreed to by the project parties during its initial implementation.

The general scope of the RAID log in the context of risk management is to identify and centralize the following information:

- Identified Risks
- Triggers of said risks
- Probability of risk occurrence
- Impact of a risk upon occurrence
- Prioritization of risks
- Mitigation strategies
- Owner/Responsible party

If a risk that was identified in the risk log does occur, it is transferred to the issue log with an accountable party and monitored as an issue to be resolved through the project's execution.

The RAID log will be reviewed at regular intervals to ensure that its information is current and applicable. A final review will be conducted at project close to both document lessons learned

[7] See Section 5.3

(for risks that occurred or were successfully prevented from occurring) and to accurately transfer outstanding issues and risks to the operations team.

5.4 Project Document Control

Given the importance of this project to the City, a logical and functional document control plan will be in place. In the experience of Badger Meter, it is most beneficial when the project document repository is owned by the utility. Microsoft SharePoint, Dropbox, or any other widely used cloud storage platform have been adopted with success in AMI deployments. Badger Meter will maintain and administer the project library during project execution and will coordinate the turnover of that data at project closeout.

The precise document control plan will be agreed to during pre-construction. Some key elements of this plan may include:

1. Document-level revision and versioning logs to indicate the time of update, updating party, and notes on content changes.
2. Defining a list of document templates and making them available on the project library to increase cohesiveness of project documentation.
3. Defining and enforcing naming conventions for documents.
4. Defining and enforcing user roles on document storage sites to restrict editing permissions to only those who need them.
5. Use of a system that is backed up regularly to prevent document data loss.
6. Preferring static document sharing (such as via SharePoint shareable links) to emailing documents.

6 Project Deployment Plan

6.1 Ordering of Equipment and Materials

Badger Meter will be primarily responsible for monitoring lead times and the ordering strategy for certain materials for the Project, in conjunction with the City project manager(s). These materials include: (i) meters, (ii) endpoints, (iii) meter pit lids, and (iv) certain other ancillary equipment that may be needed as agreed to in writing between Badger Meter and the City (the "Materials"). After the project schedule is agreed to, Badger Meter and its IP will analyze projected installation rates and survey data (see Section 6.3) to determine quantities of Materials that will be needed for the project and the material ordering plan. Sufficient materials will be ordered to facilitate the agreed installation rates. As a best practice, the parties will attempt to maintain sufficient inventory on hand based on actual production rates. The parties will agree to the specific threshold during preconstruction planning – generally, Badger Meter sees at least thirty (30) calendar days as a threshold for appropriateness. Based on the projected timeline of installations, roughly 1,500 installations per month will be the expected production rate at full deployment pace. Badger Meter will consult the City and shall have approval over the ordering plan before orders are placed. The material ordering plan will be subject to price escalations in line with the escalation laid out in Badger Meter's response to the proposal.

Monthly, or at an alternate frequency mutually agreed upon, the plan shall be reviewed by the City's project manager(s) and Badger Meter to ensure that it remains on schedule and adequate for project needs.

6.2 Inventory Management Plan

Badger Meter shall invoice for product upon shipment, whereupon the title for said product will be passed to the City. Product will be received and stored at PVI's warehouse facility prior to installation. Badger Meter will assist PVI in developing a warehouse/inventory management plan that aligns with Badger Meter's best practices. Elements of this plan may include the following:

1. Provide a warehouse of suitable size to house the project's inventory needs, and with appropriate security features to ensure inventory control.
2. Receive, count, and quarantine deliveries of Badger Meter product as necessary.
3. Record serial numbers of received inventory into the WOMS upon delivery to permit the City to access inventory records via the digital WOMS platform.
4. Verify the count and condition of deliveries against the packing slip/bill of lading and promptly report variance or damage to Badger Meter for remediation.
5. Utilize barcode scanning to prevent data entry errors in serial numbers.
6. Issue stock of product daily to field installation technicians (logging product out) in a "first-in, first-out" fashion.
7. Reconcile inventory returned to the warehouse nightly against installation records to ensure no inventory is lost in the field.
8. Perform a weekly physical count and reconciliation of warehouse stock against receiving records and installation records.

9. Maintain inventory of removed meters and materials from installations in a secure and quarantined location for return pursuant to an agreed schedule with the City. All removed items will remain property of the City.

6.3 Pre-installation Service Area Survey

In the experience of Badger Meter, one of the most advantageous actions to take during an AMI deployment is a pre-installation survey. This is a crucial step that is often not considered when planning a project, but which has immense benefit. The purpose of the pre-installation survey is to capitalize on the opportunity to gather actionable data of the City's service footprint. This data will examine the accounts in the City's territory, locate the meters within the project scope, and gather information about the installation conditions that will be encountered. Performing the survey as laid out in this Section significantly reduces the number of accounts designated RTU due to location issues and can allow for proactive remediation of plumbing, landscaping, access constraints, or other issues that could delay installation work. Pricing for the Pre-installation Service Area Survey is included in the proposal.

The survey will be approached as follows:

1. Survey crews will deploy to the City's service territory between 30 and 45 days from the first NTP.
2. The specific cycles and/or routes to be surveyed can be coordinated with the City's read schedule to minimize disruption to operations.
3. Surveyors will spend no more than five (5) minutes at an address attempting to locate a meter. Accounts that are unable to be located within that timeframe will be returned to the City for assistance with locations. For these returned accounts, a surveyor will be made available to return to the location and complete the survey after location.
4. The data collected during the survey shall include the following items:
    - Identification (manufacturer and material) and dimensionality of existing boxes and lids
    - Condition and substrate of existing boxes and lid
    - Identification (manufacturer, model, and serial) of existing meter (and endpoint if present)
    - Assessment of installation-impacting conditions (e.g. overgrown roots in meter box, flooded meter box, visible leak, or plumbing irregularity)
5. If the meter pit is filled with soil, sand, or water upon arrival, it will be marked as such. The meter installation team will remediate the situation contemporaneously with the installation or retrofit of the meter.
6. During the course of the survey, up to six (6) photos may be taken of the box, lid, meter, and immediate surroundings. If additional photos are desired, they can be taken for an additional fee (an estimate for which can be provided upon request).
    - Survey photos will be provided to the City at a cadence agreed to post-award.

7. Survey data will be aggregated into an excel or similar format and provided to the City at regular intervals. The final compilation of survey data will be provided at the conclusion of the survey.

6.4 Initial Deployment Area (IDA)

As a functional test of the system, procedures, and other elements of the project plan, an initial deployment area will be defined and installed. This installation will serve as a 'dry run' of the planned procedures for the full deployment, and as such will substantially mirror the full deployment plan.

6.4.1 IDA Scope of Work

The IDA for the City will encompass a minimum of 100 meters. These meters will be identified with the assistance and collaboration of the City so as to provide a representative sample of the meter sizes and locations in the service territory. These installations will follow the same procedures laid out in Section 6.5 below as pertain to customer notification and installation procedures. However, as the IDA installations may not be confined to a single route, they by necessity may not follow the planned route release and completion structure prescribed for full deployment.

Additionally, the requisite integrations between and among the WOMS, BEACON and the City's Billing Vendor will be workshopped, deployed, and tested during this phase so as to prove their concept. For details on the proposed software integrations, refer to Section 7 of this SOW.

Certain key elements of the system may require initial training sessions be provided to the City personnel in order to facilitate their use and evaluation of the system. These sessions will be agreed to as to timing and content between Badger Meter and the City in compliance with the overall training plan for this project as laid out in Section 9 of this SOW.

6.4.2 IDA Procurement

Once the approximately 100 accounts comprising the IDA are identified, they will be prioritized for surveying (refer to the preceding Section 6.3). Once the survey information is gathered, the requisite Materials will be placed on order in accordance with the material ordering plan and their estimated lead times advised. The delivery schedule for these products will be monitored and presented in the fashion prescribed previously in Section 6.1.

6.4.3 IDA Material Handling and Storage

IDA materials will be staged at a PVI facility, in compliance with the inventory management plan laid out in Section 6.2.

6.4.4 IDA Evaluation Period

The 100 installations are estimated to take approximately thirty (30) calendar days The overall IDA period will include ninety (90) to one hundred and twenty (120) calendar days for integration work, communications planning, and other such necessary precursor elements to evaluate the

full deployment plan during the IDA. For more details, refer to the tentative schedule presented previously in Section 3.

6.4.5 IDA Acceptance Criteria

The IDA is intended to serve as a demonstration of system functionality. The following objectives of the IDA shall serve as evaluation criteria for the conclusion of the IDA and progression to full deployment:

1. Verification of all installations completed and inspected by the City
2. Verification of all endpoints communicating within the agreed performance margin
3. Completion of required software integrations and associated testing plans, as specified in Section 7
4. Completion of the training sessions designated in Section 9 to be performed during the IDA
5. Successful execution of a billing process using the system by the City
6. Other criteria as mutually agreed

6.5 Full Deployment

Full deployment will substantially mirror the IDA, as the latter is a test of the former's planned procedures. The procedures herein will detail the expected approach for the meter and endpoint installations necessary to complete the project. Deployment planning workshops during the pre-construction phase will allow the City to review and become familiar with these procedures and provide an opportunity to make reasonable alterations thereto to best suit the needs of the project.

The number of crews deployed for installation will be reported by Badger Meter and its IP to the City as part of the planning process and will be monitored on an ongoing basis to ensure appropriate staffing levels are maintained throughout the project.

6.5.1 Outdoor-Set Meter Installation

For meters less than or equal to 2" in size, outdoor set meter installations will follow the following procedure.

1. All Badger Meter products will be installed in accordance with the appropriate installation manual.
2. For any meter exchange where water service to a resident may be interrupted, the installation crew will knock on the resident's door prior to beginning work to provide them notice that their water service may be interrupted for a brief period.
    i) Should the resident be actively using water (e.g. running the dishwasher or washing machine), the installers shall set a time to return to that resident and complete the installation in a manner that minimizes impact to the resident.
    ii) If the resident does not answer the door, the installer shall approach the meter pit and examine the register to determine if it shows consumption.

iii) If consumption is found, the resident is assumed to be using water or have an active upstream leak. A door hanger will be left that an attempt was made but the installation could not be completed, and the installers will make another attempt at a later date.
iv) If no consumption is found, then the installer will proceed.
v) If the meter pit is inaccessible (e.g. in a scenario where a vehicle is parked over the pit), a door hanger will be left indicating the attempt was made and the installer will come back at another time.

3. The installer will examine the meter pit to determine if installation can be completed.
4. Survey data gathered in the pre-installation survey will help minimize RTU accounts during full deployment but cannot eliminate it entirely.
5. If the meter box is damaged, work will not proceed and the account will be designated as UIR. The City will be notified of the damage and provided photos documenting the situation.
6. If the meter pit was identified as flooded or covered by dirt, such obstacles will be removed during installation.
7. If the meter setting and surrounding plumbing/valves is visibly defective or damaged such that there is reasonable confidence that damage will be exacerbated by an installation, work will not proceed. Photos will be taken to document the condition, and the account will be designated UIR.
8. If there are plumbing irregularities (e.g. meter installed backwards, disconnected, by-passed, etc.), work will not proceed, and the account will be designated UIR.
9. In such cases where deliberate tamper or intentional theft of service is identified, pictures will be taken and the account will be designated RTU.
10. The installer will locate a shut-off valve (curb stop) to temporarily turn off service for the installation. If no curb-stop can be located, work will not proceed. If the curb-stop is nonfunctional or broken, work will not proceed and the account will be designated UIR.
    i) If the installer finds that an account is in an off state at the curb stop upon arrival, work will proceed. The account will be left in the same state it was found (i.e., water will be left off if it was found off). This may preclude a line from being flushed.
11. The existing meter will be removed and replaced with a new meter. Consumable items, such as washers, gaskets, nuts and bolts, are included in the meter exchange pricing. Additional plumbing components will be priced and included as needed.
    i) Any ancillary parts furnished to complete an installation are subject to approval by the City. Post-award, specifications for same will be provided.
12. The new endpoint will be connected to the meter and mounted per the procedure for endpoint installation laid out in Section 6.5.2.
13. Photographs will be taken during this process, which will include:

- Preinstall condition.
- Post-install condition.
- Old meter reading.
- Preinstall valve position.
- Post-install valve position.
- Flow direction indicator (arrow) on new meter.

- Barcode labels (for serial number capture).
- Restoration of area to original state.

14. The installer will restore water service (if service was on upon arrival) by opening the curb-stop. Upon restoration of service, the installer will attempt to flush the service line using an external hose bib or spigot to remove air and incidental debris.
    i) If no such device exists, the installer will knock on the door and ask the resident to open the bathtub tap to flush the line.
    ii) If the resident is not home, the line will not be flushed, and water will be left off. A note will be made on the door hanger indicating that water is off with instructions to call the installation partner for restoration of service upon the resident's return.
15. A door hanger will be left notifying the resident that the exchange has been completed. The door hanger will have contact information should the customer have questions or concerns about their installation.

6.5.2 Outdoor-Set Endpoint Installation Procedure

All Badger Meter products will be installed in accordance with Badger Meter's installation manuals. These manuals will be provided to all installers prior to commencing installation work in addition to any installation training that is to be provided. For endpoint installation, best practices include the following:

1. Work orders for endpoint installation will be dispatched via NIMS to ensure the work is performed at the correct account and to facilitate tracking of installation records.
2. Endpoints will be mounted through a composite, RF-friendly pit lid (in outdoor applications). This may necessitate a lid change-out in some scenarios.
    i) The endpoint will be mounted using Badger Meter's top cap and lock nut to ensure a secure fit.
    ii) Where possible, holes will be drilled in existing lids to permit the endpoint to be installed.
3. In outdoor applications without a pit lid (generally for larger meters), the endpoint shall be installed using a mounting bracket.
4. Endpoints should be installed away from large metal objects to maximize radio-frequency (RF) signal propagation. In vault applications, a non-metal vault lid kit may be installed through a hole drilled by the installation partner, or a 'buddy box' may be used.
5. Endpoints will be activated using the ORION Activation Tool to verify their function and communication with the network.
6. Endpoint serial numbers will be recorded electronically into the WOMS.
7. After installation, the endpoint will be monitored to confirm communication to BEACON.

6.5.3 Retrofit Installation Procedure

In a scenario where a register is to be retrofitted onto an existing meter to permit its communication with the AMI system without a full meter exchange being performed, the same provisions from Section 6.5.2 apply to the endpoint installation. Additionally, the following steps will be taken as part of a retrofit.

1. All Badger Meter products will be installed in accordance with their installation manual(s).
2. Work orders for retrofits will be dispatched via an electronic WOMS to ensure work is performed at the correct location and to facilitate tracking of installation records.
3. Upon arrival, installation crews will validate that the serial number and address of the meter in place match the expected meter serial number and address on the work order.
    i) Serial number data will be gathered as part of the pre-installation survey (refer to 6.3)
    ii) If the meter on location differs from the specification expected and the provided retrofit encoder is incompatible with it, the account will be designed UIR.
4. The following digital photographs will be taken as part of the retrofit:

    - Old meter in place
    - Surrounding area of original meter
    - Old register reading.
    - Old register serial number.
    - New register installed.
    - New register serial number.
    - New register start read.
    - New endpoint serial number.
    - Photo post-installation indicating site restoration to original state.

5. The existing register will be removed and the new register will be installed.
6. The new register will be connected to the endpoint.
7. The endpoint will be activated using the ORION activation tool

6.5.4 Large Meter (>2") Installation Procedure

Generally, large meters are associated with commercial accounts that have water usage needs that differ from residential accounts. As such, all large meters will be contacted directly by the installer to schedule an appointment for the meter exchange to prevent water-service interruption from disrupting commercial operations. At times, this may necessitate after-hours or weekend work, which will be provided at no additional cost for these appointments. Larger meters that have bypass functionality set up such that they can be exchanged without interrupting service may not have the same appointment requirements. The large meter installation procedure is as follows:

1. All Badger Meter products will be installed in compliance with the relevant installation manual(s).
2. Given that all commercial customers will be scheduled, the installer will reach out to the identified point of contact for the account to confirm that the scheduled change-out appointment is still suitable via the call center and/or in person visits as applicable.
3. Upon arrival, the installers will inspect the pipe condition of the installation and determine if installation can proceed.

    - If the meter setting and surrounding plumbing/valves is visibly defective or damaged such that there is reasonable confidence that damage will be exacerbated by an

installation, work will not proceed. Photos will be taken to document the condition, and the account will be designated UIR.

4. If a by-pass is present, it will be utilized to permit water service to continue for the customer during the exchange.

    - If no by-pass is present, water service will be shut off using the appropriate valve. If the valve is damaged to the point where water cannot safely be shut off without damaging the valve, piping, or meter, work will not proceed and the account will be designated UIR.

5. The meter will be exchanged. Ancillary items such as bolts and gaskets will be exchanged for new material. If additional material (i.e. ground clamps, support brackets, or large valves) are required for the successful completion of an exchange, the City may provide and install these materials, or the procedure in Section 6.5.11 will be followed to agree a price for them.
6. The endpoint will be installed per the endpoint installation procedure specified in Section 6.5.2
7. Photographs will be taken during this process, which will include:

    - Preinstall condition.
    - Post-install condition.
    - Old meter reading
    - Preinstall valve position.
    - Post-install valve position.
    - Flow direction indicator (arrow) on new meter.
    - Barcode labels (for serial number capture).
    - Restoration of area to original state.

8. The installer will coordinate flushing the line with the point of contact on the account.

6.5.5 Vault-Set Meter Installation

It is assumed that only large (3" and larger) meters will be in vaults. Work in vaults that are not classified as an OSHA-defined confined space is included in the proposal and will follow the procedure in 6.5.4. Any defined, permit-required confined space will be evaluated on a case-by-case basis and will be priced in accordance with Section 6.5.11.

6.5.6 Installation Data Collection

The installer will use NIMS both to dispatch and manage work orders and to record the data. Each procedure laid out in the preceding sections details the specific photographs which will be captured for readings and serial numbers of both new and old meters and endpoints. Additional data collected will include:

1. Material number of the City for installed materials (if provided/required)
2. Installation notes
3. GPS coordinates
4. Installation time
5. Any reason that an account was returned to the utility or otherwise not completed.

All installation data collected will be subject to the quality control plan detailed previously in Section 4 of this document. Installation data that passes quality control will be reported in a file format compatible with automatic ingestion for the City billing software at a frequency agreed by the project parties.

Installation data will be compiled and sent as a backup copy to the City upon project completion and will be retained by the installer for an agreed period for additional redundancy.

6.5.7 Installer Identification and Qualification

All installation technicians shall be suitably skilled and experienced with AMI deployments to support the project. A roster of installers shall be maintained by Badger Meter and PVI which shall include:

1. Name.
2. Copies of photo identification.
3. Copies of relevant background check information[8].
4. Vehicle information (Make/Model/Plate).
5. Other information required by the City.

Installers will wear a branded, standardized uniform making it easy to identify the installers as part of the project. At the request of the City, badge hangers or other identification of the installers as authorized contractors can be included.

The opportunity for the City to review and recommend changes to dress codes, badging, vehicle tags, and other installer identification prior to deployment will be available.

6.5.8 Route/Cycle Release Procedure

To meet the schedule expectations of the project, the procedure to release routes for production needs to be agreed to and upheld. It is a requirement that multiple routes be worked simultaneously (at minimum, two (2) routes) so that the installation teams may operate efficiently. To support this objective, the following steps will be taken.

1. The first routes for work shall be released a minimum of thirty (30) calendar days prior to work commencing. Subsequent route releases should be scheduled and planned in advance

[8] Background check information will detail what was checked and cleared, not the full details of the background check for privacy.

such that they can be immediately or near-immediately available upon the substantial completion of a preceding route.
2. Installation progress and percentage complete within a route shall be available via the WOMS portal for the City and all project parties to monitor.
3. When a cycle or route reaches 85% completion, a summary of the open work on that cycle or route will be presented at the next team meeting. Accounts designated UIR will be reviewed and a plan for their remediation agreed, otherwise they will be removed from scope.
4. Once the open accounts are reviewed, the estimated date of substantial completion for the route/cycle will be identified based on installation rates and project conditions.
5. This procedure will be evaluated regularly and may be modified by the project team to better suit project conditions if necessary.

6.5.9 Customer Notification Procedure

Customer notification for all in-scope accounts will be managed in the following manner:

1. Based on the route/cycle release procedure defined above, the route schedule will be identified.
2. At least one (1) week prior to work commencing on a route, a notification will be sent to the customers on that route informing them of the upcoming change-out.
    i) The form and content of this notification will be agreed to during the communication development phase of the project and will be approved by the City before use
3. The notification will include a request to contact the installer to schedule an appointment if the customer has an indoor-set meter, access constraints, or special needs for uninterrupted water service.
    i) When possible and reasonable, appointments shall be made within a 2-hour window for customer convenience.
    ii) Changes to scheduled appointments will be communicated, when possible, at least one (1) day prior.
4. All contact with the customer will be documented, including customer name, account number, address, time of communication, method of communication, contacting party, returned mail (if applicable), and the name of the customer spoken to (if applicable).
5. If a customer refuses an installation, the account will be designated UIR
6. When installers arrive at a customer's location for a change out, they will knock on the door to inform the customer the work will be occurring, following the procedures laid out previously in this SOW.
7. A door hanger will also be left upon an attempt indicating successful completion or requesting follow up from the customer.

6.5.10 Conditional Acceptance

To facilitate timely invoicing and payment of installation work on the project, the procedure below for conditional acceptance of installations will be followed. Conditional acceptance is solely an administrative and procedural step to permit the flow of invoicing processes to proceed. It does not relieve Badger Meter or its IP from their responsibility to correct deficiencies if they are identified within the warranty period of that installation.

Installation labor will only be invoiced to the City for completed installations that have been inspected and accepted. If, however, after a period of five (5) business days from the completion of an installation and the transmission of the installation data to the City to inspect and/or test installations, no results are communicated to Badger Meter due to delay in performing the testing by parties other than Badger Meter and its IP, the account(s) in question will be deemed 'conditionally accepted' and submitted for payment pursuant to the process laid out in Section 10 of this SOW.

6.5.11 Additional Work

Installations of new meters and endpoints in support of the project are assumed to be like-for-like and are thus assumed not to require substantial ancillary work. However, situations may arise where such work is necessary, for example, upon inspection of a meter, either during the pre-installation survey or while performing installation work (e.g., the curb stop is broken). Prior to any such work being performed, the following procedure will be followed.

1. The technician will photograph the conditions that require the corrective work and transmit them via the foreman/supervisor for the installers to the Badger Meter project management team.
2. The Badger Meter lead project manager will review the additional items included in the contract and determine if a price for the work has previously been agreed.

If a price has been agreed, the Badger Meter lead project manager will solicit approval in writing from the City project manager to execute the work at the approved price.
If no price has been agreed, the Badger Meter lead project manager will prepare an estimate for the work and submit it to the City project manager for review and approval pursuant to the change management process laid out in Section 8 of this SOW.

3. The project manager for the City will review the documentation and approve or reject the additional work. In situations where the work is approved, it will be performed and submitted for payment when the relevant installation labor is approved. In situations where it is rejected, the account will be designated as UIR or RTU as appropriate for the City to correct or self-perform the additional work.

7 Project Software Deployment and Integration

As part of the preparation for both the IDA and full deployment, the initial setup and testing of the software interfaces that will support the project must be iterated, tested, and aligned on by the project parties. As specified previously, there are certain key precursors that the City must meet in order to facilitate the work characterized in this section proceeding. Refer to Section 1.6.5, previously, for these details. Related to this interface development may be training of City staff – this will be characterized subsequent in Section 9 of this document. For purposes of this section, references to "BEACON customer" means the City.

7.1 BEACON and EyeOnWater Customer Portal

The BEACON software platform, as a native part of its functionality, provides our customer engagement portal, EyeOnWater. This portal includes online access via a web portal as well as a smartphone application for both iOS and Android that provides usage information to the water utility customer. Given that EyeOnWater is a native element of the BEACON platform, no additional integration is required to deploy it.

7.2 Facilitated Interfaces

7.2.1 Mass-Meter Change Out (MMCO) File

The MMCO file is a file that is generated by the installation partner that is provided to the City and its billing vendor, Tyler Munis, in a format agreed upon in the relevant workshop (refer to the milestone chart in Section 3.2). It is imperative for successful system integration that the data passed in this file is accurate both at the time of transmission (the responsibility for which rests with the installation partner subject to the QC plan in Section 4 of this SOW), and at the time of ingestion (the responsibility for which rests with Tyler Munis). The Badger Meter interface team and project management team will facilitate the interface workshop to develop the MMCO file and provide guidance where necessary, but the ultimate responsibility for completing this interface rests with PVI, Tyler Munis, and the City.

7.2.1.1 MMCO Assumptions and Services Not Included

- Badger Meter is only responsible for assistance in scheduling the interface workshop and for providing guidance to the parties related to the MMCO file. The ultimate responsibility for completing this interface rests with the IP, the Billing Vendor, and the City.
- Badger Meter will not be creating the file and will not be responsible for ensuring correct formatting for ingestion by the Billing Vendor.

7.2.2 Standard Billing Integration

A billing integration is necessary for any BEACON customer to configure the data transfer between BEACON and the BEACON customer's billing system to support meter-to-cash operations. This is the effort to load the "Accounts and Assets" data into BEACON and provide the BEACON customer or BEACON customer's billing vendor with the billing reads information.

7.2.2.1 Services Included in Standard Billing Integration

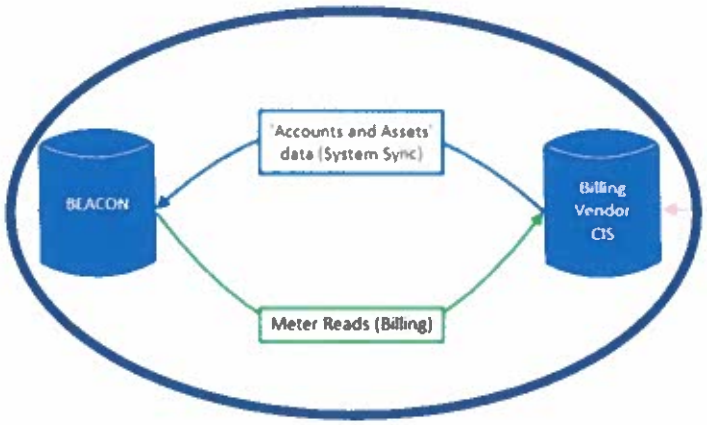


Figure 5: Standard Billing Integration Scope

- Iterative review and troubleshooting of the "Accounts and Assets" file (a/k/a the BEACON Import file, System Sync File, or Meter Provisioning File). The process of iterative review and troubleshooting as applied to this file is considered a fixed bid amount.
- Formatting of the Billing Reads data to fit the BEACON customer's billing system requirements. This process may also be iterative and is also considered a fixed bid.
- API Request configuration assistance for development of requests to *only* the BEACON ../import and ../read API endpoints. Assistance with other API requests is not in the scope of standard billing integrations.

7.2.2.2 Standard Billing Integration Assumptions and Services Not Included

- The BEACON customer or BEACON customer's billing vendor must provide a delimited file with headers matching the latest BEACON billing integration specification file.
- Upon receipt of the "Accounts and Assets" file, the Badger Meter BEACON interface analyst will review the file and detail any corrections which need to be made. The Badger Meter BEACON interface analyst will normally detail any required corrections within 1-2 business days but must communicate required corrections within ten (10) business days of receiving the "Accounts and Assets" file.

    - The BEACON customer or BEACON customer's billing vendor must make these corrections and provide a new file within ten (10) business days of being notified.
    - This is expected to be an iterative process.
    - Once all corrections are made, the Badger Meter BEACON interface analyst will approve the file.
- After the "Accounts and Assets" file is approved, the Badger Meter BEACON interface analyst will create a billing reads file and provide it to the BEACON customer or the BEACON customer's billing vendor for review.
    - Both BEACON reports and the BEACON ../read API have robust capabilities to choose and order fields within the report. However, the billing reads report must fit a possible specification in the publicly documented BEACON help wiki. Any changes necessary within the billing system to import the billing reads data outside the capabilities in the BEACON public help website will be the responsibility of the BEACON customer or BEACON customer's billing vendor.
    - As with the "Accounts and Assets" file, an iterative review process can be expected. The BEACON customer or BEACON customer's billing vendor has two (2) weeks to review and provide feedback or change requests. The Badger Meter BEACON interface team will make these changes and provide a new file, normally within 1-2 business days but absolutely within ten (10) business days of being notified of changes requested. After each billing reads file iteration, the BEACON customer or BEACON customer's billing vendor will have a chance to review.
- Fifteen (15) business days after the Badger Meter BEACON interface team provides the last file iteration, the billing reads file is assumed to be correct and the interface project will be closed.
    - Further changes to the billing reads file after the interface project is closed may incur additional fees for interface modification.
- Upon the BEACON interface team's approval of the BEACON customer's "Account and Assets" file, the BEACON customer has ten (10) business days to complete the API Request Configuration. After that, another purchase order must be submitted for the BEACON team to assist with API Request Configuration. For this included "API Request Configuration Assistance", or for any separately purchased "API Request Configuration Assistance", these terms apply:
    - Data transfer methodology must adhere to publicly documented BEACON APIs. No other forms of data transfer are supported.
    - The BEACON customer must provide knowledgeable resources to build the BEACON API requests. Training on web service fundamentals is not in scope for the API Request Configuration Assistance Professional Services hours.
    - The BEACON customer is expected to understand hardware and environment requirements for making API requests. If the BEACON customer or BEACON customer's billing vendor does not have the capability to make such requests, any charges associated with adding this capability will be the responsibility of the BEACON customer.

    - The Badger Meter BEACON interface team will help the BEACON customer troubleshoot the requests and understand the API responses, interpret datasets, and explain BEACON functionality, but cannot assist with or describe the functionality of any non-BEACON systems.
    - The BEACON interface team cannot assist with loading data into a non-BEACON system.
    - Maintenance is not included after the ten (10) business day period. Support for API requests is not provided by the BEACON helpdesk. If something changes on the side of the BEACON customer and the request fails, a new "API Request Configuration Assistance" order must be made to engage the Badger Meter BEACON interface team.
    - Prior to the order being placed, a 30-minute discovery call may be provided to diagnose the issue and expedite resolution.
    - Only the BEACON ../import and ../read API endpoints are in scope for a billing integration. Discussion of other endpoints requires a different purchase order.
- Data must be transferred in one of the formats supported by BEACON as defined in the publicly available BEACON help documentation.
    - Data transfer methodology is either a manual "drag-and-drop" file transfer between BEACON and the billing system or implementation of the publicly documented BEACON APIs.
    - If the BEACON customer would like to implement an alternate data transfer methodology, the Badger Meter BEACON software services team may facilitate one or more discovery calls. Additional scope and effort will be identified in these discovery calls and priced accordingly.
- Any data transfer or functionality configuration outside of the "Accounts and Assets" and billing reads data is not in the scope of a billing integration.
- Assistance retrieving and/or understanding interval read data (the BEACON ../range or ../flow APIs) is out of scope for any billing integration. BEACON customers are welcome to retrieve data from these endpoints, but the Badger Meter BEACON interface analyst will require an additional purchase order to engage.
- Throughout the course of the integration, the Badger Meter BEACON interface team will describe the interface functionality and BEACON functionality. The BEACON help documentation also provides complete system use detail. However, follow-up on use-case or user acceptance testing—such as meter change-outs or hardware decommissioning—is not part of a billing integration. The billing integration ensures that the file structure is correct. Additional support for user acceptance testing can be quoted as a separate scope of work.
- The BEACON interface team will not backload meter reads from previous systems. This can be done but must be a separate scope of work.
- If there is a change in a BEACON customer's external system and an API request fails or the dataset needs to be updated, a new scope of work may be required.
- Support of non-BEACON systems is not provided by the Badger Meter BEACON helpdesk.

7.3 Interface Testing

The objective of testing is to prove end-to-end functionality across all in-scope software functionality. This may include but is not limited to applications of field devices through the communications network to BEACON, WOMS to Tyler Munis integration, and Tyler Munis to and from BEACON data flows. This ensures that the specified integration requirements are met and that data is accurate and timely. This phase of testing is best executed in a 'sandbox' testing environment to test the MMCO interface, BEACON, customer portal, and billing system hardware and software components.

The table below outlines the high-level responsibilities and objectives for Badger Meter and the project parties to test the various integrations that may be developed over the course of the project. Badger Meter, in many cases, will have frameworks or sample test cases that it can supply as a starting point upon request; however, Badger Meter does not maintain such sample test cases for third-party software that Badger Meter does not develop or maintain. For those instances, Badger Meter will collaboratively develop test cases and/or frameworks with the City and Tyler Munis.

Table 7: High-Level Testing Responsibilities

Badger Meter	Utility and Billing Vendor
• BEACON billing interface requirements and specifications • Review and analyze requested field data. • Work Utility and Billing Vendor on data setup and questions • Help troubleshoot BEACON-related issues and questions. • Provide a sample test plan. • Support test case execution and validation for BEACON	• Billing system test environment and support • Develop test cases for BEACON integrations and use cases (e.g., meter changeout, deactivations) • Verification of physical meter and endpoints • Test case execution and validation of BEACON integrations and use cases. • Execute test cases. • Validate results

7.4 Integration Assumptions and Out-of-Scope Services for Billing Integration

- The BEACON interface team will assist the City or third-party implementation team troubleshoot BEACON API requests and responses, interpret datasets, and explain BEACON functionality, but cannot assist with or describe the functionality of any non-BEACON systems.
- If there is a change in the customer system and a request fails or the dataset needs to be updated, a new scope of work may be required.
- Support for functionality troubleshooting of non-BEACON systems is not provided by the BEACON helpdesk.

- The total work time required for all project software deployment and integration services as detailed in this Section 7 is expected not to exceed eighty (80) hours. If this threshold is reached, Badger Meter will provide the City with a detailed hours log of all work performed, which will include root cause(s) for exceeding the threshold. Subsequently, Badger Meter will work with the City to identify any remaining work outstanding and an applicable hourly rate to complete the remaining work.

7.5 BEACON UAT Environment

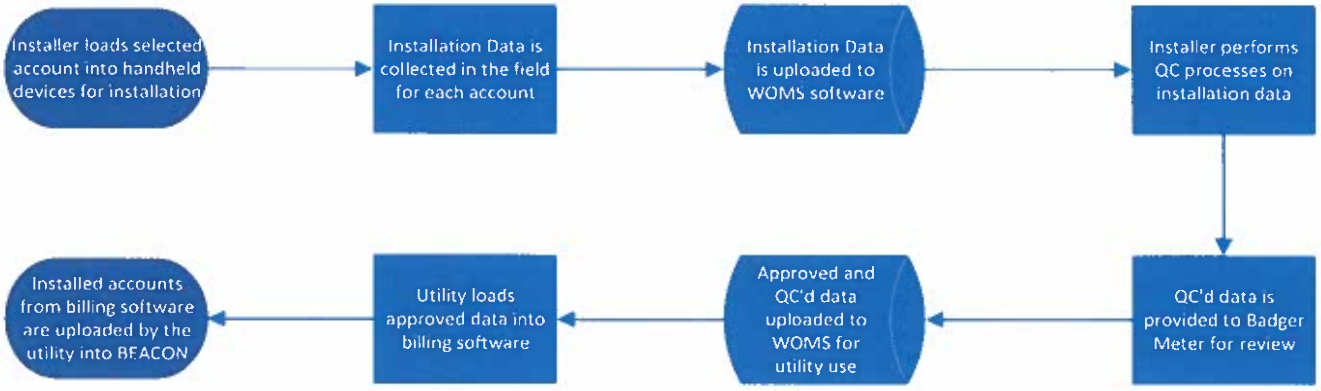
BEACON has a User Acceptance Testing (UAT) or sandbox environment available to clients during the development and implementation phase of the project. There are several caveats to this availability, as follows:

- BEACON UAT is synchronized with production roughly once a quarter. This sync will overwrite any change in UAT that is not also made in production. Clients may or may not be notified of sync dates.
- BEACON's internal interface and development teams will also be contemporaneously using UAT for testing. Data stability is not guaranteed in this environment.
- BEACON UAT's system uptime is not guaranteed or beholden to the BEACON SLA as BEACON production is.
- BEACON UAT is not intended for parallel use with production.
- Excessive continued use of UAT after development and implementation may warrant use-case discovery and further negotiation if appropriate.
- If the City would like to run tests in UAT, this can generally be accommodated. Please make the Badger Meter technical support team aware of the testing goals and expected duration and the interface and development teams will endeavor to avoid making changes during the time.

7.6 Project Data Workflow

The figure below details the method by which the City will be provided installation data to upload into its billing system at a mutually agreed frequency. There is a slight lag from when a meter is installed to the installation data being available, which generally does not exceed three (3) days. The reason for this delay is to permit the quality control procedures to be applied and to ensure the most accurate data possible is transmitted.

Figure 6: Installation Data Workflow - Standard Operating Procedure



7.7 Transition to Badger Meter Technical Support

The 'Billing Integration' portion of this project is complete when the following three milestones are complete:

1. The 'Accounts and Assets' file is approved by the BEACON interface analyst.
2. The billing reads data is approved by Tyler Munis.
3. If in scope, the APIs are in place to automate these two dataflows (or the time limit to implement APIs has expired).

After the billing integration is complete, the Badger Meter interface analyst will remain available for projects for approximately one (1) billing cycle, unless otherwise agreed. Once this additional availability expires, subsequent questions and answers must be directed to Badger Meter's technical support group as prescribed in the BEACON Service-Level Agreement (SLA).

8 Change Management Plan

Change is somewhat of an inevitability on projects of the size and duration of AMI deployments. Changes in scope require careful management to avoid disrupting the project. Should a situation arise that begets a change on the project, the following change management procedure will be followed.

8.1 Change Management Team

If a change is identified, it will be reviewed by the following personnel: the TK-Ops Manager, the lead project manager, the account manager, the sales manager, the contract manager, and relevant installation partner and the City's personnel. These individuals will follow a change management workflow as follows:

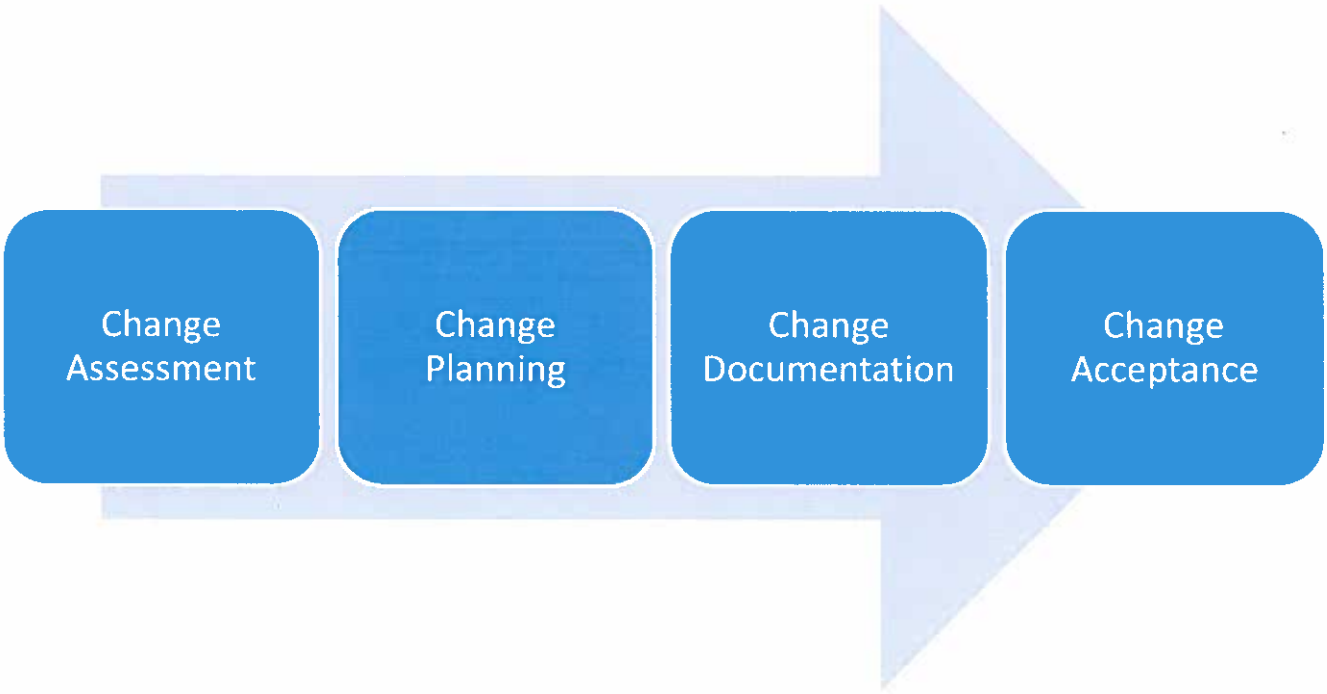


Figure 7: Change Management Plan

- The change will be assessed to determine its impact in terms of cost, schedule, and risk. If the change is within the capacity of the project to absorb, either due to available contingency funds, low to no cost impact, or other project-specific factors, and if the change management team agrees to do so, the change will be absorbed and documented in the project RAID log as a decision.
- If the change cannot be absorbed, a change order will be prepared. A change memo will be prepared first that characterizes cost and time impact for review. If the solution is acceptable, the memo will form an exhibit to the formal change order. This preliminary review helps clearly document and manage the change process.

- If a proposed change memo is not acceptable in terms of its impact, the change management team will return to the assessment phase and attempt to arrive at alternate solutions that can be planned, documented, and accepted.
- If the change memo is acceptable, the change will be documented by means of a change order signed by the appropriate parties.
- Part of the documentation process will include an assessment of other project artifacts (such as the installation schedule and/or project ordering plan) that may be impacted and the assignment of responsible parties to update them.

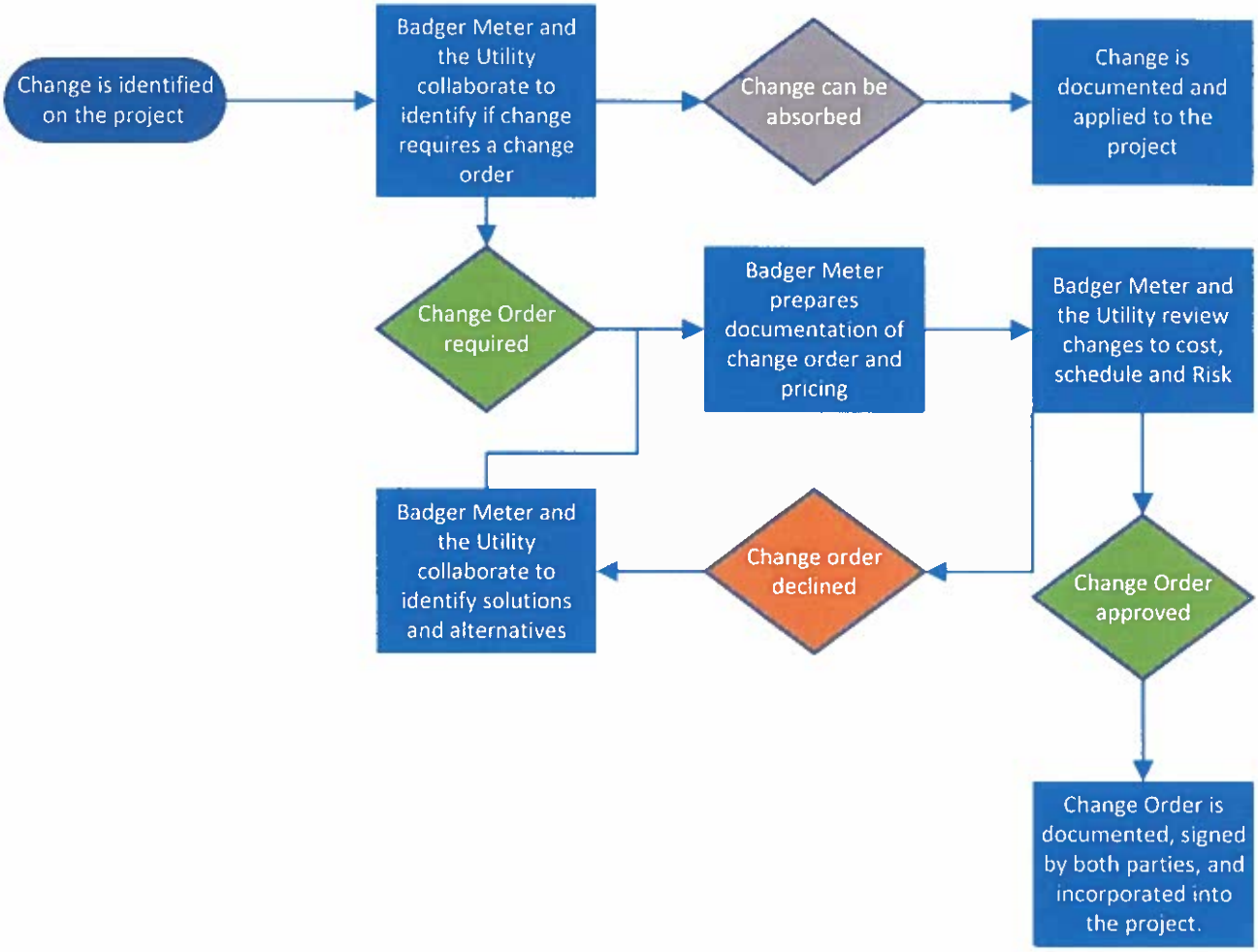


Figure 8: Change Management Workflow Diagram

9 Project Training Plan

Badger Meter's approach to training is one that is highly tailored to the specific needs of its individual utility customers. To that end, the methodology for training is best understood as "demonstrate, perform, and practice." Trainees can expect to have the first part of a given training session to consist of demonstrations, lectures, and walkthroughs of the product or solution being taught. The second portion of a given session will consist of more hands-on work with the product or solution to better impart the lesson(s) to be learned.

From experience, Badger Meter has found that structuring training around the message of 'a day in the life' is the most effective way to impart the information on trainees. To facilitate this, Badger Meter will engage functional managers of the City's relevant departments to be trained in planning workshops prior to the curriculum for that training session being finalized. In this way, the users being trained are readily able to relate the training to their day-to-day job duties and will typically demonstrate higher retention.

While Badger Meter does not provide training sessions as prerecorded videos (given the preference for highly tailored, 1-of-1 trainings), Badger Meter has no objection to the City recording the training sessions delivered as part of this project for future in-house training sessions.

9.1 General Training Notes

- All training will be conducted on the City's BEACON portfolio and with the City's hardware.
- Training can be conducted in person or via videoconference. Some training (for example, installation training) is best delivered in person, while software-focused training can be more effective over videoconference to allow trainees to participate on their own copy of the software.
- Training sessions can, at the City's discretion, include verbal or written tests to assess the success of the training at imparting knowledge to the trainees. The exact content of these tests will be created by Badger Meter and approved by the City.
    - the City and Badger Meter will determine the course of action if a trainee fails the test.
- Class sizes for training are generally capped at 25-30 attendees to ensure personal attention from the instructor and to permit all attendees the opportunity to ask and have questions answered.
- Training documentation, where applicable, will be provided by Badger Meter. All product literature, manuals, and installation documentation are available online at either www.badgermeter.com for product, or www.beaconama.net for the BEACON software platform.
- Training for this project is proposed in the following general phases.

Table 8: Proposed Training Types and Timings

Training Name	Training Type	General Timing in Project
Installation and Product SME Training	Train-the-Trainer	In preparation for IDA
BEACON SME Training	Train-the-Trainer	In preparation for IDA
BEACON Technical Staff Training	Technical Training	After IDA is complete
BEACON Billing Training	Technical Training	Prior to first billing cycle using AMI system
BEACON Operations Training (Incl. EyeOnWater)	Technical Training	After ~30% of installations are complete or prior to EyeOnWater roll-out, whichever is earlier
BEACON Operational Transition Preparedness	Review and Assignment of Handoff Readiness	After ~75% of installations are complete, or prior to the commencement of project closeout activities, whichever is earlier.
Refresher Training	Technical Training	As needed within project duration

9.2 Installation and Product SME Training

This session's target audience is leaders from meter installation and field operations personnel from the City who will be responsible for AMI meter installations and maintenance in support of the system's operations. This training is broken into three parts, each of which has a proposed agenda as follows. As previously mentioned, these agendas are illustrative of general concepts and elements. The City will have final approval of training agendas and materials prior to course administration.

9.2.1 Installation and Product SME Training: Part 1 - Meter School

Introduction to Meter School:

1. Overview of BEACON solution for utilities
    - A high-level overview of BEACON and the entire solution being deployed.
2. Endpoint Installation and Activation – Best Practices and Demonstration
    - Demonstration of process to connect, mount, and activate an endpoint.
3. Understanding Meter Application Criteria and Key Terms
    - Review of general meter application and sizing theory.
    - Review of key terminology in use to ensure understanding.

4. Small Meter Technology Options
    - Discussion of the various small meters (<2") that form the solution and their technologies and differences.
5. Small Meter Breakdown and Reassembly Demo
    - Live breakdown and reassembly of a small meter to demonstrate its construction and components.
6. Understanding Ultrasonic Metering Technology
    - Review of ultrasonic metering technology and its application in the solution.
7. Understanding Fire Service Metering Technology
    - Review of how fire service metering can be incorporated into the system.

The approximate duration of this session is four (4) hours but will vary depending on the exact agenda determined by Badger Meter and the City.

9.2.2 Installation and Product SME Training: Part 2 – BEACON Introduction for Operations

Introduction to BEACON for Operations:

1. Overview of ORION Cellular Technology
    - General explanation and demonstration of how endpoints function and interact with the BEACON platform.
2. BEACON Roles
3. The At-A-Glance Page
    - Modules
    - Configuration
4. The Assets Page
    - Review of the various statuses endpoints can have in BEACON, their meaning, and how they move between them.
    - Demonstration of how to track assets as they are added to the system.
5. The Monitor Page
    - Usage and Consumption Graphs
    - Overlays for Temperature and Precipitation data
    - Alarms
    - Account Lookup
    - Favorites and Tags
    - Exporting Data

The approximate duration of this session is three (3) hours, but will vary depending on the exact agenda determined by Badger Meter and the City.

9.2.3 Installation and Product SME Training: Part 3 – Practical Installation (Optional)

Practical Installations

1. Classroom installation practice
    - Demonstrate correct technique and have trainees practice working with the tools and products.
2. In-Field installation practice
    - At appropriate locations, apply installation best practices and install meters/endpoints in the ground.

Depending on the number of installations to be performed as part of this training, the duration can vary significantly. A more refined plan for this session will be presented after it is workshopped with the City.

9.3 BEACON Technical Staff Training

This session builds upon the concepts in Section 9.2. With the SME trained on the system, they will help lead this session with the Badger Meter trainers. This will also help the SME become more confident in their knowledge and become more effective trainers for the City going forward. The target audience of this session is IT personnel, technical problem solvers, and other similar individuals who are expected to have a high level of command of the BEACON software.

9.3.1 Sample Agenda

The BEACON Technical Staff Training includes:

1. Introduction to BEACON Software
2. Steps of a Billing Cycle in BEACON
    i) Data import
    ii) Data export
3. The At-A-Glance Page
    i) Modules and their features
    ii) User-level personalization
4. Users and Roles
    i) Administrators
    ii) Permissions
    iii) Assigning roles
    iv) Creating new users
5. The Monitor Page
    i) Usage and Consumption Graphs
    ii) Overlays for Temperature and Precipitation data
    iii) Alarms
    iv) Account Lookup

v) Favorites and Tags
vi) Exporting Data

6. The Assets Page
    i) Endpoint status
    ii) Utility Settings
    iii) Asset Lookup
7. EyeOnWater Overview
8. BEACON Integrations on this project
9. Open discussion with BEACON staff on technical questions.

This training will require a high degree of care in curating the agenda to ensure that the technical staff derive value from the session. The estimated duration of this training is four (4) hours but could vary depending not only on the agreed agenda but also on the number of questions asked.

9.4 BEACON Billing Training

This session is a focused training session on the role of BEACON within the billing cycle. By necessity, it cannot be conducted until after billing integration is complete. It should, however, be conducted prior to the first billing cycle with BEACON. The audience here is intended to be billing clerks or other office personnel who will be interfacing with the system in a billing capacity. Customer service representatives may also find value in this session.

9.4.1 Sample Agenda

The BEACON Billing Training includes:

1. Introduction to BEACON Software
2. The At-A-Glance Page
    i) Modules and their features
    ii) How to personalize by user
3. Users and Roles
    i) Staff
    ii) Customers
        (1) EyeOnWater Users
4. The Monitor Page
    i) Usage and Consumption Graphs
    ii) Overlays for Temperature and Precipitation data
    iii) Alarms
    iv) Account Lookup
    v) Favorites and Tags
    vi) Exporting Data
5. The Assets Page
    i) Endpoint status
    ii) Utility Settings
    iii) Asset Lookup
6. Walk through of a billing cycle.

i) Data flow from billing to BEACON and back

The total duration of this session is typically between two (2) and three (3) hours, depending on the agreed agenda.

9.5 BEACON Operations Training

This session covers nearly the same agenda as the session characterized in Section 9.3, but its target audience is the day-to-day operators of the system in customer service and billing. SMEs that were created in the earlier training will again participate and help lead the course to instill in the other trainees that they are a resource to whom questions can be brought. This training will focus more on the 'day in the life' model prescribed earlier and will prepare staff to work with the system.

9.5.1 Sample Agenda

The BEACON Operations Training includes:

1. Introduction to BEACON Software
2. Steps of a Billing Cycle in BEACON
    i) Data import
    ii) Data export
3. The At-A-Glance Page
    i) Modules and their features
4. Users and Roles
    i) Staff
    ii) Customers
    iii) EyeOnWater Users
    iv) Creating a new user
5. The Monitor Page
    i) Usage and Consumption Graphs
    ii) Overlays for Temperature and Precipitation data
    iii) Alarms
    iv) Account Lookup
    v) Favorites and Tags
    vi) Filters
    vii) Exporting Data
6. The Assets Page
    i) Endpoint status
    ii) Utility Settings
    iii) Asset Lookup
7. EyeOnWater Overview

The total duration of this session is typically between three (3) and four (4) hours, depending on the agreed agenda.

9.6 BEACON Operational Transition Preparedness

The purpose of this session differs from the previous sessions in that it is less of a structured training and more of a working session and evaluation of the City's understanding and usage of the BEACON platform. Specific topics on the agenda for this session will include:

1. Review of Badger Meter Technical Support Procedures and Processes
2. Review of the RMA (Return Material Authorization) Process
3. Review of Portfolio Management Best Practices
4. Controlling Provisioned/Pre-Provisioned Endpoints
5. General BEACON operations and maintenance best practices.

9.7 Refresher Training

Within the project term, should the City decide that additional training would be beneficial, it can be arranged. The form, content, and timing of said refresher training will be agreed to at the time it is requested. Refresher training will be billable at the agreed training rate in the contract unless otherwise agreed.

10 Project Invoicing Procedure

The project shall be invoiced as laid out in this Section.

10.1 Project Invoicing

All Materials supplied as part of the project will be invoiced upon shipment from Badger Meter, and at that time, ownership of the products shall pass to the City. This includes meter pit lids and/or boxes (if applicable), as well as plumbing components supplied. PVI will hold and maintain such Materials in their respective warehouse in accordance with Section 6 prior to their installation to alleviate the need for the City to allocate warehouse space and inventory management resources to the Project.

10.2 Service Invoicing

Installation labor will be invoiced upon acceptance subject to the procedures in Section 6 of this SOW. Additional work approved via the procedure in Section 6.5.11 will similarly be invoiced upon acceptance.

Non-installation services (such as project management fees and/or software integration costs that may be included) will be invoiced upon agreed milestones. Such milestones will be agreed during pre-construction and documented within a billing milestone schedule.

10.3 Invoice/Pay Request Procedure

Monthly, a pay request detailing the installation services accepted and other non-installation services performed in accordance with the agreed upon milestones will be prepared by the Badger Meter project manager and submitted to the City. Supporting documentation will be furnished by Badger Meter alongside the pay request. the City will have five (5) business days to review the pay request and provide acceptance of the pay request to the Badger Meter project manager in writing. Upon receipt of that approval, the Badger Meter lead project manager shall have an invoice automatically generated and submitted to the City.

10.4 Conditional Approval of Pay Request

If no objection is provided by the City to the Badger Meter lead project manager within five (5) business days of the submission of the pay request from the Badger Meter lead project manager to the City, the pay request will be deemed conditionally accepted by the City and an invoice will be generated and submitted. Like the installation conditional acceptance procedure laid out in Section 6, this does not alleviate Badger Meter's obligation to provide accurate invoicing but allows for administrative processes to proceed in a timely fashion.

If a conditionally accepted pay request and subsequent invoice is found to be inaccurate, it will be edited, re-issued, or otherwise updated as necessary by Badger Meter upon such notification from the City with any incorrect payments remitted by the City to Badger Meter to be credited towards future invoices.

11 Project Acceptance and Closeout Plan

11.1 Project Closeout Plan

Once the scope of installations reaches 85% complete, preparation for the project closeout and turnover meeting will begin. Steps included in this plan will include:

- Agreement on a target completion percentage and date.
  - The target completion percentage will factor in any accounts designated as RTU or otherwise removed from scope.
- The deliverables specified in this SOW and any other deliverables identified and agreed to by the project parties will be evaluated for completeness.
- Acceptance of all installed accounts will be confirmed by the City.
- Review any open UIR accounts and arrange for remediation.
- Review any pending action items assigned and determine their completion timeline.
- Review financial performance against budget and discuss any discrepancies, including any unpaid invoices.
- All installation data, including photos, will be turned over to the City.

11.2 Closeout Meeting

Once the project installations and items identified in Section 11.1 are complete, the closeout meeting will be held. This will consist of input and discussion from project parties to identify and document lessons learned, present project performance and/or KPI, and review highlights of the project. The agenda of the closeout meeting prepared by Badger Meter will be informed by the planning performed in Section 11.1, but will generally include the following items:

- Review of project scope and milestones
- Review of budget and schedule performance
- Review of other project metrics
- Review of UIR/RTU list
- Review of action items
- Turnover of project documentation
- Turnover of installation data
- Plan for notification of final acceptance by the City

11.3 Project Acceptance Criteria

Sample project acceptance criteria may include:

1. Verification that all uninstalled inventory housed in the IP warehouse is turned over to the City.
2. Confirmation of all removed items that were to remain the property of the City have been satisfactorily returned to the City.
3. Confirmation that all installation and project data has been passed from the document control system to the City's operational systems.

4. Other criteria as mutually agreed.

11.4 Project Inventory Reconciliation

Throughout the project, Badger Meter will, in its capacity as project installation and quality manager, audit the warehouses operated by PVI to ensure that the inventory management plan laid out in Section 6.2 is being observed. During preparation for the closeout, Badger Meter will perform a final audit of the warehouses and ensure that any inventory not to be installed is correctly transferred back to the City. Serial number-level verification will be performed for serialized products.

11.5 Project Closeout Notification

Once the criteria in Section 11.3 are satisfied, and any other criteria agreed by Badger Meter and the City are similarly satisfied, the Badger Meter lead project manager will request a formal notice of project completion from the City's project manager. Upon receipt of such notice, the Project will be complete.

***SMART WATER IS** BADGER METER*

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BADGER METER RESUMES

Brad Lowe

Account Manager – Utility



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Summary of Qualifications

Brad, serving as the Badger Meter Account Manager for Central and North Florida, works closely with utilities to craft customized metering solutions and oversee the entire project lifecycle, from conception to execution. Prior to joining Badger Meter's sales team in 2018, Brad gained valuable sales experience at Innovative Metering Solutions (IMS), the primary distributor of Badger Meter products in Florida. With his extensive background in the water industry, sales, and operations, Brad delivers tailored solutions that surpass customer expectations.

Education & Associations

University of Central Florida, *Business Management*
American Water Works Association (AWWA)
Florida Rural Water Association

Accomplishments

Brad, in his role as an Account Manager at Badger Meter, has forged strong partnerships with various utilities across Florida. Some of the key clients he oversees include Jacksonville Energy Authority (JEA), Auburndale, Dunedin, Pasco County, Orlando Utilities Commission (OUC), and Ocala. Through effective communication, strategic planning, and tailored solutions, Brad ensures that each client receives personalized support and achieves their metering goals. His dedication to client satisfaction and his commitment to delivering innovative solutions make him a valuable asset to both Badger Meter and its clients.

Colin Middaugh
Regional Sales Manager



Cell: 414-339-0146
cmiddaugh@badgermeter.com

Summary of Qualifications

Colin brings with him extensive experience and a proven track record of success in solution-based sales across global and domestic markets. Before joining Badger Meter in January 2018, he served as a Client Partner at Verizon, where he was responsible for driving sales growth within his assigned account base. During his time at Badger Meter, Colin has held a variety of roles, including Solution Architect and Utility Solutions Manager. In these positions, he worked closely with utilities to optimize revenue, enhance meter reading accuracy, increase productivity, and expand customer service capabilities. Colin has also been heavily involved in numerous AMI deployments across the United States.

Currently, Colin serves as the Eastern Region Manager for Badger Meter. In this role, he is responsible for coordinating the sales strategy of the company's product and service offerings, while also serving as the primary interface between his sales team and utility customers. He works closely with his customers to develop customized metering solutions that are tailored to their unique needs and ensures that organizational goals are met. Colin's expertise and innovative approach to problem-solving make him an invaluable asset to both Badger Meter and its customers.

Education & Associations

D'Youville University, Bachelor of Business Management
St. Bonaventure University, Master of Business Administration

Accomplishments

Colin has a proven track record of success in expanding and promoting Badger Meter products and services to a range of clients. Recently, Colin has worked with esteemed organizations such as Columbia, SC, American Water, Miami Beach, FL, and Liberty Water-NY to deploy Badger Meter products and services to great success. In addition to his work with Badger Meter offerings, Colin has extensive experience in implementing private network solutions for IoT security, as well as onboarding and managing Smart Building and Smart Grid IoT resale customers.

Jack Morrison, PMP
Manager, Turnkey Operations



Cell: 407-701-8209
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Summary of Qualifications

As the Manager of Turnkey Operations (TK-Ops), Jack oversees all projects to make sure they are being implemented on time and on budget. Jack brings years of project management experience from a diverse set of industries to Badger Meter. His experience crosses the sectors of live events and performing arts, construction litigation, aircraft maintenance/MRO, electrical construction, and themed experiences. Jack has a demonstrated history of delivering time-critical projects, building lasting customer relationships, and meeting time and cost objectives. His broad array of experience and exceptional interpersonal skills make him an integral part of the Badger Meter TK-Ops team.

Education & Associations

University of Wisconsin-Madison - Bachelor of Science (B.S.)., Double Major: English (Creative Writing) and Theatre, 2014-2018
Project Management Institute - Project Management Professional (PMP) Certified, 2022

Accomplishments

In 2018, Jack took over the Southeast region for projects at ETC, and immediately instituted process changes to better integrate stakeholders into projects and open lines of communication. Additionally, he was a lead member of the digital process transformation team at ETC, successfully moving the professional services group to a fully digital process. Furthermore, he has played a part in several funded research projects in conjunction with his alma mater, the University of Wisconsin – Madison, most recently as a member of the Construction Industry Institute's Research Team DCC-02.

Jennifer Rittmann

Project Manager, Turnkey Operations



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Summary of Qualifications

During Jennifer's career at Badger Meter, she has worked in various roles, such as a Technical Support Representative and Interface Analyst. Currently, Jennifer is a Project Manager in the Turnkey Operations (TK-Ops) group and is part of a dynamic team of project management professionals who oversee the planning, implementation, and deployment of AMR/AMI solutions for utilities. With her professional experience and educational background in IT, Jennifer provides expert insight and knowledge regarding software integration customer information systems, such as billing vendors.

Education & Certifications

University of Wisconsin-Platteville, *Bachelor of Science in Computer Science*
Six Sigma Green Belt

Professional Experience

Prior to joining Badger Meter in 2010, Jennifer worked for Honeywell HomMed both as a Technical Support Specialist and as an Application Engineer. Her responsibilities included providing support and troubleshooting to customers regarding HomMed's suite of products. In addition, Jennifer monitored and provided maintenance on an SQL-hosted environment; administered and designed a CRM platform; and worked with a product quality council to assist in resolving and preventing product issues.

Jennifer also has experience providing technical support at the University of Wisconsin-Platteville. From 1999 to 2003, she assisted with computer software and hardware rebuilds, Access Database designing, People Soft training, and Novell networking in a Microsoft Windows environment

Jessica O'Malley
Director, Turnkey Operations



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Summary of Qualifications

As Badger Meter's Director of Turnkey Operations (TK-Ops), Jessica O'Malley is responsible for setting the strategic direction of the TK-Ops team, as well as overseeing Badger Meter's Turnkey projects and Project Managers. In addition, Jessica employs technical troubleshooting and creative problem-solving skills she developed during her time as a customer-facing Project Manager in the construction field. Her astute leadership skills have been honed over years of roles in Customer Service, Project Management, Inside Sales and Estimating/Proposals. Passionate about leadership and customer satisfaction, Jessica views all projects – internal or external – as an opportunity to support Badger Meter customers.

Education & Certifications

University of Wisconsin-Milwaukee - Bachelors, Double Major: English Literature and French, 2011, Summa Cum Laude
Marquette University – Executive Master of Business Administration, 2021
Morrine Park Technical College - Lean Six Sigma Green Belt Certification, 2013
Cornell University - Women in Leadership Certification, 2019

Accomplishments

Professionally proficient in French, Jessica leveraged her distinct language skills while working with McDonald's of Canada to support installation projects throughout Quebec. Not only is Jessica a certified Lean Six Sigma Green Belt but also holds a certification pertaining to Women in Leadership Roles from Cornell University. Jessica graduated with an Executive MBA from Marquette University in 2021. This degree, in conjunction with many years of professional experience, enhanced her appreciation for the "triple threat": leadership through customer satisfaction, strong metrics and process standardization.

Joe Lucia

Manager – Technical Sales & Support



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jlucia@badgermeter.com

Summary of Qualifications

Joe oversees and manages the Field Sales Support Specialists while leading the charge in making sure our customers have the upmost knowledge and support on Badger Meter products and services. Joe manages the delivery of post-sales support to ensure the efficient use of resources to provide quick resolution of issues or hurdles and to ensure a high level of customer satisfaction. Additionally, Joes manages the daily operations of personnel providing necessary technical training and assistance, system pre-installation planning with the customer, meter and endpoint installations and any other special sales support projects or activities as required. Prior to being the Manager of Technical Sales and Support, Joe Lucia assisted utility customers in Florida as a Field Sales Support Specialist. In this role, Joe interfaced across multiple departments at Badger Meter, including sales, support services, and technical support, in order to provide customers with not only innovative products and technology from Badger Meter but also a quality customer experience throughout the lifecycle of each project.

Education & Associations

University of Illinois, *Bachelor of Science in Economics*

Professional Experience

Before joining Badger Meter in 2018, Joe was an Implementation Consultant for ADP, where he managed multiple system configurations and interfaces for customers. In addition to his career at ADP, Joe also worked for the companies FormFast and Health Central Hospital as a Project Manager and Systems analyst, respectively. He spent many years of his professional career at McKesson Corporation, working in various roles throughout the company, including sales and engineering. From 2006 to 2013 at McKesson, Joe served as the Senior Implementation Engineer and was responsible for software and contracts management. Because of his professional experience, he has wide-ranging knowledge in technology protocols, operating systems and software, and hardware configurations.

Joe DeVito

Senior Utility Solution Manager – National Strategic Accounts



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Summary of Qualifications

As a Senior Manager of Utility Solutions at Badger Meter, Joe plays a critical role in forging strategic partnerships with utilities and municipalities throughout the Southeast. In this capacity, Joe is responsible for educating and advising customers on the implementation of major AMR/AMI projects, including Water Quality and Smart City deployments. With nearly 40 years of experience in the water industry, ranging from his beginnings as a plumber to his numerous leadership roles within utilities and contributions to industry-wide associations, Joe brings a wealth of knowledge and expertise to his position. He is highly skilled in account and operations management, as well as overseeing water and wastewater distribution systems. Joe's in-depth knowledge and experience make him an integral part of the Badger Meter sales team and a valuable asset to utility customers. His ability to forge strong partnerships and provide expert guidance has helped to drive the success of our utility solutions division and has enabled our customers to achieve their goals and objectives.

Education, Associations & Certifications

Technical College of Lowcountry
American Water Works Association (AWWA) of South Carolina
Water Environmental Association of South Carolina
South Carolina A Wastewater Collection License
South Carolina A Water Distribution License

Professional Experience

Prior to joining Badger Meter in 2019, Joe held several leadership roles within the water industry. He worked as an account manager for Lucity, Inc., a provider of enterprise asset management software, where he was responsible for cultivating customer relationships, performing product demonstrations, and attending industry events. From 1999 to 2017, Joe served as the Director of Field Operations for Beaufort Jasper Water and Sewer Authority (BJWSA). In this role, he was responsible for the daily management and oversight of operations of BJWSA's water and wastewater delivery and collection systems. Prior to the merger of the City of Beaufort with BJWSA, Joe served as the Water and Sewer Superintendent beginning in 1988.

Mark Mc Millen

Senior Manager – Utility Solutions – National Strategic Accounts



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mmcmillen@badgermeter.com

Summary of Qualifications

In November 2017, Mark McMillen joined Badger Meter as a Senior Manager of Utility Solutions for National Strategic Accounts. Prior to joining our team, Mark served as the Vice President of Sales for Carolina Meter and Supply, a distributor of Badger Meter products. In this role, Mark was responsible for the outside operations at Carolina Meter, as well as maintaining account responsibility for several medium to large utilities within the territory. At Badger Meter, Mark brings a wealth of technical expertise and consultation to his role, assisting utilities and consulting engineers in the selection of proper meters and Automated Metering Infrastructure (AMI) solutions. His solutions enable utilities to optimize revenue, enhance meter reading accuracy, increase productivity, and expand customer service capabilities. Mark's extensive experience in the water industry and his deep understanding of the challenges and opportunities facing his customers make him an invaluable asset to our team. His commitment to providing exceptional service and developing customized solutions has helped to drive the success of our utility solutions division and has enabled our customers to achieve their goals and objectives.

Education & Associations

University of South Carolina-Columbia, Bachelor of Arts in Business Administration
American Water Works Association (South Carolina, North Carolina, and Virginia chapters)

Professional Experience

Mark's extensive knowledge of the water utility industry was gained through his tenure as Vice President of Sales at Carolina Meter and Supply from 1999 to 2017. During this time, he successfully managed several large utility accounts, including Greenville Water, Beaufort Jasper Water and Sewer Authority, Spartanburg Water, and Cape Fear Public Utility Authority. These accounts involved both AMR and AMI deployments of Badger Meter products, including ORION and BEACON. When Carolina Meter and Supply was acquired by Badger Meter in 2017, Mark brought his wealth of experience in the water utility industry to our sales team. He believes in a results-driven approach to delivering profitable, accurate, and productive solutions to his utility customers. Mark has played a key role in several recent and ongoing AMI project awards, including Columbia SC (completed 10/22), Miami Beach (FL), Chesterfield County (VA), JEA (FL), Pinellas County (FL), Fayette County (GA), Orlando Utilities Commission (FL), and Robeson County (NC).

Morrice D. Blackwell

Senior Manager – Utility Solutions – National Strategic Accounts



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mblackwell@badgermeter.com

Summary of Qualifications

Morrice Blackwell joined Badger Meter in 1994 and has worked throughout Badger Meter in a variety of roles: Production Manager; Senior Manufacturing Engineer; Customer Solutions Manager; Application Engineering Manager; Marketing Manager of Network Products; Manager of Utility Product Marketing; Marketing Manager of Network AMI Solutions; and New Product Sales and Market Development Manager. In 2017, Morrice was promoted to his current position of Senior Manager - Utility Solutions for National Strategic Accounts. As a recognized industry expert in water technology products with over 25 years of experience in the areas of engineering, marketing, and sales. Morrice has also taken his talents to YouTube with "The Smart Water Show", where he provides insights on a variety of topics covering the water utility industry.

Professional Experience

Morrice began his professional career in the early 1990s as a Manufacturing Engineer at Briggs & Stratton Corp. Since joining Badger Meter in 1994, Morrice has worked in various departments, such as engineering, marketing, and sales, where he has developed an expansive knowledge of the utility industry. In 2017 he was promoted to Senior Utility Solution Manager for National Strategic Accounts. In this critical role, Morrice serves as the prime consultant with national water utility accounts in developing and implementing the right metering and technology solutions. Morrice's commitment to the water utility industry extends to his membership to the American Water Works Association.

Accomplishments

Washington Sanitation and Sewer Commission, Washington DC project: $750,000 supply and install contract with Badger Meter serving as the project coordinator. Full project management services and training provided through the department of Application Services and Customer Support at Badger Meter.

Albany, New York project: $5,000,000 supply and install contract with Badger Meter serving as prime contractor. Full project management services provided through the department of Application Services and Customer Support at Badger Meter.

Patrick Williamson, PMP
Solution Architect



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Summary of Qualifications

Patrick has been serving as a Solution Architect for Badger Meter since 2018. He works closely with cities, water utilities, and local stakeholders to raise awareness of Badger Meter product lines, develops customized Automated Meter Reading/Automated Meter Infrastructure (AMR/AMI) solutions, and builds strong, long-lasting partnerships with customers within his territory. Before joining Badger Meter, Patrick held leadership positions in various industries, including IT, healthcare, real estate, and aviation. Throughout his diverse professional career, Patrick has honed his skills in technology integration, system design, project management, and software development. In addition to his technical expertise, Patrick is committed to delivering high-quality service and providing practical and profitable solutions to his customers.

Education & Associations

University of Central Florida, *Bachelor of Science in Management of Information Systems*
University of Central Florida, *Master of Business Administration*
Project Management Institute Member – Central Florida Chapter
Project Management Professional (PMP®)
American Water Works Association – Council Member, FSAWWA MAC council

Professional Experience

Patrick held several leadership positions in various industries before joining the Badger Meter team in 2018. From 2013 to 2018, he served as the Vice President of Development & Operations at My Florida Regional MLS, the most extensive real estate multiple listing service in Florida. In this role, Patrick spearheaded numerous projects, including the development of a new corporate website and the release of an updated consumer web portal. Before joining My Florida Regional MLS, Patrick worked as the Vice President of IOD Incorporation, a leading provider of document solutions to the healthcare industry. He also served as the Director of Operations for Air Transport IT Services, Inc., where he delivered IT solutions to airlines and airports globally.

Ron Lilley
East Region - Sales Manager



Cell: 336-971-9601
rlilley@badgermeter.com

Summary of Qualifications

As East Region – Sales Manager, Ron Lilley leads a sales team which promotes the product and service offerings of Badger Meter to water utilities and municipalities from New England to Florida. Over the course of more than 35 years in the water and wastewater industry, Ron has developed experience in project management, operations, consulting, business development, and sales. In addition, Ron has developed, and managed residuals reuse programs for industrial and municipal treatment facilities. Furthermore, Ron has consulted on system designs and operations for water distribution systems and wastewater plants. Ron received dual bachelor's degrees from North Carolina State University in Raleigh, North Carolina.

Education & Associations

North Carolina State University, *Bachelor of Science, Agronomy*
North Carolina State University, *Bachelor of Science, Conservation of Natural Resources*
North Carolina Section, American Water Works Association
North Carolina Rural Water Association
Virginia Rural Water Association

Professional Experience

Ron has maintained account responsibilities in North Carolina and Virginia for the past decade. He is responsible for maintaining client relations in his territory and developing new business. He has been successful in developing metering solutions utilizing the full catalog of Badger Meter products and reading technologies. Most notably, Ron has helped develop BEACON ORION Cellular solutions for Salisbury-Rowan Utilities, Salisbury, NC; Augusta County Service Authority, Verona, VA; Lynchburg, VA and Pittsylvania County Service Authority, near Danville, VA; along with 20 more accounts now utilizing BEACON Cellular Solution.

Shauna Griffin

Senior Director – Sales



Office: 414-371-6524
Cell: 414-202-5803
sgriffin@badgermeter.com

Summary of Qualifications

Shauna Griffin is a seasoned sales and management professional with over 20 years of experience in the utility and telecommunications industries. As Senior Director of Sales for Badger Meter, Shauna brings a wealth of expertise and strategic insight to our team. Since joining Badger Meter in 2010, Shauna has developed an in-depth knowledge of flow measurement products, Automated Meter Reading, Advanced Metering Infrastructure, SaaS, and Naas products. She is also an active member of the New York section of the American Water Works Association. With her diversified sales and service portfolio, Shauna plays an essential role in crafting customized and localized metering solutions for our utility customers. Her leadership and strategic approach have helped to drive the success of our sales team, and her commitment to delivering exceptional service has enabled our customers to achieve their goals and objectives.

Education & Associations

Niagara University-Buffalo, New York, *Master of Science in Business Administration*
State University of New York at Buffalo, *Bachelor of Science in Business Administration*
American Water Works Association-New York Section
MAC Committee Chairwoman, 2014-2017
Young Professionals Committee Member

Accomplishments

Shauna has played a pivotal role in advancing the growth and market share of Badger Meter products and services, successfully working with several key accounts. She has recently worked with Columbia, SC; American Water; Miami Beach, FL, Cal Water, CA, Beaufort Jasper Water and Sewer; City of Albany, NY; Liberty Water-NY; Charlotte Water; and City of Chicago, IL on the successful deployment of Badger Meter products and services. With her extensive experience in the utility and telecommunications industries and her deep understanding of flow measurement products, Automated Meter Reading, Advanced Metering Infrastructure, SaaS, and Naas products, Shauna has provided invaluable support to our utility customers.

Bradley Pace

Field Sales Support Specialist

Office: 414-371-9682
Cell: 720-296-3025
bpace@badgermeter.com



Summary of Qualifications

Bradley Pace brings a wealth of experience in customer service and sales support to his role as a Field Sales Support Specialist at Badger Meter. With a strong foundation in customer relations, Bradley has demonstrated his ability to ensure utmost satisfaction in various capacities. As the Director of Dining Services at Windsor in Celebration, FL, he managed multiple dining facilities, collaborating with department heads to maximize operational efficiency and profits. Bradley's leadership was evident as he oversaw the hiring, training, and scheduling of over 50 employees, ensuring they were well-equipped to deliver exemplary customer service.

Education & Associations

Hartwick College, Oneonta, NY - Bachelor of Arts in Business Management
Disney Institute – Quality Service - 2000, Employee Engagement - 2021, Leadership Excellence – 2021
NHC - National Hurricane Center Volunteer
FEPA - Florida Emergency Preparedness Association Volunteer

Professional Experience

In his previous roles in business management and sales, Bradley demonstrated exceptional leadership and strategic acumen. As President of Pace Capital Management, LLC, he built a multimillion-dollar Private Wealth Management Firm from the ground up, managing client assets with discretion and achieving significant growth. His tenure as National Sales Manager at TD Waterhouse, Inc. showcased his ability to recruit, train, and manage sales teams across multiple states, resulting in substantial revenue growth and landmark deals such as the $14M naming rights agreement for the Orlando Magic's TD Waterhouse Centre.

Matthew Schuette

Manager, Technical Support



Cell: 414-371-6188
mschuette@badgermeter.com

Summary of Qualifications

Matthew Schuette boasts over a decade of expertise in customer service and technical leadership, serving as the Manager of Technical Support at Badger Meter. In this pivotal role, Matthew manages a dedicated team focused on delivering exceptional support services. His tenure at Badger Meter spans over five years, during which he has played a crucial role in optimizing technical support operations. Matthew's strategic leadership ensures that customer queries are addressed promptly and accurately, upholding Badger Meter's reputation for excellence in customer service.

Prior to his tenure at Badger Meter, Matthew showcased his leadership prowess at Motus, LLC (formerly Runzheimer), where he held the position of Customer Care Supervisor for nearly three years. Here, he successfully navigated his team through a corporate acquisition and merger, ensuring seamless transitions and maintaining high levels of customer satisfaction. Matthew's emphasis on fostering a positive work culture led to consistently high employee engagement scores and numerous promotions within his team, attesting to his effective leadership style and commitment to employee development.

Education & Associations

University of Wisconsin-Whitewater, *Bacholer of Fine Arts (BFA), 1997-2003*

Accomplishments

Matthew's career journey also includes valuable experience in sales and customer support at Konica Minolta Business Solutions U.S.A., Inc. As an Account Executive, he managed the sales process for digital printing systems, showcasing his versatility and proficiency in diverse domains of customer service and technical expertise. Matthew's dedication to continuous learning is underscored by his graduation from the PLX Certificate Series at the MRA Institute of Management, where he honed competencies in leadership excellence. With his proven track record of success and commitment to delivering outstanding results, Matthew Schuette continues to drive excellence as the Manager of Technical Support at Badger Meter.

Steven Thompson

Strategic Software Services Manager



Cell: 414-426-9108
sthompson@badgermeter.com

Summary of Qualifications

Steven is tasked with managing his team, resources, and processes that are crucial in the development of new software or the enhancement of existing products at Badger Meter. He maintains close collaboration with business managers and marketing professionals to assess the progress of ongoing projects and identify potential barriers that could impede completion. Moreover, he diligently monitors the quality of our products to ensure alignment with our customers' technical and business requirements. Steven and his team remain steadfast in their commitment to aiding Badger Meter in delivering top-notch products and differentiated software offerings that provide our customers with real-time, actionable insights into their operations, regardless of their location.

Education & Associations

Milwaukee School of Engineering, Bachelor of Science in Industrial Engineering, Minor in Business Management Accomplishments

Professional Experience

Before joining Badger Meter, Steven served as a senior engineering manager at Tom Zosel Associates, Ltd. (TZA), where he managed all project deliverables and led a team of engineers in various engineering disciplines. He acquired extensive experience collaborating with clients and leadership teams to improve and strengthen operations and identify new opportunities with potential customers. Steven has received comprehensive training in diverse software implementation fields and provided daily support to TZA's product support team in resolving challenging troubleshooting issues and identifying the most efficient practices to complete work efficiently and professionally. While at TZA, he successfully implemented labor management solutions in over 40 distribution and manufacturing centers across the United States and Canada.

Rachel Meyer

Contract Manager and Proposal Manager



Cell: 414-554-6676
rmeyer@badgermeter.com

Summary of Qualifications

As the Proposal Manager, Rachel oversees the proposal process from bid inception through submittal and award on all projects. Through her astute leadership and communication, Rachel guides a team of Proposal Leads, Specialists and Writers. Her attention to detail ensures Badger Meter remains compliant with all rules and regulations specific to every proposal. While supervising each project, Rachel successfully collaborates with the Badger Meter Legal Counsel, Field Support Services, and Sales and Marketing departments. Throughout her time at Badger Meter, Rachel has been a vital part of numerous large opportunities – most notably, Miami Dade County, Florida.

Education & Associations

St. Norbert College, Bachelor of Arts – Education, Broadfield Science
Saint Mary's University, Master of Arts – Philanthropy and Development
Chippewa Valley Museum, Vice President of the Board of Directors
Visit Eau Claire, Visit Eau Claire Grants Committee Member

Professional Experience

Rachel began her career as a middle school science teacher, where she taught for three years. In 2018, Rachel transitioned to grant writing, quickly connecting her teaching experience to the situations and skills of a grant writing professional. Rachel has worked on grants with various organizations, including The Étude Group, La Crosse Promise, and the Chippewa Valley Museum. Just before joining Badger Meter in 2022, in her role as a Development Manager at the Chippewa Valley Museum, Rachel increased the number of annual donations by 45 percent and business sponsorships by 49 percent; through the development of unique partnerships with local businesses and the acquisition of over $31,000 in grant funding. Her commitment to her community and extensive leadership and grant writing experience has made Rachel a valuable asset to the Badger Meter team.

BEACON MASTER AGREEMENT

Badger Meter

BADGER METER
BEACON SAAS MANAGED SOLUTION
MASTER AGREEMENT

This BEACON SAAS MANAGED SOLUTION MASTER AGREEMENT ("**Agreement**") is entered into as of the _____ day of _____, 2024 (the "**Effective Date**") by and between Badger Meter, Inc. , a Wisconsin corporation with offices located at 4545 W. Brown Deer Road, Milwaukee, Wisconsin 53223 ("**Badger Meter**") , and _____, with offices located at _____, and as applicable its officers, directors, members, board members, governing members, trustees, commissioners, elected and appointed officials, employees, agents, consultants and other representatives ("**Customer**").

(1) SERVICE. Badger Meter and its cellular service aggregator and data-hosting service providers ("**Suppliers**") have developed a hosted, on-demand, web-based service website ("**Portal**") accessible to its customers to provide metering and water usage service information, communicated through a cellular network, for its customers ("**Service**"), and documentation to assist customers in using the Portal and the Service ("**Documentation**").

(2) RIGHT TO ACCESS AND USE THE PORTAL AND SERVICE. In consideration of the payment of the Service Fees as set forth in Section (5), Badger Meter grants to Customer, its employees and contractors that Customer approves as users of the Service ("**Authorized User**") and Customer's approved end-user water customers ("**Authorized Consumer**") the right to remotely access and use the Service from the Portal (as currently configured) for Customer's internal business use and for the benefit of its Authorized Consumers in accordance with this Agreement. Any rights and obligations in this Agreement relative to Customer and its Authorized Consumers will only be in effect when Customer affirmatively enables the EyeOnWater Service.

(3) OWNERSHIP OF PORTAL AND SERVICE.

(a) Badger Meter Service. Badger Meter owns all rights, title and interest in the Portal, Service and Documentation, including all associated intellectual property rights. Neither Customer, nor its Authorized Users or Authorized Consumers will obtain any rights, title or interest in the Portal, Service, or Documentation or any associated intellectual property rights, other than the right to access and use the Portal, Service and Documentation, subject to the terms of this Agreement.

(b) Suggestions. If Customer provides Badger Meter any suggested improvements ("**Suggestions**") to the Portal, Service or Documentation, Customer agrees that Badger Meter will own all rights, title and interest in and to the Suggestions, even if Customer has designated the Suggestions as confidential. Badger Meter will be entitled to use the Suggestions without restriction. By entering into this Agreement, Customer irrevocably assigns, conveys and transfers to Badger Meter all right, title and interest in and to the Suggestions and agrees to provide Badger Meter with commercially reasonable assistance to document, perfect and maintain Badger Meter's rights in the Suggestions.

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(4) TERM. The term of this Agreement begins on the Effective Date and continues for a ten (10) year term unless earlier terminated in accordance with Section (16) of the Agreement (the "**Term**").

(5) FEES.

(a) Service Fees. In consideration for the right to access and use the Portal, Service and Documentation, Customer agrees to pay Badger Meter certain fees ("**Service Fees**") to obtain enterprise-wide access to the Portal, Service and Documentation, authorizing all of its Authorized Users and Authorized Consumers to use the Portal and Service and Documentation in accordance with the terms of this Agreement, pursuant to the pricing set forth in **Exhibit 1 - Fees**.

(b) Taxes All prices are exclusive of all sales, use, value added, customs and excise taxes, and any other taxes, duties, fees and charges of any kind imposed by any governmental authority in connection with this Agreement. Buyer shall pay or reimburse Badger Meter on demand for all such taxes, duties, fees and charges but Buyer shall not be responsible for any taxes imposed on, or with respect to, Badger Meter's income.

(c) Updated Schedule of Fees. At least ninety (90) days prior to the expiration date of the Term ("**Anniversary Date**"), Badger Meter will provide Customer with an updated Schedule of Fees for the Service for the upcoming contract term.

(6) RESTRICTIONS ON RIGHT TO USE. Customer agrees that Customer, its Authorized Users and Authorized Consumers will not use or permit or assist another to use the Portal, Service or Documentation in violation of this Agreement and will not:

(a) Sell, license, resell, sublicense, or otherwise permit any third parties other than Authorized Users or Authorized Consumers to access or use the Portal, Service, or Documentation.

(b) Remove patent, copyright, trademark or other intellectual property markings from the Portal, Service or Documentation.

(c) Modify, alter, tamper with, repair or otherwise create derivatives from the Portal, Service or Documentation.

(d) Copy, reverse engineer, disassemble or decompile the Portal, Service or Documentation or apply any other process or procedure to derive the source code from any software included in the Portal or Service.

(e) Use the Portal or Service in a manner that violates any applicable international, federal, state or local laws, rules or regulations.

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(f) Assert or authorize, assist or encourage any third party to assert against Badger Meter, its affiliates, customers, vendors, business partners, Servicers or licensors any intellectual property infringement Claim regarding the Portal, Service or Documentation.

(g) Transmit content or messages that are illegal, fraudulent, threatening, abusive, defamatory, or obscene.

(h) Make any unauthorized connection to Badger Meter's information technology architecture ("**Network**")

(i) Communicate any unsolicited commercial, voice, SMS, or other message.

(j) Upload or transmit any "virus," "worm," or malicious code or access, alter, or interfere with the communications of and/or information about another customer.

(k) Take actions that could cause damage to or adversely affect Badger Meter, the Service, Portal, Suppliers, Network or the property or reputation of Badger Meter or its Suppliers.

Customer and Badger Meter agree to make good faith efforts to minimize abuse or fraudulent use of the Portal and Service, to promptly report to each other any such abuse or fraudulent use of which they become aware, and to fully cooperate in any investigation or prosecution initiated by Badger Meter, its Suppliers or Customer related to abuse or fraudulent use of the Portal and Service.

(7) CUSTOMER SUPPORT. Badger Meter will provide Customer the support services described in **Exhibit 2 - Service Level Agreement**.

(8) CUSTOMER DATA.

(a) Customer Data Defined. Customer, its Authorized Users and Authorized Consumers may provide Badger Meter and its Suppliers certain, customer billing information, personally identifiable information or other content ("**Customer Data**").

(b) Ownership. The Parties agree that the Customer Data is and shall remain the sole and exclusive property of Customer and/or its licensors or Authorized Consumers, including but not limited to any intellectual rights in the Customer Data.

(c) Use of Customer Data by Badger Meter. Customer, its Authorized Users and Authorized Consumers consent to Badger Meter and its Suppliers' right to host, access, store, copy and use the Customer Data as reasonably necessary to provide, maintain, repair and enhance the Portal, Service and Documentation. Badger Meter may disclose certain Customer Data only to provide the Service to Customer, its Authorized Users and Authorized Consumers or to comply with the law or request of a governmental or regulatory body (including subpoenas or court orders as described in Section 9.) .

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(d) Customer Responsibilities. Customer is solely responsible for the development, content, operation and maintenance of the Customer Data, including but not limited to the technical operation of the Customer Data, and ensuring that calls made to the Service from Customer's network are compatible with then-current API's for the Service. Customer is responsible to ensure that Customer, its Authorized Users and Authorized Consumers comply with the Badger Meter Terms of Use Policy, the Badger Meter Privacy Policy or any other policies referenced in this Agreement and the law.

(9) CONFIDENTIALITY.

(a) Confidential Information Defined. For purposes of this Agreement, Confidential Information means all nonpublic information disclosed by one party to the other that is designated as confidential or that given the nature of the information or circumstances surrounding its disclosure, reasonably should be understood to be confidential, including but not limited to: (a) nonpublic information related to Badger Meter or its affiliates, Suppliers, business partners, technology, customers, business plans, intellectual property, promotional and marketing activities, finances and other business affairs; (b) third party information Badger Meter is obligated to keep confidential; (c) the content and existence of any discussions or negotiations between the parties; (d) Badger Meter's intellectual property used in providing the Portal, Service or Documentation; (e) Customer Data); and (f) Traffic Data, as defined below.

(b) Protection of Confidential Information. To the extent permitted by law, the parties agree to hold the other party's Confidential Information in strict confidence and will not copy, reproduce, give, sell, assign, license, market, transfer or otherwise dispose of the Confidential Information of the other party to any third parties or use the Confidential Information for any purposes whatsoever other than as contemplated by this Agreement. The Parties will take commercially reasonable steps to avoid disclosure, dissemination or unauthorized access to or use of the Confidential Information during the Term and for a period of five (5) years after the end of the Term, except that Confidential Information which is designated as a trade secret which shall continue to be subject to these confidentiality obligations in perpetuity. Customer agrees it will not misrepresent or embellish the relationship between the Parties (including by expressing or implying that Badger Meter supports, sponsors, endorses or contributes to Customer or its business endeavors) or express or imply any relationship or affiliation between Badger Meter and Customer or any other person or entity except as expressly permitted by this Agreement.

(c) Traffic Information. All de-identified data (generally, aggregated system data stripped of PII) generated or collected by Badger Meter through operation of the Portal and Service is referred to as the "**Traffic Data**." All Traffic Data shall be the Confidential Information of and owned exclusively by Badger Meter.

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(d) Third Party Requests for Confidential Information. Neither party may disclose the other party's Confidential Information except to a Supplier subject to the restrictions in this Agreement or an Authorized User or Authorized Consumer except as otherwise required by law. If a party receives a request for access to the other party's Confidential Information from a third party, the receiving party agrees to inform the disclosing party in writing within three (3) business days of receipt of the request unless prohibited by law.

(e) Exclusions from Confidential Information. Confidential Information of a party shall not include information which: (i) is in or becomes part of the public domain through no fault of the receiving party; (ii) the receiving party can prove was known to it prior to its receipt from the disclosing party without reference to the Confidential Information; (iii) is independently developed by the receiving party outside of this Agreement without use of the disclosing party's Confidential Information; or (iv) is obtained by the receiving party from a third party which had no obligation of confidentiality to the disclosing party.

(10) CUSTOMER'S REPRESENTATIONS AND WARRANTIES. Customer represents and warrants to Badger Meter that:

(a) Authority. Customer has the right and authority to enter into this Agreement and to meet its financial and legal obligations under this Agreement.

(b) Ownership. Customer, its licensors or its Authorized Consumers, own all rights, title and interest in and to the Customer Data. Customer has all rights in the Customer Data necessary to grant the rights to Badger Meter contemplated under this Agreement.

(c) Compliance with Badger Meter Policies. None of the Customer Data or the use of the Customer Data, the Portal or Service by Customer, its Authorized Users or its Authorized Consumers will violate Badger Meter's BEACON Terms of Use https://beaconama.net/termsofuse.html or Privacy Policy https://beaconama.net/privacy/privacy.html.

(d) Compliance with the Law. Neither Customer, the Authorized Users nor the Authorized Consumers will access or use the Portal, Service or Documentation in any manner that violates any applicable international, federal, state or local laws and/or regulations, including but not limited to all applicable data protection, intellectual property and privacy laws.

(11) REPRESENTATIONS AND WARRANTIES OF BADGER METER.

(a) Authority. Badger Meter represents and warrants to Customer that it has the right and authority to enter into this Agreement and to perform its obligations under this Agreement.

(b) Service Warranty. Badger Meter represents and warrants to Customer that the Portal and Service will be provided pursuant to **Exhibit 2 – Service Level Agreement**. In providing the

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Portal and Service, Badger Meter will maintain sufficient data storage capacity to satisfy the technical requirements and required storage capacity to host the Portal and Service, in its reasonable discretion. If Customer allows unauthorized users to access the Portal, Service or Documentation, this express limited warranty will immediately become null and void.

(c) **Remedy for Breach of the Express Limited Warranty**. If the Portal, Service or Documentation fail to meet the terms of the express limited warranty set forth in Section 11(b), Customer is required to notify Badger Meter promptly as defined in **Exhibit 2 – Service Level Agreement**. Customer's exclusive remedy for a breach of the express limited warranty is a Service credit to be calculated in accordance with **Exhibit 2 – Service Level Agreement**.

(d) DISCLAIMER OF IMPLIED WARRANTIES. EXCEPT FOR THE EXPRESS LIMITED WARRANTY SET FORTH IN SECTION 11(b), BADGER METER MAKES NO OTHER EXPRESS OR IMPLIED REPRESENTATIONS OR WARRANTIES AS TO THE PORTAL, SERVICE OR DOCUMENTATION. BADGER METER EXPRESSLY DISCLAIMS ANY OTHER EXPRESS OR IMPLIED WARRANTIES WITH REGARD TO THE PORTAL, SERVICE OR DOCUMENTATION, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY, TITLE, NON-INFRINGEMENT, FITNESS FOR A PARTICULAR PURPOSE, QUIET ENJOYMENT, OR IMPLIED WARRANTIES ARISING FROM A COURSE OF DEALING, INDUSTRY PRACTICE OR USAGE OF TRADE.

BADGER METER EXPRESSLY DISCLAIMS THAT THE PORTAL AND SERVICE WILL BE UNINTERRUPTED, ERROR FREE OR FREE OF HARMFUL COMPONENTS, AND EXPRESSLY DISCLAIMS ANY WARRANTIES AS TO THE RELIABILITY, QUALITY, SECURITY, CONDITION, DESIGN, SUITABILITY, INTER-OPERABILITY, AVAILABILITY, COMPLETENESS OF THE PORTAL OR SERVICE OR THAT ANY DATA, INCLUDING THE CUSTOMER DATA, WILL BE SECURE OR NOT OTHERWISE LOST OR DAMAGED.

(e) ESSENTIAL TERMS. THE ENFORCEABILITY OF THIS SECTION (11) IS ESSENTIAL TO BADGER METER'S WILLINGNESS TO ENTER INTO THIS AGREEMENT WITH CUSTOMER.

(12) LIMITATION OF LIABILITY

(a) DIRECT DAMAGES. IF ANY PARTY DEFAULTS IN ITS OBLIGATIONS UNDER THIS AGREEMENT, :THE NON-BREACHING PARTY WILL BE ENTITLED TO RECOVER FROM THE BREACHING PARTY ONLY THE ACTUAL AND DIRECT DAMAGES THAT THE NON-BREACHING PARTY MAY INCUR AS A RESULT OF SUCH BREACH.

(b) CAP ON DAMAGES. NEITHER PARTY'S NOR ANY OF ITS RESPECTIVE AFFILIATES ANNUAL LIABILITY UNDER THIS AGREEMENT WILL EXCEED THE LESSER OF (A) THE AMOUNTS THE CUSTOMER ACTUALLY PAYS BADGER METER UNDER THIS AGREEMENT FOR THE SERVICE THAT GAVE RISE TO THE CLAIM

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DURING THE 12 MONTHS PRECEDING THE CLAIM, OR (B) US $250,000. NOTHING IN THIS SECTION 12 WILL LIMIT CUSTOMER'S OBLIGATION TO PAY BADGER METER FOR USE OF THE SERVICES PURSUANT TO SECTION 5.

(c) LIMITS ON DAMAGES. EXCEPT FOR PAYMENT OBLIGATIONS ARISING UNDER SECTIONS (13) AND (14) (INDEMNIFICATION), NEITHER PARTY NOR ANY OF ITS RESPECTIVE AFFILIATES, SUPPLIERS OR LICENSORS WILL BE LIABLE TO THE OTHER PARTY, AN AUTHORIZED USER, AUTHORIZED CONSUMER OR ANY THIRD PARTY FOR ANY CLAIMS, DEMANDS, ACTIONS, LOSSES, DAMAGES, FINES, JUDGMENTS SETTLEMENTS, COSTS, EXPENSES, ATTORNEY'S FEES, AND COURT COSTS OR ANY OTHER LIABILITIES OF ANY NATURE WHATSOEVER, INCLUDING BUT NOT LIMITED TO THE PORTAL, SERVICE, DOCUMENTATION, OR THE SUBJECT MATTER OF THIS AGREEMENT ("CLAIM").

FURTHER, NEITHER PARTY NOR ANY OF EITHER PARTY'S RESPECTIVE AFFILIATES, SUPPLIERS OR LICENSORS SHALL BE LIABLE TO THE OTHER PARTY, AN AUTHORIZED CONSUMER OR ANY THIRD PARTY FOR ANY SPECIAL, INDIRECT, INCIDENTAL, CONSEQUENTIAL, EXEMPLARY, PUNITIVE OR ENHANCED DAMAGES, LOST REVENUE OR PROFITS OR DIMINUTION OF VALUE, OR OTHER ECONOMIC ADVERSITY, CLAIMS RESULTING FROM LOSS OF CUSTOMER DATA, OR BREACH OF CONFIDENTIALITY, ARISING OUT OF, OR RELATING TO, AND/OR IN CONNECTION WITH ANY BREACH OF THIS AGREEMENT, REGARDLESS OF WHETHER SUCH DAMAGES WERE FORESEEABLE, WHETHER OR NOT THE PARTY WAS ADVISED OF THE POSSIBILITY OF SUCH DAMAGES, AND THE LEGAL OR EQUITABLE THEORY (CONTRACT, TORT OR OTHERWISE) UPON WHICH THE CLAIM IS BASED.

NEITHER BADGER METER NOR ANY OF ITS AFFILIATES, SUPPLIERS OR LICENSORS WILL BE RESPONSIBLE FOR ANY COMPENSATION, REIMBURSEMENT OR DAMAGES ARISING IN CONNECTION WITH: (A) CUSTOMER'S INABILITY TO USE THE PORTAL OR SERVICE, INCLUDING AS A RESULT OF ANY: (i) TERMINATION OR SUSPENSION OF THIS AGREEMENT OR CUSTOMER'S USE OF OR ACCESS TO THE SERVICE ; OR (ii) WITHOUT LIMITING ANY OBLIGATIONS UNDER THE SERVICE LEVEL AGREEMENT, ANY UNANTICIPATED OR UNSCHEDULED DOWNTIME OF ALL OR A PORTION OF THE SERVICE FOR ANY REASON, INCLUDING BUT NOT LIMITED TO AS A RESULT OF A POWER OUTAGE, SYSTEM FAILURE OR OTHER INTERRUPTION; (B) THE COST OF PROCUREMENT OF SUBSTITUTE SERVICES; (C) ANY INVESTMENTS, EXPENDITURES OR COMMITMENTS MADE BY CUSTOMER IN CONNECTION WITH THIS AGREEMENT OR CUSTOMER'S USE OF OR ACCESS TO THE SERVICE OR (D) ANY UNAUTHORIZED ACCESS TO, ALTERATION OR THE DELETION, DESTRUCTION, DAMAGE, LOSS OR FAILURE TO STORE ANY OF CUSTOMER'S DATA.

(13) CUSTOMER'S INDEMNIFICATION OBLIGATIONS.

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(a) Generally. Customer agrees to defend, indemnify, and hold harmless Badger Meter as well as its parents, subsidiaries, affiliates, officers, employees, agents, licensors, Suppliers, representatives and customers and each of their respective employees, officers, directors, members and representatives (the "**Badger Meter Parties**"), against any and all Claims made against the Badger Meter Parties by any third party arising out of or related to: (i) Customers, Authorized Users or Authorized Consumers access and use of the Portal, Service, or Documentation; (ii) the subject matter of this Agreement ; (iii) violation of applicable law by Customer, its Authorized Users or Authorized Consumers; or (iv) a dispute between Customer and any Authorized User or Authorized Consumer.

(b) Procedure for Indemnification. Upon receipt of a Claim, Badger Meter will provide prompt written notice to Customer of the Claim for which the Badger Meter Parties seek indemnification. Badger Meter's failure to promptly notify Customer will only affect Customer's obligation to indemnify the Badger Meter Parties to the extent such failure causes actual prejudice to Customer's ability to defend the Claim. The notice must include a description of the Claim with reasonable detail of the facts giving rise to the Claim. Upon receipt of notice of a Claim, Customer shall be obligated to assume and control the defense of such Claim at its own expense. The Badger Meter Parties may retain their own counsel to cooperate in defending the Claim, at their own expense. The Badger Meter Parties agree to cooperate with Customer in defending the Claim and in making available to Customer all witnesses, records, materials and information in their possession or control to assist in the defense of the Claim, as is reasonably requested by Customer. Customer may not settle or compromise any Claim or consent to the entry of any judgment unless Badger Meter provides prior written consent and the Badger Meter Parties are given an unconditional written release from Customer with respect to the Claim. In the event Customer fails to defend, indemnify, and hold the Badger Meter Parties harmless, after notice of a request for indemnification, the Badger Meter Parties shall be entitled to assume the defense and seek reimbursement from Customer for all losses with regard to the Claim and all attorneys' fees and litigation costs expended by the Badger Meter Parties in defending the Claim.

(14) BADGER METER'S INDEMNIFICATION OBLIGATIONS.

(a) Generally. Subject to the limitations of liability provisions set forth in Section (12) of this Agreement, Badger Meter agrees to indemnify, defend and hold harmless Customer, and as applicable its officers, directors, members, board members, governing members, trustees, commissioners, elected and appointed officials, employees, agents, consultants and other representatives ("**Customer Parties**") from and against any legal proceedings filed against the Customer Parties by a third party based upon the allegations that the Portal, Service or Documentation infringes or violates a third party's patent, copyright or other intellectual property rights ("**Intellectual Property Dispute**").

(b) Mitigation. If the Portal, Service or Documentation becomes the subject of an Intellectual Property Dispute and is enjoined, Badger Meter will have the right to (i) procure for Customer

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the right to continue using the Portal and Service; (ii) modify the Portal and Service to avoid allegations of infringement, provided the modification does not materially change the functionality of the Portal and Service; (iii) replace the Portal and Service with an equally suitable, functionally equivalent, non-infringing Portal and Service; or (iv) immediately terminate this Agreement and provide Customer with a refund of any unused pre-paid portion of the Service Fees.

(c) Exclusions. Badger Meter assumes no liability for and Customer will not be entitled to receive indemnification from Badger Meter for any Intellectual Property Dispute which results directly and solely from (i) Customer's failure to use the Portal or Service in conformity with the Documentation; (ii) Customer's actions in combining the Service with any third party software, technology, hardware or data; or (iii) Customer's violation of access granted in Section (2).

(d) Procedure for Indemnification. Upon receipt of an Intellectual Property Dispute, Customer will provide prompt written notice to Badger Meter of the Intellectual Property Dispute for which the Customer Parties seek indemnification. Customer's failure to promptly notify Badger Meter will only affect Badger Meter's obligation to indemnify the Customer Parties to the extent such failure causes actual prejudice to Badger Meter's ability to defend the Claim. The notice must include a description of the Intellectual Property Dispute with reasonable detail of the facts giving rise to the Intellectual Property Dispute. Upon receipt of notice of an Intellectual Property Dispute, Badger Meter shall be obligated to assume and control the defense of such Intellectual Property Dispute at its own expense. Customer may retain its own counsel to cooperate in defending the Intellectual Property Dispute, at its own expense. Customer agrees to cooperate with Badger Meter in defending the Intellectual Property Dispute and in making available to Badger Meter all witnesses, records, materials and information in Customer's possession or control to assist in the defense of the Intellectual Property Dispute as is reasonably requested by Badger Meter. Badger Meter may not settle or compromise any Intellectual Property Dispute or consent to the entry of any judgment unless Customer provides prior written consent and the Customer is given an unconditional written release from Badger Meter with respect to the Intellectual Property Dispute. In the event Badger Meter fails to defend, indemnify, and hold the Customer Parties harmless, after notice of a request for indemnification, Customer shall be entitled to assume the defense and seek reimbursement from Badger Meter for all losses with regard to the Intellectual Property Dispute and all attorneys' fees and litigation costs expended by Customer in defending the Intellectual Property Dispute.

(15) TERMINATION.

(a) Termination for Convenience. Customer may terminate this Agreement for any reason by providing Badger Meter written notice of termination at least ninety (90) days in advance of the effective date of such termination. Badger Meter shall be entitled to receive just and equitable compensation for any services performed hereunder through the date of the termination. After receipt of a notice of termination for convenience, Badger Meter will exercise reasonable

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diligence to accomplish the cancellation or diversion of related services and settle all outstanding liabilities associated with the cancellation of such commitments.

(b) Termination for Cause. A party is in default under this Agreement if it materially breaches or materially fails to perform its obligations under this Agreement, which includes any failure to make undisputed payments pursuant to Section (5) ("**Event of Default**").

(c) Opportunity to Cure. Upon the occurrence of an Event of Default, the non-defaulting party shall deliver a written notice describing the Event of Default (the "**Cure Notice**"). If the receiving party has not cured the Event of Default within thirty (30) days after receipt of the Cure Notice, then the non-defaulting party shall have the right to terminate this Agreement, at its option, by delivering to the defaulting party a written notice of termination (the "**Termination Notice**").

(d) Immediate Right to Terminate. Badger Meter shall have the right to immediately terminate this Agreement: (i) in order to protect its Confidential Information, or its Intellectual Property Rights in the Portal or Service; (ii) in order to comply with applicable law (iii) if Customer makes any representation or warranty which is materially untrue as of the Effective Date or at any time during the Term; or (iv) upon an assignment for the benefit of creditors, if Customer suffers or permits the appointment of a receiver for its business or assets, or avails itself of, or becomes subject to, any proceeding under any statute relating to insolvency or for the protection of creditor rights or if a party becomes insolvent or technically bankrupt.

(e) Termination. Upon delivery of the Termination Notice to Customer by Badger Meter: (i) Badger Meter may cease providing Services to Customer, its Authorized Users and Authorized Consumers; (ii) Customer, its Authorized Users and Authorized Consumers will have no further right to use the Portal, Service or Documentation, will immediately cease using the Portal, Service and Documentation, and will receive no further Service; (iii) Customer will deliver to Badger Meter any Confidential Information of Badger Meter's in its possession or control, and (iv) Badger Meter may cease gathering data from Customer's endpoints, within a reasonable time, up to one hundred twenty (120) days after termination. Within a reasonable time after termination, at Badger Meter's discretion, Badger Meter will scrub the personally identifiable information from the Customer Data. Customer must immediately return, or at Badger Meter's option, destroy all Documentation provided to Customer by Badger Meter. Customer will remain liable for any Service Fees incurred prior to termination.

(f) Post – Termination Assistance. At either the expiration of the Term without renewal, or upon a default by Customer and subsequent termination, Badger Meter will provide post-termination data retrieval assistance to Customer for an additional fee, which shall be invoiced at the rate of $200/hour, with the number of hours required determined by the amount of data Customer wishes to extract from the Service. Any additional post-termination assistance from Badger Meter is subject to mutual agreement by the parties.

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(g) Reinstatement Fee. If Customer desires to reinstate access to the Portal and Service after termination, a reinstatement fee of $7.50 per endpoint reinstated will apply.

(16) SUSPENSION OF SERVICES.

(a) Nonpayment. Badger Meter may suspend the Service and access to the Portal and shall not be obligated to provide access to the Portal and Service to Customer, its Authorized Users or Authorized Consumers until all outstanding undisputed invoices for the Service have been paid in full, including any fees associated with suspension of the Service.

(b) Network Protection. Customer acknowledges that Badger Meter (and any of its Suppliers) may restrict, or suspend all or a portion of the Service or limit the Service as may be reasonably necessary to prevent or limit suspected fraud or any problem that materially and adversely affects the performance of the Service and/or is likely to do substantial damage to Badger Meter, Badger Meter's customers or Suppliers. Some of these actions may interrupt or prevent legitimate communications and usage. Such situations may arise: (a) if a device deployed on the Service is materially out of compliance with the technical requirements; (b) in case of actual or suspected fraudulent use; or (c) in case of disruptive or damaging operation.

(c) Notification. In the event that Badger Meter or one of its Suppliers restricts, suspends or cancels any portion of the Service or limits the operation of the Service, Badger Meter shall use reasonable efforts to (i) promptly notify Customer in advance; (ii) provide reasonable information regarding its identification of the issue that resulted in the actions taken; and (iii) reinstate Service upon resolution of the issue as soon as practicable and in any case within a reasonable timeframe.

(d) Immediate Suspension. Badger Meter may suspend Customer's or an Authorized Users or Authorized Consumers right to access or use the Service immediately upon notice to Customer if Badger Meter determines:

(i) Use of the Service poses a security risk to the Service, the Network or any third party, adversely impacts the Service, the Network or data of any other Badger Meter customer, or subjects Badger Meter or any third party to liability or fraud.

(ii) Customer or one of its Authorized Users or Authorized Customers is in breach of this Agreement or is delinquent on its payments for more than fifteen (15) days.

(iii) Badger Meter ceases to operate in the ordinary course, has an assignment for the benefit of creditors or similar disposition of its assets or becomes the subject of any bankruptcy, reorganization, liquidation dissolution or similar proceeding.

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(e) Reinstatement. Badger Meter will use commercially reasonable efforts to restore Customer's rights to use and access those portions of the Service or accounts that gave rise to the suspension promptly after Customer has resolved the problem giving rise to the suspension.

(f) Effect of Suspension. If Badger Meter suspends Customer's right to access or use all or any portion of the Service or the Portal:

(i) Customer remains responsible for all Service Fees and undisputed charges incurred through the date of suspension.

(ii) Customer remains responsible for any applicable Service Fees and charges for any Services to which Customer has continued access as well as applicable fees and charges.

(iii) Customer will not be entitled to any service credits under the Service Level Agreement for any period of suspension.

(iv) Badger Meter's right to suspend the Services is in addition to Badger Meter's right to terminate this Agreement.

(17) COMPLIANCE WITH REGULATIONS; DATA PRIVACY. Each party is responsible for complying with industry standards and such applicable laws and regulations, including, but not limited to, the generally accepted practices in the information technology service management industry for providing secure data handling and management, including meeting or exceeding Information Technology Infrastructure Library (ITIL) standards for logical and physical security and all requirements regarding the protection of data in its possession or under its control. A party will not be liable for any failure of the other party to comply with this requirement.

(18) DATA SECURITY AND RECOVERY.

(a) Data Security. In order to protect the Customer Data and prevent unauthorized access to or use of the Customer Data, Portal or Service, Badger Meter has implemented commercially reasonable internal procedures and systems designed to protect the privacy and security according to the requirements set forth in **Exhibit 3 – BEACON SaaS Managed Solution Security Policy** ("**Security Standards**"), consistent with applicable international, federal, state and local laws. The purpose of the security policy is to identify reasonably foreseeable and internal risks to security and unauthorized access to Badger Meter's Network and minimize security risks, including through risk assessment and regular testing. Badger Meter will designate one or more employees to coordinate and be accountable for the security program.

(b) Protection of Customer Data. Badger Meter will implement reasonable and appropriate measures for the Badger Meter Network designed to help Customer secure the Customer Data against accidental or unlawful loss, access or disclosure in accordance with Badger Meter's Security Standards. Badger Meter may modify its Security Standards from time to time but will

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continue to provide at least the same level of security as described in the Security Standards as of the Effective Date. The security and data privacy provisions in this Section contain Badger Meter, and its Suppliers entire obligation regarding the security, privacy and confidentiality of the Customer Data.

(c) Data Storage. Badger Meter will employ commercially reasonable storage (including backup, archive and redundant data storage) and commercially reasonable precautions to prevent the loss of or alteration of Customer Data, but does not guarantee against any such loss or alteration. Badger Meter will not serve as Customer's official record keeper. Customer will maintain source documents of the Confidential Information (such as billing information) hosted by Badger Meter under this Agreement.

(d) Customer Responsibilities. Customer is responsible for properly configuring and using the Service and taking steps to maintain appropriate security, protection and backup of the Customer Data, including but not limited to the use of encryption technology to protect Customer Data from unauthorized access and will perform routine archiving of the Customer Data. Further, Customer is responsible for regularly auditing its Authorized Users, and will enact internal procedures to remove Authorized Users from the Service if their job duties change and access is no longer appropriate, or if an Authorized User separates from Customer.

(e) Data Transmission Risks.

(i) Cellular Transmissions. Badger Meter cellular endpoints conform to the AES256 encryption standards or the latest AES standard in effect. Customer acknowledges that neither Badger Meter nor its Suppliers can guarantee the privacy or security of any cellular transmissions as part of the Service. Customer acknowledges that cellular transmissions are capable of being intercepted by third parties without the knowledge or permission of Badger Meter or its Suppliers. Badger Meter and its Suppliers shall not be liable to Customer, the Authorized Users, the Authorized Consumers or any third party for interception or unauthorized use of any data transmitted through the cellular network, as part of the Service.

(ii) Internet Transmissions. Customer acknowledges that security of transmissions over the Internet cannot be guaranteed. Badger Meter is not responsible for: (i) Customer's access to the Internet; (ii) interception, unauthorized use or interruptions of communications through the Internet; or (iii) changes or losses of data through the Internet, in each case other than to the extent caused solely by Badger Meter. In order to protect Customer Data, Badger Meter may suspend Customer, Customer's Authorized Users or Authorized Consumers access to or use of the Badger Meter Portal or Service via the Internet immediately, without prior notice, pending an investigation of any potential security breach.

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(f) Coverage Availability. The Service is provided using a wireless network. Actual signal availability in the Service Area will depend on the device used to access the Service as well as coverage for the applicable wireless network provided in specific geographic regions. Coverage may be refused, interrupted or limited by environmental factors such as signal strength, buildings, weather, geography, topography, or by factors affecting the Suppliers, such as usage concentration or by facilities changes, modifications, updates, relocations, repairs, maintenance or other similar activities necessary for the proper or improved operation of the Supplier's facilities. Any such factors may result in dropped and blocked connections or slower data speeds. Neither Badger Meter nor any of its Suppliers will be responsible to Customer or any of Customer's Authorized Users or Authorized Consumers for any such lapses in or obstructions to coverage. The Service Area is subject to change from time to time. Should Badger Meter receive notice from its Supplier that such Supplier intends to discontinue its support for the Badger Meter Service in all or part of the Service Area, Badger Meter will provide Customer with as much advance notice as practicable under the circumstances.

(g) Password Protection. Customer, its Authorized Users and Authorized Consumers will be required to select and use certain user names, passwords or codes to access and use the Service and Portal. Customer assumes sole responsibility for the selection, management and use of any codes or passwords as may be permitted or required for the access to and use of the Portal and Service by Customer, its Authorized Users and its Authorized Consumers. Customer agrees to maintain the privacy of usernames and passwords associated with the Badger Meter Portal and Service. Customer shall remain responsible for all activities that occur under Customer's password or Internet account. Customer will immediately notify Badger Meter of any unauthorized use of Customer's password or Internet account or any other breach of security, and ensure that Customer exits from Customer's Internet account at the end of each session. Badger Meter shall not be liable for any damages incurred by Customer or any third party arising from Customer's failure to comply with this Section.

(h) Third Party Access. To the extent that Customer requests that Badger Meter provide any Customer Data to Authorized Users, Authorized Consumers or third parties or any non-U.S. location, Customer represents that it has acquired any consents or provided any notices required to transfer such content or information and that such transfer does not violate any applicable international, federal, state or local laws and/or regulations.

(i) Security Breach. If Badger Meter becomes aware of a security breach or that compromises the security, confidentiality or integrity of the Customer Data ("Breach"), Badger Meter will promptly notify Customer in writing and take appropriate actions to resolve the Breach. Badger Meter will reasonably cooperate with Customer to investigate the nature and scope of any Breach. In its initial notification to Customer, Badger Meter will provide Customer with: (i) a description of the Breach; (ii) the estimated impact of the Breach on Customer's Data; (iii) the name and contact information of the person at Badger Meter who will be primarily responsible for resolving the issues for Customer; and (iv) the investigation taken and the suggested corrective action. Badger Meter will provide commercially reasonable cooperation to Customer

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in investigating, assisting with notification of the Breach and taking corrective action as requested by Customer.

(j) Notification of Breach. In the event that applicable law requires notification to individuals of an Breach or if requested by Customer, Badger Meter will take additional mitigation steps for the benefit of Customer, including, but not limited to, providing reasonable assistance with drafting and sending of required notifications.

(19) CHANGES.

(a) Right to Make Changes. Badger Meter may from time to time make changes, without Customer's approval, to the Terms of Use, the Privacy policies, the Portal, Service or Documentation, provided that such changes: (i) do not increase Customer's total costs of accessing and using the Portal and Service during the Term of this Agreement ; (ii) do not require Customer to make any material changes to its systems, software, equipment, policies or procedures ; (iii) do not have a material adverse impact on the functionality, interoperability, performance, reliability, security or resource efficiency of the Portal and Service ; (iv) do not materially reduce the scope of the Portal and Service; and (v) are otherwise consistent with this Agreement. Badger Meter will publicize any changes by a notice given to Customer or by a prominent announcement on the Portal. Any such changes will not take effect until thirty (30) days after posting of notice on the Portal. By continuing to use the Service after the effective date of the modification to a policy, Customer agrees to be bound by the modified policies. It is Customer's responsibility to check the Badger Meter site regularly for modifications to the policies.

(b) Emergency Changes; System Improvement. Notwithstanding the foregoing, Badger Meter and its Suppliers may make temporary changes to the Portal and Service required by an emergency or threat to the security or integrity of the Portal or Service, to respond to Claims, litigation or loss of license rights related to third party intellectual property rights or to comply with the law or requests of a government entity, as well as take actions deemed reasonably necessary to protect or optimize the Service. Some of these actions may interrupt or prevent legitimate communications and usage, including, for example, use of message filtering/blocking software to prevent SPAM or viruses, limitations on throughput, and scheduled maintenance. Badger Meter will provide notice by sending a message to the email address then associated with Customer's account and by posting it on Badger Meter's Portal. Badger Meter will provide Customer with: (i) at least thirty (30) days' advance notice of planned maintenance by Badger Meter; and (ii) as much advance notice as reasonably possible of emergency changes or maintenance by Badger Meter or its Suppliers. Any actions resulting in permanent changes shall only be made in compliance with Section (19) (a).

(20) RIGHT TO SUBCONTRACT. Badger Meter may subcontract the performance of any of its cellular or web-services duties or obligations under this Agreement, and will use commercially

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reasonable efforts to subcontract only with subcontractors that have the requisite skills to perform any subcontracted obligations in accordance with the terms of this Agreement.

(21) GENERAL.

(a) Binding Agreement. This Agreement is binding upon and will inure to the benefit of the parties and their respective successors and assigns.

(b) Affiliates. This Agreement covers only the employees and agents of Customer. If Customer wishes to have any entity that directly or indirectly controls, is controlled by or is in common control with Customer to access the Portal and use the Service, Customer's Affiliate must execute a separate agreement with Badger Meter.

(c) Assignment. Either party may assign its rights and obligations under this Agreement with the express written consent of the other party, which consent will not be unreasonably withheld or delayed. Any purported assignment or transfer in violation of this Section will be null and void. Notwithstanding the foregoing, Badger Meter may assign its rights and obligations under this Agreement without the consent of Customer: (i) upon a sale of a majority of its outstanding capital stock to an affiliate or third party; (ii) if it sells all or substantially all of its assets; (iii) in the event of a merger; or (iv) in the event of a similar change of control.

(d) No Waiver. The waiver or failure of either party to exercise any right or remedy provided under this Agreement will not be deemed a waiver of any further right or remedy. All waivers must be in writing to be effective.

(e) Severability. If any portion of this Agreement is held to be invalid or unenforceable, the remaining portions of this Agreement will remain in full force and effect. Any invalid or unenforceable portions of this Agreement will be interpreted to effectuate the intent of the original Agreement. If such construction is not possible, the invalid or unenforceable portion of the Agreement will be severed from this Agreement, and the remainder of the Agreement will remain in full force and effect.

(f) Independent Contractors. The Parties agree that they are independent contractors and that neither party nor any of their respective affiliates, is an agent of the other for any purpose or has the authority to bind the other.

(g) Savings Clause. The invalidity of any provision of this Agreement shall not affect the validity and binding effect of the remaining provisions.

(h) No Third Party Beneficiaries. Nothing express or implied in this Agreement shall confer any rights, remedies, obligations or liabilities whatsoever to third parties which are not signatories to this Agreement.

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(i) Governing Law. To the extent permitted by law, the terms of this Agreement are governed by the laws of the State of Wisconsin, without reference to its conflict of laws principles. The United Nations Convention for the International Sale of Goods does not apply to this Agreement.

(j) No Claims Against or Liability of Badger Meter Suppliers. Customer acknowledges that the Service utilizes services that are furnished to Badger Meter and one or more Suppliers pursuant to agreements between Badger Meter and its Suppliers. Neither Customer nor any Authorized Users or Authorized Consumers has a contractual relationship with Badger Meter's Suppliers and neither Customer nor its Authorized Users or Authorized Consumers is a third party beneficiary of or will have any claim against Badger Meter's Suppliers in the event any such agreement expires or is terminated. Customer further acknowledges that the Suppliers disclaim all liability of any nature, whether legal or equitable, to Customer, its Authorized Users or Authorized Consumers, whether direct, indirect, incidental or consequential, arising out of the use of Badger Meter Portal or Service by Customer, its Authorized Users or Authorized Consumers, including any liability for personal injury or death, failure to be able to use the Service or otherwise. Customer agrees that neither it nor any Authorized Users or Authorized Consumers shall have any Claim against the Supplier of any kind with respect thereto, whether arising out of breach of contract, warranty, negligence, and tort or otherwise.

(k) Dispute Resolution.

(i) Initial Resolution Efforts. The parties shall act in good faith and use commercially reasonable efforts to promptly resolve any claim, dispute, controversy or disagreement (each a "**Dispute**") between the parties or any of their respective subsidiaries, affiliates, successors and assigns under or related to this Agreement or any document executed pursuant to this Agreement or any of the transactions contemplated hereby.

(ii) Mediation. If the parties cannot resolve the Dispute within ten (10) days after initial notice of the Dispute, the Dispute shall be submitted for resolution to the Judicial Arbitration and Mediation Services ("**JAMS**"), or its successor ("**Mediation**") in Chicago, Illinois. If the mediator is unable to amicably resolve the Dispute, then the mediator will refer the matter to a JAMS arbitrator to resolve the Dispute. Neither party shall seek, nor shall be entitled to seek, binding outside resolution of the Dispute unless and until the parties have been unable to amicably resolve the dispute as set forth in this Section, and then only in compliance with the procedures set forth in this Section. Except for Disputes relating to issues of (i) proprietary rights, including, but not limited to, intellectual property and confidentiality, and (ii) any provision of this Agreement which expressly or implicitly provides for the parties to reach mutual agreement as to certain terms, any Dispute not resolved by amicable resolution as set forth in this Section shall be governed exclusively and finally by arbitration described below.

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(iii) Arbitration. Either party may initiate arbitration with respect to a Dispute by submitting a written demand at any time following Mediation.

- Arbitration shall be administered by JAMS, or its successor, pursuant to the Comprehensive Arbitration Rules and Procedures.

- Either party may commence arbitration by notifying the other in writing that arbitration is desired and setting forth the topics to be arbitrated. Within thirty (30) days of mailing a notice of arbitration, the party receiving the notice may specify additional topics of arbitration in writing to the other party. Within forty-five (45) days of the mailing of the notice of arbitration, the parties will confirm and attempt to identify an arbitrator associated with JAMS to resolve the Dispute. If the parties cannot agree, JAMS will appoint an arbitrator who is a lawyer familiar with software as a service and information technology support services agreements.

- Except to the extent, if any, that law applicable to the dispute requires that arbitrators retain authority to award punitive damages, the arbitrators shall not have such authority.

- Each party will bear its own costs of the arbitration. The resulting award may be confirmed and reduced to judgment in any court of competent jurisdiction. With respect to any such post-arbitral judicial proceedings, the parties consent to the exercise of personal jurisdiction over them by the state and federal courts sitting in Milwaukee, Wisconsin and waive any objection that they would otherwise have to venue in such courts.

- The duty to arbitrate does not preclude either party from pursuing interlocutory or provisional relief pending arbitration in any court of competent jurisdiction if such relief is necessary in order to preserve the practical ability of the arbitrator to make an effective award or to avoid a genuine and substantial risk of injury that cannot be adequately remedied by an eventual arbitral award. Neither the pursuit of nor the failure to provide any such interlocutory or provisional remedy in court, however, shall relieve either party of the duty to pursue ultimate resolution of the dispute through arbitration as provided for herein.

- The arbitration shall be governed by and construed and interpreted in accordance with the Federal Arbitration Act, 9 U.S.C. §§ 1 et seq.

(22) INJUNCTIVE RELIEF: Notwithstanding the provisions of Section 21, to the extent permitted by law, Badger Meter shall have the right to pursue injunctive, declaratory or other relief by the state

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and federal courts sitting in Milwaukee, Wisconsin and waive any objection that they would otherwise have to venue in such courts.

(23) NOTICES. All notices shall be in writing and delivered to the other party by means of: (a) personal delivery set forth below; (b) courier (signature required upon delivery); (c) recognized overnight courier, at the following address; (d) fax with proof of delivery; or (e) via electronic mail with proof of delivery: Notices sent by email will be effective when sent and notices posted on Badger Meter's Portal will be effective upon posting. All notices must be provided in the English language.

If to Badger Meter:
Legal Department, Attn: Assistant General Counsel
4545 W. Brown Deer Road
Milwaukee, WI 53223

If to Customer:

(24) SURVIVABILITY. Any provision of this Agreement which by its nature should survive termination or expiration of this Agreement shall survive its expiration or termination.

(25) LIMITATION OF CLAIMS. No action arising under or in connection with this Agreement, regardless of the form, may be brought by Customer more than two (2) year after Customer becomes aware of or should reasonably have become aware of the occurrence of events giving rise to the Claim.

(26) FORCE MAJEURE. Neither party shall be liable to the other or any third party by reason of any failure or delay of its obligations under this Agreement where the delay or failure results from any cause beyond its reasonable control, including, but not limited to, acts of God, fires, storms, floods or other acts of nature, explosions, systemic electrical telecommunications or other utility failures, earthquakes, hurricanes, tornados, natural disasters, strikes, shortage of materials, work stoppage or other labor dispute, embargoes, riots, insurrections, acts of war or terrorism, or any action or restraint by court order or public or governmental authority ("**Force Majeure Event**"). The party subject to the Force Majeure Event agrees to use commercially reasonable efforts to minimize the impact of the Force Majeure Event on the other party.

(27) AMENDMENT. This Agreement may only be amended by a written document signed by both parties. Badger Meter will not be bound by and specifically objects to any term, condition or other provision which is different from or in addition to the provisions of this Agreement (whether or not it would materially alter this Agreement) and which is submitted by Customer in any receipt, acceptance, confirmation, agreement, purchase order, correspondence or other documentation. If the terms of this Agreement are not consistent with the terms contained in any policy, the terms contained in this Agreement will control, except that the Service Terms will control over this Agreement.

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(28) ENTIRE AGREEMENT. This Agreement, including all applicable Exhibits and policies, constitutes the entire agreement between the parties with regard to its subject matter. This Agreement supersedes all prior or contemporaneous agreements, discussions, negotiations, undertakings, communications, representations or proposals, whether written or oral.

(29) ORIGINALS, COUNTERPARTS. This Agreement may be executed in several counterparts, each of which shall be deemed an original and all of which together will be deemed to constitute one and the same document. This Agreement may be executed and delivered by facsimile signature or portable document format (.pdf) by electronic mail.

IN WITNESS WHEREOF, the authorized representatives of the parties hereby bind the parties to this BEACON SaaS Managed Solution Master Agreement by signing below:

BADGER METER, INC

Signature	Signature
Printed Name	Printed Name
Title	Title
Date	Date

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EXHIBIT 1

FEES

1. **Service Fees.** Customer agrees to pay the following Service Fees, as consideration for the right to access and use the Portal, Service and Documentation during the Term, as well as applicable Taxes.

2. **Invoicing.** Badger Meter shall issue invoices to Customer for Service and Support Fees on a monthly basis. Undisputed payments are due within thirty (30) days of the date of the invoice.

3. **Interest and Costs**. Customer agrees that it will be responsible to pay Badger Meter for any collection expenses incurred by Badger Meter, including interest at the highest interest rate permitted by law, and reasonable attorneys' fees and court costs incurred by Badger Meter in enforcing its rights under this Agreement.

BEACON Monthly Endpoint Subscription Fee

Hourly Data, Once Daily Call-in: $0.68 per endpoint per month

Invoicing for monthly endpoint subscription fee starts at time of endpoint activation or 6 months from date of shipment, whichever comes first.

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EXHIBIT 2

SERVICE LEVEL AGREEMENT

This Service Level Agreement ("SLA") will go into effect upon completion of Endpoint Provisioning, which is the point during meter installation when the endpoint is installed and verified to provide data to the BEACON SaaS Managed Solution.

1. CUSTOMER SUPPORT.

Service Levels. Within one (1) hour after a request for Customer Support Services from Customer, Badger Meter will respond to such request in accordance with the procedures set forth below. Customer may report the problem by phone, email or website provided by Badger Meter to Customer. Badger Meter will use commercially reasonable efforts to meet the response and resolution times set forth below:

Severity Level	Response Time	Resolution Time
Level 1 – Service is unavailable	one (1) hour	six (6) hours
Level 2 – certain interruptions but service is still available	twenty-four (24) hours	twenty-four (24) hours
Level 3 – minor intermittent malfunction	twenty-four (24) hours	three (3) days
Level 4 – suggestions for new features or enhancements to BEACON Portal and Service	twenty-four (24) hours	Evaluated, scheduled and prioritized for potential inclusion in upcoming releases.

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2. BEACON PORTAL AND SERVICE AVAILABILITY PROMISE.

Badger Meter will use commercially reasonable efforts to fulfill the following Service Promise:

- BEACON Portal and Service Availability of 99% within each calendar month, excluding any Emergency Downtime, Scheduled Downtime, any unavailability of the Portal and Service due to any Force Majeure Event and any unavailability of the Portal and Service less than fifteen (15) minutes in duration following written notice thereof.

Definitions

"**Availability**" is the monthly uptime percentage with normal functionality of the Portal and the Service, calculated as described below.

"**Emergency Downtime**" means any unavailability of the Portal or Service due to a temporary suspension by Badger Meter to perform maintenance to address any, urgent and unexpected issue with the Portal or Service.

"**Scheduled Downtime**" means any unavailability of the Portal or Service due to scheduled maintenance. Scheduled maintenance may occur between 10:00 p.m. on Saturday to 4:00 a.m. on Sunday (Pacific Time) every week. Badger Meter shall have the right to change the scheduled maintenance times upon notice to Customer posted on the BEACON Portal.

CALCULATION of BEACON Portal and Service Availability:

Availability is measured by Badger Meter through standard monitoring software that tests the application availability at least every five (5) minutes and logs unavailability incidents (date and UTC time) for each monitored component.

Availability is calculated as the percentage of uptime in the applicable calendar month, excluding scheduled downtime:

$$1 - \frac{Total\ Unavailability\ Minutes}{Total\ Minutes\ of\ Service\ Month - Total\ Minutes\ of\ Approved\ Downtime}$$

Where:

"**Total Unavailability Minutes**" is the cumulative unavailability time in minutes in the applicable month where the Portal and Service are not available due to unplanned outages or from systematic errors on the part of Badger Meter,

"**Total Minutes of Service Month**" is the cumulative time in minutes in the month in question, calculated by taking the number of days in month x 24 hours/day x 60 minutes/hour, and

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"**Total Minutes of Approved Downtime**" is the cumulative time in minutes in the applicable month where the Supplier applications are not available due to scheduled downtime ; other planned scheduled outages, or approved exclusion conditions as defined in this Agreement.

In order to be included within the Total Unavailability Minutes: (a) Customer shall notify Badger Meter, in writing, via email(techsupport@badgermeter.com) of the unavailability of the Portal or the Service; (b) such unavailability shall be greater than fifteen (15) minutes in duration following Badger Meter's receipt of such notice; and (c) Customer shall notify Badger Meter, in writing, via email within twenty-four (24) hours of such unavailability that it should be included within the Total Unavailability Minutes unless such unavailability is due to any Emergency Downtime, Scheduled Downtime, or any unavailability of the Services due to any Force Majeure Event.

Service Credits

If Badger Meter fails to meet the BEACON Portal and Service Availability Promise, the following Service Credits will be calculated as follows:

Service Credit = Endpoint Service Units Consumed in the Month * (1 - Availability) rounded to the next whole number

For example;

Availability	**Service Credit** (Service Units per 1,000 Service Units consumed in the month)
95%	50
90%	100
80%	200
70%	300
60%	400
50%	500

Service Credit will be added to Customer's account in the form of pre-paid Service Units for the same endpoint type(s).

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ACTIVATING ENDPOINTS

Activation is dependent on whether the endpoint is in "Pause" (soft sleep) or "Stop" (hard sleep) radio mode. The Product Configuration Utility software can be used to identify the endpoint radio mode.

Smart Activation for Endpoints in Pause Mode

All ORION endpoints offer a Smart Activation feature which utilizes consumption to automatically start an endpoint in Pause mode. After installation, the endpoint radio "wakes up" and begins broadcasting data when the encoder to which it is connected detects enough water usage from the register. No field programming or special tools are required, but the amount of water consumption depends on the encoder output and meter size so activation times will vary. Infrared (IR) activation tools are available for use if immediate activation is desired. See the *Product Configuration Utility for ORION Endpoints* software manual, available at *www.badgermeter.com*.

NOTE: Using the IR Alignment Tool (68779-001) is recommended for IR activation.

Endpoint/Encoder Assemblies

An initial encoder read is stored by the endpoint at the time the encoder and endpoint are factory connected and the endpoint is placed in Pause mode. While in Pause mode, the endpoint monitors the encoder for consumption, checking once every fifteen minutes. When the endpoint/encoder assembly is installed and sufficient water is running through the meter, the endpoint automatically "wakes up" and transitions to its operational mode when the required consumption is registered (see table below).

Encoder Output	Dial Change Required to Activate
7-dial	Any 1 unit change in the least significant digit
8-dial	Any 5 unit change in the least significant digit
9-dial	Any 5 unit change in the least significant digit

Table 1: Activation consumption thresholds

Endpoint Only

Like endpoint/encoder assemblies, ORION endpoint only configurations can be shipped in Pause mode. The initial encoder read will be established the first time an endpoint is field connected to an encoder.

NOTE: It may take up to fifteen (15) minutes for an endpoint to recognize the initial encoder read. To expedite this process, Badger Meter recommends connecting an ORION endpoint to an encoder in advance of field installation so the baseline encoder read can be captured before installing the endpoint.

After the initial encoder read is stored, the endpoint monitors the encoder for consumption, checking for a change in the encoder read once every fifteen minutes thereafter. The endpoint automatically "wakes up" and transitions to its operational mode once the required amount of consumption is registered (see *Table 1*).

Activation for Endpoints in Stop Mode

Endpoints in Stop mode must be manually activated via IR communication using either the Badger Meter IR Communication Device (68891-001) or the Product Configuration Utility software. The software can also be used to identify the endpoint radio mode. For more information, see the *Product Configuration Utility for ORION Endpoints* software manual at *www.badgermeter.com*.

IMPORTANT

*Badger Meter IR Communication Devices that shipped **prior to March 8, 2021** require a firmware update to support use with ORION Cellular C endpoints. Contact Badger Meter Utility Technical Support (800-616-3837) for help.*

Confirming Installation - ORION Cellular C, HLD, CS, LTE-M, LTE-MS, HLA, HLB, HLC, LTE

Before leaving the installation site, the installer can confirm endpoints are active and communicating.

1. BEACON® Software as a Service (SaaS) users can check ORION Cellular endpoint activation status with the ***ORION Endpoint Status*** tool. Endpoints do not need to be provisioned in BEACON SaaS to display using the tool. See *"Endpoint Status Tool for ORION Cellular Endpoints" on page 28* for more information.
2. The IR Communication Device (68891-001) can be used to confirm endpoint activation and verify the encoder connection. Instructions are included with the device. See the **IMPORTANT** note on *page 11* regarding required device firmware update.

Active endpoints automatically transition to the appropriate network.

Confirming Installation - ORION Mobile M, ME, SE, CE

Before leaving the installation site, the installer can use an ORION handheld or ORION Mobile Reading system to confirm the endpoint is broadcasting RF data for reading. See the appropriate handheld or ORION Mobile Reading system user manuals, available at *www.badgermeter.com*, for more information.

Active Endpoints

ORION Cellular C, HLD, CS, LTE-M, LTE-MS, HLA, HLB, HLC, LTE endpoints	When the endpoint transitions to *Active* mode, it begins the network registration process. BEACON assigns a daily call-in time to the endpoint as part of this process. An active operating ORION Cellular endpoint obtains a current encoder read every 15 minutes.
ORION ME endpoints used in a mobile solution deployed prior to February 1, 2023 and ORION SE	When the endpoint transitions to *On-Mobile* mode, it begins broadcasting its message for fixed network or mobile data collection. An active operating ORION endpoint obtains a current encoder read once an hour.
ORION ME endpoints used in a BEACON SaaS Mobile solution deployed on or after February 1, 2023, ORION Mobile M and CE	Once activated, the endpoint begins transmitting. An active operating ORION ME, Mobile M and CE endpoint obtains a current encoder read once an hour.

CHANGING REGISTRATION FOR AN EXISTING ENDPOINT ASSEMBLY

ORION Cellular C, HLD, CS, LTE-M, LTE-MS, HLA, HLB, HLC, LTE

If you change the encoder connected to an ORION Cellular endpoint, the endpoint will recognize the new encoder, once connected, and report previous and current interval data.

ORION Mobile M, ME, SE, CE

If you change the encoder connected to an ORION Mobile M, ME, SE or CE endpoint that has previously logged historical profile data, best practice recommends following this process:

1. Extract and save the historical profile data from the endpoint. See the *Product Configuration Utility for ORION Endpoints software manual*, available at *www.badgermeter.com*, if you need help.
2. Clear the profile data from the endpoint.
3. Connect the new encoder. Follow applicable installation instructions in this manual.
   The endpoint will recognize the new encoder, once connected, and record interval data.

ENDPOINT INSTALLATION KITS

Type	For Use With	Description	Kit Part Number
REMOTE	All ORION endpoints	*64394-032 Wall Cover Install Kit*	64394-032
REMOTE	64394-032	*67625-001 IR Holder for Wall Cover Install Kit*	67625-001
REMOTE	ORION Cellular C, HLD, CS, LTE-M, LTE-MS, HLA, HLB, HLC, LTE, and ORION Mobile M	*64394-031 Wall Bracket Install Kit - ORION Cellular LTE*	64394-031
REMOTE	ORION ME, SE, CE	*69406-001 Mounting Bracket Install Kit for ORION Endpoint and E-Series Ultrasonic Meter*	69406-001
REMOTE or PIT	ORION ME, SE, CE	*64394-029 Wall Bracket Install Kit - ORION*	64394-029
REMOTE	All ORION endpoints	*64394-008 C-Clamp Wall Bracket Install Kit - ORION*	64394-008
REMOTE or PIT	All ORION endpoints	*64394-003 Pipe Install Kit-ORION*	64394-003
REMOTE	All ORION endpoints	*64394-023 Commercial Meter Mounting Bracket Install Kit-ORION*	64394-023
PIT	All ORION endpoints	*64394-030 Thru-the-Lid Install Kit*	64394-030
PIT	ORION ME, SE, CE	*64394-009 Integrated Pit Lid Hanger Install Kit*	64394-009

Instructions for using each installation kit follow in this section.

Refer to the *ORION Water Endpoints Installation Kit Ordering Guide* and the *ORION Water Endpoint Parts List* for individual endpoint kit components. Both documents are available at *www.badgermeter.com*.

64394-032 WALL COVER INSTALL KIT

Wall Cover Install Kit (64394-032) is recommended for proper mounting of an endpoint for indoor and outdoor remote applications, and is designed to provide an environmentally protected area for gel splice connections (if needed). Outside dimensions are shown in *Figure 10*.

For use with: All ORION endpoints



Figure 9: 64394-032 wall cover enclosure

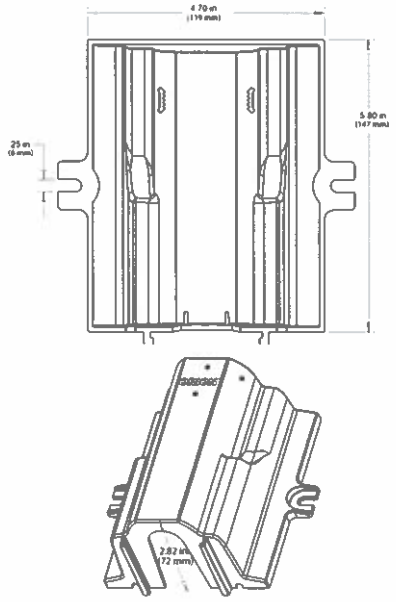


Figure 10: 64394-032 Outside dimensions

To install an ORION endpoint, follow these steps.

1. Choose an appropriate installation location within the limits of the endpoint cable/connector harness.
2. Verify the proper orientation (*Figure 11*). The bottom of the enclosure has an opening for IR programming. The opening gives access to the endpoint IR LED port (*Figure 14* and *Figure 15*) without having to disassemble the unit.
3. Place the endpoint into the wall cover enclosure, antenna (threaded portion) up.

   Cellular endpoints: *Figure 11* shows the correct endpoint placement.

   All other ORION endpoints: Make sure the flat side of the endpoint faces in and fits up against the inside wall of the enclosure.

   NOTE: If double-sided tape is included in the kit, you can use the tape to temporarily secure the endpoint inside the enclosure before mounting.



Figure 11: ORION Cellular LTE endpoint orientation

4. Position the endpoint cable.
   - Route the endpoint cable through the cutout on the bottom of the wall cover.

     NOTE: If you are drilling a hole through the wall behind the enclosure for the endpoint cable, the cable does not need to route through the cutout at the bottom.

- If the endpoint has an inline connector, place the connector *inside* with the endpoint and route the connector cable through the cutout on the bottom.

  NOTE: If used, place gel splice connections inside the enclosure.

  NOTE: See *"Outdoor Installation for Endpoint with Inline Connector" on page 16* for additional information about installing the endpoint outdoors with the wall cover enclosure.

5. Make sure the wall cover is properly positioned, with the endpoint antenna straight up and the endpoint IR LED port visible through the bottom opening.
6. Secure the wall cover using customer-supplied screws.
   Installation is complete.



Figure 12: 64394-032 installation complete

67625-001 IR Holder for Wall Cover Install Kit

IR Holder for Wall Cover Install Kit (67625-001) is an optional part which can be ordered for use with the Wall Cover install kit (**64394-032**). The IR holder bracket fits on the wall cover adapter rails to hold an IR programming head in correct alignment with the endpoint LED port.

1. Place the optical head of an IR programming cable into the holder. The nubs on the optical head fit into the cutouts on the holder.



(67625-001) IR holder bracket



Optical head of the IR programming cable



Optical head in the bracket

Figure 13: IR holder and programming cable optical head

2. Slide the bracket into the adapter rails at the bottom of the wall cover enclosure (64394-032) so the IR optical head is aligned with the endpoint LED port. See *Figure 14* and *Figure 15*.
3. Connect the IR programming cable to a Badger Meter mobile reading device to perform IR functions. Refer to the *Product Configuration Utility for ORION Endpoints software manual*, available at www.badgermeter.com, for IR programming instructions.



Figure 14: IR LED port ORION Cellular LTE endpoint (bottom up view)



Figure 15: IR LED port ORION ME endpoint (bottom up view)

Outdoor Installation for Endpoint with Inline Connector

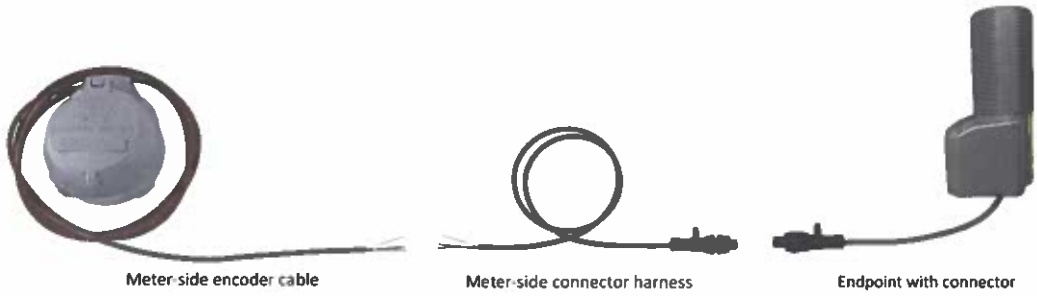


Figure 16: Outdoor endpoint installation

Meter-side connector harnesses are available with Twist Tight and Nicor connectors in the following lengths.

Harness with Twist Tight Connector	
Part Number	*Harness Lead Length*
68307-006	10 ft harness
68307-003	25 ft harness

Harness with Nicor Connector	
Part Number	*Harness Lead Length*
66488-006	10 ft harness
66488-003	25 ft harness

Follow these recommended installation steps for an outdoor endpoint installation and refer to the image in *Figure 16*.

NOTE: The Twist Tight connector is pictured above. The installation steps also apply to endpoints with Nicor and 308 connectors as well. See *"Inline Connectors" on page 30* for more information.

1. Choose an appropriate outdoor location, within the limits of the connector harness, and mount the endpoint.

   NOTE: If using a wall cover enclosure, see *"64394-032 Wall Cover Install Kit" on page 14* for additional information on mounting.

2. Join the endpoint connector with the connector mate of the encoder cable.
   If you are using a wall cover enclosure, place the inline connector inside the enclosure.
3. Drill a small hole in the wall of the house/structure to accommodate the endpoint/encoder cable.
4. Pass the cable end with the flying leads through the wall of the house.
5. Inside the house, connect the encoder wires. Depending on the encoder connection, use a field splice kit or connect the wires directly to the encoder terminal screws. See the appropriate wiring charts in this manual if you need help.

NOTE: Refer to the *Field Splice Kit Application Data Sheet*, available at *www.badgermeter.com*, for field splice instructions.

When the meter, encoder and endpoint are installed and connected, installation is complete.

64394-031 WALL BRACKET INSTALL KIT - ORION CELLULAR LTE

Wall Bracket Kit 64394-031 (*Figure 17*) is available for mounting ORION Cellular endpoints.



Figure 17: 64394-031

For use with: ORION Cellular C, HLD, CS, LTE-M, LTE-MS, HLA, HLB, HLC and LTE endpoints

The bracket clips into the slot on the endpoint and can be used to attach the endpoint to a wall. A screwdriver and two (2) customer-supplied screws are required. Drill pilot holes for the screws (**recommended**) before attaching the wall bracket and endpoint.

The bracket can also be used to mount the endpoint to a pole with cable ties (customer supplied) threaded through the bracket openings.

69406-001 MOUNTING BRACKET INSTALL KIT FOR ORION ENDPOINT AND E-SERIES ULTRASONIC METER

Mounting Bracket Install Kit (69406-001) is designed to securely install an ORION endpoint to an E-Series Ultrasonic meter for non-submerged indoor and outdoor remote applications. The bracket can be used for installations in any nonmetallic joist, wall or pit application.

For use with: ORION ME, SE, CE endpoints

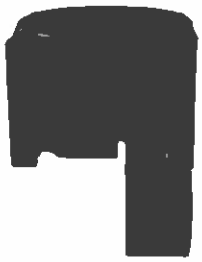


Figure 18: Mounting bracket with locking clip in place

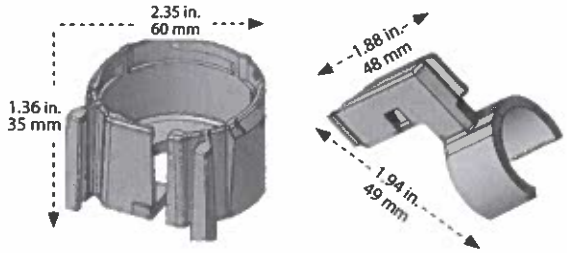


Figure 19: Mounting bracket and locking clip dimensions

To connect the bracket to the meter and endpoint, follow these steps.

NOTE: The kit components are the mounting bracket (**68789-001**) and the locking clip (**68790-001**). Keep the two pieces separate when you start.

1. Feed the endpoint wiring cable through the mounting bracket central opening.

   You will see a small triangle on the underside of the bracket (*Figure 20*) and at the bottom of the endpoint.

   Align the triangles, push the bracket and endpoint together and twist the endpoint clockwise until the endpoint clicks into place.



Figure 20: Triangle on underside of bracket

2. Align the tabs of the mounting bracket to the tabs on the side of the E-Series register (*Figure 21*). Then slide the mounting bracket/ endpoint down into place on the register.
3. Once the endpoint is mounted on the E-Series register, insert the locking clip underneath the mounting bracket in the space between the mounting bracket and the register. The flat side of the locking clip should face the mounting bracket and fit in the mounting bracket grooves. It will click into place and lock.



Figure 21: E-Series Ultrasonic meter register tabs

   NOTE: The endpoint is secure and cannot be removed until you remove the locking clip.

4. Make sure the endpoint antenna is upright in its final position.



Figure 22: ORION endpoint mounted on E-Series meter register

64394-029 WALL BRACKET INSTALL KIT

Wall Bracket Install Kit (64394-029) can be used to securely install an ORION endpoint. For non-submerged indoor and outdoor applications, the bracket can be used in any indoor or outdoor *nonmetallic* joist, wall or pit application.

For use with: ORION ME, SE, CE endpoints

You will need the following items.

- Wall Bracket install kit
- Two customer-supplied screws
- Screwdriver and drill

To connect the bracket to the endpoint and mount, follow these steps.

1. Using the screw holes of the wall bracket as a guide, drill two pilot holes on the joist or wall where the bracket is to be installed.



Figure 23: Endpoint wall bracket

Connect the endpoint

2. Carefully slide the encoder cable harness through the slit in the bracket with the screw holes at the bottom (*Figure 24*).
3. Locate the small triangle and hole underneath the bracket (*Figure 25*). The triangle is used to align the bracket with the endpoint.



Figure 24: Threading cable harness

4. Locate the small raised triangle at the bottom of the ORION endpoint housing (*Figure 26*).

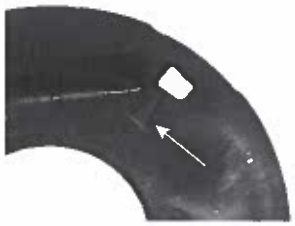


Figure 25: Aligning triangle



Figure 26: Housing triangle

5. Align the endpoint and bracket triangles. Then push the bracket and endpoint together. This should be easy.
6. With one hand holding the bracket, use the other hand to twist the endpoint approximately 1/4 turn clockwise until you feel it lock into place (*Figure 28*).



Figure 27: Align triangles and push bracket onto endpoint



Figure 28: Twist endpoint to lock

Mount the endpoint assembly

7. Make sure the endpoint antenna is upright (*Figure 29*) when you place it into its final position.
8. Using two customer-supplied screws, secure the bracket assembly using the pilot holes you drilled in Step 1.

   Installation is complete.



Figure 29: Endpoint positioning

64394-008 C-CLAMP WALL BRACKET INSTALL KIT

C-Clamp Wall Bracket Install Kit (64394-008) can be used when mounting an endpoint to a wall.

For use with: All ORION endpoints. For ORION Cellular endpoints, the kit can be used for indoor and remote installations, but should NOT be used in a vault.

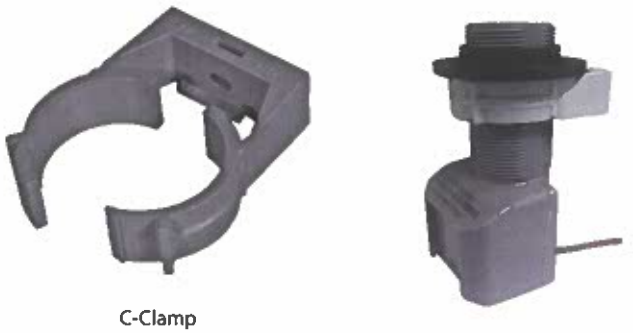
To mount an ORION endpoint using this kit, follow these steps and refer to *Figure 30*.

1. Choose an appropriate location on the wall for the endpoint. Using an appropriate size fastener and washer (customer-supplied), mount the C-clamp to the wall through the opening at the back. When mounting in a vault, install the C-clamp close to the top to prevent damage when accessing the meter is required.

   NOTE: ORION Cellular endpoints should NOT be mounted in a vault.
2. Place the neoprene spacer from the installation kit around the endpoint, approximately 1/2 inch (13 mm) from the top of the endpoint. Hold the neoprene spacer in place with your fingers.
3. Thread the lock nut onto the endpoint until it makes contact with the neoprene spacer.
4. Insert the endpoint into the C-clamp, making sure the neoprene spacer stays inside the C-clamp.
5. Close the C-clamp and lock it in place so that it closes over the neoprene spacer and securely holds the endpoint as shown in *Figure 30*.

   Installation is complete.

NOTE: ORION radio endpoints perform best with a clear line of sight. Performance varies with installation.



C-Clamp

C-Clamp around endpoint

Figure 30: C-Clamp and placement

64394-003 PIPE INSTALL KIT

Pipe Install Kit (64394-003) with mounting support bracket (*Figure 31*) is designed for pipe installations on a 3/8, 5/8 and 1/2 inch rebar or 1/2 inch schedule 40 PVC pipe.

For use with: All ORION endpoints. For ORION Cellular endpoints, the kit can be used for indoor and remote installations, but should NOT be used under a pit lid.

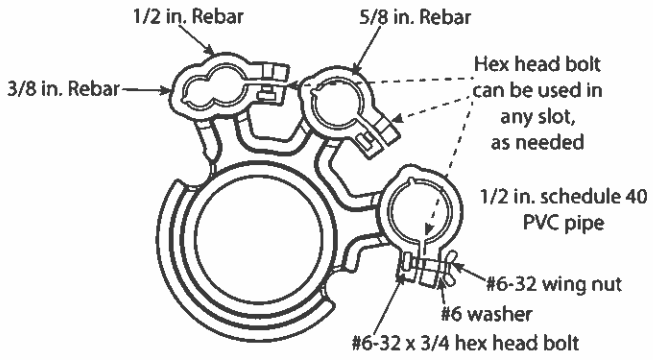


Figure 31: Support bracket (knuckles)

To install an ORION endpoint using the mounting support bracket, follow these steps.

1. Drive rebar or stake into the ground, or use a free-standing pipe or rebar.

   ⚠CAUTION

   DRIVE REBAR OR STAKE INTO THE GROUND PRIOR TO ATTACHING THE ENDPOINT TO AVOID DAMAGE.

2. Slide the mounting support bracket on the rebar/stake/pipe and secure using the enclosed washer, wing nut and hex head bolt provided with the bracket. The hex head bolt fits in any slot.

   NOTE: The bracket can be installed with either side up, but installing with the smooth side up is recommended if installed outdoors to avoid potential rainwater build up.

3. Insert the threaded end of the endpoint up through the bottom of the bracket opening. Then thread the lock nut onto the endpoint and tighten the lock nut to secure the bracket (*Figure 32*).
   For pit installations, mount the endpoint a maximum of 1…2 inches (25…51 mm) below the pit lid. (NOT for ORION Cellular endpoints!)

4. Install the bracket anywhere along the length of the endpoint threaded end, as long as it is at least 0.5 in. (13 mm) below the top where the antenna is located. Installation is complete.

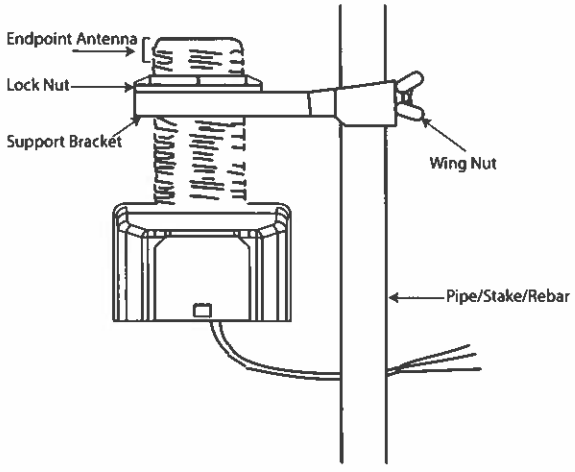


Figure 32: Pipe installation kit with ORION Cellular endpoints

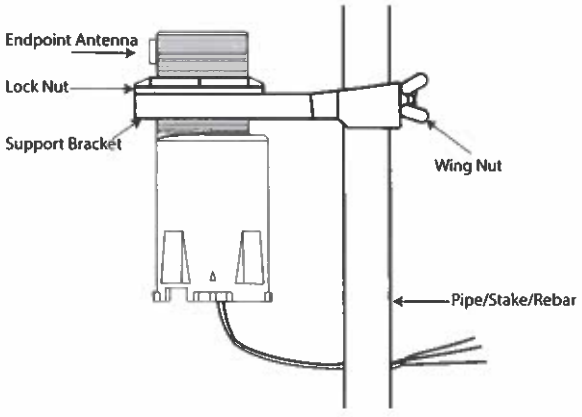


Figure 33: Pipe installation kit with ORION ME, SE, CE endpoints

64394-023 COMMERCIAL METER MOUNTING BRACKET INSTALL KIT

Commercial Meter Mounting Bracket Install Kit (64394-023) is designed for use with most Badger Meter Turbo, Compound Series and Fire Service Disc bypass meter lines. Use the kit to securely mount an ORION endpoint to a meter.

For use with: All ORION endpoints

You will need a torque wrench set for installation. The kit components are:

- Stainless steel mounting bracket 66360-001
- Lock nut 62825-001

To install the bracket, follow these steps:



Figure 34: Stainless steel mounting bracket



Figure 35: Lock nut with gussets

1. Verify that the water is turned off.
2. Slip the mounting bracket over the top of the ORION endpoint, as shown.
3. Screw the lock nut from the kit onto the threaded section of the endpoint. Hand tighten the lock nut to secure the bracket.
4. At the meter, unscrew the head assembly bolt at the location where you plan to mount the endpoint.
5. Position the bracket, reinsert the bolt and hand tighten it.

   NOTE: For visual clarity, the photo in *Figure 38* shows the bracket without the endpoint attached.



Figure 36: Mounting bracket over endpoint



Figure 37: Tighten lock nut



Figure 38: Bracket attached with bolt

6. Position the bracket so the endpoint is as far from the meter as possible to provide adequate space for the endpoint signal to propagate (*Figure 39*).

IMPORTANT

If two ORION endpoints are required for a fire series assembly or a compound meter application, mount the endpoints on OPPOSITE sides of the meter head assembly.

7. With the torque wrench, tighten the bolt as indicated in the chart that follows.



Figure 39: Endpoint connected to meter with bracket

Meter	Ft-lb
2-inch Turbo Series Meter	10.9
3-inch Turbo Series Meter	37.5
4-inch Turbo Series Meter	37.5
6-inch Turbo Series Meter	37.5

Meter	Ft-lb
2-inch Compound Series Meter	16.7
3-inch Compound Series Meter	33.3
4-inch Compound Series Meter	33.3
6-inch Compound Series Meter	33.3
Heavy Duty Bypass M70	21.0
Heavy Duty Bypass M170	50.0

Installation is complete. Turn the water back on.

64394-030 THRU-THE-LID INSTALL KIT

The ADA-compliant **Thru-the-Lid Install Kit (64394-030)** is designed for use with a NON-METAL PIT LID, 2 inches (51 mm) maximum thickness, with a standard hole diameter of 1-7/8 inches (48 mm).

For use with: All ORION endpoints

To install an endpoint through a non-metal pit lid, follow these steps and refer to *Figure 40*.

1. Screw the lock nut (large diameter side up) onto the endpoint tube threads.
2. Insert the endpoint tube through the bottom of the pit lid.
3. Screw the top nut onto the endpoint tube threads.
4. Tighten the lock nut and top nut to make sure the endpoint is secure.

   Installation is complete.

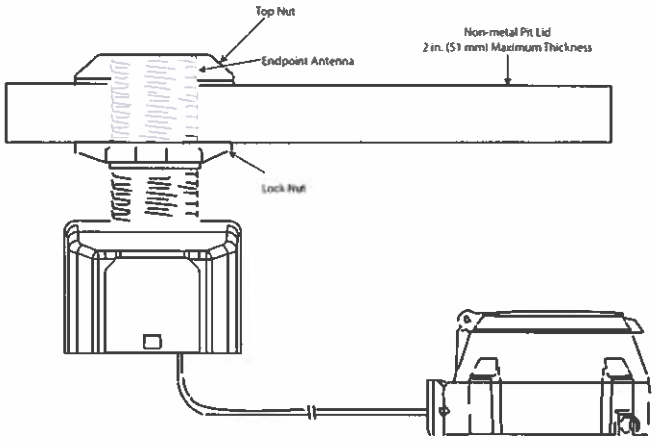


Figure 40: ORION endpoint thru non-metal pit lid

NOTE: When installing an endpoint through a thick lid, you can use a **Pit Tube Extender (67025-001)**. The Extender requires a 2 inch (51 mm) diameter hole. It screws onto the threaded portion of the endpoint. Radio frequency (RF) performance may be reduced when using the Pit Tube Extender.

Do not use Pit Tube Extender with ORION Cellular endpoints.



Figure 41: Endpoint pit tube extender – NOT for ORION Cellular endpoints

64394-009 INTEGRATED PIT LID HANGER INSTALL KIT

Integrated Pit Lid Hanger Install Kit (64394-009) is designed for ORION endpoints installed below composite and plastic lids that have an integrated AMR/AMI endpoint hanger.

For use with: ORION ME, SE, CE endpoints

To install an ORION endpoint with this kit, follow these steps and refer to *Figure 42*.

1. Thread the lock nut onto the top of the ORION endpoint as shown.
2. Slide the endpoint into the lid bracket.
3. Tighten the lock nut so that the endpoint is held firmly in place.

   Installation is complete.

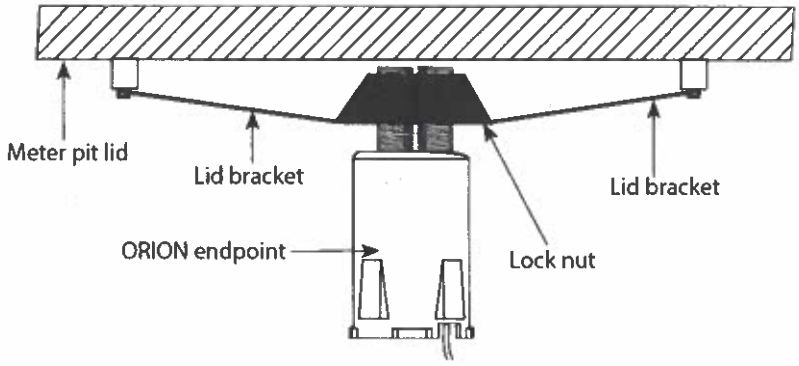


Figure 42: Integrated pit lid hanger installation

INTEGRAL ENDPOINT INSTALLATION

ORION ME, SE and CE endpoints are available in an integral configuration in which the endpoint and encoder are connected in one assembly. There are two types of integral configurations. This section includes instructions for mounting an integral endpoint on a meter and also provides instructions for disassembling both types of integrals.

Mounting an Integral Endpoint on the Meter

An integral endpoint can be installed on any Badger Meter Disc, Turbo, or Compound Series meter. Both integral configuration styles mount to the meter the same way, by placing the assembly onto the bayonet of the meter and rotating it into its locking position. See *Figure 43*.

1. Loosen the security screw on the endpoint encoder assembly.
2. Mount the assembly housing on the meter bayonet.
3. Turn the assembly clockwise 1/4 turn to lock the assembly into place on the meter.
4. After the assembly is mounted on the meter, tighten the security screw to secure the assembly to the register.

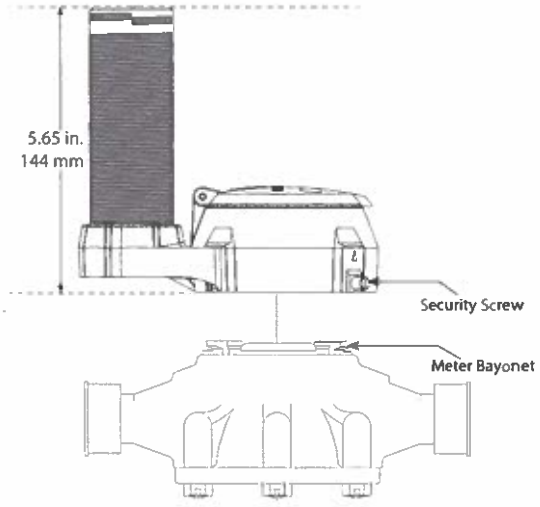


Figure 43: Integral assembly on meter

HR-E LCD Encoder Integral Configuration



Figure 44: HR-E LCD Integral

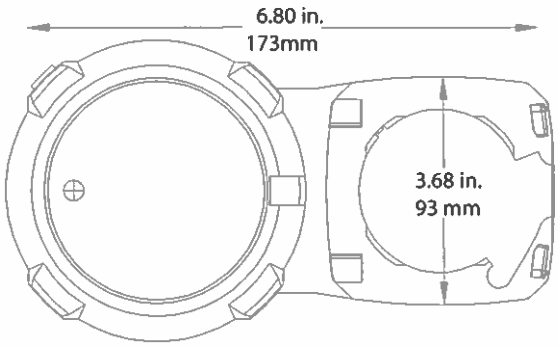


Figure 45: HR-E LCD Integral base dimensions

Configuration

The ORION HR-E LCD Integral Assembly is shown in *Figure 44*. In an HR-E LCD integral assembly, the endpoint is factory-wired to the encoder and both are mounted to the shroud bracket. Endpoints are available with a 3-foot or 10-foot wire that is wrapped around the body of the endpoint. The endpoint wire is contained under a removable cover. With this option, the endpoint can be removed from the housing, if necessary, and mounted away from the encoder. The endpoint can also be returned to the housing assembly without damage.

Removing the Endpoint from the Assembly Housing

NOTE: The endpoint cover connects to the base with three tabs: one in the back and two in the front (closest to the encoder.)

1. Remove the integral assembly from the meter.
   - Remove the security screw at the base of the assembly. Keep the screw for remounting the encoder assembly.
   - Turn the assembly (as one piece) 1/4 turn, counter-clockwise and lift the assembly off the meter.
2. With the endpoint side of the assembly facing toward you, grasp the bottom of the cover with one hand on either side of the endpoint cover base.
3. With your thumbs, push the cover at the center of the base to release the back tab (*Figure 46*). Then lift up to release the front tabs and remove the cover from the base.



Figure 46: Push at center of endpoint base to release the cover



Figure 47: Cover tabs released, endpoint wire exposed

4. Twist the endpoint to release it from the housing and uncoil the wire.
5. Mount the endpoint according to recommended installation guidelines within the limits of the endpoint wire.

NOTE: The encoder cannot be removed from the assembly housing.

6. Remount the encoder (in the assembly housing) onto the meter bayonet.
   - Turn the assembly clockwise 1/4 turn so it locks in place.
   - Replace and tighten the security screw.

Reattaching the Endpoint

To reattach the endpoint to the assembly housing, follow these steps.

1. Wrap the wire around the endpoint. Make sure the wire is wrapped tightly and neatly around the endpoint or the cover will not fit.
2. Insert the endpoint base into the shroud bracket. Adjust the endpoint so the tabs on the endpoint base align with the openings on the bracket, and the wire at the endpoint base fits into the opening at the back of the bracket. See *Figure 48*.
3. When the endpoint is correctly inserted into the bracket opening, turn the endpoint clockwise to make sure it is secure.
4. Place the cover over the endpoint, with the single tab at the back.
5. When the cover is almost completely on, align the two front tabs with the openings on the shroud bracket (closest to the encoder) and then push down until all three tabs click into place.



Figure 48: Integral bracket without endpoint

HR-E Encoder Integral Configuration



Figure 49: HR-E Integral assembly with additional wire

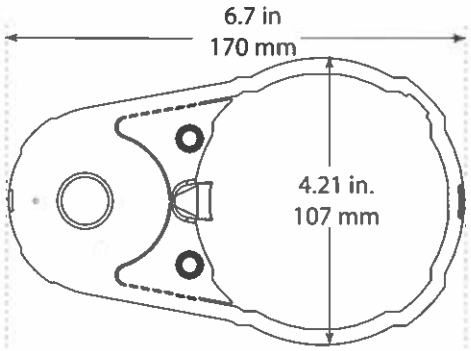


Figure 50: HR-E Integral base dimensions

Configuration

The ORION HR-E Integral Assembly is shown in *Figure 49*. The endpoint has a 3-foot length of wire stored inside the bottom of the assembly housing. The endpoint can be removed from the housing, if necessary, and mounted away from the encoder.

NOTE: Once removed, the endpoint CANNOT be reassembled into an integral configuration.

Removing the Endpoint from the Assembly Housing

IMPORTANT

Removing the endpoint from the assembly housing can only be done once with this integral configuration.

⚠CAUTION

PRIOR TO DISASSEMBLING AN INTEGRAL ENDPOINT, VERIFY THAT THE ENDPOINT HAS THREE FEET OF WIRE PACKAGED WITH THE ASSEMBLY. CHECK THE SERIAL NUMBER LABEL ON THE SIDE OF THE INTEGRAL BRACKET TO MAKE SURE IT INDICATES "3 FT WIRE." DO NOT CONTINUE WITH THE STEPS LISTED BELOW IF YOUR INTEGRAL ENDPOINT DOES NOT HAVE THIS DESCRIPTION ON THE SERIAL NUMBER LABEL, AS ENDPOINT DAMAGE WILL OCCUR.

1. Remove the assembly from the meter.
   - Remove the security screw at the base of the assembly. Keep the screw for remounting the encoder assembly.
   - Turn the assembly (as one piece) 1/4 turn, counter-clockwise.
   - Lift the assembly off the meter.



Figure 51: Remove assembly from meter

2. Remove the endpoint wire under the breakaway plate.
   - Turn the endpoint/encoder assembly over.
   - Grasp the pull tab located to the right of the encoder seal screw with pliers (*Figure 52*). Then pull and remove the bottom breakaway plate from the housing to expose the wire. The plate is scored to facilitate removal.
   - With your fingers, remove the three feet of endpoint wire from the housing.

     NOTE: The wire is attached to the endpoint.

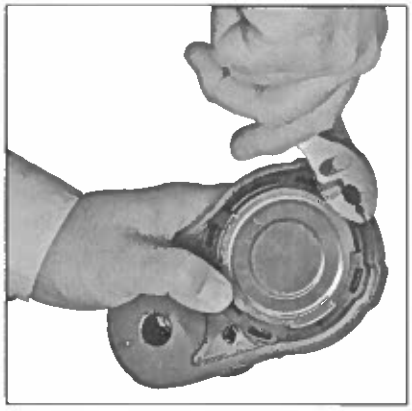


Figure 52: Pull tab to remove the breakaway plate

3. Rotate the endpoint counter-clockwise 1/4 turn and pull the endpoint and endpoint wire out from the assembly base.



Figure 53: Rotate endpoint clockwise



Figure 54: Pull endpoint away from base

4. Mount the endpoint according to recommended installation guidelines within the limits of the endpoint wire.

   NOTE: The encoder cannot be removed from the assembly housing.

5. Remount the encoder (in the assembly housing) onto the meter bayonet.
   - Turn the assembly clockwise 1/4 turn so it locks in place.
   - Replace and tighten the security screw.

ENDPOINT STATUS TOOL FOR ORION CELLULAR ENDPOINTS

BEACON® users can check the activation status of ORION Cellular endpoints with the ORION Endpoint Status tool. Several minutes after installation, the tool displays ORION Cellular endpoints assigned to you. Endpoints do not need to be provisioned in BEACON to display.

The browser-based tool can be viewed on a computer or mobile device. An Internet connection is required. Follow these steps to use the ORION Endpoint Status tool.

1. Go to *https://orionstatus.beaconama.net*.
2. Sign in with your BEACON email address and password (*Figure 55*).
   Result: The ORION Endpoint Status screen (Figure 56) opens showing the list of activated Cellular endpoints.

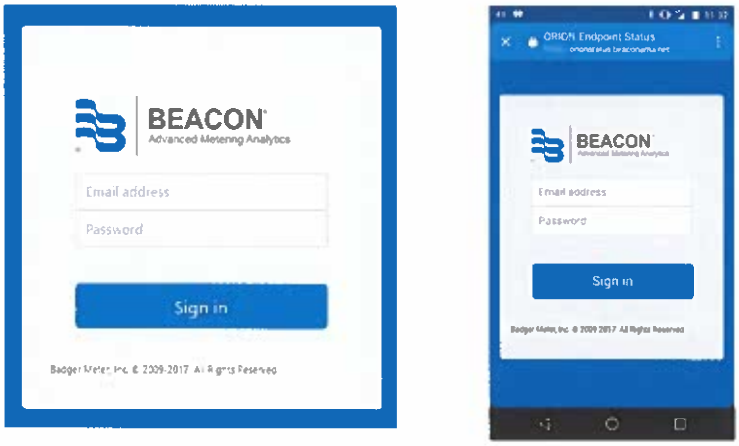


Figure 55: Tool sign in screen - computer and mobile

NOTE: It can take several minutes for a newly installed endpoint to communicate with the cellular network and display on the ORION Endpoint Status screen.

3. View the endpoint list.
   The list displays endpoint serial number, activation time, and activation signal strength. The current endpoint and meter status are also shown. Endpoints are listed according to their activation time, with the most recent endpoint activation times listed first (top of list).

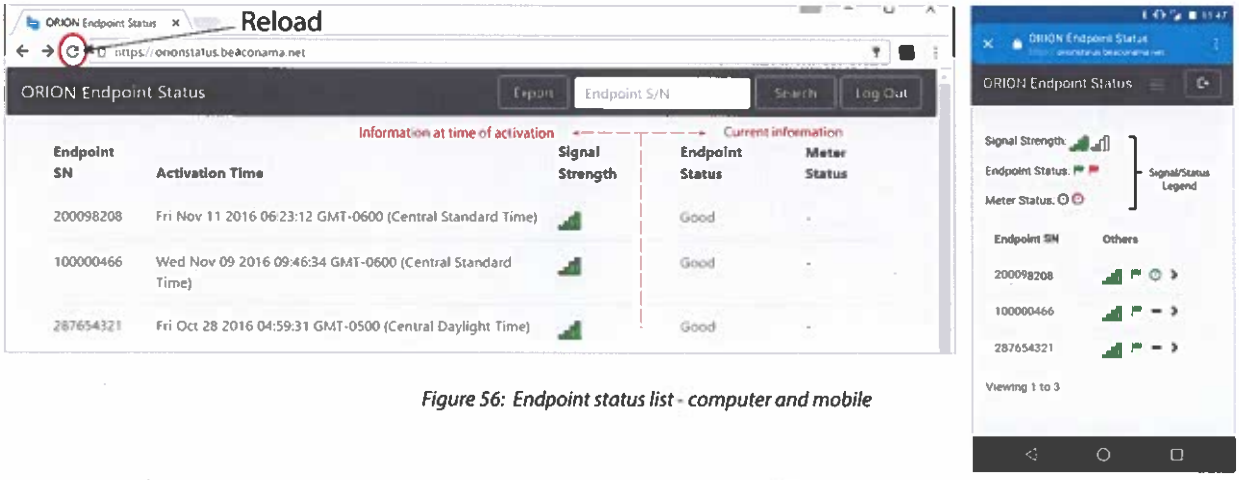


Figure 56: Endpoint status list - computer and mobile

You can also **Export** endpoints into a program such as Excel®, or **Search** to find a specific endpoint.

4. To see any new endpoints that have been added since logging in, reload/refresh the browser window. On a computer, use the reload button ↻ at the top left of the screen. On a mobile device, swipe down the screen to refresh.

5. Select an endpoint in the list to see the endpoint raw read. A window opens, like the examples shown in *Figure 57*.

   NOTE: Information in the first three fields is captured at the time of activation. Information in the next three fields is current information.

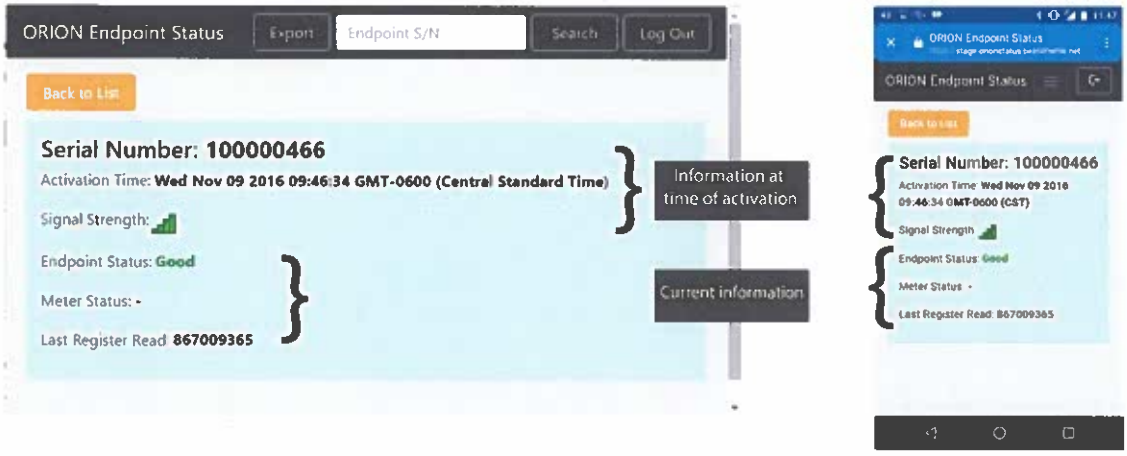


Figure 57: Status detail screen - computer and mobile

The *Endpoint Status* field displays one of the following:

Endpoint Status	Response
Good	No response required.
Endpoint Tamper or Encoder Error	Incomplete information. This message updates at the next scheduled communication.
Endpoint Tamper	Endpoint* requires attention.
Encoder Error	Encoder* requires attention.

*For additional endpoint information, see the *Product Configuration Utility for ORION Endpoints* software manual. For additional encoder information, see the appropriate encoder user manual. All documents are available at www.badgermeter.com.

The *Meter Status* field displays one of the following:

NOTE: *Meter Status* only displays for E-Series Ultrasonic meters. For other meters, the field will have a dash mark (–).

Meter Status	Response
Good	No response required.
Sensor Error	Meter* requires attention.

*For additional information, see the appropriate E-Series Ultrasonic Meter User Manual, available at www.badgermeter.com.

6. Tap/click **Back to List** to return to the previous screen.

7. When finished using the tool, tap the **Log Out** button or  on a mobile device.

INLINE CONNECTORS

Inline connectors are used to allow AMA/AMR/AMI device connectivity without the need for a field splice kit. There are three available inline connector types: Twist Tight, 308, Nicor.

When ordered separately, the endpoint and encoder (or electronic meter) inline connectors come with removable caps, which can be removed in the field before joining the connector ends. With the proper orientation, the connector ends go together easily. No tools are necessary.

NOTE: Additional removable caps are available for order. Part numbers are listed in *Figure 59*, *Figure 61*, *and Figure 63*.

⚠CAUTION

BEFORE JOINING, MAKE SURE ALL SURFACES OF THE CONNECTOR ENDS ARE CLEAN, DRY, AND FREE OF ANY DEBRIS OR DIRT. THIS STEP IS ESSENTIAL TO MAKE SURE THE CONNECTOR REMAINS WATER TIGHT AND SUBMERSIBLE.

Twist Tight Connector

To use the Twist Tight connector, follow these steps and refer to *Figure 59*.

1. Remove the protective caps. Twist the rotating collar on each connector counter clockwise (left) to loosen and remove the cap.
2. Align the notches inside each connector and push the ends together until the endpoint-side is fully seated in the encoder-side connector.



Figure 58: Twist Tight inline connector



Protective cap endpoint-side 68307-007 | Protective cap encoder-side 68307-008 | Endpoint-side | Encoder-side

Figure 59: Twist Tight connector ends and caps - close up view

3. On the endpoint-side connector, twist the rotating collar clockwise (right) until the ends are tightly connected. When tightly connected, the tabs at the top of the connectors should be aligned and the red O ring on the encoder-side connector should NOT be visible.

IMPORTANT

Do NOT use tools to tighten the connector ends. Hand tighten only.

Twist Tight Extension Harness

An extension harness connects inline between the meter- and endpoint-side connectors. Extension harnesses are available in the lengths shown, with and without a cable shield. The cable shield offers extra protection for harsh environments such as pit installations.

Part Number Harness only	Extension Harness Length	Part Number Harness with Cable Shield
68307-009	5 ft extension	68883-002
68307-010	10 ft extension	68883-004

NOTE: For more information about the Twist Tight connector, refer to the *Twist Tight Inline Connector Assembly Application Data Sheet*, available at *www.badgermeter.com*.

308 Connector

To use the 308 connector, follow these steps and refer to *Figure 61*.

1. Squeeze the notched area and pull to remove the cap(s).
2. Align the notches inside each connector and push the ends together. You will hear a "click" when the connector ends are firmly seated and secure.



Figure 60: 308 inline connector



Protective cap endpoint-side
66233-005

Protective cap encoder-side
66233-006

Endpoint-side

Encoder-side

Figure 61: 308 connector ends and caps - close up view

NOTE: For additional information, refer to the *308 Inline Connector Assembly Application Data Sheet*, available at *www.badgermeter.com*.

Nicor Connector

To use the Nicor connector, follow these steps and refer to *Figure 63*.

1. Pull the cap(s) straight off to remove.
2. Locate the arrow on each connector. With the arrows pointed toward each other, **install at a 45 degree angle to prevent air from bubbling in the connection**. Push the ends together until the encoder-side connector is fully seated into the endpoint-side connector. There should be no visible gap.



Figure 62: Nicor inline connector



Dust cap endpoint-side
66488-014

Dust cap encoder-side
66488-004

Endpoint-side

Encoder-side

Figure 63: Nicor connector ends and caps - close up view

Nicor Extension Harness

An extension harness connects inline between the meter- and endpoint-side connectors. An extension harness in this lead length is available with the Nicor connector.

Part Number	Extension Harness Length
66488-024	10 ft extension

USING GEL CAPS TO CONNECT AN ENCODER

For those connections that are not factory wired or equipped with inline connectors, follow these guidelines for using gel caps when splicing is required, either for installation or to fix a connection after a tamper. Refer to the wiring charts for each ORION endpoint, starting on page 6.

NOTE:

- For pit environments, splice connections require a field splice kit (**62084-001**), which can be ordered separately. Refer to *Field Splice Kit for Badger Meter AMR/AMI Products*, available at www.badgermeter.com.
- For all installations, excess wire should be coiled and cable tied to avoid any damage.

Required Tools

Splicing Tools (Customer Supplied)	**Badger Meter Part Number**
• Parallel Pliers	59983-001
• Coax Wire Stripper	59989-001
• Diagonal Cutting Pliers	n/a

Connecting an Encoder Using Gel Caps

Follow these steps when using Badger Meter supplied gel caps.

1. To connect an encoder with existing wires to an ORION endpoint, strip approximately 1-1/2 inches (38 mm) of outer insulation sheath from the encoder and endpoint cables using a coax wire stripping tool. We recommend using the Badger Meter Coax Wire Stripper (**59989-001**).

   ⚠CAUTION

   USE CAUTION WHEN REMOVING THE OUTER SHEATH SO THAT THE INNER SIGNAL WIRE INSULATION IS NOT NICKED OR DAMAGED.

2. Unwind the outer foil shield from the endpoint cable and cut it off even with the outer sheath using diagonal cutting pliers.
3. Connect the ORION endpoint to an approved encoder. Verify the endpoint serial number prior to completing the wiring setup.
   - Connect the encoder cable wires to the ORION endpoint wires using the insulation gel caps provided in the installation kit. Refer to the wiring charts for the endpoint type starting on page 6 and determine which wires need to be connected to complete an installation.

     NOTE: The terminal posts and wire colors may not match.

     ⚠CAUTION

     DO NOT STRIP ANY INSULATION FROM THE ENDS OF THE WIRES BEFORE YOU PUSH THEM INTO THE GEL CAP.

   - Insert the wires from each cable end as far as possible into the gel cap. See *Figure 64: Wires in gel cap*.



Figure 64: Wires in gel cap

- Using a crimping tool such as the Badger Meter Parallel Pliers (**59983-001**), place the gel cap with the wires into the jaws of the crimping tool.

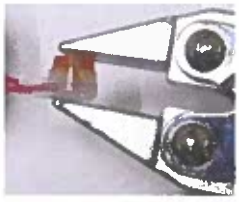


Figure 65: Gel cap in crimping tool

- Crimp the gel cap by squeezing the crimping tool handles until the gel cap is completely compressed. The Badger Meter Parallel Pliers is designed to apply just enough pressure to crimp the gel cap. Apply pressure for three seconds.



Figure 66: Compress the gel cap

- Repeat the crimping procedure for the remaining gel caps and wires.

4. Attach the two plastic cable ties and tighten securely for strain relief. Snip off the excess cable tie with the wire cutter.
5. For remote installations, the connection is complete.

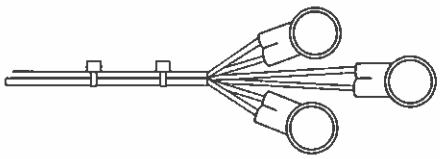


Figure 67: Cable tie attachment locations

NOTE: For pit installations, an appropriate field splice kit should be used. If using the Badger Meter Field Splice Kit, refer to the *Field Splice Kit Application Data Sheet* provided with the kit.

Testing Wire Connections

Test all wiring connections to confirm connectivity, and to verify the ORION endpoint reading and the encoder reading are the same. The connections can be tested using the Quick Read function with either an ORION handheld or mobile data collector. See the appropriate software manual, available at www.badgermeter.com, for more information.

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www.badgermeter.com

Legacy Document Number: ORI-I-79

PEDAL VALVE DOCUMENTATION



PEDAL VALVE RESUMES

2 Azalea Court
Luling, LA 70070
Work 985-785-9997
Home 504-559-0655



Chad J. Nuccio

Qualifications

- Served as Construction Manager for the Water Meter Division of Pedal Valves Inc. for the past 16 years.
- Oversees all critical contruction and project management facets of water meter installations.
- Supervises material acquisition, coordination efforts for material storage, installation management, QC, and Inventory control.
- Monitor daily progress of the installations and make adjustments to procedures to maximize efficiency of the installation process.
- Manage project budget and finance reports.
- Installed meters of all types and sizes during testing phases of water meter projects.
- Conducted audits for Water Conservation and Water Meter Jobs.
- Established relationships and set up dealers for residential foot pedals.

Education

2000 Louisiana State University Baton Rouge, LA
Bachelors In Marketing

Professional experience

2007 – Present Pedal Valves Inc. Luling, LA
Construction Manager – Water Meter Division

2002 – 2006 Pedal Valves Inc. Luling, LA
Sales Manager – Water Meter Division, Water Conservation Division

2001 – 2002 Pedal Valves Inc. Luling, LA
Residential Sales Manager

2000 – 2001 Kentwood Spring Water Baton Rouge, LA
Outside Sales Representative

DONNIE S. MATTHEWS

618 WILLOWRIDGE DR.
LULING, LA 70070
(m): 504.470.3282
E-mail: donniem@pedalvalve.com



EDUCATION:

Nicholls State University, Thibodaux, LA 70310	
B.S. in **Computer Information Systems**, Graduation: December 1999	
• Major GPA: 3.4	• President's List: Spring 1998
• Dean's List: Summer 1998, Spring 1999, Summer 1999	• UNO Founder's Scholarship

COMPUTER / PROGRAMMING SKILLS:

ASP.Net	**SQL Server** 6.0 and up	Text File Manipulation	Access 97/00/07	**VB.Net**
HTML	Visual Basic 5.0 and up	Visual Interdev/ASP	VB Script	VBA
Flash (Action Script)	DAO	Outlook Hooks	Excel Hooks	Win32 API
C++	Java Script	Some C#	T-SQL	JSON

IIS / Apache	SQL Server	Win Server – NT, 2000, 2003, 2008	Active Directory	DHCP
VM Ware / Citrix	WINS Server	Switches/Routers/Hubs/WAS	TCP/IP	DNS
AD Policy Management	Exchange Admin	SQL 6.0 / 2K …SSIS and up	PDC/BDC	Linux

WORK EXPERIENCE:

March 2012 to Present – **IT Manager**, Pedal Valves Inc., Luling, LA
And January 2003 to August 2009 – **IT Manager**, Pedal Valves Inc., Luling, LA

- Analyzed, engineered, installed and configured AMR/AMI systems for municipalities across the United States.
- Supported data extract and meter exchange integration with over 40 different utility billing systems
- Managed IT Specialists nationally that served vital role in the implementation of water meter projects.
- Provided water meter data transformation services for AMR/AMI import/export integration
- Coordinated with project development engineers and project managers to ensure data accuracy/integrity before, during, and after contract.
- Billing system data analysis and manipulation, including: customer data, revenue data, unaccounted for water data, meter accuracy data, produced vs. billed data…etc
- Developed processes to ease access of post-project M&V data for Performance Assurance Managers.
- Extensive SQL Server database administration
- Application development in .net environment – vb.net / asp.net / JavaScript / VBScript
- Development of SetPoint™ meter data collection application
- Development of TrackPoint™ installation management system to utilize handheld data collectors for all data capture needs along with integration to sql server.
- Developed project management application (MPMS™) to automate and manage multiple project tasks. System managed overall status of project, contact management, inventory, payroll, automated electronic reporting, project statistics, tool inventory, rainout days, etc. Application contained hooks into MS Outlook for automated customer status reporting and hooks into Excel for employee payroll reporting. MS Access back-end.
- Development of NIMS – National Installation Management System, a work order tracking system to manage water/electric/gas meter installation projects. NIMS utilizes APIs from each of the major meter manufacturers to automatically download and reconcile PVI meter installations with readings from the head-end AMI system.

Feb 2010 to Feb 2012 – **Nat'l AMR/AMI Operations Program Manager**, Johnson Controls, Inc., Milwaukee, WI

- Established corporate guidelines on project scheduling, procurement, execution, close out and other best practices
- Supervised all AMR/AMI meter installations in North America including Canada and Hawaii.
- Served as JCI corporate liasion during project kickoffs, project meetings, and reviews.
- Managed and assisted JCI project managers as necessary during project implementation
- Managed project schedules, project scope, slippage, cost overruns, and budgets
- Facilitated in design /development of new AMR/AMI projects
- Worked with JCI PM's to execute projects effectively, manage costs, schedules, and contract scope

- Performed post-project customer satisfaction reviews
- Equipment and material procurement on large projects
- Worked closely with most major meter manufacturers to develop implementation strategies, teaming agreements, standardized nationl pricing…etc.
- Contract review and negotiation
- Monitored projects with self-written software (.asp + sql server) to better control route saturations and schedules

Sep 2009 to Feb 2010 – **Database Applications Manager**, Adams & Reese LLP, New Orleans, LA

- Database and applications manager for one of the largest law firms in New Orleans
- Database administration and management in SQL Server, File Maker Pro, and MS Access Databases.
- Developed DTS Packages (data exports and transformations), stored procedures, and queries in SQL Server as needed to interconnect different mission critical applications.
- Developed, planned, and executed software installation projects for 500+ employees.
- Reported directly to CIO for all database related activites for the firm.
- Extensive NetApp SAN and VM Ware exposure.

December 2001 to December 2002 – **Systems Administrator**, P&S Local 60, Metairie, LA
And September 1999 to December 2001-- **Software Developer**, P&S Local 60, Metairie, LA

- Managed all vital functions of Local 60's computer system including benefits administration, pension, contractor hours, death and disability benefits and membership dues.
- Migrated Windows NT PDC and BDC to Full Win 2000 Active Directory
- Migrated SQL 6.5 to SQL 2000 (AD), migrated Exchange 5.5 to AD Based Exchange 2000
- Developed backup scripts, sql server backup procs, stored procedures, triggers, and other programs
- Managed company website and associated ASP/CGI web apps
- Developed building lease application, dues transaction packages, security/logging applications and others
- SQL Server, Access, API, DAO, ADO, RDO, ASP, Class Modules, Active X, JavaScript, VB Script, Crystal Reports
- Developed company website and web applications utilizing HTML, Java Script, CGI, ASP and Visual Interdev, multiple ASP applications in conjunction with SQL Server 6.5 & 7.0
- Installed and administered Windows NT 4.0, Exchange Server 5, SQL Server 6.5 & 7.0, MS IIS 4 (BackOffice Suite)

PROJECT MANAGEMENT:

PROJECT	DESCRIPTION
Laredo, TX	Automatic Meter Reading System Installation - Crew of 20-30 mechanics installed over 60,000 water meters (IT Crew configured system)
Pinellas County, FL	AMI – Badger Cellular System – Currently under construction…installation of over 120,000 potable and reclaim water meters
Nacogdoches, TX	Automatic Meter Reading System Installation - Crew of 10-15 mechanics installed over 15,000 water meters (IT Crew configured system)
…many (20+) more with great references (references provided upon request)	

OTHER SKILLS:

- Server setup and configuration, RAID hardware management, backup management, server management…etc, firewall management with Remote VPN (IPSec), FTP Server Management
- Project management of large-scale construction projects
- Hardware: Networking, router installations, Cisco swich experience, trouble shooting, card installations
- System Development Tools: Visible Analyst, MS Project, Visio
- Other Skills: Graphic Design, Systems Analysis, Entity Relationship Diagrams, Data Flow Diagrams, Table Normalization, Relational Database Development, Adobe Photoshop, Flash, Macromedia MX Studio

AWARDS AND COMMUNITY INVOLVEMENT:

- Luling United Methodist Church – Homework Help Mentoring Program
- Luling United Methodist Church – Finance Committee, Technology Committee
- Co-Founder, Casting For Christ Fishing Club - First Baptist Luling Webmaster (www.castingforchrist.com)
- Red Cross volunteer for misc. community activities
- 1st Runner Up – Bell Chase Air Show Poster Design, Discover St. Charles Parish Magazine Cover Design Winner, 1st Place - St. Charles Parish Art Guild Water Color

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jasonw@pedalvalve.com



Jason G. Wilkie

Qualifications

- Oversees all aspects of Water Conservation and Water Meter Installations from 2007 to present.
- Served as Construction Manager for the Water Meter Division of Pedal Valves Inc. from 2004 to 2006.
- Oversees all contruction and project management aspects of water, electric, and gas meter installations and provides engineering support to these projects.
- Supervises material acquisition, coordination efforts for material storage, installation management, QC, and inventory control.
- Monitor daily progress of the installations and make adjustments to procedures to maximize efficiency of the installation process.
- Served as Construction Manager on meter installation jobs ranging from $700,000 to larger jobs in excess of $20,000,000. Hands on and supervisory experience in the installation of well over 2,000,000 meters ranging in size from 5/8" through 12" and in every type made.
- Served as Engineer and Project Manager for the Water Conservation Division of Pedal Valves Inc. from 2001-2004.
- Engineered and executed water conservation projects as project manager in 100's of buildings including: K-12 Schools, Hospitals, City Buildings, Universities, Militray Bases, Prisons, etc.

Education

1998 Louisiana State University Baton Rouge, LA
Bachelors of Science, Environmental Engineering
Registered Engineer Intern - Registration Number T-18721

Professional experience

2007 – Present Pedal Valves Inc. Luling, LA
Vice President of Operations

2004 – 2006 Pedal Valves Inc. Luling, LA
Engineer/Construction Manager – Water Meter Division

2001 – 2004 Pedal Valves Inc. Luling, LA
Engineer /Project Manager – Water Conservation Division

2001 – 1999 Louisiana DEQ Baton Rouge, LA
Environmental Engineer

Licensing

Master Plumber Licenses/Responsible Plumber of Record in the following states: AR, AZ, CA, IL, IN, NC, OH, OK, OR, TN, VA, WV

Robert Gilbert, Jr.

VP of Pedal Valves, Inc.

	Responsible for customer satisfaction and sales of all utility meter projects from inception through completion.
Responsibilities:	We will provide a customer-oriented team of competent professionals and mechanics to complete all phases of the project including field surveys, meter replacements or retrofits, and information systems work needed to execute a utility metering system upgrade project in a manner that brings delight to the customer.
Experience:	22 years as VP of Pedal Valves, Inc. Have lead projects that include nearly every water meter brand and type on the market and all of these manufactures various AMI/AMR systems.
Education:	Bachelors in Marketing, 1998 Louisiana State University
Major Utility Meter Projects:	▪ City of Arlington, TX ▪ Sarasota County, FL ▪ City of Pompano Beach, FL ▪ City of Salina, KS ▪ City of O'Fallon, MO ▪ Pinellas County, FL ▪ City of Baker, LA ▪ City of Abilene, TX ▪ City of Laredo, TX ▪ City of McComb, MS ▪ City of Southaven, MS ▪ Greater Ouachita Water Authority, LA ▪ City of Tulare, CA



Andrew Suffrin

241 Villere Drive Destrehan, LA 70047 (504) 343-6820
andrews@pedalvalve.com

Qualifications

Sales manager with over eight years of experience in water conservation and water meter work. Currently responsible for all water meter project sales and customer satisfaction.

Works diligently with our partners to make sure we are performing and communicating appropriately throughout each project.

Works daily with the engineering and construction team to ensure each project is running as it was proposed.

Education

2013 Southeastern Louisiana University Hammond, LA
Bachelor of Arts with Major in Business Management

Professional Experience

August 2014-Present — Pedal Valves, Inc. — Luling, LA
Sales Manager

July 2013-August 2014 — Environmental Safety and Health
Belle Chasse, LA — Project Supervisor

Recent Utility Meter Projects:

1. Pinellas County, FL
2. Dothan, AL
3. Irving, TX
4. City of Allen, TX
5. GOWC, LA
6. City of Abilene, TX
7. City of Sandy, OR

PEDAL VALVE REFRENCES

PEDAL VALVE, INC.

Pinellas County

Contact Information:

Jeremy Capes
6730 142nd Ave. N.
Largo, FL 33771
Phone: 727-464-5882

Completion Date: November 2022 – December 2026

Number of Products: 110 (new meter installations); 14,000 (cut-in meters for reclaim)

City of Laredo

Contact Information:

Margarita Ayala
1110 Houston Street
Laredo, TX 78040
Phone: 956-285-9642

Completion Date: June 2013 – February 2015

Number of Products: 75,000 (water meter installations)

Cape Fear Public Utility Authority

Contact Information:

Craig Wilson
235 Government Center Dr.
Wilmington, NC 28403
Phone: 910-332-6474

Completion Date: December 2016 – November 2017

Number of Products: 75,000 (water meter installations)

City of Abilene

Contact Information:

David Whittemore
555 Walnut St.
Abilene, TX 79601
Phone: 325-676-6471

Completion Date: September 2019 – October 2021

Number of Products: 45,000 (water meter installations)

Greater Ouachita Water Company

Contact Information:

Philip McQueen
1869 Avenue of America, Suite B
Monroe, LA 71201
Phone: 318-388-4303

Completion Date: November 2020 – December 2021

Number of Products: 25,000 (water meter installations)

North Miami Beach

Contact Information:

Karim Rossy
17011 NE 19th Ave.
North Miami Beach, FL 33162
Phone: 305-948-2967

Completion Date: August 2014 – October 2015

Number of Products: 35,000 (water meter installations)

Sarasota County Florida

Contact Information:

Katrina Coomer
1001 Sarasota Center Blvd.
Sarasota, FL 34240
Phone: 941-861-6775

Completion Date: March 2016 – May 2017

Number of Products: 31,000 (water meter installations)

The Woodlands

Contact Information:

Randy Edwards
2455 Lake Robbins Dr.
The Woodlands, TX 77380

Phone: 832-813-6905

Completion Date: October 2021 – November 2022

Number of Products: 32,000 (water meter installations)

City of Irving

Contact Information:

Brad Simpson
333 Valley View Lane
Irving, TX 75061
Phone: 972-721-2788

Completion Date: January 2019 – Present

Number of Products: 20,000 (water meter installations) to date (yearly service contract for 10,000 water meters)

PEDAL VALVE WARRANTY INFORMATION

PEDAL VALVES™
• 13625 River Road • Luling, LA • 70070 • www.pedalvalve.com • 1-800-431-3668 • (fax) 985-785-0082 •

Workmanship Warranty

Pedal Valves, Inc. (PVI) will warranty for a period of 2 (two) years from installation date that all installations will be free of defects in workmanship. At the point of a successful and complete meter installation, the installation labor warranty begins.

This warranty is inclusive of the following items:

- Defects in meter gaskets installed by PVI
- Defects in any fittings installed by PVI

This warranty does not include the following items:

- Acts of God such as lightning, flooding, etc.
- Any damage as a result of vandalism
- Broken boxes from vehicles or abuse by customer
- Broken or Missing Lids
- Seasonal damage to any piping (i.e., frozen pipes and/or pipe bursts)
- Cut or pulled wires
- Damaged transmitter antenna
- Any damages outside a 2-foot radius of the meter
- Any meters not exchanged by PVI
- Customer reports of low pressure not received within 1 month of installation

Pinellas Park (PP) shall be first response for any calls. If PP determines the problem lies within PVI's scope of workmanship warranty, they will contact PVI for coordination of repairs.

PVI will respond within 24 hours of notification. A local technician will inspect and make a report. The technician will then get authorization for repairs from PVI.

Once complete, a field report, description of repair/replacement will be provided within 5 working days. A call from the PVI Construction Manager will be made to the designated person within 1 business day of initial PVI technician inspection.

CERTIFICATE OF INSURANCE

PEDAVAL-01 GBUSTILLO

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY) 4/11/2024

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER License # 231432 Hub International Gulf South 3861 Ambassador Caffery Parkway Suite 550 Lafayette, LA 70503	CONTACT NAME: Janie Guidry PHONE (A/C, No, Ext): (337) 262-7207 FAX (A/C, No): E-MAIL ADDRESS: janie.guidry@hubinternational.com
INSURED Pedal Valves, Inc 13625 River Road Luling, LA 70070	INSURER(S) AFFORDING COVERAGE — NAIC # INSURER A : Valley Forge Insurance Company — 20508 INSURER B : Continental Casualty Company — 20443 INSURER C : Transportation Insurance Company — 20494 INSURER D : Columbia Casualty Company — 31127 INSURER E : INSURER F :

COVERAGES **CERTIFICATE NUMBER:** **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS		
A	X COMMERCIAL GENERAL LIABILITY CLAIMS-MADE X OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: X POLICY PRO-JECT LOC OTHER:			7036140723	11/10/2023	11/10/2024	EACH OCCURRENCE DAMAGE TO RENTED PREMISES (Ea occurrence) MED EXP (Any one person) PERSONAL & ADV INJURY GENERAL AGGREGATE PRODUCTS - COMP/OP AGG	$ $ $ $ $ $	1,000,000 300,000 5,000 1,000,000 2,000,000 2,000,000
A	AUTOMOBILE LIABILITY X ANY AUTO OWNED AUTOS ONLY SCHEDULED AUTOS HIRED AUTOS ONLY NON-OWNED AUTOS ONLY			7036140673	11/10/2023	11/10/2024	COMBINED SINGLE LIMIT (Ea accident) BODILY INJURY (Per person) BODILY INJURY (Per accident) PROPERTY DAMAGE (Per accident)	$ $ $ $	1,000,000
B	UMBRELLA LIAB X OCCUR X EXCESS LIAB CLAIMS-MADE DED RETENTION $			7036140706	11/10/2023	11/10/2024	EACH OCCURRENCE AGGREGATE	$ $	10,000,000 10,000
A	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) Y / N: Y If yes, describe under DESCRIPTION OF OPERATIONS below	N/A		7036140687	11/10/2023	11/10/2024	X PER STATUTE OTH-ER E.L. EACH ACCIDENT E.L. DISEASE - EA EMPLOYEE E.L. DISEASE - POLICY LIMIT	$ $ $	1,000,000 1,000,000 1,000,000
C	Worker's Compensatio			7036140690	11/10/2023	11/10/2024	Per Accident		1,000,000
D	Professional / Poll			7036235296	11/10/2023	11/10/2024	Limit		5,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

CERTIFICATE HOLDER

Insured Copy

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE



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AGENCY CUSTOMER ID: PEDAVAL-01 GBUSTILLO

LOC #: 1

ADDITIONAL REMARKS SCHEDULE

AGENCY	License # 231432	NAMED INSURED
Hub International Gulf South		Pedal Valves, Inc 13625 River Road Luling, LA 70070
POLICY NUMBER		
SEE PAGE 1		
CARRIER	NAIC CODE	EFFECTIVE DATE: SEE PAGE 1
SEE PAGE 1	SEE P 1	

ADDITIONAL REMARKS

THIS ADDITIONAL REMARKS FORM IS A SCHEDULE TO ACORD FORM,

FORM NUMBER: ACORD 25 FORM TITLE: Certificate of Liability Insurance

POLICY INFORMATION CONTINUED:
CYBER LIABILITY
Policy # C4LPT156541
Carrier: Coalition Insurance Solutions
Effective 11/10/2023 - 11/10/2024
Coverage Limit: $5,000,000

FORMS & ENDORSEMENTS
GENERAL LIABILITY POLICY INCLUDES:
Additional Insured Where Required by Written Contract
Waiver of Subrogation Where Required by Written Contract
Primary & Non-Contributory Where Required by Written Contract
30 Day Notice of Cancellation

AUTO LIABILITY POLICY INCLUDES:
Additional Insured Where Required by Written Contract
Waiver of Subrogation Where Required by Written Contract
Primary & Non-Contributory Where Required by Written Contract
Blanket 60 Day Notice of Cancellation

EXCESS LIABILITY POLICY INCLUDES:
Additional Insured Where Required by Written Contract
Waiver of Subrogation Where Required by Written Contract
Primary & Non-Contributory Where Required by Written Contract
30 Day Notice of Cancellation

WORKERS COMPENSATION POLICIES INCLUDE:
Alternate Employer Where Required by Written Contract
Waiver of Subrogation Where Required by Written Contract
Blanket 60 Day Notice of Cancellation

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NICOR DOCUMENTATION



NICOR REFERENCES

NICOR

Nicor, Inc. Selected 2023 References

1. **City of Long Beach, CA**
   Tai Tseng - Assistant General Manager, Operations
   562-570-2472 | Tai.Tseng@lbwater.org
   4 years, 70,000 lids

2. **City of Hayward, CA**
   Daryl Lockhardt - Utility Field Services Manager
   510-881-7932 | Daryl.lockhart@hayward-ca.gov
   6 years, 32,000 lids

3. **Lafayette Utilities System, LA**
   Catherine Coker – Utility Director
   337-291-5724 | ccoker@lus.org
   8 years, 20,000 lids

4. **City of Cedar Park, TX**
   Eric Rauschuber - Director of Utilities
   512-401-5570 | Eric.rauschuber@cedarparktexas.gov
   4 years, 3,000-5,000 lids

5. **City of Euless, TX**
   Jeff Pearson - Engineering
   817-685-1580 | jpearson@eulesstx.gov
   2 years, 2,500 lids

6. **City of Ruston, LA**
   Charlie Stachacz, Jr. - AMI Consultant
   352-638-2219 | charlie@independentutilityconsultant.com
   4 years, 5,000 lids

7. **City of Round Rock, TX**
   Richard Medrano - Utility Services Superintendent
   512-218-564 | rmedrano@roundrocktexas.gov
   5 years, 5,000 lids

8. **Kansas City BPU, KS**
   Ron Roy - AMI Project Manager
   913-573-9624 | rroy@bpu.com
   7 years, 80,000 lids

9. **Denver Water, CO**
   Cindy Hagwood - Supervisor of Meter Reading
   303-628-6828 | Cindy.hagwood@denverwater.org
   12 years 50,000 lids

10. **City of Olathe, KS**
    Tanya Roberts - AMI Project Manager
    913-971-9423 | TanyaRoberts@olatheks.org
    5 years 35,000 lids

11. **DC WASA Washington, DC**
    Sri Appana - Program Manager
    202-612-3543 | Sri.Appana@dcwater.com
    5 Years 25,000 and ordering another 80,000 lids

12. **City of North Miami Beach, FL**
    Karim Rossi - Utilities Engineering Manager
    (305)-948-2980 | Karim.Rossy@citynmb.com
    5 Years 12,000 lids

13. **Scottsdale Water, AZ**
    Rey Ferrolino – Water Resource
    (480) 312-5650 | RFerrolino@Scottsdaleaz.gov
    2 Years 40,000 Lids

14. **Buckeye Water, AZ**
    James Reynolds - Meter Service Supervisor
    623-349-6120| jreynolds@buckeyeaz.gov
    3 Years 20,000

15. **Savannah Water, GA**
    Andrew Collins - Meter Supervisor
    404-772-2998 | ACollins@Savannahga.Gov
    2 Years, 20,000 lids

16. **Augusta Utilities, GA**
    Michael Bryant – Engineer
    706-834-6179 | MBryant@augustaga.gov
    6 Years, 15,000 lids

17. **Miami Dade County Water and Sewer, FL**
    Juan Pelay – Chief Meter Installation Divison
    786-268-5454| Juan.pelay@miamidade.gov
    7 Years, 20,000 lids

18. **Aiken Utilities, SC**
    Daryl Burckle – Inventory Supervisor
    803-642-7614 |dburckle@cityofaikensc.gov
    2 years, 3,000 lids

19. **Orangeburg DPU, SC**
    Eric Odom – Meter Supervisor
    803-268-4401| eodom@orbgdpu.com
    6 years, 17,000 lids

20. **Madison County Water, AL**
    Vincent Moody – Engineering
    256-783-1547| vmoody@madisoncountyal.gov
    2 years, 7,000 lids

21. **Sarasota County, FL**
    Sean Lacaill – Utilities Manager
    941 -955-2325 | slacaill@scgov.net
    2 years, 8,000 lids

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22. **St. Petersburg, FL**
    Eric Lynch – Water Resources
    727-892-5105 | eric.lynch@stpete.org
    2 years, 4,500 lids

23. **TOHO Water, FL**
    Ken Denson – Utilities Manager
    407- 518-2502 | kbenson@tohowater.com
    6 years, 40,000 brackets

24. **ECUA, FL**
    Paul Nobles– Purchasing Manager
    850-476-0480| paul.nobles@ecua.fl.gov
    8 years, 25,000 lids

25. **Blakely, GA**
    Lane Davis – Utility Director
    229- 723-6455| lane.davis@cityofblakely.org
    1 year, 2,400 lids and brackets

WBE CERTIFICATION

WBENC

WOMEN'S BUSINESS ENTERPRISE NATIONAL COUNCIL

JOIN FORCES. SUCCEED TOGETHER.

hereby grants

National Women's Business Enterprise Certification

to

NICOR INC

who has successfully met WBENC's standards as a Women's Business Enterprise (WBE).
This certification affirms the business is woman-owned, operated and controlled and is valid through the date herein.

WBENC National WBE Certification was processed and validated by Women's Business Enterprise Alliance, a WBENC Regional Partner Organization.

Certification Granted: May 26, 2021
Expiration Date: May 31, 2024
WBENC National Certification Number: WBE2101242

April Day

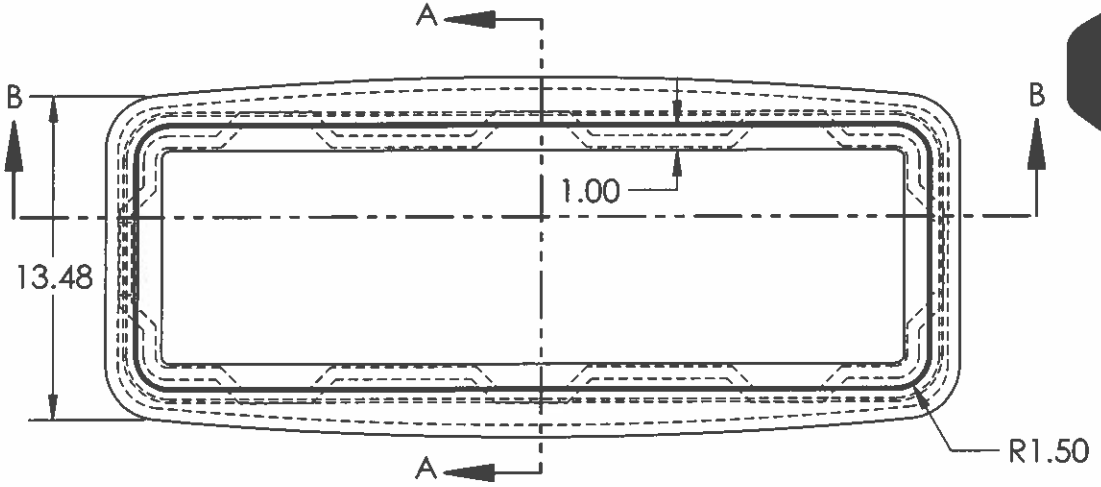
Authorized by April Day, President Women's Business Enterprise Alliance

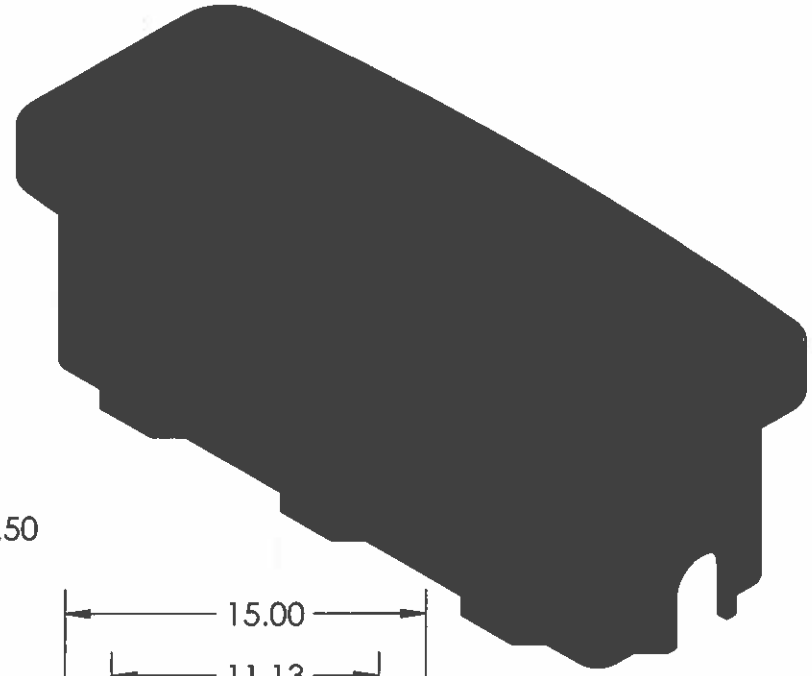
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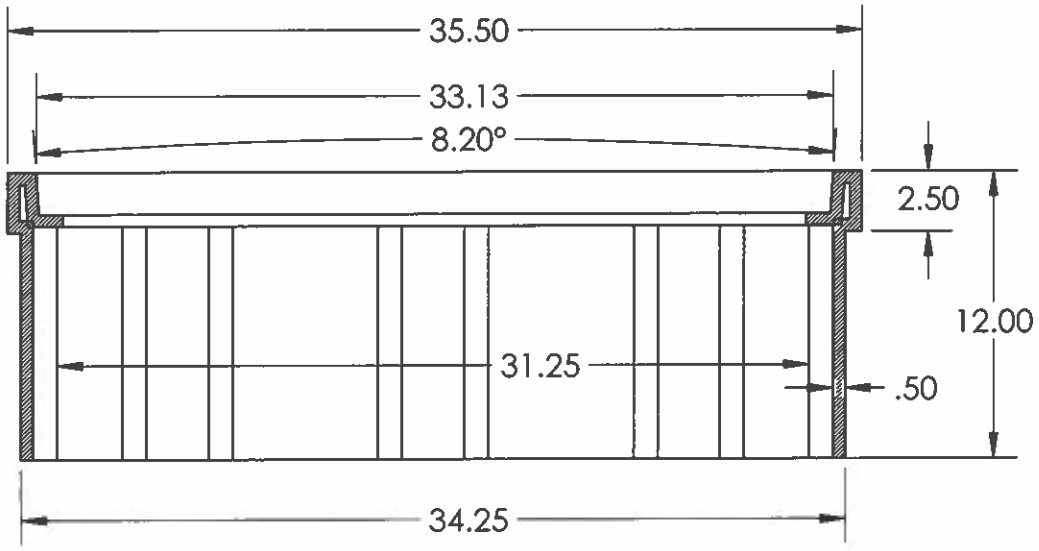
NAICS: 326199, 334514
UNSPSC: 31141501, 31141901

Center for Women & Enterprise · Great Lakes Women's Business Council · Greater Women's Business Council · Women's Business Council Southwest · WBEC Metro NY · WBEC Greater NY · WBEC South · WBEC East · WBEC ORV · WBEC Pacific · Women's Business Development Center · WBEC West · WBEC Florida

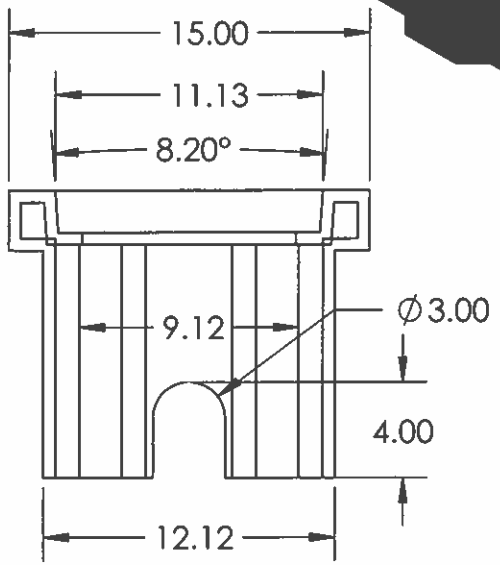
PRODUCT DOCUMENTATION







SECTION B-B



SECTION A-A

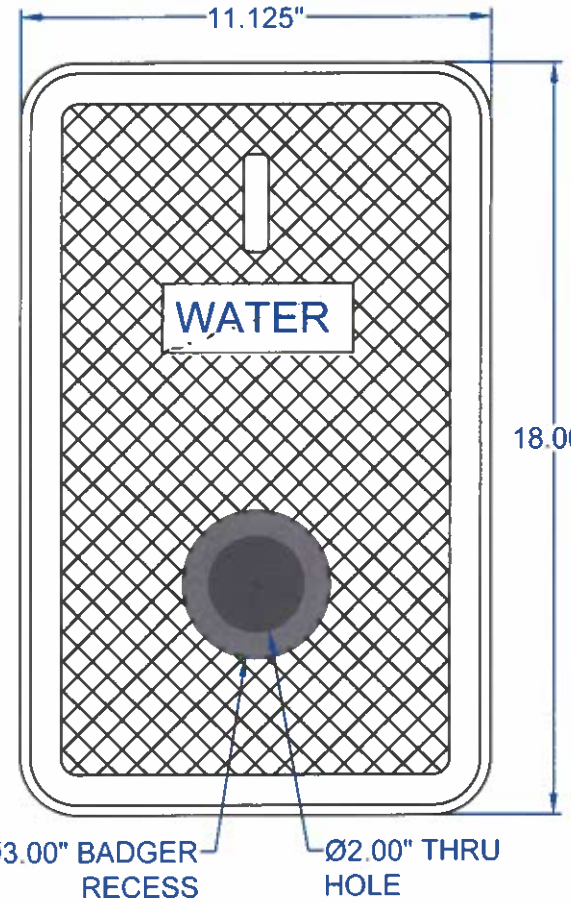
TOLERANCE: +/- 1/8"

REVISION NOTES:
REV1;ADDED RIBS TO BOX

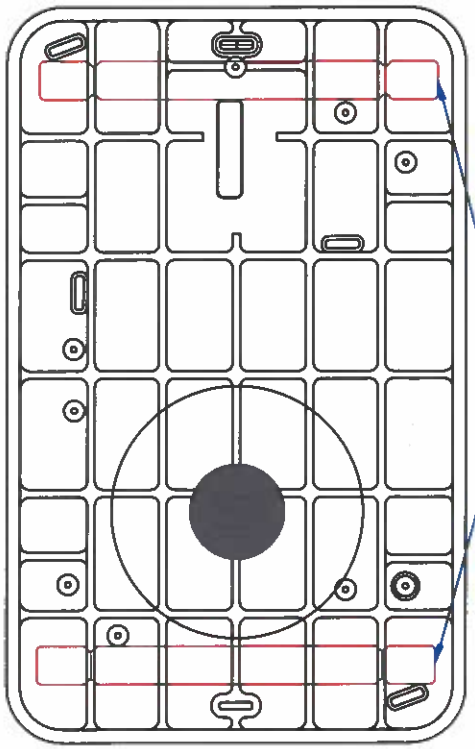
SIGMA™

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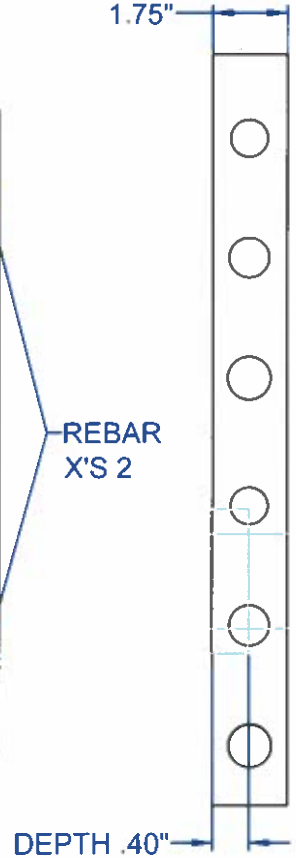
TOP VIEW



BOTTOM VIEW



SIDE VIEW



SIDE WIDTH VIEW



PROPRIETARY

General Notes

Lid Weight: 8.7 lbs

Revision	Drawn By	Date
4	DLM	11/15/19
3	DLM	12/11/17
2	DLM	9/24/17
1	DLM	12/9/16

MATERIAL MAIN LID POLYMER
FINISH PROCESS
SURFACE FINISH 125

FINISH OR TREATMENT
(UNLESS OTHERWISE SPECIFIED)

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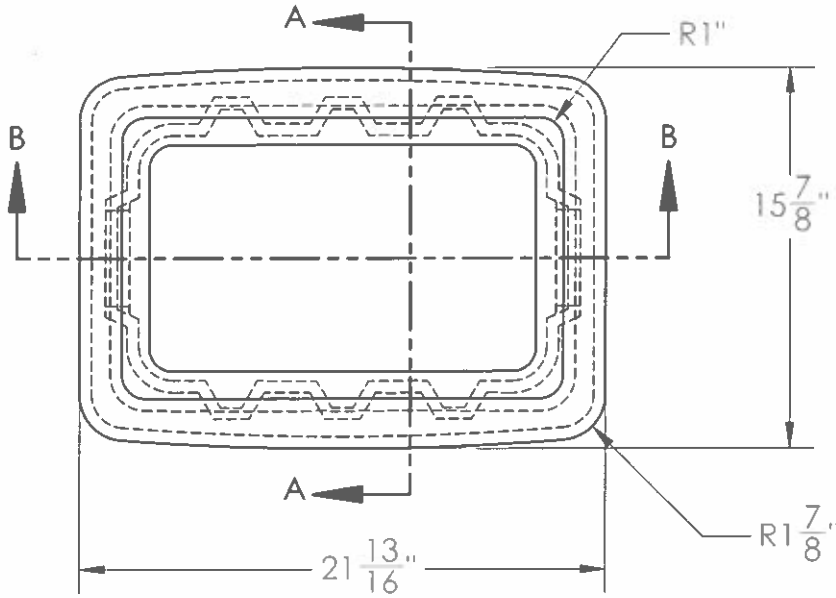
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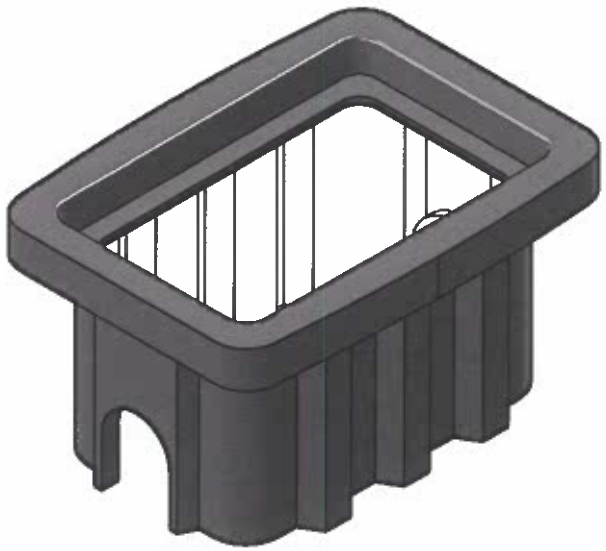
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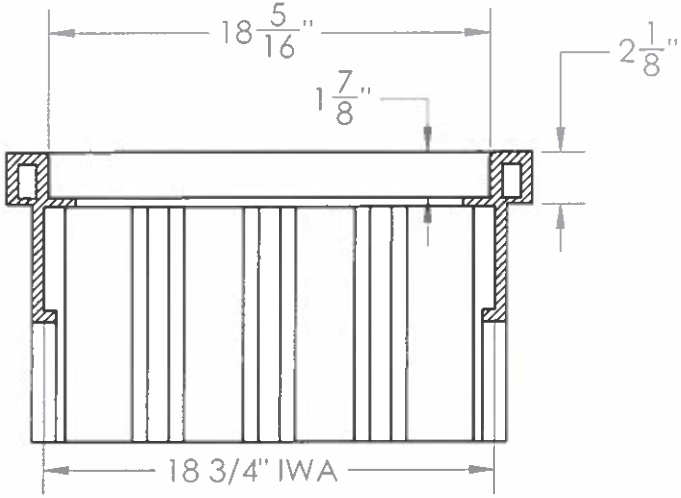
CUSTOMER DRAWING

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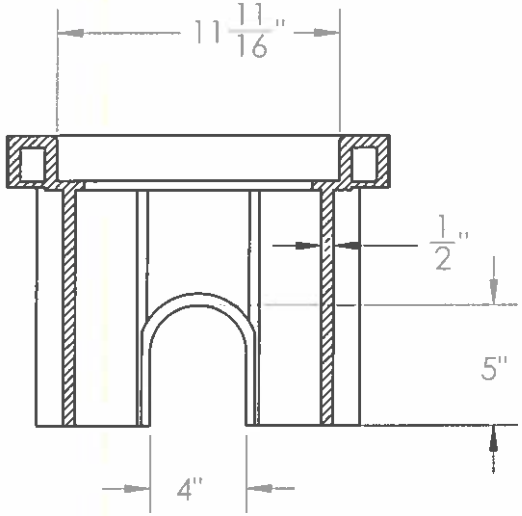
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SECTION B-B

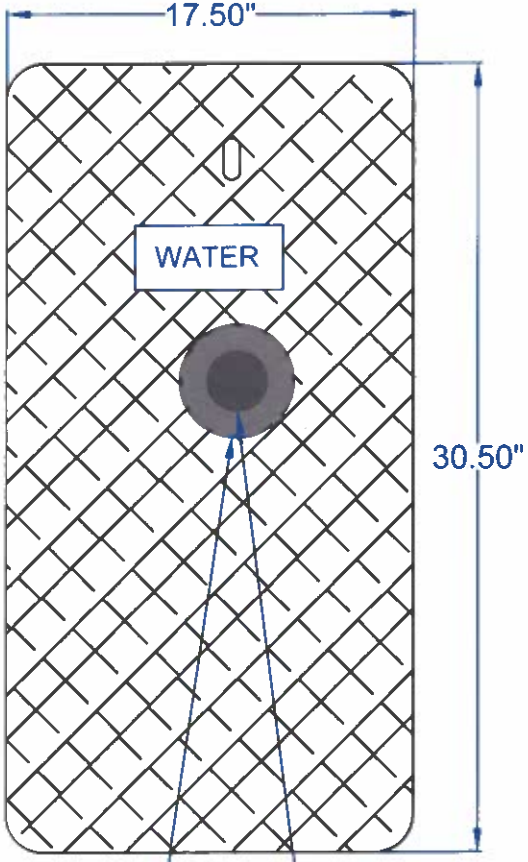


SECTION A-A

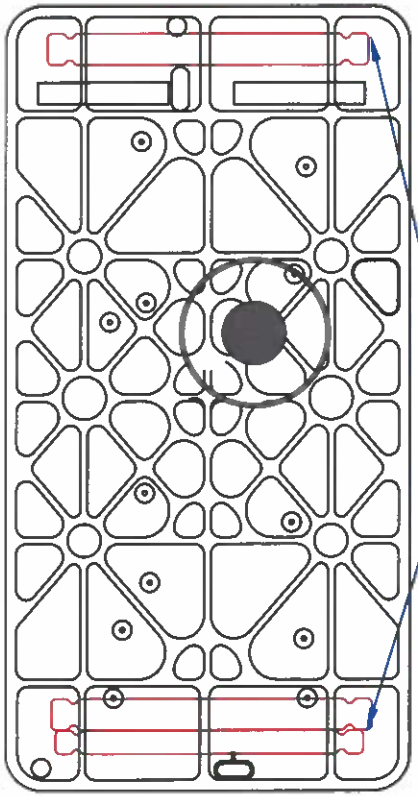
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DIMENSIONAL TOLERANCE +/- 1/8"

RMB 111812-NSW-W

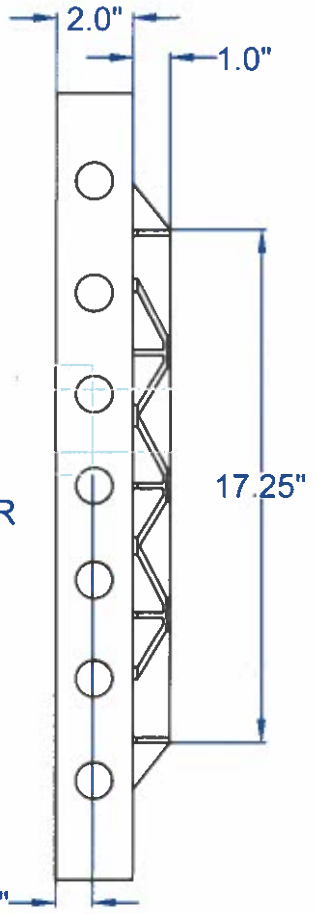
TOP VIEW



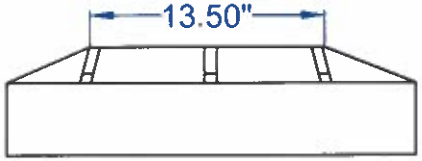
BOTTOM VIEW



SIDE VIEW



SIDE WIDTH VIEW



PROPRIETARY

General Notes

Lid Weight 32.5 lbs

Revision	Drawn By	Date
5	DLM	7/22/21
4	DLM	11/15/19
3	DLM	12/12/17
2	DLM	10/2/17
1	DLM	1/28/16

MATERIAL MAIN LID POLYMER
FINISH PROCESS
SURFACE FINISH 125

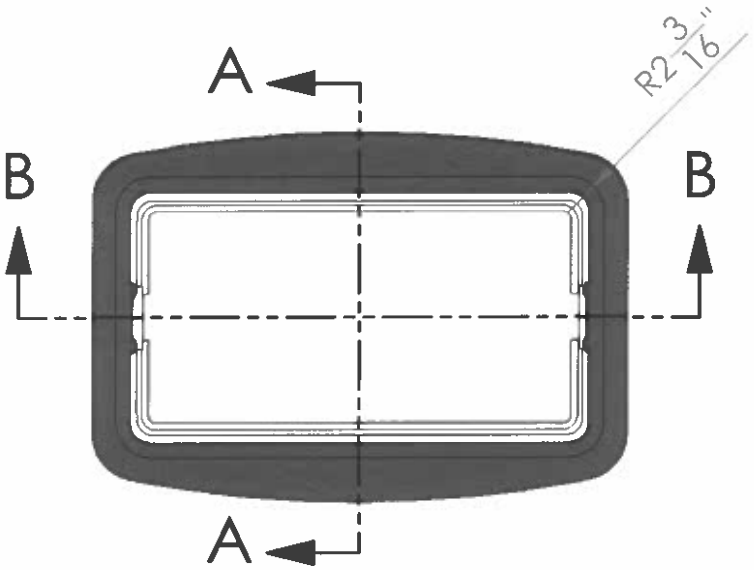
FINISH OR TREATMENT
(UNLESS OTHERWISE SPECIFIED)

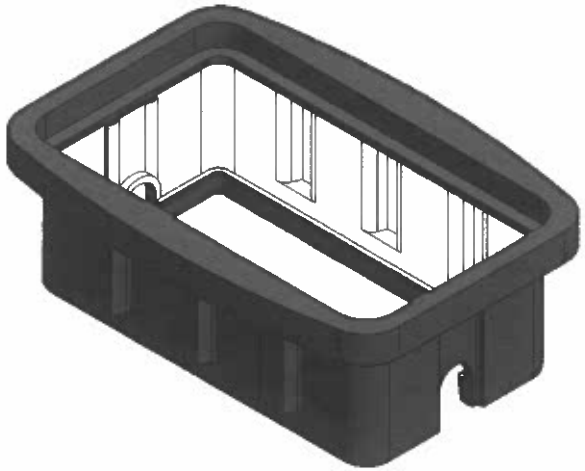
NICOR, INC.
PROPRIETARY NOTICE
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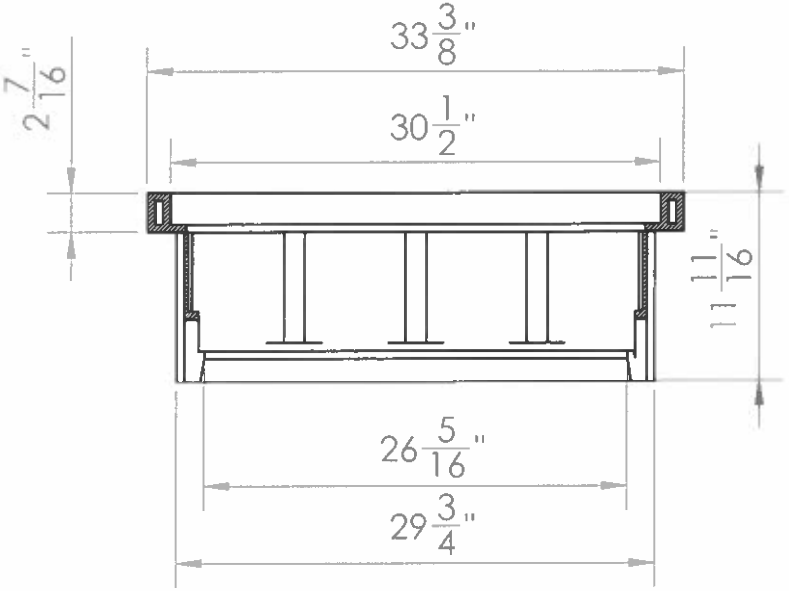
NICOR

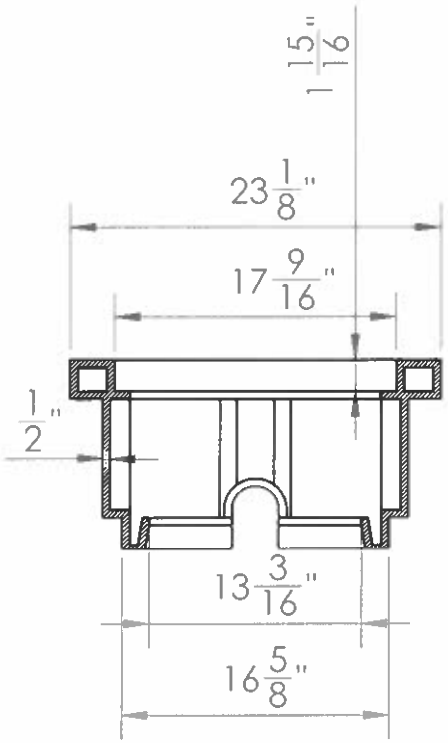
Project Name
B36 with Badger Recess & Thru Hole

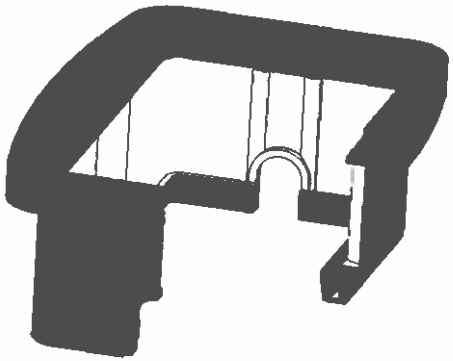
Drawing Number: CUSTOMER DRAWING
Sheet: 05
Date: 17.50"x30.50"











SECTION B-B

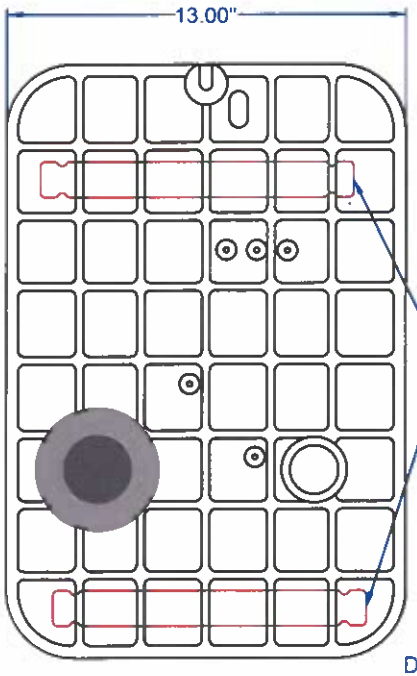
SECTION A-A

RMB 173012-SW-W

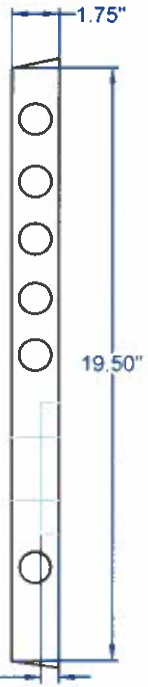
TOP VIEW



BOTTOM VIEW



SIDE VIEW



SIDE WIDTH VIEW



PROPRIETARY

General Notes

Lid Weight: 10.5 lbs

Revision	Drawn By	Date
3	DLM	11/23/20
2	DLM	9/9/20
1	DLM	5/13/20

WOMAN OWNED
&
MADE IN THE USA

MATERIAL MAIN LID POLYMER
FINISH PROCESS
SURFACE FINISH 125

FINISH OR TREATMENT
(UNLESS OTHERWISE SPECIFIED)
INTERPRET FINISH PROCESS
DIMENSIONS IN INCHES
DIMENSIONS IN MILLIMETERS
TOLERANCES UNLESS SPECIFIED XX± .010 (.254)
.XXX± .005 (.127)
XX ± .010 (.254)
ANGLES ± .010 10'
REMOVE BURRS AND BREAK CORNERS
.005 (.127) MAX UNLESS SPECIFIED
INSIDE CORNERS .010 R MAX
CONCENTRICITY .005 TIR

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NICOR

Base Lid Name
B13 13.25X19.75 with Badger Recess & Thru Hole

Drawing Number
CUSTOMER DRAWING

Sheet
01

Lid Size/Dim
13.25X19.75

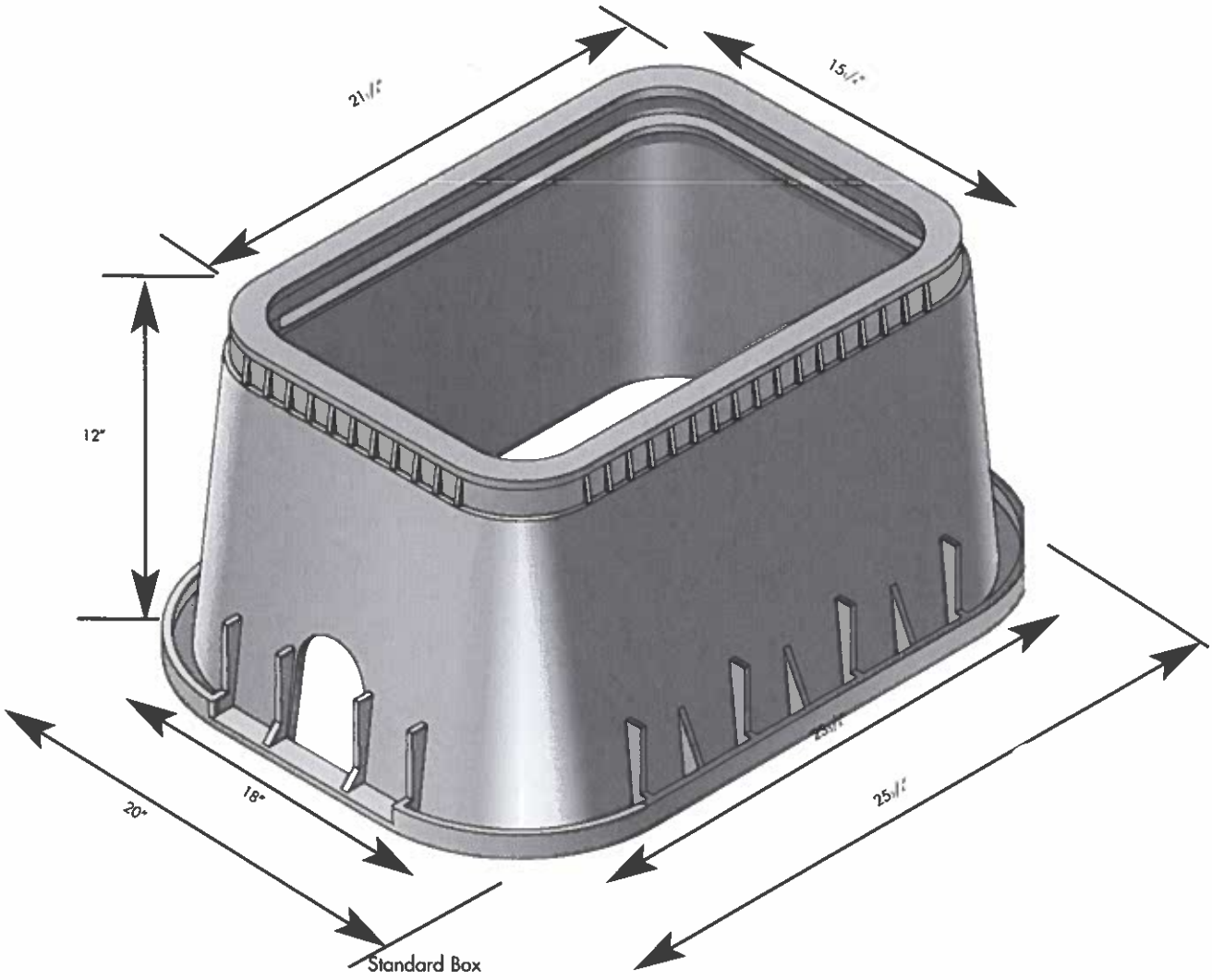
NDS
WE PUT WATER IN ITS PLACE

TECHNICAL SPECIFICATIONS

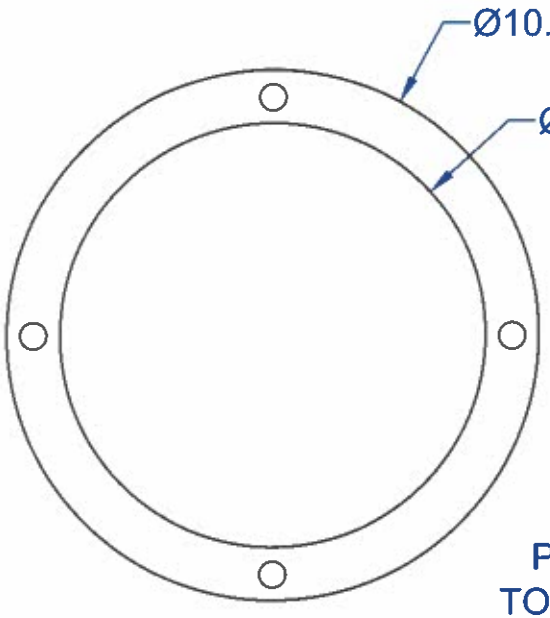
NDS D1500 Meter Boxes

NDS WATER METER BOXES AND COVERS

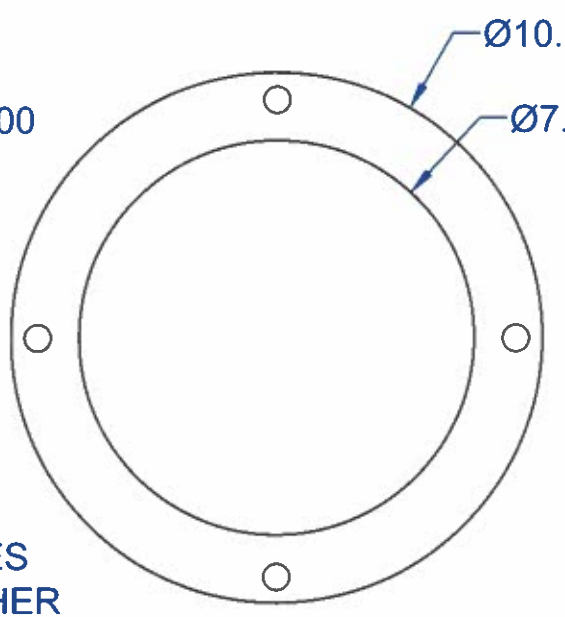
NDS 13"x 20" meter boxes and covers are injection molded of structural foam recycled polypropylene material with a melt index between 10-12. Coloring and UV stabilizers are added, along with processing lubricants when needed. The 13"x 20" body shall be tapered and have a minimum wall thickness of .25". The body shall have a double wall at the top cover seat area with a minimum thickness of .187". The cover seat area shall have 56 structural support ribs on the underside of the seat, each with a minimum thickness of 1/50". The bottom of the body shall have a 1" flange. The 13"x 20" cover shall have an average thickness of .250".



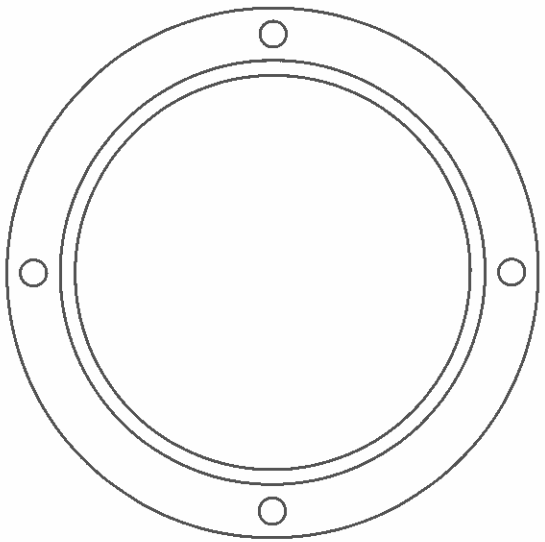
TOP PLATE



BOTTOM PLATE



PLATES TOGETHER



PROPRIETARY

THICKNESS

VAULT	BOTTOM PLATE
.25"	.50"
.375"	.375"
.50"	.25"

WOMAN OWNED
&
MADE IN THE USA

MATERIAL MAIN LID POLYMER
FINISH PROCESS
SURFACE FINISH 125

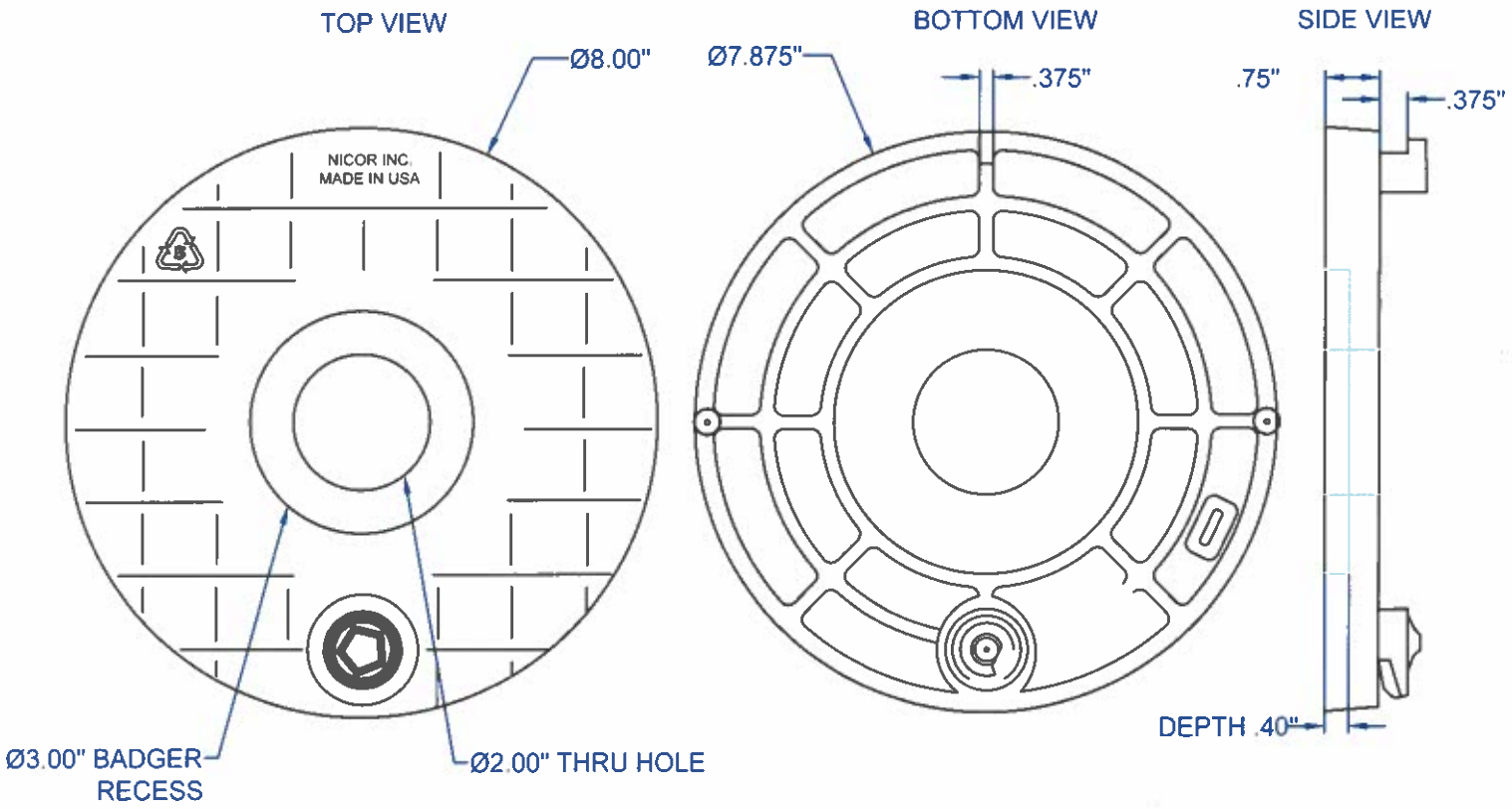
FINISH OR TREATMENT
(UNLESS OTHERWISE SPECIFIED)

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NICOR

8.0CSRING

CUSTOMER DRAWING 01
8.0CSRINGKIT



PROPRIETARY

Lid Weight: 1.5 lbs

WOMAN OWNED
&
MADE IN THE USA

MATERIAL MAIN LID POLYMER
FINISH PROCESS
SURFACE FINISH 125

FINISH OR TREATMENT

(UNLESS OTHERWISE SPECIFIED)

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NICOR

8.0" Insert with Badger Recess & Thru Hole

CUSTOMER DRAWING 01

8.0" Insert

TERMS AND CONDITIONS OF SALE

Terms: Standard terms are NET 30. A 1½% per month (18% per annum) service charge will be added to all past due accounts

Errors & Claims: All claims for shortage in shipment or damaged material must be noted on the "Bill of Lading" and a written request for credit submitted to Nicor Inc. within 15 days of shipment. Nicor Inc. responsibility ceases upon delivery to the carrier.

Returned Goods: Returned goods will be accepted only after written approval and shipping instructions are received from Nicor Inc. A return goods authorization number is required and must be on all cartons, documents, and correspondence. All returns are subject to a 30% restocking charge, freight cost of returned goods (plus "out freight if applicable"). A higher restocking charge may be assessed against any return requiring extraordinary handling costs.

Minimum Order: 50-piece minimum order net billing.

Limited One Year Warranty: The liabilities of Nicor Inc. are limited solely and exclusively to replacement as set forth in our standard "Statement of Warranty", alone and do not include any liability for incidental, consequential or other damage of any kind whatsoever, whether any claim is based upon theories of contract, warranty, negligence or tort and without any limitations and do not include shipping charges, labor, installation or any other losses or expenses incurred in operation of any replacement specialty item or fitting. Nicor Inc. products are designed to be used for meter applications only. Any modifications to the lid after acceptance and or products used in improper application by customer as described within, voids the warranty.

Limited Lifetime Warranty: Nicor Inc. warrants to the original owner of its Nicor meter lids and connectors, subject to the conditions set forth in this warranty, that Nicor Inc. products will remain free from manufacturing defects. All Nicor Inc. products are guaranteed against defects resulting from faulty workmanship or materials. Claims for labor costs and other expenses required to replace defective products or repair of any damage resulting from the use thereof will not be allowed by Nicor Inc. Our liability is limited to replacement of products acknowledged by Nicor Inc. to be defective.

Exclusive Warranties and Remedies: The FOREGOING REMEDIES ARE EXCLUSIVE AND ARE GIVEN AND ACCEPTED IN LIEU OF (I) ANY AND ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING WITHOUT LIMITATION THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR PARTICULAR PURPOSE; AND (II) ANY OBLIGATION, LIABILITY, RIGHT, CLAIM OR REMEDY IN CONTRACT OR TORT, WHETHER OR NOT ARISING FROM Nicor Inc.'s NEGLIGENCE, ACTUAL OR IMPUTED.

The remedies of customer shall be limited to those provided herein to the exclusion of any and all other remedies including, without limitation, incidental or consequential damages. No agreement varying or extending the foregoing warranties, or these limitations will be binding on Nicor, Inc., unless such is signed in writing by an authorized officer of Nicor, Inc. The liability of Nicor, Inc., hereunder shall be limited to restoring to good working order, provided that Nicor, Inc., is not required to restore the product to good working order when such failure is due to causes beyond Nicor, Inc.'s control, including but not limited to, acts of God, acts of civil or military authority, priorities, strikes, floods, epidemics, war, riots, and other causes that are beyond the manufacturers control. These provisions are complete and exclusive statements of all terms and conditions between Nicor, Inc., and the consumer. These provisions may not be varied, supplemented, qualified or interpreted by any prior course of dealings, written or oral or by trade usage. No Nicor, Inc. agent, officer or employee has authority to make any representation, promise or warranty concerning these provisions.

***SMART WATER IS** BADGER METER*

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www.badgermeter.com

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México | Badger Meter de las Americas, S A de C V | Pedro Luis Ogazón N°32 | Esq. Angelina N°24 | Colonia Guadalupe Inn | CP 01050 | México, DF | México | +52-55-5662-0882
Europe, Eastern Europe Branch Office (for Poland, Latvia, Lithuania, Estonia, Ukraine, Belarus) | Badger Meter Europe | ul. Korfantego 6 | 44-193 Knurów | Poland | +48-32-236-8787
Europe, Middle East and Africa | Badger Meter Europa GmbH | Nurtinger Str 76 | 72639 Neuffen | Germany | +49-7025-9208-0
Europe, Middle East Branch Office | Badger Meter Europe | PO Box 341442 | Dubai Silicon Oasis, Head Quarter Building, Wing C, Office #C209 | Dubai / UAE | +971-4-371 2503
Slovakia | Badger Meter Slovakia s.r.o. | Racianska 109/B | 831 02 Bratislava, Slovakia | +421-2-44 63 83 01
Asia Pacific | Badger Meter | 80 Marine Parade Rd | 19-07 Parkway Parade | Singapore 449269 | +65-63464836
Switzerland | Badger Meter Swiss AG | Mittelholzerstrasse 8 | 3006 Bern | Switzerland | +41-31 932 01 11

3. MONTHLY BILLING DATA SERVICE PROMISE.

Badger Meter will use commercially reasonable efforts to fulfill the following Service Promise:

- The BEACON SaaS Managed Solution will successfully provide Monthly Billing Data for at least 98.5% of provisioned accounts at the time of billing request to the BEACON SaaS Managed Solution.

Definitions

"**Managed Solution**" is a system that consists of a network deployment using fixed network and/or cellular endpoints, where Badger Meter maintains the responsibility for managing the reading hardware and software for system operation over the Term of the Agreement.

"**Provisioned Accounts**" are accounts with cellular or fixed network endpoints that are discovered by the network, fully able to communicate with the network, and completely entered correctly in the BEACON SaaS Managed Solution.

"**Monthly Billing Data**" is a valid meter reading obtained within three (3) days of the billing as performed through the BEACON SaaS Managed Solution to provisioned accounts.

CALCULATION of Monthly Billing Data Service Promise for Provisioned Accounts:

Monthly Billing Data success rate is calculated by the count of accounts in the billing cycle with meter read data within three (3) days ("**Count of Billing Reads**") divided by the number of active and Provisioned Accounts in the billing cycle ("**Count of Total Billing Cycle**").

$$\frac{\textit{Count of Billing Reads}}{\textit{Count of Total Billing Cycle}}$$

Where:

"Count of Billing Reads" is the total number of accounts in the billing file with valid data that a billing quality reading is supplied for managed solution endpoints.

"Count of Total Billing Cycle" is the total number of accounts with valid data in the billing file being processed for managed solution endpoints.

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If Customer suspects that the Monthly Billing Data Service Promise has not been met for a particular Billing Cycle, (a) Customer shall notify Badger Meter, in writing, within twenty-four (24) hours of the occurrence, via email (techsupport@badgermeter.com) of the Count of Billing Reads and Count of Total Billing Cycle of managed solution endpoints; (b) the specific time and date when the billing read file was generated.

Service Credits

If Badger Meter fails to meet the Monthly Billing Data Service Promise, Service Credits will be calculated as follows:

Service Credit = Managed Solution Endpoint Service Units Consumed in the Month * (1 - Monthly Billing Data Success Rate) rounded to the next whole number

For example;

Monthly Billing Data Success Rate	**Service Credit** (Service Units per 1,000 Service Units consumed in the month)
95%	50
90%	100
80%	200
70%	300
60%	400
50%	500

Service Credit will be added to Customer's account in the form of pre-paid Service Units for the same endpoint type(s).

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4. **MISCELLANEOUS.**

Exclusions

The BEACON Portal and Service Availability Promise and Monthly Billing Data Service Promise do not apply to any of the following performance issues, in addition to other exclusions herein:

(i) Resulting from any actions or inactions of Customer, its Authorized Users or Authorized Consumers in accordance with the restrictions and requirements of this Agreement;

(ii) Resulting from Customer or its suppliers equipment, software, or other technology and/or Customer's third party equipment, software, or other technology outside of Badger Meter's control;

(iii) Caused by failures, including, but not limited to, internet connectivity, port availability, firewall configuration, or cellular networks at Customer's location;

(iv) Resulting from Customer's breach of any term or condition under the Agreement;

(v) Caused by unexpected or unintentional RF interference or signal obstruction caused by sources not present or not in use during endpoint installation;

(vi) Caused by intentional RF interference or signal obstruction not present during endpoint installation, caused by third parties;

(vii) Caused by Customer, an Authorized User's or an Authorized Consumer's misuse or abuse of the Portal or Service;

(viii) During an event triggering a disaster recovery and for a twenty-four (24) hour period after the resumption of the Service following such an event to allow for the system to return to normal operating ranges;

(ix) Arising from Badger Meter's suspension or termination of Customer's right to use the BEACON Managed Solution in accordance with the Agreement;

(x) Arising from failure of Customer to follow Badger Meter's published installation, operation and maintenance instructions and Clarifications from Badger Meter's Preliminary Network Design;

(xi) When outdoor temperatures either exceed or are below the endpoint operating temperature range as described in the applicable product data sheet.

(xii) Accounts read using manual, touch read, handheld and mobile technology are not included as part of the Monthly Billing Data Service Promise, as these reading technologies are outside of Badger Meter's control.

In the event Badger Meter does not meet a Service Promise hereunder, Badger Meter will conduct a commercially reasonable root cause analysis of the Service promise failure. If Badger Meter's analysis is inconclusive, or if Badger Meter concludes that circumstances outside of Badger Meter's control caused the Service promise failure, or if Badger Meter concludes that a failure falls under any other exclusions described hereunder, Customer will not be entitled to a Service Credit. If Badger Meter's analysis is conclusive and that circumstances within Badger Meter's control caused the Service failure, Customer will be eligible to receive a Service Credit as described above.

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EXCEPT AS EXPRESSLY PROVIDED IN THIS SLA, THE SERVICE CREDITS SPECIFIED IN THIS SLA WILL BE CUSTOMER'S SOLE AND EXCLUSIVE REMEDY FOR BADGER METER'S FAILURE TO MEET THE SERVICE PROMISE SPECIFIED IN THIS SLA.

Badger Meter will report Service Promises and applicable Service Credits upon request and upon a commercially reasonable frequency. Following each report, upon Customer request, the parties will discuss such performance and the extent to which any Service Credits either are appropriate or should be modified due to circumstances not captured by the reporting methodology.

Upon agreement concerning the Service Credits due, such Service Credits will be applied against Badger Meter's charges in the months following the month in which the credits were incurred.

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EXHIBIT 3

BEACON SaaS MANAGED SOLUTION SECURITY POLICY

1. **BEACON SaaS Portal and Service Information Security Program.** Badger Meter maintains an information security program (including the adoption and enforcement of internal policies and procedures) designed to (a) support the BEACON SaaS Managed Solution, (b) identify reasonably foreseeable and internal risks to the BEACON Portal and Service security and unauthorized access to the Badger Meter Network, and (c) minimize security risks. The BEACON Portal and Service information security program includes the following measures:

   1.1 **Network Security.** The Badger Meter Network is electronically accessible to employees, and contractors necessary to provide the Portal and Service. Badger Meter maintains access controls and policies to manage what access is allowed to the Badger Meter Network from each network connection and user, including the use of firewalls or functionally equivalent technology and authentication controls. Badger Meter maintains corrective action and incident response plans to respond to potential security threats.

   1.2 **Physical Security.**

   1.2.1 **Physical Access Controls.** Physical components of the Badger Meter Network are housed in nondescript facilities (the "**Facilities**"). Physical barrier controls are used to prevent unauthorized entrance to the Facilities both at the perimeter and at building access points. Passage through the physical barriers at the Facilities requires either electronic access control validation (e.g., card access systems, etc.) or validation by human security personnel (e.g., contract or in-house security guard service, receptionist, etc.). Employees and contractors are assigned photo-ID badges that must be worn while the employees and contractors are at any of the Facilities. Visitors are required to sign in with designated personnel, must show appropriate identification, and are assigned a visitor ID badge that must be worn while the visitor is at any of the Facilities, and are continually escorted by authorized employees or contractors while visiting the Facilities.

   1.2.2 **Limited Employee and Contractor Access.** Badger Meter provides access to the Facilities to those employees and contractors who have a legitimate business need for such access privileges. When an employee or contractor no longer has a business need for access privileges, the access privileges are promptly revoked, even if the employee or contractor continues to be an employee of Badger Meter or its affiliates.

   1.2.3 **Physical Security Protections.** All major access points (other than main entry doors) are maintained in a secured (locked) state. Access points to the Facilities are monitored by video surveillance cameras designed to record all individuals accessing the Facilities. All physical access to the Facilities by employees and contractors is logged and routinely audited.

   1.2.4 **Pre-Employment Screening.** Badger Meter conducts criminal background checks, as permitted by applicable law, as part of pre-employment screening practices for

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employees commensurate with the employee's position and level of access to the Facilities. Badger Meter will not permit an employee to have access to the non-public Customer Data or perform material aspects of the Service if such employee has failed to pass such background check.

2. **Continued Evaluation.** Badger Meter will conduct periodic reviews of the security of its Badger Meter Network and adequacy of its information security program as measured against industry security standards and its policies and procedures. Badger Meter will continually evaluate the security of its Badger Meter Network and associated Service to determine whether additional or different security measures are required to respond to new security risks or findings generated by the periodic reviews.

3. **Customer Responsibilities.** System security is a shared responsibility between Badger Meter and Customer. Customer shall assign a systems service administrator to be responsible for establishing access and usage policies. Customer shall develop commercially reasonable policies and procedures to insure physical security, establishing account access approvals and procedures, conduct regular reviews of access rights, and provide security awareness training for staff using the Service. The administrator shall also be responsible for policies and procedures related to Authorized Consumers access to their individual data resident on the Network.

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GENERAL BADGER DOCUMENTATION

Badger Meter

4545 W Brown Deer Road
PO Box 245036
Milwaukee, Wisconsin 53224-9536
414-355-0400 | 800-876-3837
www.badgermeter.com

APPOINTMENT OF ELECTED AND NON-ELECTED OFFICERS

We certify as follows:

Under authority delegated by the Badger Meter, Inc. Board of Directors to Badger Meter, Inc. executive management, the following are appointed:

Non-Elected Officers:

Charla D. Dury	Assistant Secretary	Proposal Lead – Bids and Contract Administration
Wayne Dennis	Assistant Secretary	Senior Director - International Sales & Marketing & Business Development
Nicholas J. Gemmell	Assistant Secretary	Senior Legal Counsel
Matthew B. Gieseke	Assistant Secretary	Proposal Lead – Bids and Contract Administration
Charity D Granberry	Assistant Treasurer	Milwaukee Accounting Manager
Shauna A. Griffin	Assistant Secretary	Sr. Director – Utility Sales
Benjamin E. Loomis	Assistant Secretary	Milwaukee Credit Manager
David A. Miller	Assistant Secretary	Counsel II
Rachel J. Meyer	Assistant Secretary	Proposal Manager – Bids and Contract Administration
Jessica A. O'Malley	Assistant Secretary	Director – Turnkey Operations
Jevgeni Neufeld	Assistant Treasurer	Director – Finance
Michael Steiner	Assistant Secretary	General Manager of Water Quality International
Christie M. Tarantino	Assistant Treasurer	Director - Accounting & External Reporting
Kavin Tedamrongwanish	Assistant Secretary	Counsel III

BY: KRB
Ken Bockhorst (Mar 8, 2024 11:51 CST)

William R. Bergum

Kenneth C. Bockhorst

Chairman, President, and Chief Executive Officer

Badger Meter, Inc.

March 8, 2024

William R. A. Bergum,

Vice President - General Counsel & Secretary

Badger Meter, Inc.

March 8, 2024

DEPARTMENT OF BUSINESS & PROFESSIONAL REGULATION REGISTRATION

Entity Information

BADGER METER INC • Active Registration

Unique Entity ID
WZCBUQDPMWR3

CAGE/NCAGE
05105

Expiration Date
Jan 7, 2025

Physical Address
4545, West Brown Deer Road
Milwaukee, Wisconsin
53223-2479, United States

Mailing Address
P O Box 245036
Milwaukee, Wisconsin
53224-9536, United States

Purpose of Registration
All Awards

Version

Current Record

may subject the Web Services Employer, its subcontractors, its employees, or its representatives to: (1) prosecution for false statements pursuant to 18 U.S.C. 1001 and/or; (2) immediate termination of its MOU and/or; (3) possible debarment or suspension.

G. The foregoing constitutes the full agreement on this subject between DHS and the Web Services Employer.

Approved by:

Web Services Employer Badger Meter, Inc.	
Name (Please Type or Print) Donna R Koepke	Title
Signature Electronically Signed	Date 08/07/2008
Department of Homeland Security – Verification Division	
Name (Please Type or Print) USCIS Verification Division	Title
Signature Electronically Signed	Date 08/07/2008

Company ID Number: 142953

Information Required for the E-Verify Program **Information relating to your Company:**	
Company Name	Badger Meter, Inc.
Company Facility Address	4545 W. Brown Deer Road Milwaukee, WI 53223
Company Alternate Address	P. O. Box 245036 Milwaukee, WI 53224-9536
County or Parish	MILWAUKEE
Employer Identification Number	390143280
North American Industry Classification Systems Code	332
Parent Company	
Number of Employees	500 to 999
Number of Sites Verified for	5

Company ID Number: 142953

Are you verifying for more than 1 site? If yes, please provide the number of sites verified for in each State:

ARIZONA	1 site(s)
CALIFORNIA	1 site(s)
OKLAHOMA	1 site(s)
WISCONSIN	2 site(s)

2024 FOREIGN PROFIT CORPORATION ANNUAL REPORT

DOCUMENT# 841521

Entity Name: BADGER METER, INC.

Current Principal Place of Business:

4545 W. BROWN DEER RD.
MILWAUKEE, WI 53223

Current Mailing Address:

4545 W. BROWN DEER RD.
MILWAUKEE, WI 53223 US

FEI Number: 39-0143280

FILED
Mar 15, 2024
Secretary of State
9158284196CC

Certificate of Status Desired: No

Name and Address of Current Registered Agent:

CORPORATION SERVICE COMPANY
1201 HAYS STREET
TALLAHASSEE, FL 32301-2525 US

The above named entity submits this statement for the purpose of changing its registered office or registered agent, or both, in the State of Florida.

SIGNATURE:

Electronic Signature of Registered Agent — Date

Officer/Director Detail :

Title	VP, SECRETARY, GENERAL
Name	BERGUM, WILLIAM ROBERT AXEL
Address	N63 W29924 WOODFIELD CT
City-State-Zip:	HARTLAND WI 53029

Title	VP
Name	STOLL, KIMBERLY KVISTAD
Address	W294 N6012 RIVER GROVE LN
City-State-Zip:	HARTLAND WI 53029

Title	DIRECTOR
Name	STERN, JAMES F.
Address	4545 W. BROWN DEER RD.
City-State-Zip:	MILWAUKEE WI 53223

Title	CFO, SVP
Name	WROCKLAGE, ROBERT ALAN
Address	19915 WEST PHEASANT RUN DRIVE
City-State-Zip:	NEW BERLIN WI 53146

Title	VP
Name	BEGALE, FRED JOSEPH
Address	3656 NORTH HICKORY LN
City-State-Zip:	OCONOMOWOC WI 53066

Title	DIRECTOR
Name	TELLOCK, GLEN E.
Address	4545 W. BROWN DEER RD.
City-State-Zip:	MILWAUKEE WI 53223

Title	CEO, PRESIDENT, DIRECTOR
Name	BOCKHORST, KENNETH CHARLES
Address	923 EAST KILBOURN AVENUE UNIT 701
City-State-Zip:	MILWAUKEE WI 53202

Title	TREASURER, VP
Name	BAUER, KAREN M.
Address	150 BUNKER HILL DRIVE
City-State-Zip:	BROOKFIELD WI 53005

Continues on page 2

I hereby certify that the information indicated on this report or supplemental report is true and accurate and that my electronic signature shall have the same legal effect as if made under oath; that I am an officer or director of the corporation or the receiver or trustee empowered to execute this report as required by Chapter 607, Florida Statutes; and that my name appears above, or on an attachment with all other like empowered.

SIGNATURE: DANIEL R WELTZIEN — VP - CONTROLLER — 03/15/2024

Electronic Signature of Signing Officer/Director Detail — Date

Officer/Director Detail Continued :

Title	DIRECTOR
Name	MYERS, TESSA
Address	4545 W. BROWN DEER RD.
City-State-Zip:	MILWAUKEE WI 53223

Title	DIRECTOR
Name	MCGILL, JAMES W.
Address	4545 W. BROWN DEER RD.
City-State-Zip:	MILWAUKEE WI 53223

Title	DIRECTOR
Name	ADAMS, TODD A.
Address	4545 W. BROWN DEER RD.
City-State-Zip:	MILWAUKEE WI 53223

Title	DIRECTOR
Name	BROOKS, HENRY F.
Address	4545 W. BROWN DEER RD.
City-State-Zip:	MILWAUKEE WI 53223

Title	VP
Name	WELTZIEN, DANIEL R.
Address	4545 W. BROWN DEER RD.
City-State-Zip:	MILWAUKEE WI 53223

Title	VP
Name	HOPKINS, SHERYL
Address	4545 W. BROWN DEER RD.
City-State-Zip:	MILWAUKEE WI 53223

Title	VP
Name	PARISEN, WILLIAMS JAMES
Address	4545 W. BROWN DEER RD.
City-State-Zip:	MILWAUKEE WI 53223

Form **W-9**
(Rev. October 2018)
Department of the Treasury
Internal Revenue Service

Request for Taxpayer Identification Number and Certification

▶ **Go to *www.irs.gov/FormW9* for instructions and the latest information.**

Give Form to the requester. Do not send to the IRS.

Print or type. See Specific Instructions on page 3.

1 Name (as shown on your income tax return). Name is required on this line; do not leave this line blank.

Badger Meter, Inc.

2 Business name/disregarded entity name, if different from above

3 Check appropriate box for federal tax classification of the person whose name is entered on line 1. Check only **one** of the following seven boxes.

☐ Individual/sole proprietor or single-member LLC ☑ C Corporation ☐ S Corporation ☐ Partnership ☐ Trust/estate

☐ Limited liability company. Enter the tax classification (C=C corporation, S=S corporation, P=Partnership) ▶ _____

Note: Check the appropriate box in the line above for the tax classification of the single-member owner. Do not check LLC if the LLC is classified as a single-member LLC that is disregarded from the owner unless the owner of the LLC is another LLC that is **not** disregarded from the owner for U.S. federal tax purposes. Otherwise, a single-member LLC that is disregarded from the owner should check the appropriate box for the tax classification of its owner.

☐ Other (see instructions) ▶

4 Exemptions (codes apply only to certain entities, not individuals; see instructions on page 3):

Exempt payee code (if any) 5

Exemption from FATCA reporting code (if any) _____

(Applies to accounts maintained outside the U.S.)

5 Address (number, street, and apt. or suite no.) See instructions.

4545 W Brown Deer Road

Requester's name and address (optional)

6 City, state, and ZIP code

Milwaukee, WI 53223

7 List account number(s) here (optional)

Part I Taxpayer Identification Number (TIN)

Enter your TIN in the appropriate box. The TIN provided must match the name given on line 1 to avoid backup withholding. For individuals, this is generally your social security number (SSN). However, for a resident alien, sole proprietor, or disregarded entity, see the instructions for Part I, later. For other entities, it is your employer identification number (EIN). If you do not have a number, see *How to get a TIN*, later.

Note: If the account is in more than one name, see the instructions for line 1. Also see *What Name and Number To Give the Requester* for guidelines on whose number to enter.

Social security number

			–			–				

or

Employer identification number

3	9	–	0	1	4	3	2	8	0

Part II Certification

Under penalties of perjury, I certify that:

1. The number shown on this form is my correct taxpayer identification number (or I am waiting for a number to be issued to me); and
2. I am not subject to backup withholding because: (a) I am exempt from backup withholding, or (b) I have not been notified by the Internal Revenue Service (IRS) that I am subject to backup withholding as a result of a failure to report all interest or dividends, or (c) the IRS has notified me that I am no longer subject to backup withholding; and
3. I am a U.S. citizen or other U.S. person (defined below); and
4. The FATCA code(s) entered on this form (if any) indicating that I am exempt from FATCA reporting is correct.

Certification instructions. You must cross out item 2 above if you have been notified by the IRS that you are currently subject to backup withholding because you have failed to report all interest and dividends on your tax return. For real estate transactions, item 2 does not apply. For mortgage interest paid, acquisition or abandonment of secured property, cancellation of debt, contributions to an individual retirement arrangement (IRA), and generally, payments other than interest and dividends, you are not required to sign the certification, but you must provide your correct TIN. See the instructions for Part II, later.

Sign Here Signature of U.S. person ▶ *Charity Granberry* Date ▶ 1/3/2024

General Instructions

Section references are to the Internal Revenue Code unless otherwise noted.

Future developments. For the latest information about developments related to Form W-9 and its instructions, such as legislation enacted after they were published, go to *www.irs.gov/FormW9*.

Purpose of Form

An individual or entity (Form W-9 requester) who is required to file an information return with the IRS must obtain your correct taxpayer identification number (TIN) which may be your social security number (SSN), individual taxpayer identification number (ITIN), adoption taxpayer identification number (ATIN), or employer identification number (EIN), to report on an information return the amount paid to you, or other amount reportable on an information return. Examples of information returns include, but are not limited to, the following.

- Form 1099-INT (interest earned or paid)
- Form 1099-DIV (dividends, including those from stocks or mutual funds)
- Form 1099-MISC (various types of income, prizes, awards, or gross proceeds)
- Form 1099-B (stock or mutual fund sales and certain other transactions by brokers)
- Form 1099-S (proceeds from real estate transactions)
- Form 1099-K (merchant card and third party network transactions)
- Form 1098 (home mortgage interest), 1098-E (student loan interest), 1098-T (tuition)
- Form 1099-C (canceled debt)
- Form 1099-A (acquisition or abandonment of secured property)

Use Form W-9 only if you are a U.S. person (including a resident alien), to provide your correct TIN.

If you do not return Form W-9 to the requester with a TIN, you might be subject to backup withholding. See What is backup withholding, *later.*

ACORD®

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY): 12/28/2023

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER 1-414-443-0000 Hays Companies, Inc. 1200 North Mayfair Road, Suite 100 Milwaukee, WI 53226	CONTACT NAME: PHONE (A/C, No, Ext): FAX (A/C, No): E-MAIL ADDRESS:
INSURED Badger Meter, Inc. 4545 West Brown Deer Road Milwaukee, WI 53223	INSURER(S) AFFORDING COVERAGE / NAIC # INSURER A: PHOENIX INS CO — 25623 INSURER B: TRAVELERS PROP CAS CO OF AMER — 25674 INSURER C: CONTINENTAL INS CO — 35289 INSURER D: ACCIDENT FUND INS CO OF AMER — 10166 INSURER E: INSURER F:

COVERAGES **CERTIFICATE NUMBER:** 70295515 **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
A	X COMMERCIAL GENERAL LIABILITY ☐ CLAIMS-MADE ☒ OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: X POLICY ☐ PRO-JECT ☐ LOC ☐ OTHER:			Y660 268J2023	01/01/24	01/01/25	EACH OCCURRENCE DAMAGE TO RENTED PREMISES (Ea occurrence) MED EXP (Any one person) PERSONAL & ADV INJURY GENERAL AGGREGATE PRODUCTS - COMP/OP AGG	$ 1,000,000 $ 300,000 $ 10,000 $ 1,000,000 $ 4,000,000 $ 2,000,000
B	AUTOMOBILE LIABILITY X ANY AUTO ☐ OWNED AUTOS ONLY ☐ SCHEDULED AUTOS X HIRED AUTOS ONLY X NON-OWNED AUTOS ONLY			BA 2L694073	01/01/24	01/01/25	COMBINED SINGLE LIMIT (Ea accident) BODILY INJURY (Per person) BODILY INJURY (Per accident) PROPERTY DAMAGE (Per accident)	$ 1,000,000 $ $ $
C	X UMBRELLA LIAB X OCCUR ☐ EXCESS LIAB ☐ CLAIMS-MADE ☐ DED X RETENTION $ 10,000			6076540927	01/01/24	01/01/25	EACH OCCURRENCE AGGREGATE	$ 5,000,000 $ 5,000,000
D	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? Y/N ☐ (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	N/A		UH WCP 100074452 02	01/01/24	01/01/25	X PER STATUTE ☐ OTH-ER E.L. EACH ACCIDENT E.L. DISEASE - EA EMPLOYEE E.L. DISEASE - POLICY LIMIT	$ 1,000,000 $ 1,000,000 $ 1,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

CERTIFICATE HOLDER

Evidence of Insurance

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

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PRODUCT DOCUMENTATION

PRODUCT DATA SHEETS

Recordall
RCDL | Mechanical Flow Meters

Recordall® Disc Meters

Lead-Free Bronze Alloy 120 & 170, Sizes 1-1/2 in. (40 mm) & 2 in. (50 mm), NSF/ANSI/CAN Standards 61 and 372 Certified

DESCRIPTION

Recordall Models 120 and 170 Disc Series meters meet or exceed the most recent revision of AWWA Standard C700 and are available in a lead-free bronze alloy. Both meters comply with the lead-free provisions of the Safe Drinking Water Act, are certified to NSF/ANSI/CAN Standards 61 and 372 (Trade Designations: M120-LL and M170LL) and carry the NSF-61 mark on the housing. All components of the lead-free bronze alloy meter (housing, measuring element, seals, and so on) comprise the certified system.

Applications: For use in measurement of potable cold water in residential, commercial and industrial services where flow is in one direction only.

Operation: Water flows through the meter's strainer and into the measuring chamber where it causes the disc to nutate. The disc, which moves freely, nutates on its own ball, guided by a thrust roller. A drive magnet transmits the motion of the disc to a follower magnet located within the permanently sealed register. The follower magnet is connected to the register gear train. The gear train reduces the disc nutations into volume totalization units displayed on the register or encoder face.

Operating Performance: The Recordall Disc Series meters meet or exceed registration accuracy for the low flow rates (95%), normal operating flow rates (100 ± 1.5%), and maximum continuous operation flow rates as specifically stated in AWWA Standard C700.

Construction: Recordall Disc meter construction, which complies with ANSI/AWWA standard C700, consists of three basic components: meter housing, measuring chamber, and permanently sealed register or encoder. The water meter is available in a lead-free bronze alloy. A corrosion-resistant engineered polymer material is used for the measuring chamber.

Magnetic Drive: Direct magnetic drive, through the use of high-strength magnets, provides positive, reliable and dependable register coupling for straight-reading or AMR/AMI meter reading options.

Tamper-Proof Features: Unauthorized removal of the register or encoder is inhibited by the option of a tamper detection seal wire screw, TORX® tamper-resistant seal screw or the proprietary tamper-resistant keyed seal screw. Each can be installed at the meter site or at the factory.

Maintenance: Badger Meter Recordall Disc Series meters are designed and manufactured to provide long-term service with minimal maintenance. When maintenance is required, it can be performed easily either at the meter installation or at any other convenient location.

To simplify maintenance, the register, measuring chamber, and strainer can be replaced without removing the meter housing from the installation. No change gears are required for accuracy calibration. Interchangeability of parts among like-sized meters minimizes spare parts inventory investment. The built-in strainer has an effective straining area of twice the inlet size.

Connections: Companion flanges in cast iron or NL bronze are available as options. Straight connection sets are available in NL bronze.



M120 M170

SPECIFICATIONS

Meter Model	M120	M170
Typical Operating Range (100% ± 1.5%)	2.5…120 gpm (0.57…27 m^3/hr)	2.5…170 gpm (0.57…39 m^3/hr)
Low Flow (Min. 95%)	1.25 gpm (0.28 m^3/hr)	1.5 gpm (0.34 m^3/hr)
Maximum Continuous Operation	80 gpm (18 m^3/hr)	100 gpm (23 m^3/hr)
Pressure Loss at Maximum Continuous Operation	4.8 psi at 80 gpm (0.33 bar at 18 m^3/hr)	3.3 psi at 100 gpm (0.23 bar at 23 m^3/hr)
Maximum Operating Temperature	80° F (26° C)	80° F (26° C)
Maximum Operating Pressure	150 psi (10 bar)	150 psi (10 bar)
Measuring Element	Nutating disc, positive displacement	Nutating disc, positive displacement
Meter Connections	1-1/2 in. AWWA two-bolt elliptical flange, drilled or 1-1/2…11-1/2 NPT internal pipe threads	2 in. AWWA two-bolt elliptical flange, drilled or 2…11-1/2 NPT internal pipe threads
Test Plugs	Optional 1 in. NPT test plug (TP)	Optional 1 in. NPT test plug (TP)

Materials

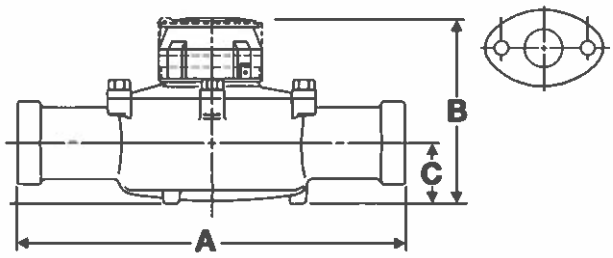
Meter Housing	Lead-free bronze alloy
Housing Top Plates	Lead-free bronze alloy
Measuring Chamber	Engineered polymer
Disc	Engineered polymer
Trim	Stainless steel
Strainer	Engineered polymer
Disc Spindle	Stainless steel
Magnet	Ceramic
Magnet Spindle	Stainless steel
Register Lid and Shroud	Engineered polymer, bronze

Badger Meter

RDM-DS-00465-EN-10 (April 2024)

Product Data Sheet

DIMENSIONS



Meter Size	Meter Model	A Laying Length	B Height Reg./RTR	C Centerline Base	Width	Approx. Shipping Weight
1-1/2 in. (40 mm)	120 EL, Hex 120 EL, TP	12-5/8 in. (321 mm)	7 in. (178 mm)	2-3/8 in. (60 mm)	8-3/4 in. (222 mm)	19 lb (8.6 kg)
1-1/2 in. (40 mm)	120 ELL 120 ELL, TP	13 in. (330 mm)	7 in. (178 mm)	2-3/8 in. (60 mm)	8-3/4 in. (222 mm)	19 lb (8.6 kg)
2 in. (50 mm)	170 EL, Hex 170 EL, TP	15-1/4 in. (387 mm)	8 in. (203 mm)	2-7/8 in. (73 mm)	9-1/2 in. (241 mm)	30 lb (13.6 kg)
2 in. (50 mm)	170 ELL 170 ELL, TP	17 in. (432 mm)	8 in. (203 mm)	2-7/8 in. (73 mm)	9-1/2 in. (241 mm)	30 lb (13.6 kg)

EL = Elliptical ELL = Elliptical Long Hex = Hexagon, 1-1/2...11-1/2 in. NPT Thread TP=Test Plug 1 in.

REGISTERS / ENCODERS

Standard—Sweep-Hand Registration

The standard register is a straight-reading, permanently sealed magnetic drive register. Dirt, moisture, tampering and lens fogging problems are eliminated. The register has a six-odometer wheel totalization display, 360° test circle with center sweep hand, and flow finder to detect leaks. Register gearing is made of self-lubricating engineered polymer, which minimizes friction and provides long life. The multi-position register simplifies meter installation and reading. The register capacity is 100,000,000 gallons (10,000,000 ft^3, 1,000,000 m^3).



Meter Model	Gallon	Cubic Feet	Cubic Meter
120	100	10	1/0.1
170	100	10	1

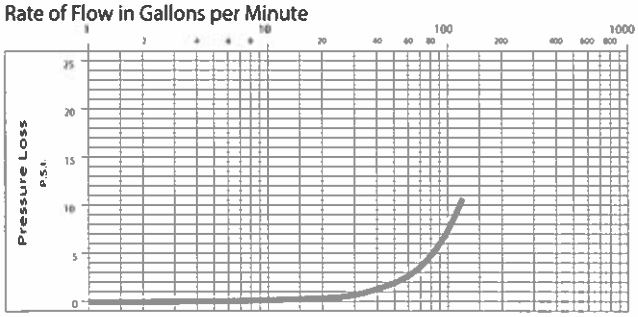
Optional—Encoders for AMR/AMI Reading Solutions

AMR/AMI solutions are available for all Recordall Disc Series meters. All reading options can be removed from the meter without disrupting water service. Badger Meter encoders provide years of reliable, accurate readings for a variety of applications and are also available pre-wired to Badger Meter approved AMR/AMI solutions. See details at *badgermeter.com*.

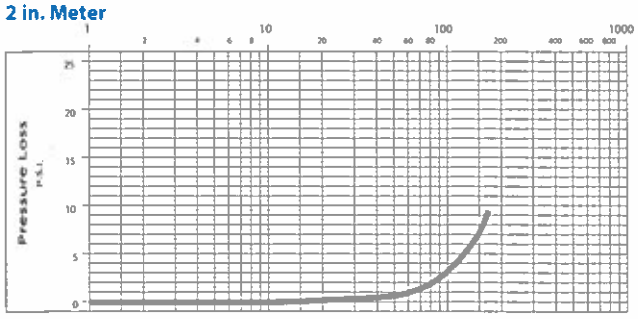
PRESSURE LOSS CHARTS

1-1/2 in. Meter

Rate of Flow in Gallons per Minute



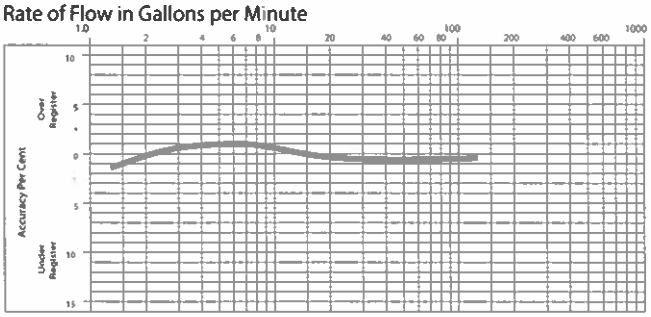
2 in. Meter



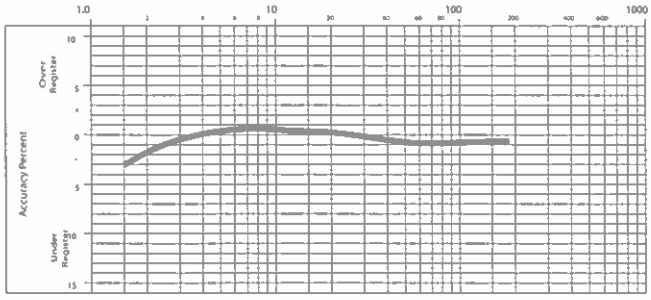
ACCURACY CHARTS

1-1/2 in. Meter

Rate of Flow in Gallons per Minute



2 in. Meter



SMART WATER IS *BADGER METER*

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www.badgermeter.com

Legacy Document Numbers: RDM-DS-00071-EN and RDM-DS-00072-EN

E-Series®
Ultrasonic Flow Meters

E-Series G2® Ultrasonic Meter

Lead-Free Bronze Alloy, 3, 4, 6 and 8 inch

DESCRIPTION

The next generation E-Series G2® Ultrasonic meter uses solid-state technology in a compact, tamper protected, weatherproof and UV-resistant housing, suitable for commercial applications. Electronic metering provides information—such as rate of flow and status and alarm indication—and data not typically available through traditional, mechanical meters and registers. Electronic metering minimizes measurement errors due to sand, suspended particles and pressure fluctuations.

Ultrasonic 3, 4, 6 and 8 inch Meter Features

- Open flow tube design prevents flow obstruction to reduce pressure loss
- Greater turn-down ratio for extended flow ranges and increased revenue
- Easy-to-read, 9-digit LCD display, which presents consumption, rate of flow, unit of measure, pressure, temperature, alarm conditions and firmware version
- Pressure alarm and pressure and temperature data reported through ORION Cellular endpoints and BEACON®
- Field programmable registration and maintains an hourly internal logging capacity of 160 days of data
- Single and dual outputs include high resolution industry standard ASCII encoder protocol, scaled/unscaled and 4-20 mA

The meter is available with an inline connector for easy connection and installation to ORION endpoints. It is also available with a flying lead for field splice connection.

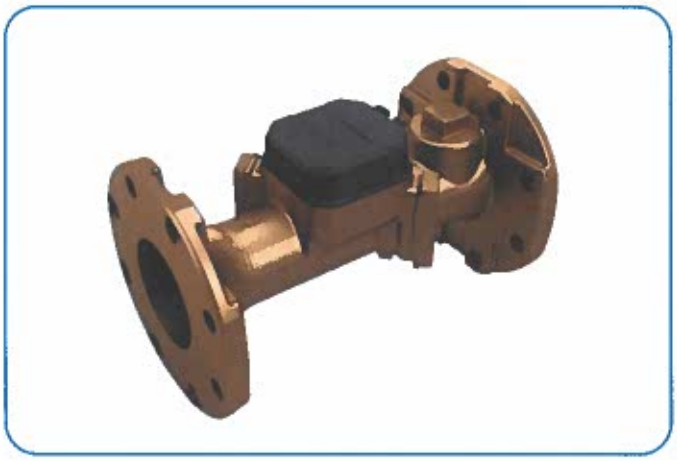
APPLICATIONS

Use the E-Series Ultrasonic meter for measuring potable cold water in commercial and industrial services. The meter is also ideal for non-potable, reclaimed irrigation water applications or less than optimum water conditions where small particles exist.

E-Series Ultrasonic meters meet and exceed the most recent version of AWWA C715 Standards. The lead-free bronze alloy meters comply with the lead-free provisions of the Safe Drinking Water Act and NSF/ANSI/CAN Standards 61 and 372. E-Series Ultrasonic meters also conform to UL 327B and FM 1044 for fire service applications.

OPERATION & PERFORMANCE

As water flows into the measuring tube, ultrasonic signals are sent consecutively in forward and reverse directions of flow. Velocity is then determined by measuring the time difference between the measurement in the forward and reverse directions. Total volume is calculated from the measured flow velocity using water temperature and pipe diameter. The LCD shows total volume, unit of measure, rate of flow, pressure, temperature, firmware and



alarm conditions (reverse-flow, no usage, empty pipe, exceeding max flow, suspected leak, pressure, temperature, end of life and measurement error).

In normal temperature range of 45…122° F (7…50° C), the Ultrasonic "new meter" consumption measurement is accurate to:

- ±1.5% over the normal flow range
- ±3.0% from the extended low flow range to the minimum flow value

CONSTRUCTION

The E-Series Ultrasonic meter features lead-free bronze alloy meter housing, ultrasonic transducers, a meter-control circuit board with associated wiring, LCD and battery. Wetted elements are limited to the pressure vessel and transducers. The electronic components are housed and fully potted within a molded, engineered polymer enclosure, which is attached to the meter housing. The transducers extend through the housing and are sealed by O-rings, enabling turbulence-free water flow through the tube. The open flow tube design prevents obstruction of flow to reduce pressure loss and provide long-term accuracy.

METER INSTALLATION

For long-term performance the meter is weatherproof, UV-resistant, fully submersible and can be installed using horizontal or vertical piping. The registration electronics and battery are encapsulated to withstand harsh environments and protect the electronics in flooded or submerged pit applications. The meter will not measure flow when an "empty pipe" condition is experienced. An empty pipe is defined as a condition that occurs when the flow sensors are not fully submerged.

FM APPROVED

UL LISTED

Badger Meter

ESM-DS-02781-EN-19 (February 2024)

Product Data Sheet

SPECIFICATIONS

E-Series G2 Ultrasonic Meter Size	3 in.		4 in.		6 in.		8 in.
	3 × 12 in. (76 × 305 mm)	3 × 17 in. (76 × 432 mm)	4 × 14 in. (102 × 356 mm)	4 × 20 in. (102 × 508 mm)	6 × 18 in. (152 × 457 mm)	6 × 24 in. (152 × 610 mm)	8 × 20 in. (203 × 508 mm)
Normal Test Flow Limits	0.75…560 gpm		1.5…1100 gpm		2.2…2000 gpm		4…3500 gpm
Minimum Test Flow Limits	0.37 gpm		0.75 gpm		1.1 gpm		2.0 gpm
Safe Maximum Operating Condition (SMOC)	560 gpm		1100 gpm		2000 gpm		3500 gpm
Typical Pressure Loss	2.6 psi @ 350 gpm		2.1 psi @ 630 gpm		1.5 psi @ 1400 gpm	1.8 psi @ 1400 gpm	2.4 psi @ 2800 gpm
Totalization Display Resolution	*3 inch and 4 inch meters* • Gallons: 0.1 • Cubic feet: 0.01 • Cubic meters: 0.001				*6 inch and 8 inch meters* • Gallons: 1.0 • Cubic feet: 0.1 • Cubic meters: 0.01		
Operating Performance	In normal temperature range of 45…122° F (7…50° C), new meter consumption measurement is accurate to: • 100% ±1.5% over the normal test flow limits • 100% ±3.0% for the minimum test flow limits						
Storage Temperature	– 40…140° F (– 40…60° C)						
Maximum Ambient Storage (Storage for One Hour)	150° F (66° C)						
Measured Fluid Temperature Range	34…140° F (1…60° C) .						
Humidity	0…100% condensing; meter is capable of operating in fully submerged environments						
Maximum Working Pressure of Meter Housing	175 psi (12 bar)						
Maximum Operating Pressure of Pressure Sensor	150 psi (10 bar)						
Pressure Sensor Accuracy	±2% of full scale pressure, up to 150 psi (10 bar)						
Register Type	Straight reading, permanently sealed electronic LCD; digits are 0.28 in. (7 mm) high						
Register Display	• Consumption (up to nine digits) • Rate of flow • Alarms • Pressure				• Temperature • Firmware version • Unit of measure factory programmed for gallons, cubic feet and cubic meters		
Scaled/Unscaled Output*	Solid-state relay with 4-20mA output; open drain MOSFET with encoder output						
Max. Voltage	30V DC						
Current	100 mA						
Pulse Width	50 ms (programmable 30…100 ms)						
Analog 4-20 mA Output*	Two-wire/passive						
Input Voltage Range	9…50V DC supply						
Current	4…20 mA						
Max. Load Resistance (Ohms)	50 Ohms + 50 Ohms (supply voltage - 9V)						
Battery	3.6-volt lithium thionyl chloride battery is fully encapsulated within the register housing and is not replaceable. 20-year battery life; 15-year battery life for scaled/unscaled dual output meters						

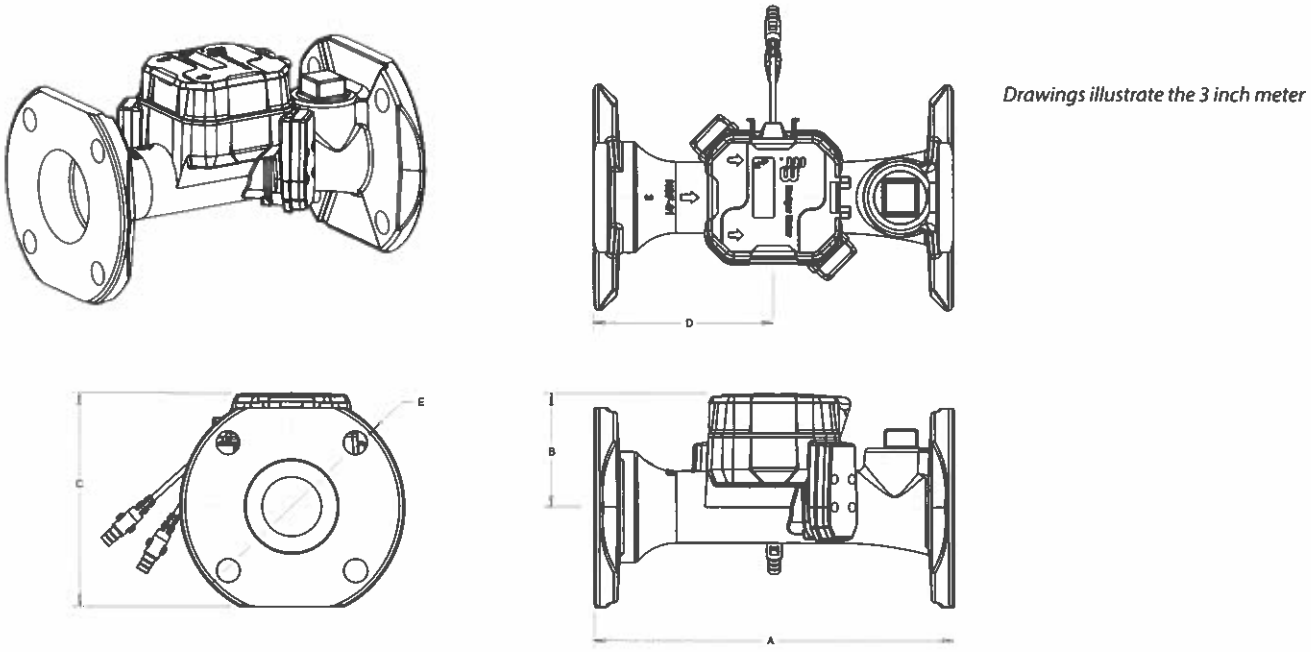
NOTE: See Pressure Loss Chart on *page 4* for typical pressure loss over complete UL 327B flow range.

* Applicable to meters with dual output options

PHYSICAL DIMENSIONS

E-Series G2 Ultrasonic Meter Size	3 in.		4 in.		6 in.		8 in.
Housing	Round	Round	Round	Round	Round	Round	Round
Size Designation X Lay Length	3 × 12 in. (76 × 305 mm)	3 × 17 in. (76 × 432 mm)	4 × 14 in. (102 × 356 mm)	4 × 20 in. (102 × 508 mm)	6 × 18 in. (152 × 457 mm)	6 × 24 in. (152 × 610 mm)	8 × 20 in. (203 × 508 mm)
Weight (without AMR)	26 lb (11.8 kg)	28.5 lb (12.9 kg)	38 lb (17.2 kg)	42 lb (19.1 kg)	59 lb (26.8 kg)	66 lb (29.9 kg)	96 lb (43.5 kg)
See illustration below for Measurement Designations							
Length (A)	12 in. (305 mm)	17 in. (432 mm)	14 in. (356 mm)	20 in. (508 mm)	18 in. (457 mm)	24 in. (610 mm)	20 in. (508 mm)
Height (B)	3.76 in. (95 mm)	3.76 in. (95 mm)	3.99 in. (101 mm)	3.99 in. (101 mm)	5.15 in. (131 mm)	5.15 in. (131 mm)	6.49 in. (165 mm)
Height (C)	7.08 in. (180 mm)	7.08 in. (180 mm)	8.5 in. (216 mm)	8.5 in. (216 mm)	10.36 in. (263 mm)	10.36 in. (263 mm)	13.05 in. (331 mm)
Height with Lifting Ring	NA	NA	NA	NA	12.96 in. (329 mm)	12.96 in. (329 mm)	15.65 in. (398 mm)
Length (D)	6 in. (152 mm)	8.5 in. (216 mm)	7 in. (178 mm)	10 in. (254 mm)	8 in. (203 mm)	8 in. (203 mm)	9 in. (229 mm)
Width (E)	7.5 in. (191 mm)	7.5 in. (191 mm)	9 in. (229 mm)	9 in. (229 mm)	11 in. (279 mm)	11 in. (279 mm)	13.50 in. (343 mm)
Number of Bolts	4	4	8	8	8	8	8
Bolt Hole Diameter	0.781 in. (19.84 mm)						
Companion Flange	3 in. (76 mm)	3 in. (76 mm)	4 in. (102 mm)	4 in. (102 mm)	6 in. (152 mm)	6 in. (152 mm)	8 in. (203 mm)
NPT Test Port	1.5 in. (38 mm)	1.5 in. (38 mm)	2 in. (51 mm)	2 in. (51 mm)	2 in. (51 mm)	2 in. (51 mm)	2 in. (51 mm)

Measurement Designations



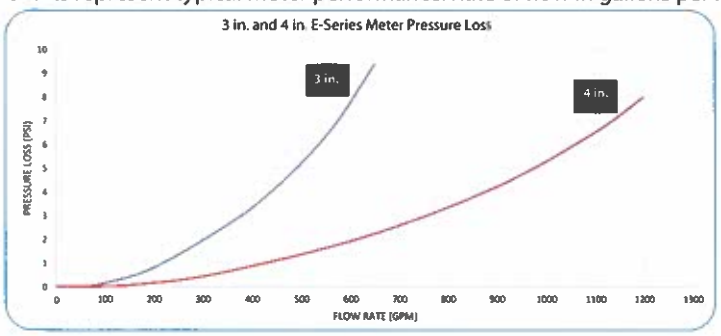
Drawings illustrate the 3 inch meter

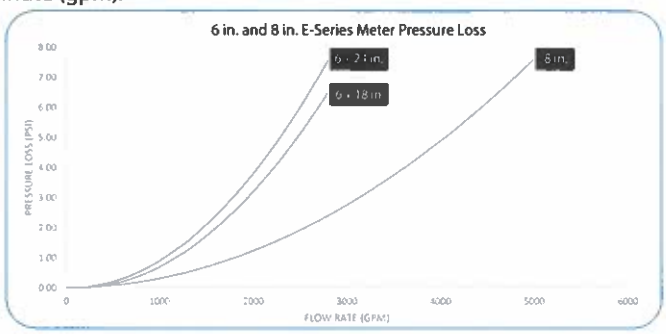
MATERIALS

Meter Housing	Lead-free bronze alloy
Measuring Section	Ultrasonic sensors located in the flow tube
Register Housing & Lid	Engineered polymer
Transducer Port Covers 3 in., 4 in.	Lead-free bronze alloy
Transducer Port Covers 6 in., 8 in.	Engineered polymer

PRESSURE LOSS CHARTS

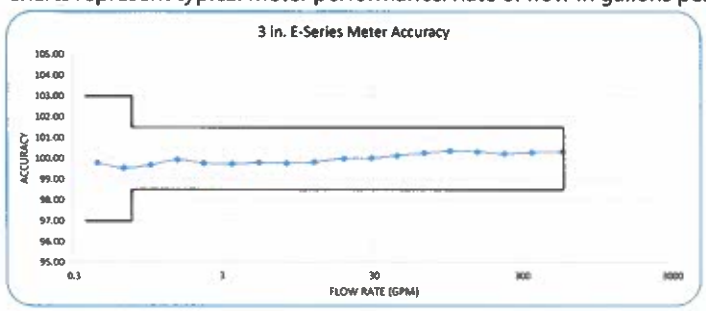
Charts represent typical meter performance. Rate of flow in gallons per minute (gpm).

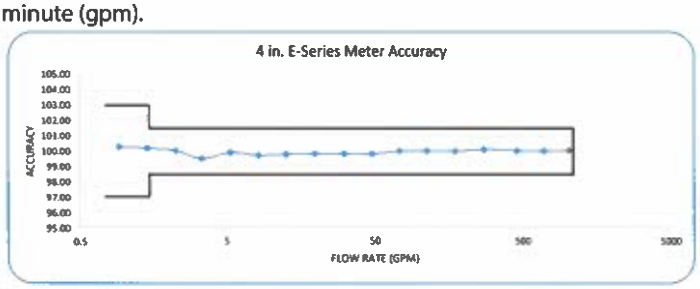


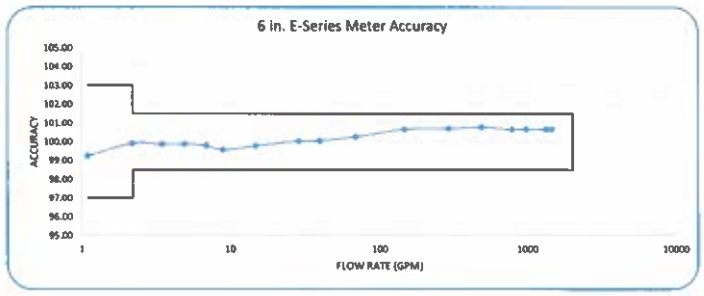


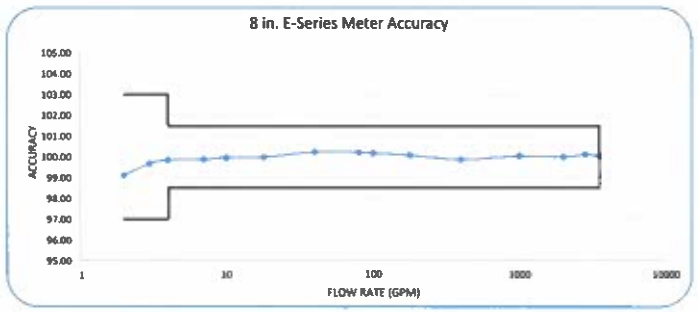
ACCURACY CHARTS

Charts represent typical meter performance. Rate of flow in gallons per minute (gpm).









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Recordall® Disc and Turbo Series Meters for Reclaimed Water

Sizes 5/8...12" (DN 15...300 mm)

Applications

For use in measurement of cold water in reclaimed water distribution systems. Meters are available for residential, commercial and industrial services where flow is in one direction only.

The meter and its internal components are for use in the measurement of non-potable water only. Caution must be exercised not to mingle non-potable and potable water meters and especially their internal components.



Utility Impacts

Utilities faced with rising water costs and limited water resources are developing non-potable, reclaimed water distribution systems. Accurate, dependable metering is needed to bill customers for these alternate supplies.

Special coloring and markings are designed to distinguish potable water meters from reclaimed water meters in accordance with current industry standards. The utility must develop appropriate operational procedures to ensure that potable water meters and reclaimed water meters and their internal components are not mingled.

Warranty

Due to the lack of a uniform definition of the composition of reclaimed water, the warranties associated with reclaimed water meters are different than the potable water Recordall meter line. Please review the warranty statement for this important difference.

Specifications

5/8...2" Recordall Disc Series Meters
1-1/2...12" Recordall Turbo Series Meters

For meter specifications for each Recordall size and type meter, see the Product Data Sheet for that specific meter.

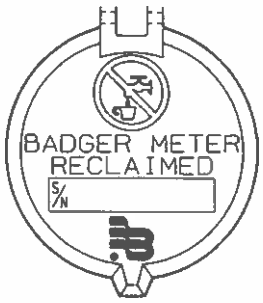
Thermoplastic shroud and lid only.

Special Markings

Local register	Lavender lid and shroud, "RECLAIMED" on dial face & non-potable water symbol on register lid
HR-E & HR-E LCD encoders	Lavender lid
Chamber assembly	Has designation for non-potable water only
Meter housings	"RCLM" etched on housings, bronze covers and bottoms
Cast iron bottoms (5/8...1" disc meters)	Lavender

Register Type

The Reclaimed water meter line supports the same types of registration and reading systems as the potable meter line.





Meter with local register

Product Data Sheet

Making Water Visible®

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Legacy Document Number: RR-T-02

Alternate

E-Series
Ultrasonic Flow Meters

E-Series G2® Ultrasonic Meters

Lead-Free Bronze Alloy, 5/8, 5/8 x 3/4, 3/4, 1 inch

DESCRIPTION

The next generation E-Series G2® Ultrasonic meter uses solid-state technology in a compact, tamper protected, weatherproof and UV-resistant housing, suitable for residential applications. Electronic metering provides information—such as rate of flow and status and alarm indication—and data not typically available through traditional, mechanical meters and registers. Electronic metering minimizes measurement errors due to sand, suspended particles and pressure fluctuations.

Ultrasonic Meter Features

- Flow tube design prevents obstruction of flow, and provides greater turn-down ratio for extended flow ranges and increased revenue
- No moving parts for increased performance and maximized revenue
- Easy-to-read, 9-digit LCD display for consumption, rate of flow, unit of measure, pressure, temperature, alarm conditions (reverse-flow, no usage, empty pipe, exceeding max flow, suspected leak, pressure*, temperature, end of life and measurement error) and firmware version
- High resolution industry standard ASCII encoder protocol sends alarms and data to ORION® endpoints and BEACON® Software as a Service (SaaS) suite to establish a smart water solution for better visibility and management
- Pressure* and temperature data and alarms reported at meter and through ORION endpoints and BEACON SaaS
- Field programmable registration and maintains an hourly internal logging capacity of 160 days of data
- Maximum flow reporting analytics available to improve meter right sizing and monitor irrigation events
- Single and dual outputs include encoder, scaled/unscaled and 4-20 mA

**available with optional integrated pressure sensor*

OPERATION AND PERFORMANCE

As water flows into the measuring tube, ultrasonic signals are sent consecutively in forward and reverse directions of flow. Velocity is then determined by measuring the time difference between the measurement in the forward and reverse directions. Total volume is calculated from the measured flow velocity using water temperature and pipe diameter.

The LCD screen toggles to total volume, unit of measure, rate of flow, pressure*, temperature, firmware and alarm conditions (reverse-flow, no usage, empty pipe, exceeding max flow, suspected leak, pressure*, temperature, end of life and measurement error).

When connected to ORION endpoints, both the pressure and temperature information are communicated to and presented in BEACON, helping utilities understand and proactively manage their water systems faster and more efficiently.



In the normal temperature range of 45…122° F (7…50° C), the "new meter" consumption measurement is accurate to:

- ±1.5% over the normal flow range
- ±3.0% from the extended low flow range to the minimum flow value

**available with optional integrated pressure sensor*

APPLICATIONS

Use the E-Series Ultrasonic meter for measuring potable cold water in residential applications. The meter is also ideal for non-potable, reclaimed irrigation water applications, or less than optimum water conditions where small particles exist.

E-Series Ultrasonic meters meet and exceed ANSI/AWWA C715 Standards. The lead-free bronze alloy meters comply with the lead-free provisions of the Safe Drinking Water Act and NSF/ANSI/CAN Standards 61 and 372.

The 3/4 and 1 inch Ultrasonic meters are UL Listed under UL Subject 327B, inferential type water meters used in residential fire service applications. These applications are regulated by local codes and requirements established by the Authority Having Jurisdiction (AHJ). Additional application information is provided in NFPA 13D, one- and two-family residences.

CONSTRUCTION

The E-Series Ultrasonic meter features lead-free bronze alloy meter housing, ultrasonic transducers, a meter-control circuit board with associated wiring, LCD, and battery. Wetted elements are limited to the pressure vessel and transducers. The electronic components are housed and fully potted within a molded, engineered polymer enclosure, which is attached to the meter housing. The transducers extend through the housing and are sealed by O-rings, enabling turbulence-free water flow through the tube. The flow tube is designed to reduce pressure loss and provide long-term accuracy.

Badger Meter

UL LISTED

ESM-DS-03096-EN-09 (April 2024)

Product Data Sheet

METER INSTALLATION

For long-term performance the meter is weatherproof, UV-resistant, fully submersible and can be installed using horizontal or vertical piping. The registration electronics and battery are encapsulated to withstand harsh environments and protect the electronics in flooded or submerged pit applications. The meter will not measure flow when an "empty pipe" condition is experienced.

NOTE: An empty pipe is defined as a condition that occurs when the flow sensors are not fully submerged.

The meter is available with an inline connector for easy installation and connection to ORION endpoints. It is also available with a flying lead for field splice connection.

SPECIFICATIONS

E-Series G2 Ultrasonic Meter Size	5/8 in.	5/8 x 3/4 in.	3/4 in. (7-1/2 in.)	3/4 in. (9 in.)	1 in.
Normal Test Flow Limits	0.08…30 gpm (0.02…6.81 m³/hr)	0.08…30 gpm (0.02…6.81 m³/hr)	0.1…35 gpm (0.02…7.95 m³/hr)	0.1…35 gpm (0.02…7.95 m³/hr)	0.16…62 gpm (0.04…14.08 m³/hr)
Minimum Test Flow Limits	0.04 gpm (0.009 m³/hr)	0.04 gpm (0.009 m³/hr)	0.04 gpm (0.009 m³/hr)	0.04 gpm (0.009 m³/hr)	0.075 gpm (0.017 m³/hr)
Safe Maximum Operating Condition (SMOC)	30 gpm (6.81 m³/hr)	30 gpm (6.81 m³/hr)	35 gpm (7.95 m³/hr)	35 gpm (7.95 m³/hr)	62 gpm (14.08 m³/hr)
Typical Pressure Loss	TBD	2.6 psi @ 15 gpm (0.18 bar @ 3.4 m³/hr)	4.2 psi @ 25 gpm (0.29 bar @ 5.7 m³/hr)	4.2 psi @ 25 gpm (0.29 bar @ 5.7 m³/hr)	4.1 psi @ 40 gpm (0.28 bar @ 9.1 m³/hr)
UL Approval for Residential Fire Service Meters - File No. EX15653	NA	NA	UL 327B	UL 327B	UL 327B
UL Test Flow Limits (at ±1.5% accuracy)	NA	NA	2…30 gpm (0.45…6.81 m³/hr)	2…30 gpm (0.45…6.81 m³/hr)	2…50 gpm (0.45…11.36 m³/hr)
Typical UL Pressure Loss	NA	NA	4.2 psi @ 25 gpm (0.29 bar @ 5.7 m³/hr)	4.2 psi @ 25 gpm (0.29 bar @ 5.7 m³/hr)	4.1 psi @ 40 gpm (0.28 bar @ 9.1 m³/hr)
Operating Performance	In the normal temperature range of 45…122 °F (7…50 °C), new meter consumption measurement is accurate to: 100% ±1.5% over the normal test flow limits, 100% ±3.0% for the minimum test flow limits				
Storage Temperature	– 40…140° F (– 40…60° C)				
Maximum Ambient Storage (Storage for One Hour)	150° F (66° C)				
Measured Fluid Temperature Range	34…140° F (1…60° C)				
Humidity	0…100% condensing; meter is capable of operating in fully submerged environments				
Maximum Working Pressure of Meter Housing	175 psi (12 bar)				
Maximum Operating Pressure of Pressure Sensor	150 psi (10 bar)				
Pressure Sensor Accuracy	±2% of full scale pressure, up to 150 psi (10 bar)				
Register Type	Straight reading, permanently sealed electronic LCD; digits are 0.28 in. (7 mm) high				
Register Display	• Total consumption (nine digits) • Rate of flow • Temperature • Pressure *(Optional: for meters ordered with integrated pressure sensor)*		• Alarm and operating mode • Firmware version • Alarm indicators • Unit of measure (factory programmed for gallons, cubic feet and cubic meters)		
Totalization Display Resolution	• Gallons: 0.01	• Cubic feet: 0.001		• Cubic meters: 0.0001	
Scaled/Unscaled Output*	Solid-state relay and Open Collector				
Max. Voltage	30V DC				
Current	10 mA				
Pulse Width	50 ms (programmable 30…100 ms)				
Analog 4-20 mA Output*	Two-wire/passive flow rate measurement				
Input Voltage Range	9…50V DC supply				
Current	4…20 mA				
Max. Load Resistance (Ohms)	(50 Ohms + 50 Ohms) × (Supply Voltage - 9V)				
Battery	3.6-volt lithium thionyl chloride; battery is fully encapsulated within the register housing and is not replaceable; 20-year battery life				

*Applicable to meters with dual output options

MATERIALS

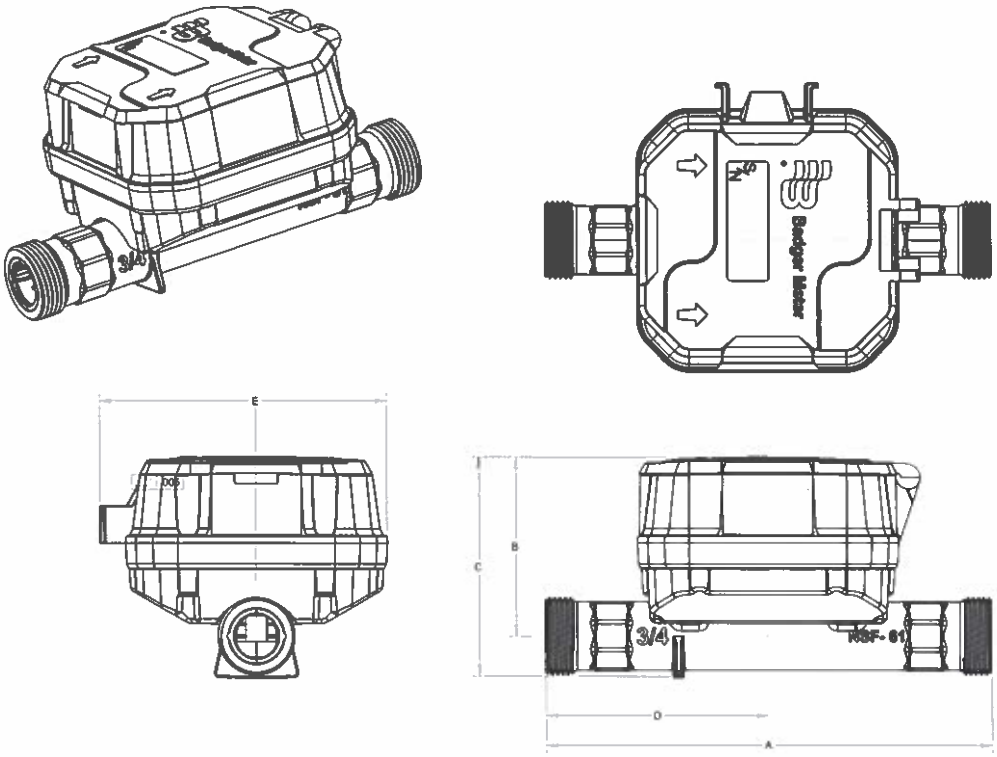
Meter Housing	Lead-free bronze alloy
Measuring Section	Ultrasonic sensors located in the flow tube
Register Housing and Lid	Engineered polymer
Strainer*	Engineered composite

** Fire Service meters do not have a Strainer*

PHYSICAL DIMENSIONS

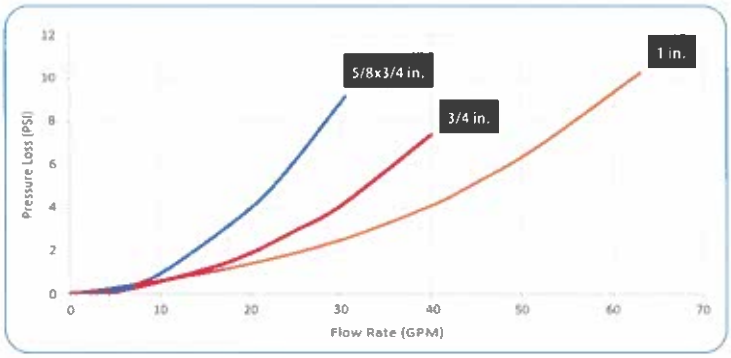
E-Series G2 Ultrasonic Meter Size	5/8 in.	5/8 x 3/4 in.	3/4 in. (7-1/2 in.)	3/4 in. (9 in.)	1 in.
Size Designation X Lay Length	5/8 × 7-1/2 in. (16 × 191 mm)	5/8 × 3/4 × 7-1/2 in. (16 × 19 × 191 mm)	3/4 × 7-1/2 in. (19 × 191 mm)	3/4 × 9 in. (19 × 229 mm)	1 × 10-3/4 in. (25 × 273 mm)
Bore Size	5/8 in. (16 mm)	3/4 in. (19 mm)	3/4 in. (19 mm)	3/4 in. (19 mm)	1 in. (25 mm)
Coupling Nut & Spud Thread (NPSM)	3/4 in. (19 mm) × 14 NPSM	1 in. (25 mm) × 11-1/2 NPSM	1 in. (25 mm) × 11-1/2 NPSM	1 in. (25 mm) × 11-1/2 NPSM	1-1/4 in. (32 mm) × 11-1/2 NPSM
Service Pipe Thread (NPSM)	1/2 in. (13 mm)	3/4 in. (19 mm)	3/4 in. (19 mm)	3/4 in. (19 mm)	1 in. (25 mm)
Tailpiece Pipe Thread (NPSM)	1/2 in. (13 mm)	3/4 in. (19 mm)	3/4 in. (19 mm)	3/4 in. (19 mm)	1 in. (25 mm)
Weight (without AMR)	TBD	2.7 lb (1.23 kg)	2.62 lb (1.19 kg)	2.86 lb (1.30 kg)	4.02 lb (1.82 kg)
See illustration below for Measurement Designations					
Length (A)	7.49 in. (190 mm)	7.46 in. (189 mm)	7.46 in. (189 mm)	8.93 in. (227 mm)	10.75 in. (273 mm)
Height (B)	2.95 in. (75 mm)	2.99 in. (76 mm)	2.99 in. (76 mm)	2.99 in. (76 mm)	3.19 in. (81 mm)
Height (C)	3.55 in. (90 mm)	3.66 in. (93 mm)	3.66 in. (93 mm)	3.69 in. (94 mm)	4.06 (103 mm)
Length (D)	3.74 in. (95 mm)	3.74 in. (95 mm)	3.74 in. (95 mm)	3.77 in. (96 mm)	3.94 (100 mm)
Width (E)	4.82 in. (122 mm)				

Measurement Designations



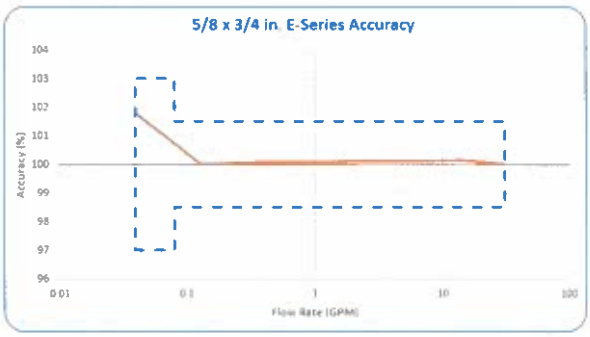
PRESSURE LOSS CHART

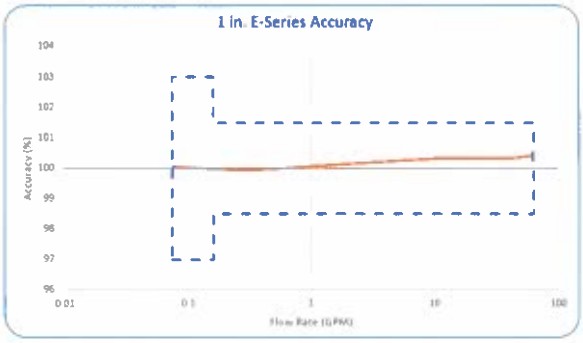
Chart represents typical meter performance. Rate of flow in gallons per minute (gpm).



ACCURACY CHARTS

Chart represents typical meter performance. Rate of flow in gallons per minute (gpm).





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E-Series®
Ultrasonic Flow Meters

E-Series® Ultrasonic Meter

Cold Water Stainless Steel Meter

DN15, DN20, DN25, DN32, DN40, DN50

DESCRIPTION

The E-Series® Ultrasonic meter uses solid-state technology in a compact, totally encapsulated, weatherproof and UV-resistant housing suitable for residential and commercial applications. Electronic metering provides information—such as rate of flow and reverse flow indication—and data not typically available through traditional mechanical meters and registers. Electronic metering eliminates measurement errors due to sand, suspended particles and pressure fluctuations.

E-Series Ultrasonic meter features:

- Minimum extended low-flow rate lower than typical positive displacement meters.
- Simplified one-piece electronic meter and register that are integral to the meter body and virtually maintenance free.
- Sealed, non-removable, tamper-protected meter and register.
- Easy-to-read, 9-digit LCD display presenting consumption, rate of flow, indicators and alarms.
- High resolution industry standard ASCII encoder protocol.

The meter is available with an in-line connector for full connectivity to AMR/AMI devices.

APPLICATIONS

Use the E-Series Ultrasonic meter for measuring potable cold water in residential, commercial and industrial services. The meter is also ideal for non-potable, reclaimed irrigation water applications or less than optimum water conditions where small particles exist.

E-Series Ultrasonic meters meet and exceed ANSI/AWWA Standard C715 and OIML R49-1. The meters also comply with the lead-free provisions of the Safe Water Drinking Act and NSF/ANSI Standards 61 and 372.

OPERATION & PERFORMANCE

As water flows into the measuring tube, ultrasonic signals are sent consecutively in forward and reverse directions of flow. Velocity is then determined by measuring the time difference between the measurement in the forward and reverse directions. Total volume is calculated from the measured flow velocity using water temperature and pipe diameter. The LCD display shows total volume and alarm conditions and can toggle to display rate of flow.

In the normal temperature range of 7…50° C (45…122° F), the Ultrasonic "new meter" consumption measurement is accurate to:

- ± 2% from Q_2 to Q_4
- ± 5% from Q_1 to Q_2



CONSTRUCTION

E-Series Ultrasonic meters feature a stainless steel, lead-free meter housing, an engineered polymer and stainless steel metering insert, a meter-control circuit board with associated wiring, LCD and battery. Wetted elements are limited to the pressure vessel, polymer/stainless steel metering insert and the transducers.

The electronic components are housed and fully potted within a molded, engineered polymer enclosure, which is permanently attached to the meter housing. The transducers extend through the stainless steel housing and are sealed by O-rings.

The metering insert holds the stainless steel ultrasonic reflectors in the center of the flow area, enabling turbulence-free water flow through the tube and around the ultrasonic signal reflectors. The metering insert's patented design virtually eliminates chemical buildup on the reflectors, ensuring long-term metering accuracy.

METER INSTALLATION

The meter is completely submersible and can be installed using horizontal or vertical piping, with flow in the up direction. The meter will not measure flow when an "empty pipe" condition is experienced. An empty pipe is defined as a condition when the flow sensors are not fully submerged.

SPECIFICATIONS

E-Series Ultrasonic Meter	DN15		DN20		DN25		DN32	DN40	DN50
Size	15 mm (5/8 in.)	15 mm (5/8 in.)	20 mm (3/4 in.)	20 mm (3/4 in.)	25 mm (1 in.)	25 mm (1 in.)	32 mm (1-1/4 in.)	40 mm (1-1/2 in.)	50 mm (2 in.)
Nominal Flow Rate Q_3	2.5 m^3/hr (11.0 gpm)	2.5 m^3/hr (11.007 gpm)	4.0 m^3/hr (17.6 gpm)	4.0 m^3/hr (17.6 gpm)	6.3 m^3/hr (28 gpm)	10.0 m^3/hr (44 gpm)	10.0 m^3/hr (44 gpm)	16.0 m^3/hr (70 gpm)	25.0 m^3/hr (110 gpm)
Overload Flow Rate Q_4	3.1 m^3/hr (13.7 gpm)	3.125 m^3/hr (13.759 gpm)	5.0 m^3/hr (22.0 gpm)	5.0 m^3/hr (22.0 gpm)	7.9 m^3/hr (34.78 gpm)	12.5 m^3/hr (55 gpm)	12.5 m^3/hr (55 gpm)	20.0 m^3/hr (88 gpm)	31.25 m^3/hr (138 gpm)
Transitional Flow Rate Q_2	0.016 m^3/hr (0.07 gpm)	0.01 m^3/hr (0.044 gpm)	0.026 m^3/hr (0.115 gpm)	0.016 m^3/hr (0.07 gpm)	0.063 m^3/hr (0.28 gpm)	0.064 m^3/hr (0.28 gpm)	0.064 m^3/hr (0.28 gpm)	0.102 m^3/hr (0.45 gpm)	0.16 m^3/hr (0.70 gpm)
Minimum Flow Rate Q_1	0.010 m^3/hr (0.04 gpm)	0.006 m^3/hr (0.027 gpm)	0.016 m^3/hr (0.07 gpm)	0.01 m^3/hr (0.04 gpm)	0.039 m^3/hr (0.17 gpm)	0.04 m^3/hr (0.18 gpm)	0.04 m^3/hr (0.18 gpm)	0.064 m^3/hr (0.28 gpm)	0.1 m^3/hr (0.44 gpm)
Pressure Loss at Q_3	0.045 bar (6.0 psi)	0.045 bar (6.0 psi)	0.40 bar (6.0 psi)	0.40 bar (6.0 psi)	0.60 bar (8.7 psi)	0.60 bar (8.7 psi)	0.60 bar (8.7 psi)	0.40 bar (5.8 psi)	0.2 bar (2.90 psi)
Reverse Flow Maximum Rate	0.55 m^3/hr (2.4 gpm)	0.55 m^3/hr (2.4 gpm)	0.91 m^3/hr (4.0 gpm)	0.91 m^3/hr (4.0 gpm)	1.71 m^3/hr (7.5 gpm)	1.71 m^3/hr (7.5 gpm)	1.71 m^3/hr (7.5 gpm)	3.2 m^3/hr (14.0 gpm)	4.5 m^3/hr (20 gpm)
R Value	250	400	250	400	250	250	250	250	250
Operating Performance	In the normal temperature range of 7…50° C (45…122° F), new meter consumption measurement is accurate to: • ± 2% from Q_2 to Q_4 • ± 5% from Q_1 to Q_2								
Storage Temperature	– 40…60° C (– 40…140° F)								
Maximum Ambient Storage (Storage for One Hour)	66° C (150° F)								
Measured-Fluid Temperature Range	1…60° C (34…140° F)								
Humidity	0…100% condensing; meter is capable of operating in fully submerged environments; IP68 rating								
Maximum Allowable Pressure	16 bar (232 psi)								
Register Type	Straight reading, permanently sealed electronic LCD; digits are 7 mm (0.28 in.) high								
Register Display	Consumption (up to nine digits) • Rate of flow • Alarms • Unit of measure factory programmed for gallons, cubic feet or cubic meters								
Register Capacity	• 10,000,000 gallons • 1,000,000 cubic feet • 100,000 cubic meters								
Totalization Display Resolution	• Gallons: 0.XX • Cubic feet: 0.XXX • Cubic meters: 0.XXXX								
Battery	3.6-volt lithium thionyl chloride; battery is fully encapsulated within the register housing and is not replaceable								

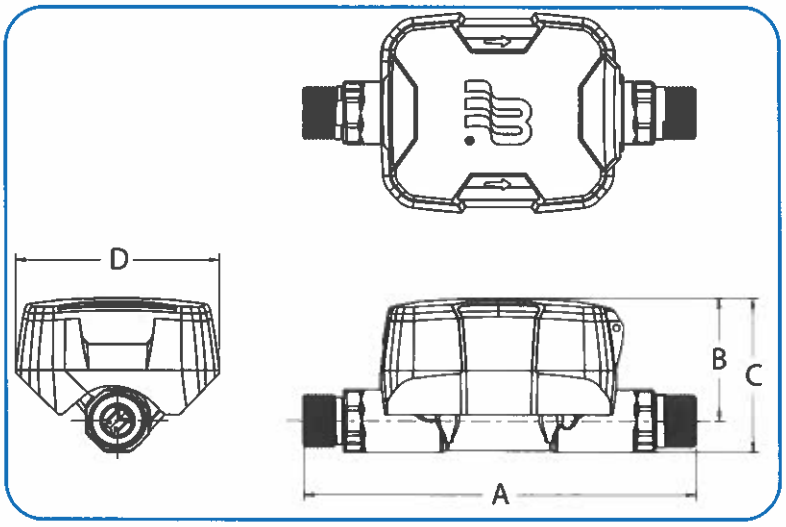
MATERIALS

Meter Housing	316 stainless steel
Register Housing & Lid	Engineered polymer
Metering Insert	Engineered polymer & stainless steel
Measuring Element	Pair of ultrasonic sensors located in the flow tube
Transducers	Piezo-ceramic device with wetted surface of stainless CrNiMo

PHYSICAL DIMENSIONS

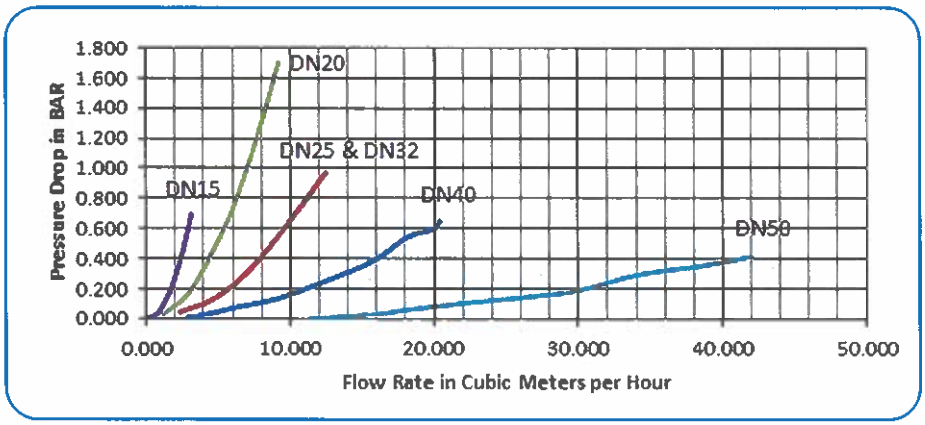
E-Series Ultrasonic Meter	DN15	DN20	DN25	DN25	DN32	DN40	DN50
Size	15 mm (5/8 in.)	20 mm (3/4 in.)	25 mm (1 in.)	25 mm (1 in.)	32 mm (1-1/4 in.)	40 mm (1-1/2 in.)	50 mm (2 in.)
Weight (without radio)	1.0 kg (2.2 lb)	0.95 kg (2.1 lb)	1.4 kg (3.1 lb)	1.4 kg (3.1 lb)	1.4 kg (3.1 lb)	2.7 kg (5.9 lb)	3.1 kg (6.8 lb)
See illustration below for Measurement Designations.							
Length (A)	165 mm (6.5 in.)	190 mm (7.5 in.)	200 mm (7.87 in.)	260 mm (10.25 in.)	260 mm (10.25 in.)	300 mm (11.8 in.)	270 mm (10.63 in.)
Height (B)	59.4 mm (2.3 in.)	61 mm (2.4 in.)	64 mm (2.5 in.)	64 mm (2.5 in.)	64 mm (2.5 in.)	71 mm (2.8 in.)	76.5 mm (3.0 in.)
Height (C)	75.9 mm (3.0 in.)	79 mm (3.1 in.)	85 mm (3.4 in.)	85 mm (3.4 in.)	85 mm (3.4 in.)	101 mm (4.0 in.)	114 mm (4.9 in.)
Width (D)	99 mm (3.9 in.)	99 mm (3.9 in.)	99 mm (3.9 in.)	99 mm (3.9 in.)	99 mm (3.9 in.)	99 mm (3.9 in.)	99 mm (3.9 in.)
Bore Size	20 mm (0.75 in.)	20 mm (0.75 in.)	25 mm (1.0 in.)	25 mm (1.0 in.)	25 mm (1.0 in.)	40 mm (1.5 in.)	50 mm (2 in.)
Coupling Nut & Spud Thread	G3/4B	G1B	G1-1/4B	G1-1/4B	G1-1/2B	G2B	G2-1/2B
Tailpiece Pipe Thread (BSP)	1/2 in.	3/4 in.	1 in.	1 in.	1-1/4 in.	1-1/2 in.	2 in.
Service Pipe Thread (BSP)	1/2 in.	3/4 in.	1 in.	1 in.	1-1/4 in.	1-1/2 in.	2 in.

MEASUREMENT DESIGNATIONS



PRESSURE LOSS CHART

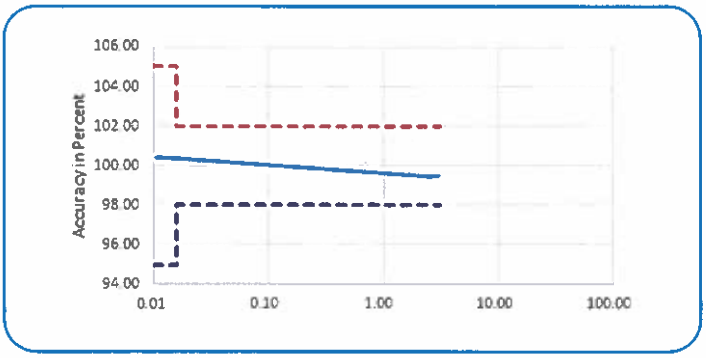
Rate of flow in cubic meters per hour (m^3/hr).



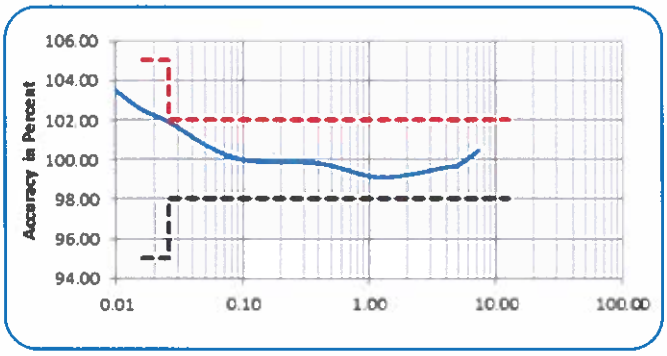
ACCURACY CHARTS

Rate of flow in cubic meters per hour (m^3/hr).

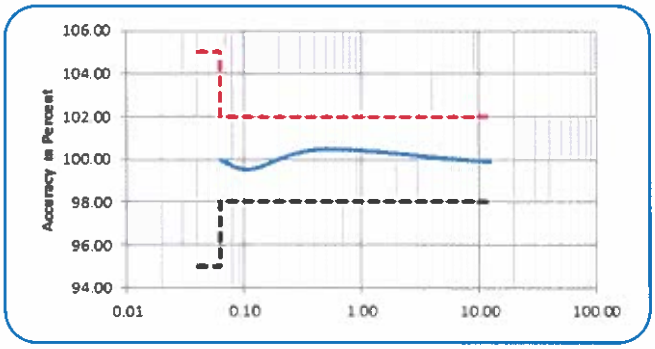
DN15 METER



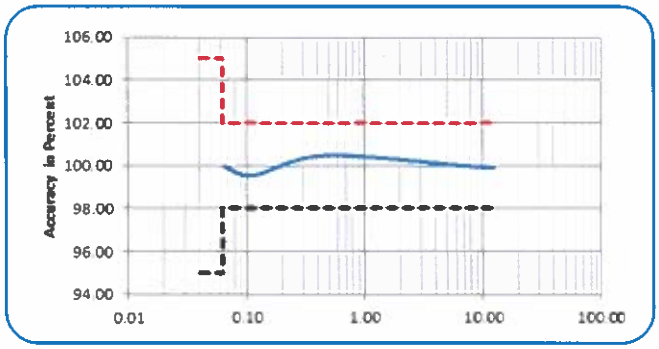
DN20 METER



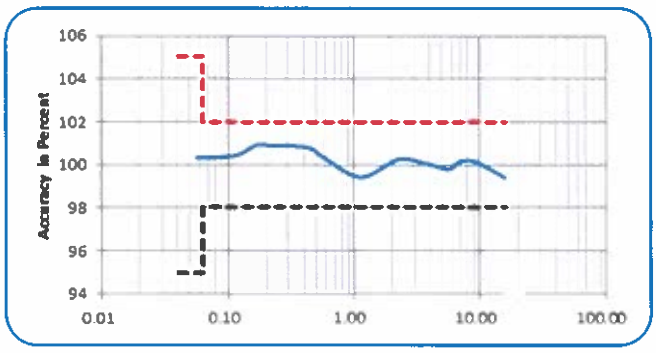
DN25 METER



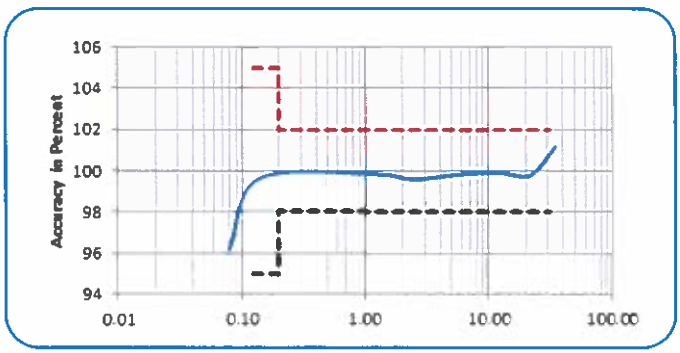
DN32 METER



DN40 METER



DN50 METER



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E-Series® Ultrasonic Plus Meter

with Integrated Valve

5/8 × 3/4 in., 3/4 × 7-1/2 in., 3/4 × 9 in.

DESCRIPTION

The E-Series® Ultrasonic Plus meter uses solid-state ultrasonic transit time technology to measure cold potable water and incorporates an integrated valve into the lay length of the meter. The integrated valve allows remote flow restriction of water service in residential utility applications.

Authorized utility personnel can actuate the valve via a command sent from BEACON® SaaS (Software as a Service) to an ORION® Cellular endpoint connected to the meter.

BEACON displays the status of the valve (open, partial or restricted) and upon a command to transition the valve, confirms the success of that actuation. Status of the valve is also indicated on the physical meter via a position-indicating LED.

E-Series Ultrasonic Plus meters comply with the lead-free provisions of the Safe Drinking Water Act, are certified to NSF/ANSI/CAN Standards 61 and 372, and carry the NSF 61 marking. All components of the meter comprise the certified system. E-Series Ultrasonic Plus meters comply with the applicable portions of the most recent revision of AWWA Standard C715.

All electronic components utilized in the meter and RF Transceiver design comply with applicable FCC Part 15 standards and AWWA C707 for encoded remote reading systems.

Features

- Delivers precision accuracies with extended flow ranges
- Gate valve integrated into standard lay length of meter—no cut-ins required
- Patented magnetically coupled valve to extend field life (US Patent No. 10,161,777.B2)
- Patented flow restriction valve technology supports open, restricted and partially restricted options (US Patent No. 8,539,827)
- Does not require infrastructure
- Valve position-indicating LED
- Fully submersible—electronics completely encapsulated to withstand harsh, flooded pit environments
- Low pressure loss
- Easy-to-read, 9-digit display presents consumption, rate of flow, reverse flow indication and alarms
- High resolution industry standard ASCII encoder protocol



APPLICATIONS

The E-Series Ultrasonic Plus meter provides a cost-effective, non-confrontational, safe method for water utilities to temporarily restrict an end consumer's water service. The most common application is for authorized utility personnel to inhibit water service of repeat delinquent accounts to encourage prompt payment from the property owner. Other applications may include actuating the valve as tenants change, or accommodating end-customer requests for temporary water restriction.

CONSTRUCTION

The E-Series Ultrasonic Plus meter features lead-free bronze alloy meter housing, ultrasonic transducers, a meter-control circuit board with associated wiring, LCD, and battery. Electronic components are housed and fully potted within a molded, engineered polymer enclosure, which is attached to the meter housing. The transducers extend through the housing and are sealed by O-rings, enabling turbulence-free water flow through the tube. The open flow tube design prevents obstruction of flow to reduce pressure loss and provide long-term accuracy.

OPERATION AND PERFORMANCE

As water flows into the measuring tube, ultrasonic signals are sent consecutively, in forward and reverse directions of flow. Velocity is then determined by measuring the time difference between the measurement in the forward and reverse directions. Total volume is calculated from the measured flow velocity using water temperature and pipe diameter. The LCD shows total volume, rate of flow and alarm conditions.

A battery-powered DC motor module drives the dry-side magnetic coupling that is completely separated from the pressure vessel. The dry-side magnet couples to a mating wet-side magnetic assembly consisting of a magnetic disc, power screw and gate. The combined dry-side and wet-side magnetic coupling transfers torque from the motor to turn the power screw inside the pressure vessel, which ultimately drives the gate into the open, restricted* or partially restricted positions based on a command prompted by the connected ORION Cellular endpoint via BEACON. If necessary, actuation of the valve can be also be performed at the meter site.

System screens within BEACON indicate the position of the valve and record the date and time for all valve actuations. In addition, the position of the valve can also be determined by physical inspection of the meter via the valve position LED.

** When the valve is in restricted position, typical water flow is restricted to 0.125 gpm (0.03 m³/hr) or less for humanitarian, life-sustaining measures.*

INSTALLATION

The E-Series Ultrasonic Plus meter is completely submersible and can be installed using horizontal or vertical piping, with flow in the up direction.

The meter will not measure flow when an empty pipe (flow sensors are not fully submerged) condition is experienced.

SPECIFICATIONS

E-Series Ultrasonic Plus Meter Size	**5/8 in. x 3/4 in. (15 mm)**	**3/4 in. (20 mm)**
Normal Test Flow Limits	0.1…25 gpm (0.023… 5.68 m³/h)	0.1…32 gpm (0.023… 7.27 m³/h)
Minimum Test Flow Limits	0.05 gpm (0.014 m³/h)	0.05 gpm (0.014 m³/h)
Safe Maximum Operating Condition (SMOC)	25 gpm (5.68 m³/hr)	32 gpm (7.27 m³/hr)
Typical Pressure Loss	4.0 psi at 15 gpm (0.28 bar at 3.41 m³/h)	2.8 psi at 15 gpm (0.19 bar at 3.41 m³/hr)
Reverse Flow - Maximum Rate	4.0 gpm (0.91 m³/hr)	4.0 gpm (0.91 m³/hr)
Operating Performance	In the normal temperature range of 45…122° F (7…50° C), new meter consumption measurement is accurate to: • ±1.5% over the normal flow range • ±3.0% from the extended low flow range to the minimum flow value	
Typical Flow Rate in Restricted Position*	0.125 gpm (0.03 m³/hr) or less for humanitarian, life-sustaining measures	
Typical Flow Rate in Partially Restricted Position*	1.0 gpm ± 0.5 gpm (0.227 m³/hr ± 0.114 m³/hr)	
Storage Temperature	– 40…140° F (– 40…60° C)	
Maximum Ambient Storage (Storage for One Hour)	150° F (66° C)	
Measured-Fluid Temperature Range	34…140° F (1…60° C)	
Humidity	0…100% condensing; meter is capable of operating in fully submerged environments	
Maximum Operating Pressure of Meter Housing	175 psi (12 bar)	
Register Type	Straight reading, permanently sealed electronic LCD; digits are 0.28 in. (7 mm) high	
Register Display	• Consumption (up to nine digits) • Rate of flow • Alarms • Unit of measure factory programmed for gallons, cubic feet and cubic meters	
Register Capacity	• 10,000,000 gallons • 1,000,000 cubic feet • 100,000 cubic meters	
Totalization Display Resolution	• Gallons: 0.XX • Cubic feet: 0.XXX • Cubic meters: 0.XXXX	
Meter Battery	3.6-volt lithium thionyl chloride battery is fully encapsulated within the register housing and is not replaceable; 20-year battery life	
Valve Battery	3.6-volt lithium thionyl chloride battery within the power module; 20-year battery life, based upon 480 actuations	

** "Typical Flow Rate" based on 60 psi (4 bar) at the meter*

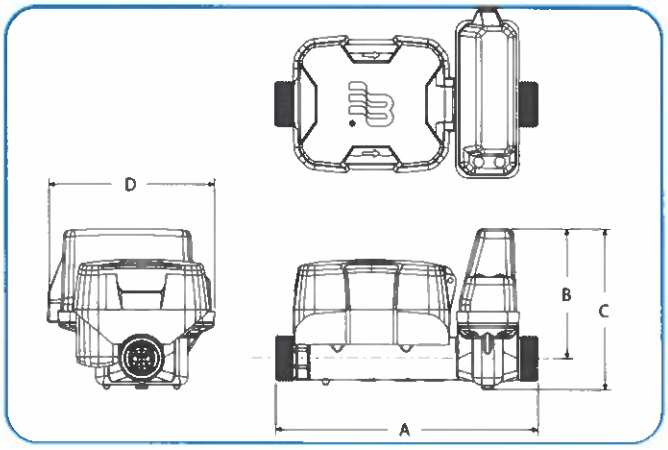
MATERIALS

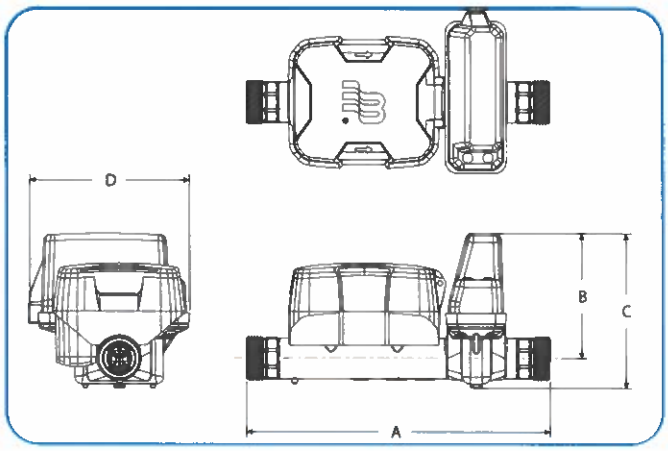
Meter Housing	Lead-free bronze alloy
Valve Bonnet	Lead-free bronze alloy
Bonnet Seal	EPDM O-ring
Register Housing	Engineered polymer
Power Control Module Housing	Engineered polymer
Gate	PTFE
Power Screw	316 stainless steel

PHYSICAL DIMENSIONS

E-Series Ultrasonic Plus Meter Size	**5/8 in. x 3/4 in. (15 mm)**	**3/4 in. (20 mm)**	
Size Designation X Lay Length	5/8 in. x 3/4 in. x 7-1/2 in. (15.9 mm x 19 mm x 190.5 mm)	3/4 in. x 7-1/2 in. (19 mm x 190.5 mm)	3/4 in. x 9 in. (19 mm x 228.6 mm)
Weight (without endpoint)	4.2 lb (1.91 kg)	4.2 lb (1.91 kg)	4.4 lb (1.99 kg)
See illustration below for Measurement Designations			
Length (A)	7.5 in. (190.5 mm)	7.5 in. (190.5 mm)	9.0 in. (228.6 mm)
Height (B)	3.69 in. (93.73 mm)	3.69 in. (93.73 mm)	3.69 in. (93.73 mm)
Height (C)	4.57 in. (116.08 mm)	4.57 in. (116.08 mm)	4.57 in. (116.08 mm)
Width (D)	4.728 in. (120.09 mm)	4.728 in. (120.09 mm)	4.728 in. (120.09 mm)
Bore Size	3/4 in. (19 mm)	3/4 in. (19 mm)	3/4 in. (19 mm)
Coupling Nut & Spud Thread	1 in. x 11-1/2 NPSM	1 in. x 11-1/2 NPSM	1 in. x 11-1/2 NPSM
Tailpiece Pipe Thread (NPT)	3/4 in. (19 mm)	3/4 in. (19 mm)	3/4 in. (19 mm)
Service Pipe Thread (NPT)	3/4 in. (19 mm)	3/4 in. (19 mm)	3/4 in. (19 mm)

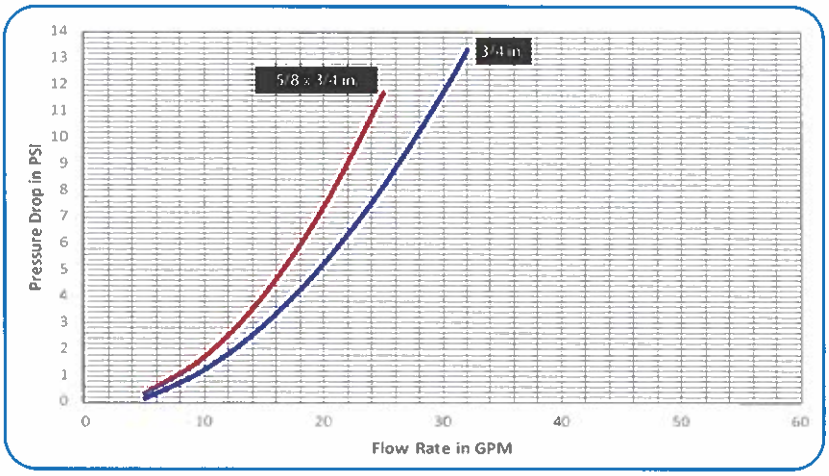
Measurement Designations





PRESSURE LOSS CHART

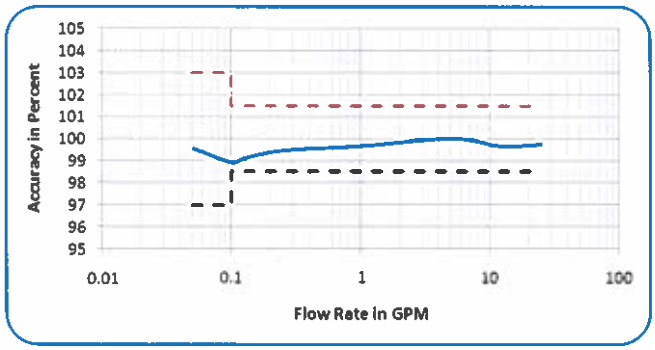
Typical Rate of Flow in Gallons per Minute (gpm)



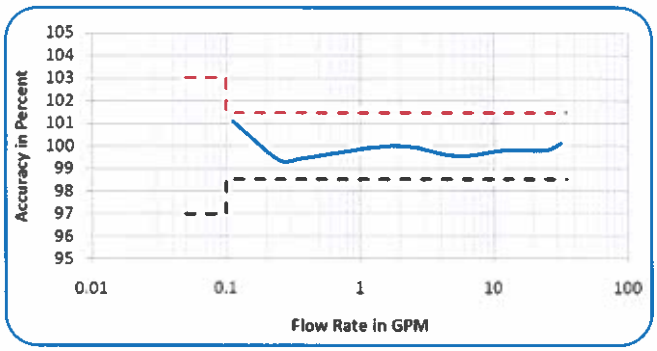
ACCURACY CHARTS

Typical Curve—Rate of Flow in Gallons per Minute (gpm)

5/8 x 3/4 in. Meter



3/4 in. Meter



***SMART WATER IS** BADGER METER*

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Badger Meter | HR-E High Resolution Encoder

DESCRIPTION

Applications: The High Resolution Encoder (HR-E) is designed for use with all current Recordall® Disc, Turbo, Compound, Combo and Fire Series meters and assemblies. The HR-E provides connectivity with Badger Meter ORION® and GALAXY® AMR/AMI endpoints, BadgerTouch® modules and other AMR/AMI technology solutions approved by Badger Meter.

Electronic Resolution: Encoder output from the HR-E includes eight-dial resolution to AMR/AMI endpoints and the option of four, five, six, seven or eight-dial resolution for touch applications. Refer to tables on the next page for details.

Mounting: The HR-E in its shroud assembly uses a bayonet mount compatible with all Recordall Disc, Turbo, Compound and Fire Series meters and assemblies. The bayonet mount allows positioning of the register in any of four orientations for visual reading convenience. The HR-E can be removed from the meter without disrupting water service.

Magnetic Drive: A direct-drive, high-strength magnetic coupling, through the meter body to the wetted magnet, provides reliable and dependable register coupling.

Local Indication: The HR-E face features an eight-dial mechanical odometer wheel stack and a flow finder with a calibrated test circle.

Tamper-Resistant Features: Unauthorized removal of the HR-E is inhibited by the option of a tamper detection seal wire screw, tamper-resistant TORX® seal screw, or the proprietary tamper-resistant keyed seal screw. Each can be installed at the meter site or at the factory.

Construction: The housing of the HR-E is constructed of a strengthened glass lens top and a corrosion-resistant metal bottom. Internal construction materials are thermoplastic for long life and high reliability. The encoder gearing is self-lubricating thermoplastic to minimize friction and provide long, reliable life. The shroud assembly is thermoplastic.

Temperature: The operating range of the HR-E is – 40…140° F (– 40…60° C). The water meter should not be subjected to temperatures below freezing.

Sealing: The HR-E encoder is permanently sealed to eliminate the intrusion of moisture, dirt or other contaminants. The HR-E achieves true water resistance due the unique adhesive technology used to seal the glass dome to the corrosion-resistant metal bottom. Due to this sealing process, the HR-E exceeds all applicable requirements of AWWA Standard C707. With leak rates less than 10-6 cc/sec, as tested by a helium mass spectrometer, the HR-E is suitable for installation in all environments, including meter pits subject to continuous submergence.

Electrical: The electronic circuitry is designed to provide immunity to electrical surges and transients per IEC1000-4-2, IEC1000-4-4. Operation of the HR-E is dependent on the wire length limitations of connected AMR/AMI equipment.



SPECIFICATIONS

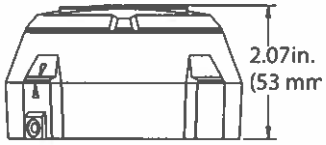
Encoder Type	Straight reading, permanently sealed, magnetic drive
Unit of Measure	U.S. Gallons, Cubic Feet, Cubic Meters, clearly identified on encoder face
Number Wheels	Eight with 5/32 inch high numerals
Test Circle	360° circle with ten major increments, ten divisions each
Weight	10 ounces
Humidity	0…100% condensing when equipped with potted lead wire, 0…95% non-condensing with screw-terminal wire connections
Temperature	– 40…140° F (– 40…60° C)
Signal Output	Industry Standard ASCII Format
Visual Resolution	1/100th of Test Circle
Electronic Resolution	8-dial resolution for AMR/AMI; 4, 5, 6, 7 or 8-dial resolution for BadgerTouch
Signal Type	3-wire synchronous for AMR/AMI solutions (red=clock/power, black=ground, green=data) 2-wire asynchronous for Touch solutions
Power Source	External

Operating Characteristics: The reading obtained by an AMR/AMI device is sensed directly from the position of the encoder's odometer using internal LED light paths to determine the exact position of each number wheel. This technology eliminates electromechanical contacts that could wear out, and provides greater long-term performance.

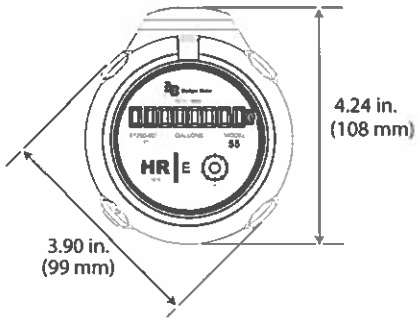
Wire Connections: The HR-E is available with an in-line connector for easy connection and installation to AMR/AMI endpoints. It is also available with a flying lead for a field splice connection or fully prewired to an AMR/AMI endpoint. A terminal screw version of the HR-E is also available. This version features a tamper-resistant cap over the three-wire terminals. The HR-E with terminal screws is designed for indoor installations in protected environments such as residential basements.

Product Data Sheet

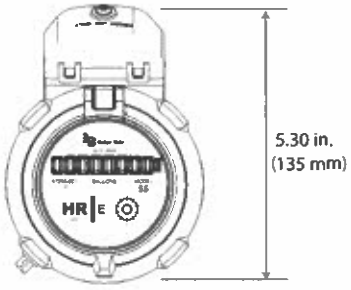
DIMENSIONAL DRAWINGS



Side view



With wire lead



With terminal screws

Top view

MEASUREMENT RESOLUTION

The minimum electronic resolution of the HR-E is as noted below (8-Dial Reading). To verify the correct resolution for your application, contact Badger Meter Customer Service.

Recordall Disc Series	Size (in.)	8-Dial Resolution (gal)	8-Dial Resolution (ft^3)	8-Dial Resolution (m^3)
M25/MLP	5/8	0.1	0.01	0.001
M25/MLP	3/4	0.1	0.01	0.001
M35	3/4	0.1	0.01	0.001
M40	1	0.1	0.01	0.001
M55	1	0.1	0.01	0.001
M70	1	0.1	0.01	0.001
M120	1-1/2	1	0.1	0.01
M170	2	1	0.1	0.01

Fire Service Series	8-Dial Resolution (gal)	8-Dial Resolution (ft^3)	8-Dial Resolution (m^3)
3 in.	1	0.1	0.01
4 in.	1	0.1	0.01
6 in.	10	1	0.1
8 in.	10	1	0.1
10 in.	10	1	0.1

Recordall Turbo Series	Size (in.)	8-Dial Resolution (gal)	8-Dial Resolution (ft^3)	8-Dial Resolution (m^3)
T160	1-1/2	1	0.1	0.01
T200	2	1	0.1	0.01
T450	3	1	0.1	0.01
T1000	4	1	0.1	0.01
T2000	6	10	1	0.1
T3500	8	10	1	0.1
T5500	10	10	1	0.1
T6200	12	100	10	0.1
T6600	16	100	10	1
T10000	20	100	100	1

Recordall Compound Series	Size (in.)	8-Dial Resolution (gal)	8-Dial Resolution (ft^3)	8-Dial Resolution (m^3)
High Side T200	2	1	0.1	0.01
Low Side M25	2	0.1	0.01	0.001
High Side T450	3	1	0.1	0.01
Low Side M25	3	0.1	0.01	0.001
High Side T1000	4	1	0.1	0.01
Low Side M35	4	0.1	0.01	0.001
High Side T2000	6	10	1	0.1
Low Side M35	6	0.1	0.01	0.001

Resolution stated as individual high and low readings.

Making Water Visible®

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ORION® Cellular Water Endpoints

DESCRIPTION

ORION® Cellular water endpoints are innovative, two-way endpoints for smart water applications. The endpoints utilize existing IoT (Internet of Things) cellular infrastructure to efficiently and securely deliver meter reading data to the utility in a Network as a Service (NaaS) approach. Leveraging existing cellular infrastructure, the NaaS solution offers all the performance benefits of AMI, while eliminating network-related maintenance and technology concerns and enhancing deployment flexibility.

Cellular endpoints are members of the time-tested ORION family of products from Badger Meter, designed for maximum flexibility. Since 2002, the ORION product family has provided comprehensive Advanced Metering Analytics (AMA) for interval meter reading and data capture using both one-way and two-way communications.

FUNCTIONALITY

Operation: ORION Cellular water endpoints communicate with the encoder and capture 15-minute interval read data and meter status information. The endpoints then automatically broadcast the information, including endpoint status information, via the cellular network to BEACON® Software as a Service (SaaS). ORION NaaS is powered by the proven ORION system for interval data capture and two-way communication. The solution employs cellular endpoints which, as they leverage the public cellular network and require no proprietary gateways to operate, dramatically reduce infrastructure requirements compared to a traditional fixed network. This speeds installations and simplifies expansion as a system evolves.

The endpoints are designed to call in four times each workday and feature a configurable schedule that enables utility customers to select call-in times that best support their processes.

Activation: ORION Cellular water endpoints are shipped in an inactive, non-transmitting state. The Badger Meter IR Communication Device can be used to activate the endpoints and verify the encoder connection. Successful endpoint function can be confirmed through a web app demonstrating that communication has been verified to both the encoder and the network.

Alternatively, the endpoints offer a Smart Activation feature. After installation, the endpoints begin broadcasting data when the encoder senses the first usage of water. No field programming or special tools are required.

Broadcast Mode: ORION Cellular water endpoints broadcast fixed network reading data through the secure cellular network within the service area.

Specific configurations also transmit a radio frequency (RF) message to facilitate troubleshooting in the field. See *"Configurations" on page 2.*

Data Storage: The endpoints store 42 days of 15-minute data.



ORION Cellular C endpoint (pictured)

Output Message: ORION Cellular water endpoints broadcast a unique serial number, meter reading data, and applicable status indicators. As an advanced data security measure, each message is securely transported to BEACON SaaS only via private network and never over the public internet.

APPLICATION

Configurations: ORION Cellular water endpoints are multi-purpose endpoints that can be deployed in indoor, outdoor and pit (non-metal pit lid) applications. The electronics and battery assembly are fully encapsulated in epoxy for environmental integrity. The endpoint is available with a connector assembly for ease of installation.

Meter Compatibility: When attached to a Badger Meter High Resolution Encoder, the ORION Cellular water endpoint is compatible with all current Badger Meter Recordall® Disc, Turbo Series, Compound Series, Combo Series and Fire Service meters and assemblies, and with E-Series G2® Ultrasonic, E-Series® Ultrasonic, E-Series® Ultrasonic Plus, and ModMAG® electromagnetic flow meters.

Encoder Compatibility: The ORION Cellular water endpoint is suitable for use with a Badger Meter High Resolution Encoder as well as the following Badger Meter approved three-wire encoder registers that have a manufacture date within 10 years of the current date as long as the encoder has three wires connected to it and is programmed into the three-wire output mode for AMR/AMI: Honeywell® (Elster/ABB) ScanCoder, evoQ4 meter with Sensus® protocol module; Master Meter® Octave® Ultrasonic meter encoder output; Metron-Farnier Hawkeye; Mueller Systems 420 Solid State Register (SSR) LCD; Neptune® ProRead, E-Coder®, ARB-V®, and ProCoder; and Sensus iPerl®.

Badger Meter

ORI-DS-02957-EN-11 (October 2023)

Product Data Sheet

SPECIFICATIONS

Dimensions	5.125 in. (130 mm) (H) 1.75 in. (44 mm) Diameter at top 2.625 in. (W) x 2.875 in. (D) at base (67 mm (W) x 73 mm (D) at base)
Broadcast Network	LTE-M cellular network (primary communication technology)
	NB-IoT (secondary communication technology for certain variants)
RF Message for Troubleshooting	Where available (see table below) frequency is FCC-regulated 902…928 MHz frequency hopping modulation
Operating Temperature Range	
• Storage, Meter Reading and RF Message (for troubleshooting)	–40…60° C (–40…140° F)
• Cellular Communications	–20…60° C (–4…140° F)
Humidity	0%…100% condensing
Battery	One (1) lithium thionyl chloride D cell (nonreplaceable)

Construction: All ORION Cellular water endpoints are housed in an engineered polymer enclosure with an ORION RF board, battery and antenna. For long-term performance, the enclosure is fully potted to withstand harsh environments and to protect the electronics in flooded or submerged pit applications.

Wire Connections: ORION Cellular water endpoints are available with inline connectors (Twist Tight® or Nicor®) for easy installation and connection to compatible encoders/meters. The endpoints are also available with flying leads for field splice connections. Other wire connection configurations may be available upon request.

FEATURES

Smart City Ready	Future-proof technology
Communication Type	Two-way
Application Type	Control/Monitor
Endpoint Communication	Configurable call-in schedule, up to four times each workday
Reading Interval Type	15-minute
Encoder Compatibility	Absolute
Fixed Network Reading	✓
Cut-Wire Indication	✓
Encoder Error	✓
Low Battery Indication	✓
Remote Clock Synchronization	✓
Firmware Upgrades	✓

CONFIGURATIONS

Endpoint	Notes
ORION Cellular C	Includes RF and IR messages for troubleshooting
ORION Cellular HLD	Includes RF and IR messages for troubleshooting
ORION Cellular LTE-M	Includes RF and IR messages for troubleshooting

NOTE: For the ORION Cellular LTE-MP endpoint, see the *ORION Cellular LTE-MP Endpoint product data sheet*, available at *www.badgermeter.com*.

License Requirements: ORION Cellular water endpoints comply with Part 15, Part 22, Part 24, and Part 27 of the FCC Rules. No license is required by the utility to operate an ORION meter reading system. This device complies with Industry Canada license-exempt RSS standard(s).

Transportation: **WARNING** The operation of transmitters and receivers on airlines is strictly prohibited by the Federal Aviation Administration. As such, the shipping of radios and endpoints via air is prohibited. Please follow all Badger Meter return and/or shipping procedures to prevent exposure to liability.

Warning: To reduce the possibility of electrical fire and shock hazards, never connect the cable from the endpoint to any electrical supply source. The endpoint cable provides SELV low voltage limited energy power to the load and should only be connected to passive elements of a water meter register.

Caution: Endpoint batteries are *not* replaceable. Users should make no attempt to replace the batteries.
Changes or modifications to the equipment that are not expressly approved by Badger Meter could void the user's authority to operate the equipment.

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WARRANTY DOCUMENTATION

Badger Meter | Lead-Free Bronze Disc Meters

PRODUCTS COVERED

This warranty shall apply to all Recordall® Lead-Free Bronze Disc Meters, models 25 through 170, when used to measure potable water, including the registers used with these meters (collectively "Product") sold on or after January 25, 2019. This warranty is extended only to utilities, municipalities, other commercial users and authorized Badger Meter, Inc. distributors, hereafter referred to as "Customer" and does NOT apply to consumers or any person or entity who is not an original customer of Badger Meter or its authorized distributors.

MATERIALS AND WORKMANSHIP

Badger Meter warrants Product to be free from defects in materials and workmanship appearing within the following time frames and those listed in the table below:

Housings
Twenty-five (25) years and six (6) months after shipment from Badger Meter.

Local Registers Supplied with the Meters Listed Herein
Twenty-five (25) years and six (6) months after shipment from Badger Meter.

	AWWA New Meter Accuracy	AWWA Repaired Meter Accuracy (AWWA M6 Manual)	Badger Meter Extended Low Flow Meter Accuracy
Recordall Meter Model, Size	*The meter product will meet or exceed new meter accuracy standards set forth in AWWA Standard C700 for the following periods:*	*The meter product will meet or exceed repaired meter accuracy standards set forth in AWWA Manual M-6, Chapter 5, Table 5.3 for the following periods:*	*Badger Meter further warrants the meter product to meet or exceed the following extended low flow accuracies in excess of AWWA standard:*
Model 25, 5/8 in. and 5/8 x 3/4 in.	Five (5) years from date of shipment or registration of 750,000 gallons, whichever occurs first.	Fifteen (15) years from date of shipment or registration of 2,500,000 gallons, whichever occurs first, with a 25 gpm safe maximum operating capacity and a 15 gpm maximum rate for continuous operation.	Badger Meter warrants Product low flow accuracy of 98.5% at a rate of 1/4 gpm and low flow accuracy of 95.0% at a rate of 1/8 gpm for five (5) years from date of shipment or registration of 675,000 gallons, whichever occurs first.
Model 35, 3/4 in.	Five (5) years from date of shipment or registration of 750,000 gallons, whichever occurs first.	Fifteen (15) years from date of shipment or registration of 2,500,000 gallons, whichever occurs first, with a 35 gpm safe maximum operating capacity and a 25 gpm maximum rate for continuous operation.	Badger Meter warrants Product low flow accuracy of 97% at a rate of 3/8 gpm for five (5) years from date of shipment or registration of 675,000 gallons, whichever occurs first.
Model 55, 1 in.	Five (5) years from date of shipment or registration of 1,000,000 gallons, whichever occurs first.	Fifteen (15) years from date of shipment or registration of 3,000,000 gallons, whichever occurs first, with a 55 gpm safe maximum operating capacity and a 40 gpm maximum rate for continuous operation.	Badger Meter warrants Product low flow accuracy of 95% at a rate of 1/2 gpm for three (3) years from date of shipment or registration of 575,000 gallons, whichever occurs first.
Model 70, 1 in.	Five (5) years from date of shipment or registration of 1,100,000 gallons, whichever occurs first.	Fifteen (15) years from date of shipment or registration of 3,250,000 gallons, whichever occurs first, with a 70 gpm safe maximum operating capacity and a 50 gpm maximum rate for continuous operation.	Badger Meter warrants Product low flow accuracy of 95% at a rate of 3/4 gpm for three (3) years from date of shipment or registration of 1,100,000 gallons, whichever occurs first.
Model 120, 1-1/2 in.	Two (2) years from date of shipment or registration of 1,600,000 gallons, whichever occurs first.	Fifteen (15) years from date of shipment or registration of 5,600,000 gallons, whichever occurs first, with a 120 gpm safe maximum operating capacity and a 80 gpm maximum rate for continuous operation.	Badger Meter warrants Product low flow accuracy of 95% at a rate of 1-1/4 gpm for two (2) years from date of shipment or registration of 1,440,000 gallons, whichever occurs first.
Model 170, 2 in.	Two (2) years from date of shipment or registration of 2,100,000 gallons, whichever occurs first.	Fifteen (15) years from date of shipment or registration of 10,400,000 gallons, whichever occurs first, with a 170 gpm safe maximum operating capacity and a 100 gpm maximum rate for continuous operation.	Badger Meter warrants Product low flow accuracy of 95% at a rate of 1-1/2 gpm for two (2) years from date of shipment or registration of 1,890,000 gallons, whichever occurs first.

PRODUCT RETURNS

Any Product proved to the satisfaction of Badger Meter to have failed the foregoing warranties will, at the option of Badger Meter, be repaired or replaced without charge to the Customer. Any eligible Product repaired or replaced by Badger Meter will retain the original Product's warranty based on the original Product purchase date, at Badger Meter's sole discretion. The Badger Meter obligation hereunder shall be limited to such repair and replacement and shall be conditioned upon Badger Meter receiving written notice of any alleged defect within ten (10) days after its discovery. This exclusive remedy shall not be deemed to have failed its essential purpose so long as Badger Meter is willing and able to replace defective products or issue a credit to purchaser within a reasonable time of proof to Badger Meter that a defect is involved. Product returns must be shipped by the Customer prepaid F.O.B. to the nearest Badger Meter factory or distribution center. The Customer shall be responsible for all direct and indirect costs associated with removing the original Product and reinstalling the repaired or replacement Product.

LIMITS OF LIABILITY

This warranty shall not apply to Product repaired or altered by parties other than Badger Meter. The foregoing warranty applies only to the extent that the Product is installed, serviced and operated strictly in accordance with AWWA Standard C700 and AWWA M6 Manual, as applicable. The warranty shall not apply and shall be void with respect to Product exposed to conditions other than those detailed in the Badger Meter Product technical and/or operational literature, or which have been exposed to adverse installation conditions, damaged by any water conditions and/or water quality, including but not limited to foreign matter in the water such as dirt, sand, minerals, debris, deposits, biofilms, extreme corrosivity, or other impurities, or which have been subject to passage of high-speed air slugs, vandalism, negligence, accident, acts of God, alteration, improper installation, operation or repair, or other circumstances which are beyond the reasonable control of Badger Meter. With respect to Product not manufactured by Badger Meter, the warranty obligations of Badger Meter shall in all respects conform and be limited to the warranty extended to Badger Meter by the supplier.

THE FOREGOING WARRANTIES ARE EXCLUSIVE AND IN LIEU OF ALL OTHER EXPRESS AND IMPLIED WARRANTIES WHATSOEVER, INCLUDING BUT NOT LIMITED TO IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE (except warranties of Title).

Any description of Product, whether in writing or made orally by Badger Meter or its agents, specifications, samples, models, bulletins, drawings, diagrams, engineering sheets, or similar materials used in connection with any Customer's order are for the sole purpose of identifying Product and shall not be construed as an express warranty. Any suggestions by Badger Meter or its agents regarding use, application or suitability of Product shall not be construed as an express warranty unless confirmed to be such in writing by Badger Meter.

Exclusion of Consequential Damages and Disclaimer of Other Liability

Badger Meter liability with respect to breaches of the foregoing warranty shall be limited as stated therein. Badger Meter liability shall in no event exceed the contract price.
BADGER METER SHALL NOT BE SUBJECT TO AND DISCLAIMS: (1) ANY OTHER OBLIGATIONS OR LIABILITIES ARISING OUT OF BREACH OF CONTRACT OR OF WARRANTY (2) ANY OBLIGATIONS WHATSOEVER ARISING FROM TORT CLAIMS (INCLUDING NEGLIGENCE AND STRICT LIABILITY) OR ARISING UNDER OTHER THEORIES OF LAW WITH RESPECT TO PRODUCTS SOLD OR SERVICES RENDERED BY BADGER METER, OR ANY UNDERTAKINGS, ACTS OR OMISSIONS RELATING THERETO, AND (3) ALL CONSEQUENTIAL, INCIDENTAL AND CONTINGENT DAMAGES WHATSOEVER.

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Legacy Document Number: RD-W-4-AWWA-EN

Badger Meter

E-Series G2® Ultrasonic Meter

Lead-Free Bronze Alloy Meters, 3, 4, 6, 8 inch

PRODUCTS

This warranty shall apply to all Badger Meter E-Series G2® Ultrasonic lead-free meters, sizes 3 inch, 4 inch, 6 inch and 8 inch, when used to measure potable cold water, and the internal encoder and battery used with these meters (collectively "Product"), sold on or after December 15, 2021. This warranty is not transferable and is extended only to utilities, municipalities, other commercial users and authorized distributors, hereafter referred to as "Customer" and does NOT apply to consumers or any person or entity who is not an original customer of Badger Meter or its authorized distributors.

MATERIALS AND WORKMANSHIP

Badger Meter, Inc. ("Badger Meter") warrants Product to be free from defects in materials and workmanship appearing within the following time frames.

Housing

Ten (10) years and six (6) months after shipment from Badger Meter.

Electronics (Battery, Registration, Transducer)

Ten (10) years and six (6) months after shipment from Badger Meter.

Pressure Sensor

Five (5) years and six (6) months after shipment from Badger Meter.

METER ACCURACY

The Product will meet or exceed all applicable specifications outlined in AWWA Standard C715 in addition to meeting meter accuracy of ±1.5% for the published ranges set forth in Badger Meter's current published product data sheet for ten (10) years from the date of shipment from Badger Meter.

EXTENDED LOW-FLOW METER ACCURACY

Badger Meter further warrants the Product will meet extended minimum test flow accuracy of ± 3% for the published ranges set forth in Badger Meter's current published data sheet for ten (10) years from date of shipment from Badger Meter.

PRODUCT RETURNS

Any Product proved to the satisfaction of Badger Meter to have failed the foregoing warranties will, at the option of Badger Meter, be repaired or replaced without charge to the Customer. Any eligible Product repaired or replaced by Badger Meter will retain the original Product's warranty based on the original Product purchase date, at Badger Meter's sole discretion. The Badger Meter obligation hereunder shall be limited to such repair and replacement and shall be conditioned upon Badger Meter receiving written notice of any alleged defect within ten (10) days after its discovery. This exclusive remedy shall not be deemed to have failed its essential purpose so long as Badger Meter is willing and able to replace defective products or issue a credit to purchaser within a reasonable time of proof to Badger Meter that a defect is involved. Product returns must be shipped by the Customer prepaid F.O.B. to the nearest Badger Meter factory or distribution center. The Customer shall be responsible for all direct and indirect costs associated with removing the original Product and reinstalling the repaired or replacement Product.

LIMITS OF LIABILITY

This warranty shall not apply to Product repaired or altered by parties other than Badger Meter, or read by equipment not explicitly approved or licensed by Badger Meter. The foregoing warranty applies only to the extent that the Product is installed, serviced and operated strictly in accordance with AWWA Standard C715 and AWWA M6 Manual, as applicable. The warranty shall not apply and shall be void with respect to Product exposed to conditions other than those detailed in the Badger Meter Product technical and/or operational literature, or which, as determined at Badger Meter's sole discretion, have affected the ability of the Product to perform, including, but not limited to: exposure to adverse installation conditions; misuse; vandalism; negligence; accident; acts of God; alteration; improper installation, operation or repair; damage from passage of high-speed air slugs; damage by water quality conditions, including but not limited to: aggressive water, foreign matter, biofilms, or extreme corrosivity; damage caused by actions not in accordance with the intended use; or other circumstances which are beyond the reasonable control of Badger Meter, as determined at Badger Meter's sole discretion. With respect to product not manufactured by Badger Meter, the warranty obligations of Badger Meter shall in all respects conform and be limited to the warranty extended to Badger Meter by the supplier of product.

THE FOREGOING WARRANTIES ARE EXCLUSIVE AND IN LIEU OF ALL OTHER EXPRESS AND IMPLIED WARRANTIES WHATSOEVER, INCLUDING BUT NOT LIMITED TO IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE (except warranties of Title).

Any description of Product, whether in writing or made orally by Badger Meter or its agents, specifications, samples, models, bulletins, drawings, diagrams, engineering sheets, or similar materials used in connection with any Customer's order are for the sole purpose of identifying Product and shall not be construed as an express warranty. Any suggestions by Badger Meter or its agents regarding use, application or suitability of Product shall not be construed as an express warranty unless confirmed to be such in writing by Badger Meter.

Exclusion of Consequential Damages and Disclaimer of Other Liability

Badger Meter liability with respect to breaches of the foregoing warranty shall be limited as stated therein. Badger Meter liability shall in no event exceed the contract price. BADGER METER SHALL NOT BE SUBJECT TO AND DISCLAIMS: (1) ANY OTHER OBLIGATIONS OR LIABILITIES ARISING OUT OF BREACH OF CONTRACT OR OF WARRANTY (2) ANY OBLIGATIONS WHATSOEVER ARISING FROM TORT CLAIMS (INCLUDING NEGLIGENCE AND STRICT LIABILITY) OR ARISING UNDER OTHER THEORIES OF LAW WITH RESPECT TO PRODUCTS SOLD OR SERVICES RENDERED BY BADGER METER, OR ANY UNDERTAKINGS, ACTS OR OMISSIONS RELATING THERETO, AND (3) ALL CONSEQUENTIAL, INCIDENTAL AND CONTINGENT DAMAGES WHATSOEVER.

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Recordall® Disc and Turbo Series Meters for Reclaimed Water

PRODUCTS COVERED

This warranty shall apply to all Recordall® bronze disc meters, models 25 through 170, and Turbo Series meters, 1-1/2 inch through 12 inch, when used to measure non-potable water, and the local registers used with these meters (collectively "Product") sold on or after September 15, 2014. This warranty is extended only to utilities, municipalities, other commercial users and authorized Badger Meter, Inc. distributors, hereafter referred to as "Customer" and does NOT apply to consumers or any person or entity who is not an original customer of Badger Meter or its authorized distributors.

MATERIALS AND WORKMANSHIP

Badger Meter warrants Product to be free from defects in materials and workmanship for one (1) year and six (6) months after shipment from Badger Meter.

PRODUCT RETURNS

Any Product proved to the satisfaction of Badger Meter to have failed the foregoing warranties will, at the option of Badger Meter, be repaired or replaced without charge to the Customer. The obligation hereunder of Badger Meter shall be limited to such repair and replacement and shall be conditioned upon Badger Meter receiving written notice of any alleged defect within ten (10) days after its discovery. This exclusive remedy shall not be deemed to have failed its essential purpose so long as Badger Meter is willing and able to replace defective products or issue a credit to purchaser within a reasonable time of proof to Badger Meter that a defect is involved. Product returns must be shipped by the Customer prepaid F.O.B. to the nearest Badger Meter factory or distribution center. The Customer shall be responsible for all direct and indirect costs associated with removing original product and reinstalling the repaired or replacement Product.

LIMITS OF LIABILITY

This warranty shall not apply to Product repaired or altered by any party other than Badger Meter. The foregoing warranty applies only to the extent that the Product is installed, serviced and operated strictly in accordance with AWWA Standards C700 or C701 as applicable, except the requirements relating to potable water.

The warranty shall not apply and shall be void with respect to Product exposed to conditions other than those detailed in Badger Meter Product technical literature, or which have been subject to vandalism, negligence, accident, acts of God, improper installation, operation or repair, alteration, or other circumstances which are beyond the reasonable control of Badger Meter. With respect to Product not manufactured by Badger Meter, the warranty obligations of Badger Meter shall in all respects conform and be limited to the warranty extended to Badger Meter by the supplier.

THE FOREGOING WARRANTIES ARE EXCLUSIVE AND IN LIEU OF ALL OTHER EXPRESS AND IMPLIED WARRANTIES WHATSOEVER, INCLUDING BUT NOT LIMITED TO IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE (except warranties of title).

Any description of the Product, whether in writing or made orally by Badger Meter or Badger Meter agents, specifications, samples, models, bulletins, drawings, diagrams, engineering sheets or similar materials used in connection with any Customer's order are for the sole purpose of identifying the Product and shall not be construed as an express warranty. Any suggestions by Badger Meter or agents of Badger Meter regarding use, application, or suitability of the Product shall not be construed as an express warranty unless confirmed to be such in writing by Badger Meter.

Exclusion of Consequential Damages and Disclaimer of Other Liability. The liability of Badger Meter with respect to breaches of the foregoing warranty shall be limited as stated herein. The liability of Badger Meter shall in no event exceed the contract price. **BADGER METER SHALL NOT BE SUBJECT TO AND DISCLAIMS: (1) ANY OTHER OBLIGATIONS OR LIABILITIES ARISING OUT OF BREACH OF CONTRACT OR OF WARRANTY, (2) ANY OBLIGATIONS WHATSOEVER ARISING FROM TORT CLAIMS (INCLUDING NEGLIGENCE AND STRICT LIABILITY) OR ARISING UNDER OTHER THEORIES OF LAW WITH RESPECT TO PRODUCTS SOLD OR SERVICES RENDERED BY BADGER METER, OR ANY UNDERTAKINGS, ACTS OR OMISSIONS RELATING THERETO, AND (3) ALL CONSEQUENTIAL, INCIDENTAL, AND CONTINGENT DAMAGES WHATSOEVER.**

Badger Meter Warranty

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Legacy Document Number: RR-W-01

Alternate

Badger Meter

E-Series® Ultrasonic Meter

Cold Water Lead-Free Meters
5/8, 5/8 x 3/4, 3/4, 1 inch

PRODUCTS

This warranty shall apply to all Badger Meter E-Series® Ultrasonic lead-free meters (stainless steel, bronze alloy or engineered polymer), sizes 5/8 inch, 5/8 x 3/4 inch, 3/4 inch, and 1 inch, when used to measure potable water and the internal register/encoder and battery used with these meters (collectively "Product"), sold on or after June 28, 2021. This warranty is not transferable and is extended only to utilities, municipalities, other commercial users and authorized distributors, hereafter referred to as "Customer" and does NOT apply to consumers or any person or entity who is not an original customer of Badger Meter or its authorized distributors.

MATERIALS AND WORKMANSHIP

Badger Meter, Inc. ("Badger Meter") warrants Product to be free from defects in materials and workmanship appearing within the earlier of the following time frames.

Lead-Free Housings

Twenty (20) years and six (6) months after shipment from Badger Meter.

Electronics, Battery, Transducers, and Register/Encoder Supplied with the Meters Listed Herein

Twenty (20) years and six (6) months, prorated, after shipment from Badger Meter.

This warranty is prorated as follows: For the first ten (10) years of the warranty the Product is replaced at no charge, and the warranty is prorated at price discounts during the last ten (10) years of the warranty.

Specifically, Badger Meter will repair or replace, at its discretion, a non-performing Product at no cost during the first ten (10) years of the warranty and at prorated price discounts during the last ten (10) years of the warranty. Badger Meter will apply these prorated price discounts to the Product list prices in effect at the time of Product return and according to the following prorated price discount schedule:

- Years 11 through 12—75% discount
- Years 13 through 15—50% discount
- Year 16—40% discount
- Year 17—30% discount
- Year 18—20% discount
- Years 19 through 20—10% discount

Replacement Products are warranted for and under the balance of the original applicable Product warranty.

Pressure Sensor

Five (5) years and six (6) months after shipment from Badger Meter.

This warranty is only applicable for the bronze E-Series G2® Ultrasonic meter with the optional pressure sensor installed.

METER ACCURACY

The Product will meet or exceed all applicable specifications outlined in AWWA Standard C715 in addition to meeting meter accuracy of ±1.5% for the published ranges set forth in Badger Meter's current published product data sheet for twenty (20) years from the date of shipment from Badger Meter.

EXTENDED LOW-FLOW METER ACCURACY

Badger Meter further warrants the Product will meet extended minimum test flow accuracy of ±3% for the published ranges set forth in Badger Meter's current published product data sheet for twenty (20) years from the date of shipment from Badger Meter.

PRODUCT RETURNS

Any Product proved to the satisfaction of Badger Meter to have failed the foregoing warranties will, at the option of Badger Meter, be repaired or replaced without charge to the Customer. Any eligible Product repaired or replaced by Badger Meter will retain the original Product's warranty based on the original Product purchase date, at Badger Meter's sole discretion. The Badger Meter obligation hereunder shall be limited to such repair and replacement and shall be conditioned upon Badger Meter receiving written notice of any alleged defect within ten (10) days after its discovery. This exclusive remedy shall not be deemed to have failed its essential purpose so long as Badger Meter is willing and able to replace defective products or issue a credit to purchaser within a reasonable time of proof to Badger Meter that a defect is involved. Product returns must be shipped by the Customer prepaid F.O.B. to the nearest Badger Meter factory or distribution center. The Customer shall be responsible for all direct and indirect costs associated with removing the original Product and reinstalling the repaired or replacement Product.

LIMITS OF LIABILITY

This warranty shall not apply to Product repaired or altered by parties other than Badger Meter, or read by equipment not explicitly approved or licensed by Badger Meter. The foregoing warranty applies only to the extent that the Product is installed, serviced and operated strictly in accordance with AWWA Standard C715 and AWWA M6 Manual, as applicable. The warranty shall not apply and shall be void with respect to Product exposed to conditions other than those detailed in the Badger Meter Product

technical and/or operational literature, or which, as determined at Badger Meter's sole discretion, have affected the ability of the Product to perform, including, but not limited to: exposure to adverse installation conditions; misuse; vandalism; negligence; accident; acts of God; alteration; improper installation, operation or repair; damage from passage of high-speed air slugs; damage by water quality conditions, including but not limited to: aggressive water, foreign matter, biofilms, or extreme corrosivity; damage caused by actions not in accordance with the intended use; or other circumstances which are beyond the reasonable control of Badger Meter, as determined at Badger Meter's sole discretion. With respect to product not manufactured by Badger Meter, the warranty obligations of Badger Meter shall in all respects conform and be limited to the warranty extended to Badger Meter by the supplier of product.

THE FOREGOING WARRANTIES ARE EXCLUSIVE AND IN LIEU OF ALL OTHER EXPRESS AND IMPLIED WARRANTIES WHATSOEVER, INCLUDING BUT NOT LIMITED TO IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE (except warranties of Title).

Any description of Product, whether in writing or made orally by Badger Meter or its agents, specifications, samples, models, bulletins, drawings, diagrams, engineering sheets, or similar materials used in connection with any Customer's order are for the sole purpose of identifying Product and shall not be construed as an express warranty. Any suggestions by Badger Meter or its agents regarding use, application or suitability of Product shall not be construed as an express warranty unless confirmed to be such in writing by Badger Meter.

Exclusion of Consequential Damages and Disclaimer of Other Liability

Badger Meter liability with respect to breaches of the foregoing warranty shall be limited as stated therein. Badger Meter liability shall in no event exceed the contract price. BADGER METER SHALL NOT BE SUBJECT TO AND DISCLAIMS: (1) ANY OTHER OBLIGATIONS OR LIABILITIES ARISING OUT OF BREACH OF CONTRACT OR OF WARRANTY (2) ANY OBLIGATIONS WHATSOEVER ARISING FROM TORT CLAIMS (INCLUDING NEGLIGENCE AND STRICT LIABILITY) OR ARISING UNDER OTHER THEORIES OF LAW WITH RESPECT TO PRODUCTS SOLD OR SERVICES RENDERED BY BADGER METER, OR ANY UNDERTAKINGS, ACTS OR OMISSIONS RELATING THERETO, AND (3) ALL CONSEQUENTIAL, INCIDENTAL AND CONTINGENT DAMAGES WHATSOEVER.

E-Series and E-Series G2 are registered trademarks of Badger Meter, Inc. Other trademarks appearing in this document are the property of their respective entities. Due to continuous research, product improvements and enhancements, Badger Meter reserves the right to change product or system specifications without notice, except to the extent an outstanding contractual obligation exists. © 2021 Badger Meter, Inc. All rights reserved.

Alternate

Badger Meter

E-Series® Ultrasonic Meters

Lead-Free Meters

DN15, DN20, DN25, DN32, DN40, DN50

PRODUCTS

This warranty shall apply to all Badger Meter E-Series® Ultrasonic lead-free meters, sizes DN15, DN20, DN25, DN32, DN40 and DN50, used to measure potable water, and the internal register/encoder and battery used with these meters (collectively "Product"), sold on or after June 6, 2022. This warranty is not transferable and is extended only to utilities, municipalities, other commercial users and authorized distributors, hereafter referred to as "Customer" and does NOT apply to consumers or any person or entity who is not an original customer of Badger Meter or its authorized distributors.

MATERIALS AND WORKMANSHIP

Badger Meter, Inc. ("Badger Meter") warrants Product to be free from defects in materials and workmanship appearing within the earlier of the following time frames.

Lead-Free Housings, Electronics, Battery, Transducers, and Register/Encoder Supplied with the Meters Listed Herein

Warranty shall commence the earlier of ten (10) years from the date of installment documented in BEACON® or ten (10) years and six (6) months after shipment from Badger Meter.

METER ACCURACY

The Product will meet or exceed meter accuracy of ±2% from Q2 to Q4 for the published ranges set forth in Badger Meter's current published product data sheet. Warranty shall commence the earlier of ten (10) years from the date of installment documented in BEACON or ten (10) years and six (6) months after shipment from Badger Meter.

EXTENDED LOW-FLOW METER ACCURACY

Badger Meter further warrants the Product will meet or exceed extended minimum test flow accuracy of ±5% from Q1 to Q2 for the published ranges set forth in Badger Meter's current published product data sheet. Warranty shall commence the earlier of ten (10) years from the date of installment documented in BEACON or ten (10) years and six (6) months after shipment from Badger Meter.

PRODUCT RETURNS

Any Product proved to the satisfaction of Badger Meter to have failed the foregoing warranties will, at the option of Badger Meter, be repaired or replaced without charge to the Customer. Any eligible Product repaired or replaced by Badger Meter will retain the original Product's warranty based on the original Product purchase date, at Badger Meter's sole discretion. The Badger Meter obligation hereunder shall be limited to such repair and replacement and shall be conditioned upon Badger Meter receiving written notice of any alleged defect within ten (10) days after its discovery. This exclusive remedy shall not be deemed to have failed its essential purpose so long as Badger Meter is willing and able to replace defective products or issue a credit to purchaser within a reasonable time of proof to Badger Meter that a defect is involved. Product returns must be shipped by the Customer prepaid F.O.B. to the nearest Badger Meter factory or distribution center. The Customer shall be responsible for all direct and indirect costs associated with removing the original Product and reinstalling the repaired or replacement Product.

LIMITS OF LIABILITY

This warranty shall not apply to Product repaired or altered by parties other than Badger Meter. The foregoing warranty applies only to the extent that the Product is installed, serviced and operated strictly in accordance with OIML R49 standards and MID approval, as applicable. The warranty shall not apply and shall be void with respect to Product exposed to conditions other than those detailed in the Badger Meter Product technical and/or operational literature, or which, as determined at Badger Meter's sole discretion, have affected the ability of the Product to perform, including, but not limited to: exposure to adverse installation conditions; misuse; vandalism; negligence; accident; acts of God; alteration; improper installation, operation or repair; damage from passage of high-speed air slugs; damage by water quality conditions, including but not limited to: aggressive water, foreign matter, biofilms, or extreme corrosivity; damage caused by actions not in accordance with the intended use; or other circumstances which are beyond the reasonable control of Badger Meter, as determined at Badger Meter's sole discretion. With respect to product not manufactured by Badger Meter, the warranty obligations of Badger Meter shall in all respects conform and be limited to the warranty extended to Badger Meter by the supplier of product.

THE FOREGOING WARRANTIES ARE EXCLUSIVE AND IN LIEU OF ALL OTHER EXPRESS AND IMPLIED WARRANTIES WHATSOEVER,INCLUDING BUT NOT LIMITED TO IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE (except warranties of Title).

Any description of Product, whether in writing or made orally by Badger Meter or its agents, specifications, samples, models,bulletins, drawings, diagrams, engineering sheets, or similar materials used in connection with any Customer's order are for the sole purpose of identifying Product and shall not be construed as an express warranty. Any suggestions by Badger Meter or its agents regarding use, application or suitability of Product shall not be construed as an express warranty unless confirmed to be such in writing by Badger Meter.

Exclusion of Consequential Damages and Disclaimer of Other Liability

Badger Meter liability with respect to breaches of the foregoing warranty shall be limited as stated therein. Badger Meter liability shall in no event exceed the contract price. BADGER METER SHALL NOT BE SUBJECT TO AND DISCLAIMS: (1) ANY OTHER OBLIGATIONS

OR LIABILITIES ARISING OUT OF BREACH OF CONTRACT OR OF WARRANTY (2) ANY OBLIGATIONS WHATSOEVER ARISING FROM TORT CLAIMS (INCLUDING NEGLIGENCE AND STRICT LIABILITY) OR ARISING UNDER OTHER THEORIES OF LAW WITH RESPECT TO PRODUCTS SOLD OR SERVICES RENDERED BY BADGER METER, OR ANY UNDERTAKINGS, ACTS OR OMISSIONS RELATING THERETO, AND (3) ALL CONSEQUENTIAL, INCIDENTAL AND CONTINGENT DAMAGES WHATSOEVER.

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www.badgermeter.com

Badger Meter

E-Series® Ultrasonic Plus Meter

with Integrated Valve

5/8 x 3/4 in., 3/4 in.

PRODUCTS

This warranty shall apply to all Badger Meter E-Series® Ultrasonic Plus lead-free meters with integrated valve, sizes 5/8 x 3/4 inch and 3/4 inch, when used to measure potable water, and the internal register/encoder and battery used with these meters (collectively "Product"), sold on or after October 2, 2023. This warranty is not transferable and is extended only to utilities, municipalities, other commercial users and authorized distributors, hereafter referred to as "Customer," and does NOT apply to consumers or any person or entity who is not an original customer of Badger Meter or its authorized distributors.

MATERIALS AND WORKMANSHIP

Badger Meter, Inc. ("Badger Meter") warrants Product to be free from defects in materials and workmanship for the time period stated.

Lead-Free Housing	20 years and 6 months after shipment
Battery[1]	20 years and 6 months after shipment (prorated)
Transducers[1]	20 years and 6 months after shipment (prorated)
Encoder Register[1]	20 years and 6 months after shipment (prorated)
Meter Accuracy[1, 2]	20 years and 6 months after shipment (prorated)
Valve and Valve Power Module[1]	20 years and 6 months after shipment (prorated) or a maximum of 240 valve actuation cycles,* whichever comes first

*A cycle is defined as the valve going from the unactuated state to the actuated state and returning to the unactuated state.

[1] Badger Meter will repair or replace, at its discretion, a non-performing Product at no cost during the first ten (10) years, and at a prorated price during the last ten (10) years of the warranty. Badger Meter will apply these prorated price discounts to the Product list prices at the time of Product return and according to the following prorated price discount schedule: Years 11 through 12 - 75% discount; Years 13 through 15 - 50% discount; Year 16 - 40% discount; Year 17 - 30% discount; Year 18 - 20% discount; and Years 19 through 20 - 10% discount. Replacement Products are warranted for and under the balance of the original applicable Product warranty.

[2] The Product will meet or exceed all applicable specifications outlined in AWWA Standard C715 in addition to meeting the meter accuracy as set forth in the Operating Performance Specifications of the Badger Meter current published product data sheet (*ESM-DS-02022-EN*).

PRODUCT RETURNS

Any Product proved to the satisfaction of Badger Meter to have failed the foregoing warranties will, at the option of Badger Meter, be repaired or replaced without charge to the Customer. Any eligible Product repaired or replaced by Badger Meter will retain the original Product's warranty based on the original Product purchase date, at Badger Meter's sole discretion. The Badger Meter obligation hereunder shall be limited to such repair and replacement and shall be conditioned upon Badger Meter receiving written notice of any alleged defect within ten (10) days after its discovery. This exclusive remedy shall not be deemed to have failed its essential purpose so long as Badger Meter is willing and able to replace defective products or issue a credit to purchaser within a reasonable time of proof to Badger Meter that a defect is involved. Product returns must be shipped by the Customer prepaid F.O.B. to the nearest Badger Meter factory or distribution center. The Customer shall be responsible for all direct and indirect costs associated with removing the original Product and reinstalling the repaired or replacement Product.

LIMITS OF LIABILITY

This warranty shall not apply to Product repaired or altered by parties other than Badger Meter, or read by equipment not explicitly approved or licensed by Badger Meter. The foregoing warranty applies only to the extent that the Product is installed, serviced and operated strictly in accordance with AWWA Standard C715 and AWWA M6 Manual, as applicable. The warranty shall not apply and shall be void with respect to Product exposed to conditions other than those detailed in the Badger Meter Product technical and/or operational literature, or which, as determined at Badger Meter's sole discretion, have affected the ability of the Product to perform, including, but not limited to: exposure to adverse installation conditions; misuse; vandalism; negligence; accident; acts of God; alteration; improper installation, operation or repair; damage from passage of high-speed air slugs; damage by water quality conditions, including but not limited to: aggressive water, foreign matter, biofilms, or extreme corrosivity; damage caused by actions not in accordance with the intended use; or other circumstances which are beyond the reasonable control of Badger Meter, as determined at Badger Meter's sole discretion. With respect to product not manufactured by Badger Meter, the warranty obligations of Badger Meter shall in all respects conform and be limited to the warranty extended to Badger Meter by the supplier of product.

THE FOREGOING WARRANTIES ARE EXCLUSIVE AND IN LIEU OF ALL OTHER EXPRESS AND IMPLIED WARRANTIES WHATSOEVER, INCLUDING BUT NOT LIMITED TO IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE (except warranties of Title).

Any description of Product, whether in writing or made orally by Badger Meter or its agents, specifications, samples, models, bulletins, drawings, diagrams, engineering sheets, or similar materials used in connection with any Customer's order are for the sole purpose of identifying Product and shall not be construed as an express warranty. Any suggestions by Badger Meter or its agents regarding use, application or suitability of Product shall not be construed as an express warranty unless confirmed to be such in writing by Badger Meter.

Badger Meter Warranty

Exclusion of Consequential Damages and Disclaimer of Other Liability

Badger Meter liability with respect to breaches of the foregoing warranty shall be limited as stated therein. Badger Meter liability shall in no event exceed the contract price. BADGER METER SHALL NOT BE SUBJECT TO AND DISCLAIMS: (1) ANY OTHER OBLIGATIONS OR LIABILITIES ARISING OUT OF BREACH OF CONTRACT OR OF WARRANTY (2) ANY OBLIGATIONS WHATSOEVER ARISING FROM TORT CLAIMS (INCLUDING NEGLIGENCE AND STRICT LIABILITY) OR ARISING UNDER OTHER THEORIES OF LAW WITH RESPECT TO PRODUCTS SOLD OR SERVICES RENDERED BY BADGER METER, OR ANY UNDERTAKINGS, ACTS OR OMISSIONS RELATING THERETO, AND (3) ALL CONSEQUENTIAL, INCIDENTAL AND CONTINGENT DAMAGES WHATSOEVER.

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Badger Meter

HR-E®

High Resolution Encoder

PRODUCTS COVERED

This Badger Meter warranty shall apply to the High Resolution Encoder (HR-E®) ("Product"), sold on or after June 18, 2021. This warranty is not transferable and is extended only to utilities, municipalities, other commercial users and authorized distributors, hereafter referred to as "Customer" and does NOT apply to consumers or any person or entity who is not an original customer of Badger Meter or its authorized distributors.

MATERIALS AND WORKMANSHIP

Badger Meter warrants the Product to be free from defects in materials and workmanship appearing within twenty (20) years and six (6) months after shipment from Badger Meter.

This warranty is prorated as follows: For the first ten (10) years of the warranty the Product is replaced at no charge, and the warranty is prorated at price discounts during the last ten (10) years of the warranty.

Specifically, Badger Meter will repair or replace, at its discretion, a non-performing Product at no cost during the first ten (10) years of the warranty and at prorated price discounts during the last ten (10) years of the warranty. Badger Meter will apply these prorated price discounts to the Product list prices in effect at the time of Product return and according to the following prorated price discount schedule:

- Years 11 through 12—75% discount
- Years 13 through 15—50% discount
- Year 16—40% discount
- Year 17—30% discount
- Year 18—20% discount
- Years 19 through 20—10% discount

Replacement Products are warranted for and under the balance of the original applicable Product warranty.

PRODUCT RETURNS

Any Product proved to the satisfaction of Badger Meter to have failed the foregoing warranties will, at the option of Badger Meter, be repaired or replaced without charge to the Customer. The Badger Meter obligation hereunder shall be limited to such repair and replacement and shall be conditioned upon Badger Meter receiving written notice of any alleged defect within ten (10) days after its discovery. This exclusive remedy shall not be deemed to have failed its essential purpose so long as Badger Meter is willing and able to replace defective products or issue a credit to purchaser within a reasonable time of proof to Badger Meter that a defect is involved. Product returns must be shipped by the Customer prepaid F.O.B. to the nearest Badger Meter factory or distribution center. The Customer shall be responsible for all direct and indirect costs associated with removing the original Product and reinstalling the repaired or replacement Product.

LIMITS OF LIABILITY

This warranty shall not apply to Product repaired or altered by parties other than Badger Meter. The foregoing warranty applies only to the extent that the Product is installed, serviced and operated strictly in accordance with Badger Meter instructions. The warranty shall not apply and shall be void with respect to Product exposed to conditions other than those detailed in the Badger Meter Product technical literature or which have been subject to vandalism, negligence, accident, acts of God, alteration, improper installation, operation or repair, or other circumstances which are beyond the reasonable control of Badger Meter. With respect to Product not manufactured by Badger Meter, the warranty obligations of Badger Meter shall in all respects conform and be limited to the warranty extended to Badger Meter by the supplier.

THE FOREGOING WARRANTIES ARE EXCLUSIVE AND IN LIEU OF ALL OTHER EXPRESS AND IMPLIED WARRANTIES WHATSOEVER, INCLUDING BUT NOT LIMITED TO IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE **(except warranties of Title).**

Any description of Product, whether in writing or made orally by Badger Meter or its agents, specifications, samples, models, bulletins, drawings, diagrams, engineering sheets or similar materials used in connection with any Customer's order are for the sole purpose of identifying Product and shall not be construed as an express warranty. Any suggestions by Badger Meter or its agents regarding use, application or suitability of Product shall not be construed as an express warranty unless confirmed to be such in writing by Badger Meter.

Exclusion of Consequential Damages and Disclaimer of Other Liability

Badger Meter liability with respect to breaches of the foregoing warranty shall be limited as stated therein. Badger Meter liability shall in no event exceed the contract price. BADGER METER SHALL NOT BE SUBJECT TO AND DISCLAIMS: (1) ANY OTHER OBLIGATIONS OR LIABILITIES ARISING OUT OF BREACH OF CONTRACT OR OF WARRANTY (2) ANY OBLIGATIONS WHATSOEVER ARISING FROM TORT CLAIMS (INCLUDING NEGLIGENCE AND STRICT LIABILITY) OR ARISING UNDER OTHER THEORIES OF LAW WITH RESPECT TO PRODUCTS SOLD OR SERVICES RENDERED BY BADGER METER, OR ANY UNDERTAKINGS, ACTS OR OMISSIONS RELATING THERETO, AND (3) ALL CONSEQUENTIAL, INCIDENTAL AND CONTINGENT DAMAGES WHATSOEVER.

Badger Meter Warranty

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Badger Meter

ORION® Water Products

with BEACON® Software as a Service (SaaS)

PRODUCTS

This warranty shall apply to Badger Meter ORION® series AMR/AMI Water Endpoints, reading hardware and software for a BEACON® system, sold on or after April 11, 2024.

ORION series AMR/AMI Water Endpoints include Fixed Network (SE), ME and Mobile M endpoints.

This warranty is not transferable and is extended only to utilities, municipalities, other commercial users and authorized distributors, hereafter referred to as "Customer" and does NOT apply to consumers or any person or entity who is not an original Customer of Badger Meter or its authorized distributors.

MATERIAL AND WORKMANSHIP

Badger Meter warrants all ORION series AMR/AMI Water Endpoints including battery, reading hardware and software, hereafter referred to as "Product(s)" as listed below, to be free from defects in material and workmanship for the time period stated.

ORION SE, ORION ME[3] and ORION Mobile M Water Endpoints[1]	20 years and 6 months after shipment
ORION Cellular LTE-MP Endpoints	10 years and 6 months after shipment
Trimble® T10 Tablet[2]	3 years after shipment
Dell® Latitude 5430 Laptop[2] and Latitude 7230 Tablet[2]	3 years after shipment
Panasonic Toughbook® Laptop for BEACON Mobile Solution[2]	3 years after shipment
Trimble® Ranger 7 Handheld[2]	3 years after shipment
Trimble Yuma 7 Tablet[2]	3 years after shipment
ORION ME Modules[2] for Trimble Yuma 7 Tablet and Trimble Ranger 7 Handheld	3 years after shipment
Microsoft® Surface Go 3 Tablet[2]	1 year after shipment
ORION Mobile (ME) Transceiver[2]	3 years after shipment
ORION Mobile Integrated Receiver[2]	1 year after shipment
ORION Fixed Network (SE) Gateway Transceiver	1 year after shipment

[1] Water Endpoints and Endpoint batteries—collectively ORION Water Endpoint Products—are warranted to be free from defects in material and workmanship for twenty (20) years and six (6) months after shipment from Badger Meter. Badger Meter will repair or replace, at its discretion, a non-performing ORION Water Endpoint Product at no cost during the first ten (10) years, and at a prorated price during the last ten (10) years of the warranty. Badger Meter will apply these prorated price discounts to the ORION Water Endpoint Product list prices at the time of ORION Water Endpoint Product return and according to the following prorated price discount schedule: Years 11 through 12 - 75% discount; Years 13 through 15 - 50% discount; Year 16 - 40% discount; Year 17 - 30% discount; Year 18 - 20% discount; and Years 19 through 20 - 10% discount. Replacement Products are warranted for and under the balance of the original.

[2] Batteries, antennas, cables and accessories warranty is limited to 12 months from the date of shipment.

[3] Mobile solutions deployed prior to February 1, 2023 include ORION ME endpoints that are migratable to fixed network. BEACON SaaS mobile solutions deployed on or after February 1, 2023 include ORION ME endpoints that operate in mobile mode only.

PRODUCT RETURNS

Product failures must be proven and verified to the satisfaction of Badger Meter. The Badger Meter obligation hereunder shall be limited to such repair and replacement and shall be conditioned upon Badger Meter receiving written notice of any asserted defect within 10 (ten) days after its discovery. This exclusive remedy shall not be deemed to have failed its essential purpose so long as Badger Meter is willing and able to replace the defective Product for the Customer within a reasonable time, after receipt of proof that a defect is involved. Product returns must be shipped by the Customer prepaid F.O.B. to the nearest Badger Meter factory or distribution center. The Customer shall be responsible for all direct and indirect costs associated with removing the Product and reinstalling the repaired or replacement Product.

LIMITS OF LIABILITY

This warranty shall not apply to any Product repaired or altered by any Party other than Badger Meter. The foregoing warranty applies only to the extent that the Product is installed, serviced and operated strictly in accordance with Badger Meter instructions. The warranty shall not apply and shall be void with respect to Products exposed to conditions other than those detailed in Product technical literature or which have been subject to vandalism, negligence, accident, acts of God, improper installation, operation or repair, alteration or other circumstances which are beyond the reasonable control of Badger Meter. With respect to products not manufactured by Badger Meter, the warranty obligations of Badger Meter shall in all respects conform and be limited to the warranty extended to Badger Meter by the supplier.

THE FOREGOING WARRANTIES ARE EXCLUSIVE AND IN LIEU OF ALL OTHER EXPRESS AND IMPLIED WARRANTIES WHATSOEVER, INCLUDING BUT NOT LIMITED TO IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE (except warranties of Title).

Any description of the Product, whether in writing or made orally by Badger Meter or its agents, specifications, samples, models, bulletins, drawings, diagrams, engineering sheets or similar materials used in connection with any Customer's order are for the sole purpose of identifying the Product and shall not be construed as an express warranty. Any suggestions by Badger Meter or its agents regarding use, application or suitability of the Product shall not be construed as an express warranty unless confirmed to be such, in writing, by Badger Meter.

Exclusion of Consequential Damages and Disclaimer of Other Liability

The liability of Badger Meter with respect to breaches of the foregoing warranty shall be limited as stated herein. Badger Meter's liability shall in no event exceed the contract price. BADGER METER SHALL NOT BE SUBJECT TO AND DISCLAIMS: (1) ANY OTHER OBLIGATIONS OR LIABILITIES ARISING OUT OF BREACH OF CONTRACT OR OF WARRANTY, (2) ANY OBLIGATIONS WHATSOEVER ARISING FROM TORT CLAIMS (INCLUDING NEGLIGENCE AND STRICT LIABILITY) OR ARISING UNDER OTHER THEORIES OF LAW WITH RESPECT TO PRODUCTS SOLD OR SERVICES RENDERED BY BADGER METER, OR ANY UNDERTAKINGS, ACTS OR OMISSIONS RELATING THERETO, AND (3) ALL CONSEQUENTIAL, INCIDENTAL AND CONTINGENT DAMAGES WHATSOEVER.

Badger Meter Warranty

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USER GUIDES

Badger Meter | IR Communication Device

The IR Communication Device (**68891-001**) can be used with ORION® Cellular endpoints* and E-Series G2® Ultrasonic meters. See general information about the device below and the instructions for use on other side of this document.

* Refer to the *ORION Water Endpoint Installation Manual* available at *www.badgermeter.com* for a complete list of ORION Cellular endpoints.

HOW TO USE

1. Point the device toward the endpoint/meter IR communication port as shown in *Figure 1*. **Range: 1/2 to 3 inches**
2. Press a numbered button to activate. See instructions on *page 2*.

LED Indicator

- Solid **green** LED = success
- Blinking **green** LED = in process
- Blinking **red** LED = fail, error

When activated, the LED indicators next to the numbered buttons light up for 10 seconds. Another command can be issued at any time, which will clear the last command.



Figure 1: IR Communication Device

Optional Tools

- **ORION Cellular Endpoint IR Alignment Tool (68779-091)** is recommended for use with ORION endpoints. Available from Badger Meter.
- **E-Series Ultrasonic Meter IR Alignment Tool (68877-001)** is recommended for use with E-Series meters. Available from Badger Meter.
- Small (#1) Phillips screwdriver (customer supplied) to remove device back and replace CR2450 3V lithium coin battery.
- Micro B USB cable (customer supplied) to connect IR Communication Device to a computing device for file download or IR communications.

View the *IR Communication Device* video for a short step-by-step tutorial about activating an ORION Cellular endpoint. Visit *https://helpbeaconama.net/training-2/#videos* or scan the QR code to access the list of available videos on the Training page in BEACON Help.

About the IR Communication Device

- Has micro USB port for extracting data files (*Figure 1*). Requires micro B USB cable to download files.
- Not rechargeable. Uses replaceable CR2450 3V lithium coin battery. Remove back of device to replace.
- Functions with Windows®10 devices.
  - USB IR passthrough COM device: Functions the same as IR programming cable when micro B USB cord is attached.
  - USB storage: Stores log files from network sessions. Use micro USB port to extract files. Requires micro B USB cable to download files.

    NOTE: Network logs are stored on the device and must be periodically downloaded/cleared via the micro USB port.

ORION® CELLULAR ENDPOINTS

NOTE: *IR Communication Devices shipped prior to March 8, 2021 require a firmware update to support use with ORION Cellular C endpoints. Contact Badger Meter Technical Support (800-616-3837).*

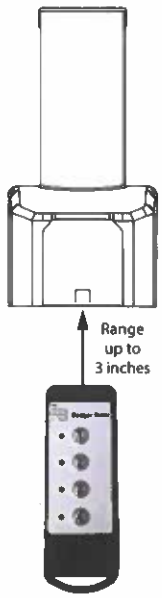


Figure 2: Using device with ORION Cellular endpoint

Button	Press Length	Command	Operation
1	SHORT*	**Start/Active/Run**	One SHORT press will START the 3-part process to activate an endpoint in Pause or Stop mode. **NOTE:** **LED 1, 3, and 4 automatically light up in sequence as process continues.** (No need to press additional buttons.) Endpoint LED flashes when process is done. **IMPORTANT**: Keep IR Communication Device aligned to endpoint IR port until process is complete. Alignment Tool recommended! Process is completed when device LEDs are no longer lit. **NOTE:** Network session generates a log file.
	LONG**	n/a	n/a
2	SHORT*	**Pause**	One SHORT press will PAUSE the endpoint radio signal.
	LONG**	**Stop/Sleep**	One LONG press will STOP the endpoint radio signal.
3	SHORT*	**Force Encoder Read**	One SHORT press checks status of the attached encoder. If error occurs (**red** blinking), press/release again after initial process is complete.
	LONG**	n/a	n/a
4	SHORT*	**Run Network Session**	One SHORT press forces endpoint to run a network session. Network session generates a log file: ICD_SerialNumber_n.log. If error occurs (**red** blinking), press/release again after initial process is complete.
	LONG**	n/a	n/a

E-SERIES G2® ULTRASONIC METERS

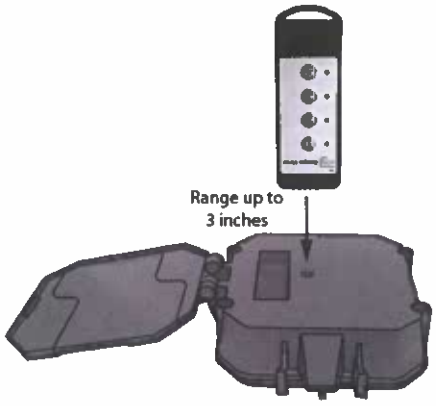


Figure 3: Using device with E-Series G2 Ultrasonic meter

Button	Press Length	Command	Operation
1	SHORT*	**Start/Active/Run**	One SHORT press sets the meter into ACTIVE mode.
	LONG**	**Storage**	One LONG press sets the meter into STORAGE mode.
2	SHORT*	**Clear All Alarms**	One SHORT press clears all alarms set for meter. Alarm icons displayed on the meter LCD are removed and replaced with the OK symbol.
	LONG**	**Download Data Profile**	One LONG press extracts the full data profile of meter and writes a log file.
3	SHORT*	**Display Next Screen**	One SHORT press displays the next available information screen on the meter LCD.
	LONG**	**Display Standard Totalizer**	One LONG press displays the information screen that contains the standard totalizer on the meter LCD.
4	SHORT*	None	n/a
	LONG**	None	n/a

SHORT** = Press and release * LONG** = Press and hold for (at least) 5 seconds*

***SMART WATER IS** BADGER METER*

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ORION® Cellular Endpoint Installation

This Quick Start Guide* details the four main steps for installing ORION® Cellular C, HLD, CS, LTE-M, LTE-MS, HLA, HLC and LTE water endpoints.

1. **Connect the endpoint to the encoder**
   (This step can be done before, or as part of installation.)
2. **Install the endpoint**
3. **Activate the endpoint**
4. **Confirm activation**

To reduce the possibility of electrical fire and shock hazards, never connect the cable from the endpoint to any electrical supply source. The endpoint cable provides SELV low voltage limited energy power to the load and should only be connected to passive elements of a water meter register.

The endpoint batteries are *not* replaceable. Users should make no attempt to replace the batteries. Changes or modifications to the equipment that are not expressly approved by Badger Meter could void the user's authority to operate the equipment.

ORION endpoints installation must comply with all applicable federal, state and local rules, regulations and codes. Proper performance and reliability of ORION endpoints depend upon installation in accordance with these instructions. Endpoints not properly installed may not be covered under warranty.

Failure to read and follow these instructions can lead to misapplication or misuse of this product, resulting in personal injury and damage to equipment.

*Complete installation information for all ORION endpoints can be found in the *ORION Water Endpoints Installation Manual*, available at *www.badgermeter.com*.

ENDPOINTS AND ENCODERS

ORION Cellular water endpoints are three-wire metering devices for indoor/outdoor use. The ORION Cellular C endpoint is shown in *Figure 1*.



Figure 1: ORION Cellular C Endpoint

Each endpoint has an FCC label on the back and the serial number engraved on the front. The serial numbers start with the numbers shown below:

- ORION Cellular HLD 16xxxxxxx
- ORION Cellular C and CS 13xxxxxxx
- ORION Cellular LTE-M and LTE-MS 12xxxxxxx
- ORION Cellular HLA 14xxxxxxx
  NOTE: Some early release HLA endpoints may have the 13xxxxxxx series.
- ORION Cellular HLC 149xxxxxx
- ORION Cellular LTE 11xxxxxxx

The endpoints have the same dimensions (*Figure 2*).

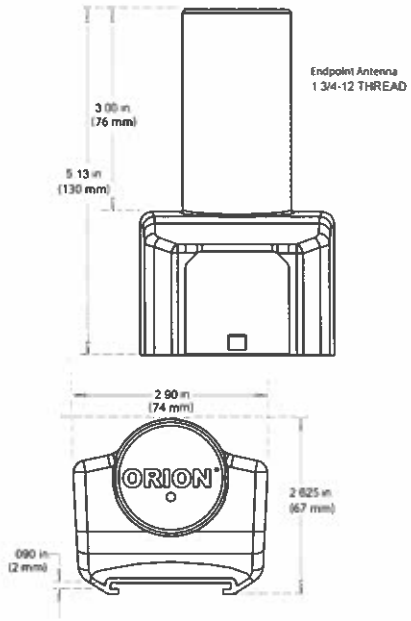


Figure 2: Endpoint dimensions

ORION Cellular water endpoints are compatible with Badger Meter high resolution encoders and E-Series Ultrasonic meters as well as a number of competitive encoders. See the *ORION Water Endpoints Installation Manual* for the complete list.

CONNECT ENDPOINTS AND ENCODERS

ORION Cellular water endpoints require connection to an encoder to complete the assembly.

Endpoints with inline connectors can be easily connected to an encoder in the field. No tools are necessary.

Endpoints with flying leads can be connected to existing wires from the encoder or directly to the encoder terminal screws, depending on the application and manufacturer.

ORION endpoint wires: Red = Power/Clock; Black = Ground; Green = Data

See the wiring chart in the *ORION Water Endpoints Installation Manual* if you need help.

Badger Meter
ORI-QS-03017-EN-10 (November 2023)

Quick Start Guide

INSTALLATION

Choose an appropriate location within the limits of the endpoint/encoder connector harness.

Indoor/Outdoor Installation:

- Indoor installation is **recommended**. Mount endpoints indoors, in the floor joist near an outside wall and away from large metal objects.
- Outdoor installation is **acceptable** and may be required where signal strength does not support an indoor installation.

Pit Installation

Mount endpoints through a NON-METAL pit lid—**REQUIRED**. See *Figure 3*.

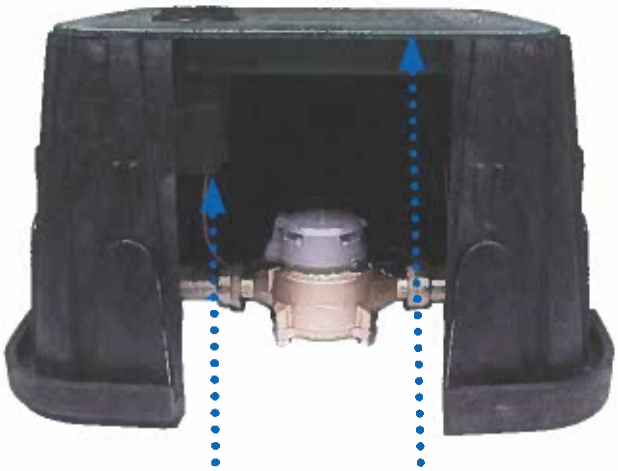


Figure 3: ORION Cellular C endpoint installed per instructions ***through non-metal pit lid***

Installation Kits

Endpoint installation kits are available. Kit information can be found in the ORION Water Endpoint Installation Manual.

ENDPOINT ACTIVATION

Activation is dependent on whether the endpoint radio is in Pause ("soft sleep") or Stop ("hard sleep") mode. ORION endpoint radios in Pause mode offer a Smart Activation feature which utilizes consumption to automatically start the endpoint. ORION endpoint radios in Stop mode must be manually activated. The Product Configuration Utility (PCU) software can be used to identify the endpoint radio mode. See the *Product Configuration Utility for ORION Endpoints User Manual* available at *www.badgermeter.com*.

Activating Endpoints in Pause Mode via Smart Activation

With Smart Activation, the endpoint radio in Pause mode automatically "wakes up" on its own and begins broadcasting data after the encoder to which it is connected detects enough water usage from the register after installation. The amount of water consumption depends on the encoder output and meter size. This section explains how Smart Activation affects endpoints connected to encoders at the factory (Endpoint/Encoder Assemblies) and endpoints connected to an encoder in the field (Endpoint Only).

Endpoint/Encoder Assemblies

An initial encoder read is stored by the endpoint at the time the encoder and endpoint are factory connected and the endpoint is placed in Pause mode. While in Pause mode, the endpoint monitors the encoder for consumption, checking once every fifteen minutes. When the endpoint/encoder assembly is installed and water is running through the meter, the endpoint automatically "wakes up" and transitions to its active operational mode once the required amount of consumption is registered (see table below).

Encoder Output	Dial Change Required to Activate Endpoint
7-dial	Any 1 unit change in the least significant digit
8-dial	Any 5 unit change in the least significant digit
9-dial	Any 5 unit change in the least significant digit

Endpoint Only

Like endpoint/encoder assemblies, ORION "endpoint only" configurations can be shipped in Pause mode. The initial encoder read is established the first time the endpoint is field connected to an encoder.

TIP: It may take up to fifteen (15) minutes for an endpoint to recognize the initial encoder read. To expedite this process, Badger Meter recommends connecting the endpoint to the encoder in advance of field installation so a baseline encoder read can be captured before installation.

After the initial encoder read is stored, the endpoint monitors the encoder for consumption, checking for a change in the encoder read once every fifteen minutes. The endpoint automatically "wakes up" and transitions to its operational mode when the required amount of consumption is registered. See the table on the previous page.

Tools

For Smart Activation, no special tools or field programming are required. For more immediate activation or for endpoints in Stop mode, infrared (IR) activation tools are available.

Activating Endpoints Using IR

NOTE: Endpoint radios in Stop mode **must** be manually activated using IR communication.

1. The Badger Meter ***IR Communication Device*** (*Figure 4*) can be used to activate an endpoint in Stop or Pause mode and verify the encoder connection. Instructions are included with the device. For a short video about how to use the device, go to BEACON Help videos at *https://helpbeaconama.net/training-2/#videos*

2. Endpoints can also be activated using the PCU software with an ORION or customer-supplied Windows® device. The software can also identify the endpoint radio mode. Instructions are available in the *Product Configuration Utility for ORION Endpoints User Manual* available at *www.badgermeter.com*.

NOTE: Using the IR Alignment Tool (*Figure 5*) is recommended for IR activation of ORION Cellular endpoints. The IR Alignment Tool is a hands-free tool for positioning the IR Communication Device or an IR programming cable head.



Figure 4: IR Communication Device ***(PN: 68891-001)***



Figure 5: IR Alignment Tool ***(PN: 68779-001)***

CONFIRMING INSTALLATION

Before leaving the installation site, you can confirm endpoint activation using one of the following tools.

1. BEACON® Software as a Service (SaaS) users can check endpoint activation status with the ***ORION Endpoint Status*** tool (*https://orionstatus.beaconama.net*). Endpoints do not need to be provisioned in BEACON to display using the tool. See the *ORION Water Endpoints Installation Manual* for more information.

2. The ***IR Communication Device*** (*Figure 4*) can be used to activate the endpoint and verify the encoder connection.

IMPORTANT

Badger Meter IR Communication Devices (Figure 4) that shipped ***prior to March 8, 2021*** *require a firmware update to support use with ORION Cellular C endpoints. Contact Badger Meter Technical Support (800-616-3837).*

Endpoint Network Registration

When the endpoint transitions to *Active* mode during activation, it automatically begins the network registration process. BEACON assigns a daily call-in time to the endpoint as part of this process. An active operating endpoint obtains a current encoder read every 15 minutes.

Changing Registration for an Existing Endpoint Assembly

If you change the encoder connected to an ORION Cellular endpoint, the endpoint will recognize the new encoder, once connected, and report previous and current interval data.

LICENSE REQUIREMENTS

ORION Cellular C, HLD, CS, LTE-M, LTE-MS, HLA, HLC and LTE endpoints comply with Part 15, Part 22, Part 24, and Part 27 of FCC Rules. Operation is subject to the following conditions: (1) These devices may not cause harmful interference, and (2) these devices must accept any interference received, including interference that may cause undesired operation of the device.

In accordance with FCC Regulations, "Code of Federal Regulations" Title 47, Part 2, Subpart J, Section 1091, transmitters pass the requirements pertaining to radiation exposure. However, to avoid public exposure in excess of limits for general population (uncontrolled exposure), a 20 centimeter distance between the transmitter and the body of the user must be maintained during operation.

No FCC license is required by a utility to operate an ORION meter reading system.

ENDPOINT TRANSPORTATION



The operation of transmitters and receivers on airlines is strictly prohibited by the Federal Aviation Administration. As such, the shipping of radios and endpoints via air is prohibited. Please follow all Badger Meter return and/or shipping procedures to prevent exposure to liability.

ADDITIONAL RESOURCES

For information not included in this guide, refer to these documents, available at *www.badgermeter.com*.

- *ORION Water Endpoints Installation Manual*
- *ORION Cellular Endpoint Installation Dos and Don'ts Quick Reference Guide*
- *ORION Water Endpoint Installation Kits Ordering Guide*
- *ORION Water Endpoint Parts List*
- *Product Configuration Utility for ORION Endpoints User Manual*

ORION Cellular LTE-MP

Another ORION Cellular endpoint, the ORION Cellular LTE-MP pulse endpoint, is available for a limited market and for connectivity with Badger Meter M-Series Electromagnetic flow meters. For more information, contact your local Badger Meter Sales Representative.

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ORION®
Cellular/Fixed Network Solutions

ORION® Water Endpoints

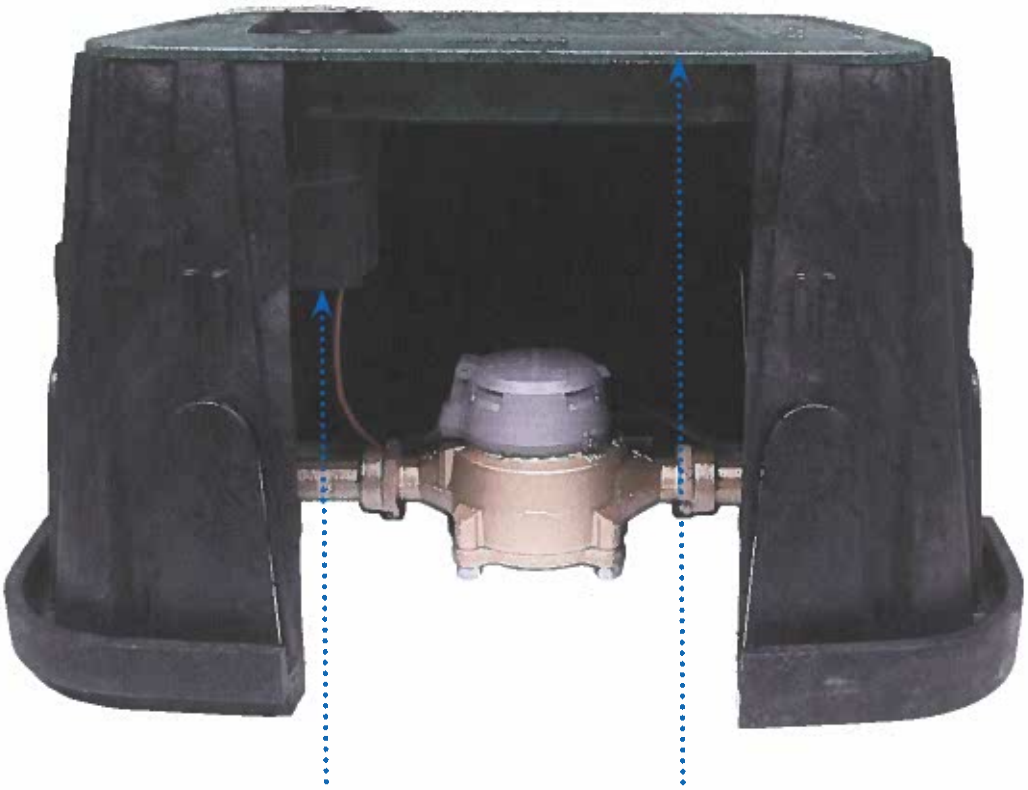


Image shown represents ORION Cellular C endpoint installed, as per instructions, through non-metal pit lid

Badger Meter

ORI-UM-00025-EN-34 (January 2024)

Installation Manual

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SCOPE OF THIS MANUAL

This manual contains installation instructions for ORION® water endpoints: ORION Cellular endpoints—C, HLD, CS, LTE-M, LTE-MS, HLA, HLB, HLC, LTE— and the ORION Mobile M, ME, Fixed Network (SE) and Classic (CE) endpoints.



ORION endpoints installation must comply with all applicable federal, state and local rules, regulations and codes.

Failure to read and follow these instructions can lead to misapplication or misuse of this product, resulting in personal injury and damage to equipment.

Proper performance and reliability of ORION endpoints depend upon installation in accordance with these instructions. Endpoints not properly installed may not be covered under warranty.

WARNING: The operation of transmitters and receivers on airlines is strictly prohibited by the Federal Aviation Administration. As such, the shipping of radios and endpoints via air is prohibited. Please follow all Badger Meter return and/or shipping procedures to prevent exposure to liability.

Additional Resources

These related documents are available at *www.badgermeter.com*

- *ORION Water Endpoint Installation Kits Ordering Guide*
- *ORION Water Endpoint Parts List*
- *Product Configuration Utility Manual for ORION Endpoints*
- *ORION Endpoint Utility Software Manual*
- *ORION Cellular HLB Endpoint Installation Manual*

PRODUCT UNPACKING AND INSPECTION

Upon receipt of the product, perform the following unpacking and inspection procedures.

NOTE: If damage to shipping container is evident upon receipt, request the carrier to be present when product is unpacked.

Carefully open the shipping package, following any instructions that may be marked on the exterior. Remove all cushioning material surrounding the product.

ORION Endpoints: Carefully remove the pre-wired ORION endpoint or ORION endpoint encoder assembly from the container and inspect for damage. Retain the contents of the installation kit for use in mounting the endpoint in the field.

Other products: Carefully lift the product from the package. Visually inspect the product and applicable accessories for any physical damage such as scratches, loose or broken parts or any other sign of damage that may have occurred during shipment. Retain the package and all packing material for possible use in reshipment or storage.

NOTE: If damage is found, request an inspection by the carrier's agent within 48 hours of delivery and file a claim with the carrier. A claim for equipment damage in transit is the sole responsibility of the purchaser.

LICENSE REQUIREMENTS

ORION Cellular C, HLD, CS, LTE-M, LTE-MS, HLA, HLB, HLC, LTE endpoints comply with Part 15, Part 22, Part 24, and Part 27 of FCC Rules. ORION Mobile M, ME, SE and CE endpoints comply with Part 15 of FCC Rules. Operation is subject to the following conditions: (1) These devices may not cause harmful interference, and (2) these devices must accept any interference received, including interference that may cause undesired operation of the device.

In accordance with FCC Regulations, "Code of Federal Regulations" Title 47, Part 2, Subpart J, Section 1091, transmitters pass the requirements pertaining to radiation exposure. However, to avoid public exposure in excess of limits for general population (uncontrolled exposure), a 20 centimeter distance between the transmitter and the body of the user must be maintained during operation.

No FCC license is required by a utility to operate an ORION meter reading system.

This device complies with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

IDENTIFICATION

Endpoints

The ORION water endpoint is a three-wire metering device for indoor/outdoor use. Each endpoint has a unique numeric serial number on the tag attached to the cable harness (wire) and etched on the endpoint housing. Endpoints require connection to an encoder to complete the assembly. Badger Meter encoders are shown in *Figure 3*.

Refer to *"ORION Cellular Endpoints" on page 5*, *"ORION Mobile M, ME and SE Endpoints" on page 7* and *"ORION Classic Endpoints" on page 9* to see endpoint photos.

Endpoint Dimensions

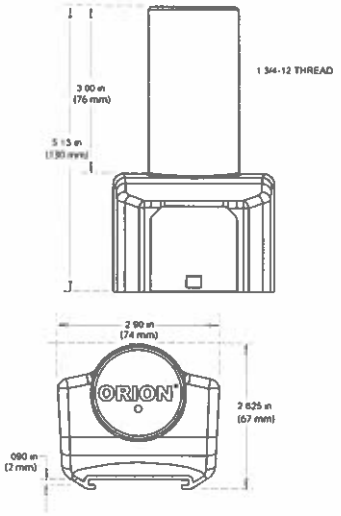


Figure 1: ORION Cellular and ORION Mobile M endpoint dimensions

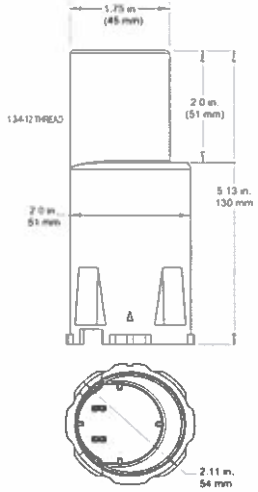


Figure 2: ORION ME, SE, CE endpoint dimensions

Encoders/Register

The encoder connects to the endpoint to complete the assembly. Each Badger Meter encoder is identified on the face of the register with an assembly number, unit of measure and meter model. Current and legacy products are shown below.

Current Products ***Legacy Products***



High Resolution LCD Encoder (HR-E® LCD) | *E-Series® Ultrasonic Meter with High Resolution LCD Encoder* | *High Resolution 8-Dial Encoder (HR-E®)* | *Absolute Digital Encoder (ADE®)* | *Recordall® Transmitter Register (RTR®)*

Figure 3: Encoders and register

ORION CELLULAR ENDPOINTS

This section discusses configuration, encoder compatibility and installation for ORION Cellular endpoints.



ORION Cellular endpoints: C, HLD, CS, LTE-M, LTE-MS, HLA, HLB and HLC (charcoal gray)



ORION Cellular LTE endpoint (medium gray)

Figure 4: ORION Cellular endpoints

Serial Number Ranges and FCC Labels

ORION Cellular Endpoint	Serial Number Range	FCC Label Color	ORION Cellular Endpoint	Serial Number Range	FCC Label Color
HLD	160000000…169999999	white	CS	130000000…139999999	white
HLB	150000000…159999999	yellow	LTE-M	120000000…129999999	yellow
HLC	149000000…149999999	green	LTE-MS	120000000…129999999	white
HLA	140000000…148999999	orange	LTE	110000000…119999999	yellow
C	130000000…139999999	yellow			

The serial number is engraved on one side of the endpoint base, and the FCC label is displayed on the other.



Figure 5: ORION Cellular endpoints FCC labels

Endpoint Configurations

Endpoint Configurations	Encoder Connection
Endpoint only with inline connector (Twist Tight® or Nicor®)	Connect the endpoint to an encoder using the inline connector. See *"Inline Connectors" on page 30*.
Endpoint only with flying lead for field splice	See *Field Wiring, Encoder Connectivity and Read Resolution* below.
Endpoint/encoder assembly with inline connector	Endpoint/encoder assemblies (endpoints connected by an inline connector to a Badger Meter encoder) are shipped from the factory, ready for installation. See *Field Wiring, Encoder Connectivity and Read Resolution* and *"Inline Connectors" on page 30*.

Field Wiring, Encoder Connectivity and Read Resolution

ORION Cellular endpoints with flying leads are shipped from the factory pre-programmed. Connect all three endpoint wires to an encoder to complete installation. The endpoint can be connected to existing wires from the encoder or directly to the encoder terminal screws, depending on the application and manufacturer. Endpoints can be connected to Badger Meter high resolution encoders and E-Series Ultrasonic meters as well as a number of competitive encoders. See the wiring chart on the next page.

NOTE: For instructions on field wiring using gel connectors, see *"Using Gel Caps to Connect an Encoder" on page 32*. Follow the manufacturer's instructions provided with the gel cap/field splice kit you are using.

ORION endpoint wires: Red = Power/Clock; Black = Ground; Green = Data

Endpoint Label	Encoder Connectivity	Encoder Wire/Termination Colors	Endpoint Wire Colors Red	Black	Green	Reading Resolution
ORION Cellular C, HLD, CS, LTE-M, LTE-MS, HLA, HLB, HLC, LTE	Badger Meter HR-E LCD or HR-E encoders or E-Series Ultrasonic and Ultrasonic Plus Meter with High Resolution output		Red	Black	Green	Up to nine (9) most significant digits
	Honeywell® (Elster/ABB) ScanCoder, evoQ4 meter with Sensus® protocol module*		Green	Black	Red	Up to nine (9) most significant digits
	Metron-Farnier Hawkeye*		Red	Black	Green	Up to nine (9) most significant digits
	Mueller Systems 420 Solid State Register (SSR) LCD*		Red	Black	Green	Up to nine (9) most significant digits
	Neptune ProRead, E-coder, ARB-V* or ProCoder with encoder output		Black	Green	Red	Up to nine (9) most significant digits
	Neptune registers with Nicor connector		Red	Black	Green	Up to nine (9) most significant digits
	Sensus iPerl®		Red	Black	Green	Up to nine (9) most significant digits
	Kamstrup flowIQ®		Red	Black	Green	Up to nine (9) most significant digits
	Master Meter® Octave® Ultrasonic meter (encoder output)*		Red	Black	Green	Up to eight (8) most significant digits
	Hersey Translator*		Due to the customized, factory wire configurations of the Hersey Translator, the terminal posts may not match the ORION endpoint wire colors. Please contact Hersey for the terminal post wiring schematic of your encoders to determine how the posts correspond to ORION endpoint wires.			

NOTE: Competitive encoder output is determined by the encoder configuration.

*ORION Cellular endpoints are compatible with the encoders/meters noted above that have a manufacture date within 10 years of the current date as long as the encoder has three wires connected to it and is programmed into the three-wire output mode for AMR/AMI. Encoder registers with two-wire mode of operation require programming by the Utility, including registers that support auto two- or three-wire detection systems that do not automatically switch to three-wire mode of operation when a compatible endpoint is connected for ORION connectivity.

Installation Guidelines (Indoor, Outdoor, Pit)

Install the endpoint/encoder assembly according to these guidelines:

Always install endpoint antenna straight up—not on an angle or upside down. Antenna is located in the top 1/3 of the threaded tube.

- **Indoor Installation:** Mount endpoints in the floor joist on an outside wall, near a window, if possible, and away from large metal objects.
- **Outdoor Installation:** See *"64394-032 Wall Cover Install Kit" on page 14* for mounting kit information.
- **Pit Installation:**

IMPORTANT

- Mount ORION Cellular endpoints through a NON-METAL pit lid—**REQUIRED**.
- **Install at or above grade level**.

NOTE: See the installation troubleshooting document, *ORION Cellular Endpoint Installation Do's and Don'ts*, available at *www.badgermeter.com*. Endpoints not properly installed may not be covered under warranty.

Endpoint Activation

See *"Activating Endpoints" on page 11* for details of the process.

ORION MOBILE M, ME AND SE ENDPOINTS

This section discusses configuration, encoder compatibility and installation information for ORION Mobile M, ME and ORION Fixed Network (SE) endpoints.

ORION Endpoint	Serial Number Range	FCC Label Color
Mobile M	60000000…69999999	blue
ME	30000000…59999999	white
SE	30000000…59999999	white

On the ORION Mobile M endpoint, the serial number is engraved on one side of the endpoint base, and the blue FCC label is displayed on the other side (*Figure 6*).
On ORION ME and SE endpoints, the serial number is engraved along the side of the endpoint body. The white FCC label is also displayed on the endpoint body.

Mobile solutions deployed prior to February 1, 2023 include ORION ME endpoints that are migratable to fixed network. BEACON SaaS Mobile solutions deployed after February 1, 2023 include ORION ME endpoints that operate in mobile mode only.



Figure 6: ORION Mobile M endpoint (medium gray)



Figure 7: ORION ME, SE endpoint

Endpoint Configurations

The following configuration options are available.

Endpoint Configurations	Encoder Connection
Endpoint only with inline connector (Twist Tight, Nicor, 308)	Connect the endpoint to an encoder using the inline connector. See *"Inline Connectors" on page 30*.
Endpoint only with flying lead for field splice	See *Field Wiring, Encoder Connectivity and Read Resolution* below.
Endpoint/encoder assembly with inline connector	Endpoint/encoder assemblies (endpoints connected by an inline connector to a Badger Meter encoder) are shipped from the factory, ready for installation.
Prewired integral endpoint/encoder assembly	Mount the assembly on the bayonet of the meter. See *"Integral Endpoint Installation" on page 24 for details.*

Field Wiring, Encoder Connectivity and Read Resolution

ORION Mobile M, ME and SE endpoints with flying leads are shipped from the factory pre-programmed. Connect all three wires to an encoder to complete installation. The endpoint can be connected to existing wires from the encoder or directly to the encoder terminal screws, depending on the application and manufacturer. Endpoints can be connected to Badger Meter high resolution encoders and E-Series Ultrasonic meters as well as a number of competitive encoders. See the wiring chart on the next page.

NOTE: For instructions on field wiring using gel connectors, see *"Using Gel Caps to Connect an Encoder" on page 32*. Follow the manufacturer's instructions provided with the gel cap/field splice kit you are using.

ORION endpoint wires: Red = Power/Clock; Black = Ground; Green = Data

Endpoint Label	Encoder Connectivity	Encoder Wire/Termination Colors	Endpoint Wire Colors Red	Black	Green	Reading Resolution
ELCD or ENC	Badger Meter HR-E LCD or HR-E encoders, or E-Series Ultrasonic Meter with High Res output		Red	Black	Green	Up to eight (8) most significant digits
ADE or ENC	Badger Meter ADE or E-Series Ultrasonic Meter with ADE output		Red	Black	Green	Up to six (6) most significant digits
RTR	Badger Meter RTR or E-Series Ultrasonic Meter with RTR output		Red	Black	Green	Up to seven (7) most significant digits
ADE or ENC	Honeywell (Elster)/AMCo ScanCoder or InVISION*and evoQ4 meter (encoder output)*		Green	Black	Red	Up to eight (8) most significant digits
C700D	Honeywell (Elster)/AMCo C700 Digital*		Red	Black	Not used – cut green wire flush with outer sheath	Up to seven (7) most significant digits
ADE or ENC	Master Meter Octave Ultrasonic meter (encoder output)*		Red	Black	Green	Up to eight (8) most significant digits
ADE or ENC	Metron Hawkeye*		Red	Black	Green	Up to eight (8) most significant digits
ADE or ENC	Mueller Systems 420 Solid State Register (SSR) LCD*		Red	Black	Green	Up to eight (8) most significant digits
ADE or ENC	Neptune ProRead, E-coder or ARB-V*		Black	Green	Red	Up to eight (8) most significant digits
ADE or ENC	Sensus Electronic Register encoder (ECR) or ICE*		Red	Black	Green	Up to eight (8) most significant digits
ADE or ENC	Hersey Translator*		Due to the customized, factory wire configurations of the Hersey Translator, the terminal posts may not match the ORION endpoint wire colors. Please contact Hersey for the terminal post wiring schematic of your encoders to determine how the posts correspond to ORION endpoint wires.			

NOTE: Competitive encoder output is determined by the encoder configuration.

*ORION ME and SE ADE or ENC endpoints are compatible with the encoders/meters noted above with a manufacture date within 10 years of the current date as long as the encoder is programmed into the three-wire output mode for AMR/AMI and has three wires connected to it. Encoder registers with two-wire mode of operation require programming by the Utility, including registers that support auto two- or three-wire detection systems that do not automatically switch to three-wire mode of operation once a compatible endpoint is connected for ORION connectivity.

Installation Guidelines (Indoor, Outdoor, Pit)

Install the endpoint/encoder assembly according to these guidelines:

Always install endpoint antenna straight up—not on an angle or upside down. Antenna is located in the top 1/3 of the threaded tube.

- **Indoor/Outdoor Installation:** Mount outside the building, or indoors in the floor joist near an outside wall and away from large metal objects.
- **Pit Installation, ORION Mobile M, ME Endpoints**: Mount through a NON-METAL pit lid—**Recommended**.
- **Pit Installation, ORION SE Endpoints**: Mount through a NON-METAL pit lid—**REQUIRED**.

NOTE: Endpoints not properly installed may not be covered under warranty.

Endpoint Activation

See *"Activating Endpoints" on page 11* for details of the process.

ORION CLASSIC ENDPOINTS

This section discusses configuration, encoder compatibility and installation information for ORION Classic (CE) endpoints.

ORION Endpoint	Serial Number Range	FCC Label Color
CE	70000000...89999999	white

On the ORION CE endpoint, the serial number and FCC information are engraved on the top of the endpoint.



Figure 8: ORION Classic (CE) Endpoint

Endpoint Configurations

The following configuration options are available.

Endpoint Configurations	Encoder Connection
Endpoint only with inline connector (Twist Tight, Nicor, 308)	Connect the endpoint to an encoder using the inline connector. See *"Inline Connectors" on page 30*.
Endpoint only with flying lead for field splice	See *Field Wiring, Encoder Connectivity and Read Resolution*.
Endpoint/encoder assembly with inline connector	Factory prewired endpoints, connected to a Badger Meter encoder, are shipped, ready for installation. No splicing required.
Prewired integral endpoint/encoder assembly	Mount the assembly on the bayonet of the meter. See *"Integral Endpoint Installation" on page 24 for details.*

Field Wiring, Encoder Connectivity and Read Resolution

ORION CE endpoints with flying leads are shipped from the factory pre-programmed. Connect all three wires to an encoder to complete installation. The endpoint can be connected to existing wires from the encoder or directly to the encoder terminal screws, depending on the application and manufacturer. Endpoints can be connected to Badger Meter high resolution encoders and E-Series Ultrasonic meters as well as a number of competitive encoders. See the wiring chart on the next page.

NOTE: For instructions on field wiring using gel connectors, see *"Using Gel Caps to Connect an Encoder" on page 32*.

ORION endpoint wires: Red = Power/Clock; Black = Ground; Green = Data

Endpoint Label	Encoder Connectivity	Encoder Wire/Termination Colors	Endpoint Wire Colors Red	Black	Green	Reading Resolution
ADE	Badger Meter ADE, HR-E LCD or HR-E encoders, or E-Series Ultrasonic Meter with High Res or ADE output		Red	Black	Green	Up to seven (7) most significant digits
RTR	Badger Meter RTR or E-Series Ultrasonic Meter with RTR output		Red	Black	Green	Up to seven (7) most significant digits
UNIV*	Honeywell (Elster)/AMCo ScanCoder or InVISION		Green	Black	Red	Up to seven (7) most significant digits
UNIV*	Master Meter Octave Ultrasonic meter (encoder output)		Red	Black	Green	Up to seven (7) most significant digits
UNIV*	Metron Hawkeye		Red	Black	Green	Up to seven (7) most significant digits
UNIV*	Mueller Systems 420 Solid State Register (SSR) LCD		Red	Black	Green	Up to seven (7) most significant digits
ARB-V*/**	Neptune ARB-V for connectivity to ORION endpoint > serial number 80000000		Black	Green	Red	Up to seven (7) most significant digits
ARB-V*/**	Neptune ARB-V for connectivity to ORION endpoint < serial number 79999999		Red	Black	Green	Up to seven (7) most significant digits
UNIV*	Neptune ProRead or E-coder		Black	Green	Red	Up to seven (7) most significant digits
UNIV*	Sensus Electronic Register Encoder (ECR) or ICE		Red	Black	Green	Up to seven (7) most significant digits
UNIV*	Hersey Translator		Due to the customized, factory wire configurations of the Hersey Translator, the terminal posts may not match the ORION endpoint wire colors. Please contact Hersey for the terminal post wiring schematic of your encoders to determine how the posts correspond to ORION endpoint wires.			

NOTE: Competitive encoder output is determined by the encoder configuration.

*ORION Classic UNIV and ARB-V endpoints are compatible with the encoders/meters noted above with a manufacture date within 10 years of the current date as long as the encoder is programmed into the three-wire output mode for AMR/AMI and has three wires connected to it. Encoder registers that are currently in two-wire mode of operation require programming by the Utility, including registers that support auto two- or three-wire detection systems that do not automatically switch to three-wire mode of operation once a compatible endpoint is connected for ORION connectivity.

**A separate ORION CE Universal endpoint is available for connectivity to the Neptune ARB-V encoder. Make sure the ORION Classic endpoint has "ARB-V" on the harness label when wiring to an ARB-V encoder. Wiring differs depending on the serial number of the ORION endpoint you are connecting to the ARB-V encoder, so make sure to verify wiring is correct per the above chart.

Installation Guidelines (Indoor, Outdoor, Pit)

Install the endpoint/encoder assembly according to these guidelines:

Always install endpoint antenna straight up—not on an angle or upside down. Antenna is located in the top 1/3 of the threaded tube.

- **Indoor/Outdoor Installation**: Mount outside the building, or indoors in the floor joist, near an outside wall, and away from large metal objects.
- **Pit Installation**: Mount through a NON-METAL pit lid—**Recommended**.

NOTE: Endpoints not properly installed may not be covered under warranty.

Endpoint Activation

See *"Activating Endpoints" on page 11* for details of the process.