**ARLINGTON COUNTY, VIRGINIA**
**OFFICE OF THE PURCHASING AGENT**
**2100 CLARENDON BOULEVARD, SUITE 500**
**ARLINGTON, VIRGINIA 22201**

# CONTRACT AWARD COVERPAGE

**TO:** M. E. Simpson Company, Inc.
3406 Enterprise Avenue
Valparaiso, IN 46383

DATE ISSUED: Lead Agency Award Date: November 17, 2022
CONTRACT NO: 24-DES-R-611
CONTRACT TITLE: Large Water Meter Testing & Repair Services

**THIS IS A NOTICE OF AWARD OF CONTRACT AND NOT AN ORDER. NO WORK IS AUTHORIZED UNTIL THE VENDOR RECEIVES A VALID COUNTY PURCHASE ORDER ENCUMBERING CONTRACT FUNDS.**

The contract documents contain the terms and conditions of AGREEMENT No. 24-DES-R-611, including any attachments or amendments.

**EFFECTIVE DATE:** 5/3/2024
**EXPIRES:** November 30, 2024
**RENEWALS:** Three 1-year Renewals Remaining
**COMMODITY CODE(S)**: 26019, 64022, 64122
**LIVING WAGE:** N

**ATTACHMENTS:**
AGREEMENT No. 24-DES-R-611

**EMPLOYEES NOT TO BENEFIT:**
**NO COUNTY EMPLOYEE SHALL RECEIVE ANY SHARE OR BENEFIT OF THIS CONTRACT NOT AVAILABLE TO THE GENERAL PUBLIC.**

VENDOR CONTACT: John H. Van Arsdel, Vice President — VENDOR TEL. NO.: (800) 255-1521
EMAIL ADDRESS: john@mesimpson.com

COUNTY CONTACT: Dajani Strachan, DES-WSS — COUNTY TEL. NO.: (703) 228-6567
COUNTY CONTACT EMAIL: dstrachan@arlingtonva.us

**PURCHASING DIVISION AUTHORIZATION**

**Tomeka D. Price** **Title** **Procurement Officer** **Date** 5/3/2024

**ARLINGTON COUNTY, VIRGINIA**
**OFFICE OF THE PURCHASING AGENT**
**2100 CLARENDON BOULEVARD, SUITE 500**
**ARLINGTON, VA 22201**

**RIDER AGREEMENT NO. 24-DES-R-611**

THIS AGREEMENT (hereinafter "Agreement") is made, on 5/3/2024, between M. E. Simpson Company, Inc. ("Contractor"), an Indiana corporation with a place of business at 3406 Enterprise Avenue, Valparaiso, Indiana 46383, authorized to transact business in the Commonwealth of Virginia, and the County Board of Arlington County, Virginia ("County"). The County and the Contractor, for the consideration specified herein or specified in a County Purchase Order referencing this Agreement, agree as follows:

**1. CONTRACT DOCUMENTS**

The Contract Documents consist of:

This Agreement,
Exhibit A – Scope of Work
Exhibit B – Contractor's Pricing
Fairfax County Water Authority Contract Number C-22-035 and any exhibits and amendments are incorporated by reference.

This Agreement is a rider to an original contract awarded by Fairfax County Water Authority and extended by the Contractor to the County on the same terms and conditions as the original agreement executed as a result of a competitive solicitation issued by Fairfax County Water Authority. Where the terms of this Agreement vary from the terms and conditions of the other Contract Documents, the terms and conditions of this Agreement shall prevail.

The Contract Documents set forth the entire agreement between the County and the Contractor. The County and the Contractor agree that no representative or agent of either of them has made any representation or promise with respect to the parties' agreement, which is not contained in the Contract Documents.

**2. CONTRACT TERM**

The Contractor's provision of goods and services for the County ("Work") shall commence 5/3/2024 and shall be completed no later than **November 30, 2024** ("Contract Term"), subject to any modifications as provided for in the Contract Documents regarding the Contract Term. No aspect of the Work shall be deemed complete until the County's Project Officer accepts it. Upon satisfactory performance by the Contractor, if the Fairfax County Water Authority renews their agreement, the County may elect to renew this Agreement under the same contract terms for three (3) one-year renewal periods from **December 1, 2024, to November 30, 2027** ("Subsequent Contract Term"). However, if the Fairfax County Water Authority does NOT renew their agreement, this Agreement shall automatically expire on the contract

expiration date.

**3. PAYMENT**

Payment will be made by the County to the Contractor within thirty (30) days after the County Project Officer receives an invoice detailing the Work provided by the Contractor and accepted by the County. All payments will be made to the Contractor via ACH from the county. The Project Officer will either approve the invoice or require corrections. The number of the County Purchase Order pursuant to which authority goods or services have been performed or delivered shall appear on all invoices.

The Contractor also must submit to the County's Project Officer its W-9 Form, which will include its Federal Employer Identification Number ("FEIN") or Social Security Number ("SSN"), whichever is applicable, before the County can process payment to the Contractor under the Contract.

**4. SCOPE OF WORK**

The Contractor agrees to perform the goods and/or services described in the Contract Documents (hereinafter "the Work"). The primary purpose of the Work is to field test and repair large water meters using a program approach as specified in Section 2 Technical Specifications.

The Contract Documents set forth the minimum Work estimated by the County and the Contractor to be necessary to complete the Work. At the Contractor's sole cost, it shall be the Contractor's responsibility to provide the specific Work set forth in the Contract Documents sufficient to fulfill the purposes of the Work. Nothing in the Contract Documents shall be construed to limit the Contractor's responsibility to manage the details and execution of the Work.

**5. PROJECT OFFICER**

The performance of the Contractor is subject to the review and approval of the County Project Officer ("Project Officer") who shall be appointed by the Director of the Arlington County department or agency which seeks to obtain the Work pursuant to this Contract. However, it shall be the responsibility of the Contractor to manage the details of the execution and performance of its Work pursuant to the Contract Documents.

**6. COUNTY PURCHASE ORDER REQUIREMENT**

County purchases are authorized only if a County Purchase Order is issued in advance of the transaction. A Purchase Order must indicate that the ordering agency has sufficient funds available to pay for the purchase. Such a Purchase Order is to be provided to the Contractor by the ordering agency. The County will not be liable for payment for any purchases made by its employees without appropriate purchase authorization issued by the County Purchasing Agent. If the Contractor provides goods or services without a signed County Purchase Order, it does so at its own risk and expense.

**7. NON-APPROPRIATION**

All funds for payments by the County to the Contractor pursuant to this Contract are subject to the availability of an annual appropriation for this purpose by the County Board of Arlington County, Virginia. In the event of non-appropriation of funds by the County Board of Arlington County, Virginia for the goods or services provided under this Contract or substitutes for such goods or services which are as advanced or more advanced in their technology, the County will terminate the Contract, without termination charge or other liability to the County, on the last day of the then current fiscal year or when the appropriation made for the then current year for the services covered by this Contract is spent, whichever event occurs first. If funds are not appropriated at any time for the continuation of this Contract, cancellation will be accepted by the Contractor on thirty (30) days prior written notice, but failure to give such notice shall be of no effect and the County shall not be obligated under this Contract beyond the date of termination specified in the County's written notice.

**8. APPLICABLE LAW, FORUM, VENUE AND JURISDICTION**

This Contract and the work performed hereunder shall be governed in all respects by the laws of the Commonwealth of Virginia, and the jurisdiction, forum, and venue for any litigation with respect thereto shall be in the Circuit Court for Arlington County, Virginia, and in no other court. In performing its Work pursuant to this Contract, the Contractor shall comply with applicable federal, state, and local laws, ordinances and regulations.

**9. NOTICES**

Unless otherwise provided herein, all notices and other communications required by this Contract shall be deemed to have been given when made in writing and either (a) delivered in person, (b) delivered by an agent, such as an overnight or similar delivery service, or (c) deposited in the United States mail, postage prepaid, certified or registered, addressed as follows:

**TO THE CONTRACTOR**:
John H. Van Arsdel, Vice President
M. E. Simpson Company, Inc.
3406 Enterprise Avenue
Valparaiso, Indiana 46383
Phone: (800) 255-1521
Email: john@mesimpson.com

**TO THE COUNTY**:
Dajani Strachan, Project Officer
Department of Engineering Services
Water, Sewer, and Streets Bureau
4200 S 28th St
Arlington, VA 22206
Phone: (703) 228-6567
Email: dstrachan@arlingtonva.us

AND

Dr. Sharon T. Lewis, LL.M, MPS, VCO, CPPB
Purchasing Agent
Arlington County, Virginia

2100 Clarendon Boulevard, Suite 500
Arlington, Virginia 22201
Phone: (703) 228-3294
Email: slewis1@arlingtonva.us

**TO THE COUNTY MANAGER'S OFFICE (FOR PROJECT CLAIMS):**
Mark Schwartz, County Manager
Arlington County, Virginia
2100 Clarendon Boulevard, Suite 318
Arlington, Virginia 22201

**10. ARLINGTON COUNTY BUSINESS LICENSES**

The Contractor must comply with the provisions of Chapter 11 ("Licenses") of the Arlington County Code, if applicable. For information on the provisions of that Chapter and its applicability to this Contract, the Contractor must contact the Arlington County Business License Division, Office of the Commissioner of the Revenue, 2100 Clarendon Blvd., Suite 200, Arlington, Virginia, 22201, telephone number (703) 228-3060, or e-mail business@arlingtonva.us.

**11. COUNTERPARTS**

This Agreement may be executed in one or more counterparts and all of such counterparts shall together constitute one and the same instrument. Original signatures transmitted and received via facsimile or other electronic transmission, (e.g., PDF or similar format) are true and valid signatures for all purposes hereunder and shall be effective as delivery of a manually executed original counterpart.

WITNESS these signatures:

| THE COUNTY BOARD OF ARLINGTON COUNTY, VIRGINIA | M. E. SIMPSON COMPANY, INC. |
|---|---|
| AUTHORIZED SIGNATURE: DocuSigned by: Tomeka D. Price 5950D4E0ACC0472... | AUTHORIZED SIGNATURE: DocuSigned by: John H. Van Arsdel BE340E24E24F464... |
| NAME: Tomeka D. Price | NAME: John H. Van Arsdel |
| TITLE: Procurement Officer | TITLE: Vice President |
| DATE: 5/3/2024 | DATE: 4/25/2024 |

**EXHIBIT A**
**SCOPE OF WORK**

## 2.2.1. Meter Testing Program Scope of Work

| Line # | Specification |
|---|---|
| 2.2.1.1 | Contractor shall assign a Project Manager to be a primary point of contact. The Project Manager shall provide project management services that includes the following responsibilities:<br>1. **Work Plan / Project Schedule** – A detailed plan and schedule shall be developed with the first 30 days of NTP and updated weekly for each Program Year. The work plan should include number of crews and the schedule for each crew, meters to be tested in Program Year, and testing prioritization. Additionally, the plan shall describe what actions will be taken in the event that planned meter testing work falls behind.<br>2. **Meeting and Conference Calls** – Contractor's PM shall take part in all meetings and conference calls required to complete the scope of work. At the minimum, this includes an annual project kickoff and planning meetings with FW to develop the testing plan for each Program Year. Additionally, a Program Year annual review meeting (see more details in Line 2.2.1.5).<br>3. **QA/QC Plan** – Plan shall include a safety program, inspection/audits of a minimum of 5% of planned work, data management, and data collection quality review.<br>4. **Communications Plan** – Plan shall detail how Contractor will be communicating with FW customers to schedule or provide advance notice of planned meter testing work.<br>5. **Data Analysis and Reporting** – Plan shall include details on the method and storage of meter test data, timing of uploads, and FW's access to the data.<br>6. **Returned to Utility Plan** – Plan shall describe the approach for meter testing work that cannot be completed due to circumstances beyond the control of the Contractor. |

| Offeror's Response |
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| Our project management system establishes - the single project manager – who has the responsibility and authority to act on behalf of M.E. Simpson Co., Inc. This project manager will stay with the project from beginning to the successful completion. The project manager's specific responsibilities include all of those listed above as well as those outlined in our Project Management Approach in Appendix G.<br><br>1. An initial schedule has been provided in line 2.2.1.3 (page 10) of this RFP. Once a Notice to Proceed has been received, the Utility will be asked to submit a full inventory of meters to be tested. Meter data will be uploaded and a schedule will be generated based on meter location, criticality of meter to the water customer, size of meter, etc. Our Schedule of Work may be referenced in Appendix G for more information.<br><br>2. A meeting schedule will be set for monthly progress meetings and regular field crew meetings with the meter staff. A 24/7 number is in place for calls anytime. Our Scope of Work may be referenced in Appendix G for more information.<br><br>3. The QA/QC plan includes regular field sampling tests and observations by MESCO management staff. Our Project Approach may be referenced in Appendix G for more information.<br><br>4. As per Addendum #1 issued September 16, 2022, the Utility is responsible for sending letters to notify their customers of upcoming testing and will not require our firm to provide this notice. Our firm will communicate with the Utility as needed as they complete this task for the project.<br><br>5. Data analysis and meter reports will be provided on a schedule agreed upon by FW and MESCO as explained in our Scope of Work that may be referenced in Appendix G for more information.<br><br>6. Meters not tested will be returned to the utility (RTU) in a procedure established and agreed upon jointly by FW and MESCO. These would include valve issues (inlet/outlet valves not working/broken, lack of valves to attain shutdown), missed appointments by water customer, meter not accessible, lack of a test port at the meter setting, etc. Our Scope of Work may be referenced in Appendix G for more information on RTU procedures. |

2.2.1.2 The Contractor shall develop and execute a large meter testing program that meets the County's program requirements. Listed below are the estimated quantities of meters, by size, covered by this contract. It is the County's intent to have each of these meters tested.

METERS TO BE TESTED UNDER CONTRACT

| Item | Meter Size (inches) | Quantity |
|---|---|---|
| A | 3 | 245 |
| B | 4 | 329 |
| C | 6 | 202 |
| D | 8 | 9 |
| E | 10 | 0 |
| **Total** | | **785** |

**Offeror's Response**

**Offeror's Response**

The addendum fee page indicates 1516 meters to test. It is assumed hospitals have a "dual" feed system, besides a by-pass for the meter.

Meters located in vaults outside, will be treated with extra care and Confined Space entry procedures followed.

2.2.1.3 All the meters listed below shall be tested per the specified schedule. Contractor shall complete any necessary repairs approved by the County and retest meters as needed.

| Size (inches) | Number in inventory | Frequency of testing | Total tested every year |
|---|---|---|---|
| 3 | 245 | 3 years | 82 |
| 4 | 329 | 2 years | 165 |
| 6 | 202 | 1 year | 202 |
| 8 | 9 | 1 year | 9 |
| 10 | 0 | 1 year | 0 |
| **Total** | | | **458** |

The quantities specified herein are estimates based upon current projected work for the next Program Year and shall not be construed to represent the exact quantities to be tested. The exact quantities to be tested may be more or less, subject to the County's actual needs. The Contractor acknowledges and agrees that the County will only be responsible for the actual quantities tested and work completed per the scope of work.

**Offeror's Response**

**Offeror's Response**

The addendum fee page indicates 1516 meters to be tested. MESCO assumes that the above meters are included in that count.

2.2.1.4 Within 30 days of NTP, Contractor shall conduct a Program Kickoff Meeting with the County. Topics are to include, but are not limited to, the following:

- Overview of the testing program
- Testing approach and methodology
- Program timeline
- Data request from FW
- Communication procedures between Contractor and FW Project Manager
- Meter testing data collection approach and data access

Analysis of large meter testing results

Please describe in the response section a brief summary on the steps that will be taken to prior to starting the meter testing program.

**Offeror's Response**

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| | **Offeror's Response** |
| | Once NTP has been received, a data request will be made for a meter inventory upload to our data base.<br><br>Meters will be scheduled for testing and the schedule will be shared with FW staff- any updates of which will be shared immediately. The time line will be set at the kick off meeting based on each field crew's capacity to test an average of 4-6 meters per day- dependent on unique circumstances at each meter and the water customer demands for water use. Since meter test results are uploaded after each test via a field tablet, FW can be issued credentials to access the database in real time. The testing approach and methodology for the Field Crew may be referenced in our Scope of Work contained in Appendix G for more information.<br><br>Communications procedures will be set so that the FW project manager will have direct access all MESCO project staff. An Assistant PM is assigned to the project so FW will have a secondary contact if the PM is unavailable at that time. These combined with the available 24/7 number enable our staff to be effectively reached at any time should the need arise. The resolution of any issue will follow an established protocol to be agreed upon between FW and MESCO.<br><br>Test results will be periodically uploaded to FW per an agreed time table. In addition, testing results will be discussed in periodic reports as well as regular monthly progress meetings. |

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| 2.2.1.5 | At the conclusion of each Program Year, the Contractor shall conduct an annual closeout meeting. Topics shall include, but are not limited to, the following:<br>• Summary of meter test results and completed work – meter tests attempted vs. meter tests completed, meter repairs/calibration completed, recommendations, etc.<br>• Meter testing analysis – includes but is not limited to:<br>  o Actual accuracy vs. manufacturer's accuracy<br>  o Accuracy trending analysis<br>  o Comparison of previous test results<br>  o Apparent water loss by meter and total for large meters<br>• Testing improvements/recommendations for the next Program Year.<br>The Contractor shall provide recommendations based on meter test data analysis for the County to consider for repair and replacement decisions. Include samples of data analysis performed on previous projects.<br><br>Please describe in the response section a brief summary on the steps that will be taken to prior to starting work for the next Program Year. |
| | **Offeror's Response** |

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| | **Offeror's Response** |
| | Once data for the tested meter population has been compiled, a report will be generated stating the overall condition. Reporting items include overall meter accuracy, general overall meter conditions, Right Sizing issues discovered during the testing, accessibility to the meter for testing and maintenance, and overall recovery of lost revenue from meters that are not performing properly. After all, meters are the cash registers for the utility.<br><br>Recommendations of meter testing frequency may be made based on the size/type/ and throughput of each meter. If FW is able to provide past test results for the meters recently tested from prior years, a predictive analysis can be made for possible meter wear and potential change outs. |
| 2.2.1.6 | Offeror shall be the Prime contractor responsible for the outcomes of this scope of work. Prime contractor can subcontract aspects of this scope; however, the Prime shall have the largest percentage of work compared to the overall effort. |
| | **Offeror's Response** |
| | **Offeror's Response** |
| | No subcontractors will be used for this project. |

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| 2.2.1.7 | Contractor shall have an online database/portal for the storage of test results, photos, and other data captured through testing, repair, and calibration. The test results shall be uploaded in tabular (Microsoft Excel) format. Contractor shall provide access to the County's staff to review or download this data. Please describe in the response section the process that will be used to upload the testing data to an online database storage system for the large meter testing program. |
| | **Offeror's Response** |

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| | **Offeror's Response** |
| | Our experience with handling massive amounts of field data span our time of existence and we have learned what works and does not work. We will work with the Utility to develop a Data Dictionary comprised of the data as required by the Utility. This may include, but is not limited to, photos, meter brand, type, size, address, location of meter on the property, any special requirements for testing, contact information of water user, and any other information needed for completion of the database.<br><br>Meter test results are uploaded after each test via a field tablet, FW can be issued credentials to access the database in real time. The information collected is included in the deliverables and compiled into the Utility's preferred software such as Microsoft Access, Microsoft Excel, .DXF file, or .SHP file for use in the Utility's GIS system or CAD mapping program. We are able to export our data into any database that supports open data connectivity.<br><br>Regular downloads will be made to FW once data has been compiled and reviewed by administrative staff for QA/QC. |

2.2.2. Crew Requirements

| Line # | Specification |
|---|---|
| 2.2.2.1 | Crew Size<br>1. The Contractor shall furnish crews sufficient in number and size to complete the scope of work in the designated time. The Contractor shall furnish a minimum of two 2-man crews to perform the work. Under no circumstance shall the crew size be less than two.<br>2. The Contactor shall provide each crew member's previous experience, including training and certifications, as part of the proposal submission.<br>3. Prior to entering the building for meter testing, the Contractor may be required to follow specific guidelines related to COVID-19 protocols.<br>4. Prior to beginning work for each Program Year, the Contractor shall submit a list of crew assignments. All assigned crew leads shall be approved by FW's Project Manager. |
| | **Offeror's Response** |

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| | **Offeror's Response**<br>1. Field Crew staffing will consist of at least two -2 -person field crews and service vehicles. Each Field Leader will have over five years experience in testing water meters of various manufacturers, sizes, types of meters,various meter settings, and various water customers who have specific water use demands. The crews are used to dealing with the idiosyncrasies of various water customers and understand when it is usually a good time to test a meter at a given location based on our past experiences with water customers and their water use needs.<br><br>2. Resumes of Key Personnel intended to be assigned to perform the work under an executed contract including experience, training, and certifications listed may be referenced in Appendix A, for more information.<br><br>3. COVID protocols will be followed per CDC guidelines, utility requirements, and local water customer requirements for building entries.<br><br>4. Intended initial Key Personnel to be assigned to perform an executed contract can be found in Appendix A. Though we intend for the list to remain mostly static in subsequent years of contract extensions, should new crew assignments happen, a new list will be provided to the Utility prior to the start of each Program Year. Any intermediate crew updates will be shared with FW prior to them taking effect.<br><br>If security clearances are requested, MESCO will need to know before the crews are deployed so that the proper clearances can be secured. Locations such as Nursing Homes, hospitals, government complexes, schools, etc., are treated with special care since they can be hard to access to test the meter. It is expected that FW will provide an escort in circumstances in which an escort is required. |

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| 2.2.2.2 | The Contractor's employees who work on the contract shall possess photo identification and have always it on their person. The County will issue special identification, which must be prominently displayed by the Contractor's employees at all times while working on this project and while at any County facility. No Contractor employee shall be assigned to the project until and unless the employee has been issued proper identification by the County. |
| | **Offeror's Response** |
| | **Offeror's Response**<br>Every meter tech will have a photo ID/badge. If FW requires a FW generated badge, arrangements will need to be made prior to deployment to accomplish this before the project begins. |
| 2.2.2.3 | The Contractor employees shall, at all times, wear OSHA-compliant PPE and high-visibility safety apparel in accordance with the Performance Class 3 requirements of the latest version of the ANSI/ISEA publication entitled "American National Stand for High Visibility Apparel and Headwear." |

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| | **Offeror's Response** |
| | **Offeror's Response** |
| | MESCO's standard uniform requirements include PPE needed to complete meter projects in a professional manner. Our Schedule of Work in Appendix G and Safety Plan in Appendix G may be referenced for more information. |

2.2.3. Meter Testing – Testing Approach and Site Activities

| Line # | Specification |
|---|---|
| 2.2.3.1 | The Work shall be performed during normal business hours (7:00 AM - 5:00 PM, Monday through Friday). However, under special circumstances, the Contractor may be required to perform work on Saturdays. The Contractor shall conduct its operations so as not to interrupt or otherwise disturb the County's customers. Whenever the Contractor intends to change from the County's normal working hours, written approval from the County's Project Officer is required before commencement of change in work schedule(s). It should be noted that assistance from the meter shop may not be available after 3:00 PM. |
| | **Offeror's Response** |
| | **Offeror's Response** |
| | Hours of testing generally follow the 7AM-5 PM pattern, but in some cases testing will need to be performed during off hours. The special cases will need to be identified during the Kickoff meeting and the appointment for testing during off hours made in full agreement with the water customer and FW. |
| 2.2.3.2 | The Contractor is responsible for scheduling meter testing with all retail customers. In cases where a retail customer operates a secured facility, the Contractor shall provide the customer at least 72-hours prior notice of a desired appointment. The County will provide a list of all retail customers included under the contract, indicating those customers known to operate secured facilities. The Contractor may be required to provide a 24-hour notice for specific customers as directed by the County Project Officer. |
| | **Offeror's Response** |
| | **Offeror's Response** |
| | This is a normal protocol for setting a testing schedule that MESCO follows. |
| 2.2.3.3 | The Contractor shall provide all necessary traffic and pedestrian control in the work area. At the |

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| | completion of work, the Contractor shall clean up the work area so that it is better than it was found before work started.<br>**Offeror's Response**<br>**Offeror's Response**<br>This is a normal protocol that MESCO follows. MESCO field staff are trained in traffic control and safety and are expected to leave the work site in a clean condition. |
| 2.2.3.4 | The Contractor shall conduct a site survey and determine if the meter can be located and is accessible, can be tested, requires test ports, requires repairs before testing, requires any special parts for testing or repairs, or requires implementing safety procedures. Additionally, any site preparation before work has commenced shall be completed by the Contractor, including:<br>• Pumping surface water or clearing debris/sediments from meter vaults<br>• Installing test nipple(s) when necessary<br>The Contractor shall report site preparation notes in work order details and upload into the test records database/portal. Site preparation notes shall also note any abnormalities (such as vault conditions, excessive water in vault, etc.) found at the meter site that requires the County's attention.<br><br>In the response section, please describe the method of data collection and how this information will be communicated such that it ensures the County effectively follow ups on these items.<br>**Offeror's Response**<br>**Offeror's Response**<br>FW is expected to generate a letter of notification that testing will occur. The letters can be sent in cycles to reflect the test schedule a few weeks ahead of the crews. Crews will make contact with the Water Customer via phone call, email, or on site visitation after the letters have been sent. In many cases meters will need to be inspected ahead of time to get the crew oriented to the meter setting/location, and any issues that may need to be mitigated for testing to occur such as time of day for tests, water use needs by the water customer, etc. All of this information will be collected and contained in the meter database and collected on the field tablet by the crew for inclusion in the meter test record. |
| 2.2.3.5 | The Contractor shall collect the GPS coordinates for every meter tested as part of the program. The County's requirements for the data collected by the Contractor are as follows:<br>• Accuracy<br>  ○ Required accuracy: < 100 cm (1 m) at a 95% confidence level<br>  ○ Preferred accuracy: < 60 cm (≈ 2') at a 95% confidence level<br>• Coordinate System<br>  ○ At a minimum, the data is to be provided in a well-established and current reference system (GCS) such as WGS 84, ITRFxx, or NAD 83 (2011).<br>  ○ Preferably, data should be provided in both the native reference frame used in collection and one that is transformed and projected to WGS 1984 UTM ZONE 18N (m).<br>• File Format<br>  ○ Submit in an Esri File Geodatabase format that contains a unique link to tie the point and data to our existing meter feature class.<br><br>Details for the GPS coordinates requirement, accuracy, coordinate system |

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| | **Offeror's Response** |
| | **Offeror's Response**<br>GPS locations of the meter are a regular part of our meter data collection. Meters located outside in meter vaults will have the location recorded for the actual location. Meters located inside buildings will have the front door location recorded unless FW indicates a different location is preferred. |
| 2.2.3.6 | The Contractor shall provide equipment and materials, including necessary field-testing equipment, to accurately determine the amount of water discharged. Test equipment shall be capable of testing meters of meter size up to 12". All testing equipment shall be calibrated and |

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| | meet AWWA standards. Proof of calibration shall be provided to FW upon request.<br><br>The discharge water shall be dechlorinated prior to discharge. The Contractor shall provide a suitable water course to direct the flow of water being expended in the testing of the water meter to have a minimal impact upon the environment, private property, roadway, and pedestrian traffic. Any damage caused by discharge of water are the responsibility of the Contractor.<br><br>Describe in the response section the testing equipment proposed for this scope of work and the procedures for ensuring accuracy of the testing equipment. |
| | **Offeror's Response** |
| | **Offeror's Response**<br>The discharge of water from meter testing will be directed to a proper location to ensure safety staff and the general public. All discharged water will be dechlorinated following accepted practices and using acceptable equipment. Inspections for water discharge will be part of the initial site visit. |
| 2.2.3.7 | Each test meter shall be of a type designed to provide measuring accuracy to within ± 1%. This accuracy shall be tested against the actual quantity of water being discharged through the meter being tested for all test flowrates. |

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| | **Offeror's Response** |
| | **Offeror's Response**<br>Test meters used in the field for meter testing have been tested and certified. The test meter accuracy is applied to the meter test results to yield corrected meter test results. |
| 2.2.3.8 | Meter testing shall be conducted in accordance with the requirements of AWWA Manual M6, Chapter 5, and applicable ANSI/AWWA/FW standards for the type of meter tested. If repairs are necessary, meter shall be calibrated and tested/retested to ensure conformance to AWWA/FW standards for repaired meters. |
| | **Offeror's Response** |
| | **Offeror's Response**<br>MESCO conducts meter testing per the stated specs above, but also understands that there are no "real" specifications for field testing of meters per the M6 manual. All the accuracy standards are based on bench testing or lab testing of meters.<br><br>MESCO technicians take into consideration the local, on-site field conditions (in which specific tests may not always be able to be performed) and apply our 43+ years of meter testing experiences. These conditions include proper flow profiles for the water being measured by the meter that can be compromised by improper piping, valve issues, or other circumstances. Meters get tested under the conditions that the meters are used, while taking into consideration the above stated applicable standards. No setting is perfect and at times certain compromises have to me made to successfully install a meter. |
| 2.2.3.9 | All meters shall be tested at between 4 - 7 different flow rates based on the meter type. All flow rates shall be in accordance with AWWA Manual M6 and cover the full continuous operating range of the meter. These flow rates shall include but are not limited to the following:<br>• Maximum Flow Rate<br>• Intermediate Flow Rate |

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| | • Minimum Flow Rate at the meter rated capacity. At least one (1) flow test in the changeover range of flows (as applicable).<br>In the response section, describe in detail your testing methodology, including how testing is executed and documented. If the procedure differs by meter type, provide a testing methodology for each meter type as applicable. |
| | **Offeror's Response** |
| | **Offeror's Response**<br>Turbine meters are tested at at least 4 flow rates to cover low flow conditions up to high flow conditions. The mechanical wear of a turbine meter is more evident at the low flow because of how the meter wears. A "start" flow rate is tested for to determine when the meter actually starts to record flow, and that is compared to the manufacturer's data for low flow to see the wear pattern of the meter.<br><br>Compound and fire line meters are tested at least 7 flow rates to cover the flow range of the meter. The "crossover" flow rate is concentrated on because that is the point of use where the meter typically is at its lowest accuracy level. Low flow readings and high flow readings are compared to make sure the meter has been properly sized for the pattern of water use the water customer has.<br><br>If there are any "static" meters installed, these are tested following the manufacturer's accuracy curve.<br><br>Each flow rate is documented for each meter so a composite meter accuracy can be derived. |
| 2.2.3.10 | The Contractor shall obtain a verbal approval from the County Project Officer prior to conducting meter testing if ambient temperatures less than 32 degrees Fahrenheit are experienced with a week of testing date. |
| | **Offeror's Response** |
| | **Offeror's Response**<br>Many of our water utility clients are located in environments where freezing can be an issue (Chicago Metro area), and so we take precautions for water discharge and exposure for our equipment. We have a lot of experience in this realm. |
| 2.2.3.11 | The Contractor shall review and analyze meter test data to conclude one of the following:<br>• Meter has passed and no repairs are needed<br>• Meter has failed and repairs recommended<br>• Meter has failed and replacement recommended<br>All meter test data, field data attributes, and results/recommendations shall be stored in an online |

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| | database storage system with access provided to FW to review and download selected data. Describe the methodology to determine whether a meter has passed or failed. |
| | **Offeror's Response** |
| | **Offeror's Response**<br>MESCO's position on meter failure is that if the meter fails at ANY flow rate, the meter fails the test. The utility is informed of the result and a decision is made to either repair the meter or change the meter out depending on meter age, throughput, or obsolescence. FW is encouraged to provide its position on pass/fail scenarios during the kickoff meeting so that the Field Crews are clear as to the expectations of FW. |
| 2.2.3.13 | For any work order that cannot be completed, the Contractor shall document why work was not able to be completed. The options include but not limited to:<br>• CC - Cannot Locate (CCL)<br>• CC - Cannot Operate (CCO)<br>• CC - Cannot Access (CCA)<br>• CC – Unsafe (CCU)<br>Describe how crews will document work that cannot be completed and what scenarios can be resolved while crews are in the field. Also provide details on how this information will be communicated/shared with the County for follow-up action. |

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| | **Offeror's Response** |
| | Describe how crews will document work that cannot be completed and what scenarios can be resolved while crews are in the field. Also provide details on how this information will be communicated/shared with FW for follow-up action. |
| | The Contractor shall make all necessary arrangements and provisions for the storage of materials and equipment to be used on the contract. The County will not be responsible for storing any materials or equipment belonging to the contractor. |
| 2.2.3.14 | **Offeror's Response** |
| | **Offeror's Response**<br>MESCO has a local shop and office located in Laurel, Maryland. No on-site storage would be needed from FW. |

2.2.4. Meter Repair, Calibration, Repair Parts, and Meter Replacement

| Line # | Specification |
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| 2.2.4.1 | Meters requiring repair shall be calibrated to within ± 2.5%. The County may elect to further test the meter accuracy at the County's facility or other designated locations. Please describe the methodology and steps to be taken after it has been determined that the meter needs a repair. |
| | **Offeror's Response** |
| | The specific failed flow rate of the test will help indicate what repair may be needed fo the meter. It has been stated that only Neptune meters will be repaired so the crews will come stocked with Neptune parts. In order to be successful, the meter data supplied by FW needs to be complete so proper set of spare parts can be carried on the service vehicles.<br><br>If a repair is required, the meter will be isolated and water pressure relieved before attempting to open the meter for repair. All used parts will be noted and new replacement parts installed, then the meter will be re-pressurized and retested to mak sure the repair is correct. Post repair test results will be documented as part of the meter test report. Old, used parts will be returned to FW. |
| 2.2.4.2 | The contractor shall perform repair on all worn parts that may be causing the meter test to fail. The work performed must be documented in the completed work order, including but not limited to a brief description of the repair, the time to complete the repair, and materials required for the repair. The County may require an approval from the Contractor for repairs that are over a certain amount which will be negotiated during contract development. Under this circumstance, the Contractor shall submit a description of required repairs and estimated time and materials to repair the meter based on Contractor's experience, engineering judgement, industry standards, and manufacturer specification, and be approved in advance by FW's Project Manager. Contractor shall provide their assessment on the expected remaining life of the meter before and after repair. |

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| | **Offeror's Response** |
| | **Offeror's Response**<br>It is expected that minor repairs would be given up front approval to be performed.<br><br>If the field crews found any major repairs that needed to be addressed right away, FW would be contacted immediately while the crew is still on-site. This would hopefully mitigate the need for a return trip unless a delay is caused by the acquisition of major repair parts.<br><br>Complete documentation of the test, repair, and retest procedures would be made in the meter test report. Specific meters that have a history of failure or are obsolete will be discussed with FW at the kick off meeting to set limits of repairs. |
| 2.2.4.3 | If repairs are necessary within the one-year workmanship warranty period, the Contractor will have 10 calendar days to complete the repairs. |
| | **Offeror's Response** |
| | **Offeror's Response**<br>Our standard warranty is 12 months for repaired meters. However, meters can fail for a variety of reasons (main break debris lodged inside meters, etc.), so the warranty work would need to be completely documented. With a local shop/office, the 10 day period is reasonable. |
| 2.2.4.4 | Charges for materials and repair parts used shall be ordered directly from the manufacturer with a maximum administrative fee of up to 5%. Repair parts shall be manufactured or approved by the original equipment manufacturer and supplied by a factory authorized distributor. The Offeror shall be required to supply copies of the price lists prior to award of Contract and at the beginning of each Program Year. |
| | **Offeror's Response** |
| | **Offeror's Response**<br>It may be that FW has parts on hand, and the crew can utilize those parts, otherwise the 5% mark up on parts MESCO supplies would apply. Documentation would be supplied. |

## 2.3. Program Specifications

2.3.1. Additional Work as Specified by the County

| Line # | Specification |
|---|---|
| 2.3.1.1 | The Contractor shall only operate the inlet, outlet, and bypass valves for inside meters. For outside meters, Contractor shall only operate valves within the meter vault. If a valve key is required, the Contractor shall not operate this valve and shall contact the County.<br><br>Under a condition where a valve malfunctions or breaks, the Contractor shall immediately contact the County and make feasible temporary repairs to mitigate leaks and flooding. |
| 2.3.1.2 | Any additional work required or requested by the County will be priced using time and materials and material cost. The time and material cost will be estimated using the appropriate hourly rates and cost for material provided in the pricing matrix. |

2.3.2. Safety Program

| Line # | Specification |
|---|---|
| 2.3.2.1 | The Contractor shall perform all Work in accordance with applicable OSHA standards and regulations. |
| 2.3.2.2 | The Contractor shall be solely and completely responsible for maintaining a safe and healthy working environment for its employees, the safety of the general public, and the preservation of property. |
| 2.3.2.3 | The Contractor shall be responsible for ensuring compliance with OSHA's permit-required confined space standard (29 CFR 1910.146) when performing work within meter vaults or other spaces meeting the definition of confined space.<br>• All confined space equipment necessary for safe entry shall be provided by the Contractor (i.e., atmospheric monitors, confined space ventilators, retrieval equipment, etc.).<br>• The Contractor shall permit only trained and authorized personnel to enter confined spaces.<br>• The County's Project Officer shall communicate the hazards identified within meter vaults and communicate the County's confined space entry procedures prior to entry. |
| 2.3.2.4 | The Contractor's failure to thoroughly familiarize itself with applicable OSHA regulations and industry recognized safe work practices shall not relieve it from compliance and penalties set forth. |
| 2.3.2.5 | The Contractor shall furnish a copy of its written and implemented safety program to the County's Project Officer no later than seven calendar days after the contract award and prior to initiating field work. |
| 2.3.2.6 | In the event of a death or serious injury to, or caused by, the Contractor's personnel, the accident shall be reported immediately to the County. If a claim is made by anyone against the Contractor on account of any accident, the Contractor shall promptly report the facts in writing to the County, giving full details of the claim. |

2.3.3. QA/QC – Inspection

| Line # | ecification |
|---|---|
| 2.3.3.1 | e County reserves the right to inspect all work, either in progress or completed. If work is found to satisfactory or in conflict with the provisions set forth in these specifications, the County will deduct fr yment the amount for work found not acceptable by the County. Under this circumstance, written or ver tification of the unsatisfactory work must be given by County's Project Officer to the Contractor. In so ses, the Contractor may be able to make the necessary repairs; this shall occur within 10 calendar day thorization. The County reserves the right to have the work completed by another contractor and deduct st of such repair from any monies owed to the Contractor. |
| 2.3.3.2 | e County will randomly check the quality of work performed under this contract. The quality control che ll involve testing and visual inspection to verify the meter has been repaired in its entirety and meets AW ecifications. Should any meter fail to pass a quality control check, the County may withhold any or all mor e, or which may be due for that repair. The County shall determine the cause of the failure. If, in the s dgment of the County, failure is determined to be the result of the contractor's inadequate performance, unty reserves the right to make repairs at the contractor's expense. Should five (5) or more meters fail ality control check, the County may elect to terminate the contract. |
| 2.3.3.3 | mage to any property, the County or privately owned, during the testing process that is the result gligence by the Contractor shall be repaired within 10 business days at the Contractor's expense and to tisfaction of the County. The County may withhold payment to the Contractor until such damage is repai the satisfaction of the County. The County may use withheld monies to hire a Contractor for corrective w ould the Contractor fail to make the necessary repairs or fail to act within 30 days of being notified of s mage. |

2.3.4. Warranties

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| | eter repaired shall be warranted to be free from defects in materials and workmanship for a period of ) year after date of test and/or repair.<br>ition to any other warranties expressed or implied, the specific warranties of Merchantability an for a Particular Purpose apply to all orders placed as a result of this solicitation.<br>ny time, any contract item fails to conform to the bid/contract specifications, the Contractor shall, at no nal cost to the County, promptly replace the defective item. If the Contractor is unable to remedy such nformity during a time period consistent with the requirements, the County may undertake to r nconformity and, in such case, Contractor shall reimburse the County for any costs thereby incurred.<br>e one-year parts and workmanship warranty. Warranty is to be effective upon receipt at the County nty is to be with either the manufacturer or a service facility authorized by the manufacturer to perform ty services. |

## 2.4. Arlington County Responsibilities

2.4.1. The County will designate a Project Officer/Primary Point of Contact to respond to questions and provide program-level oversight.

2.4.2. The County will provide a large meter inventory with a full list of service orders for specific large meters to be tested in a Program year.

2.4.3. The County will provide a list of customer contacts at the meter's location to coordinate and schedule meter testing; however, not all contacts are available.

2.4.4. The County will provide meeting facilities for conducting the annual Project Kickoff, Program Year closeout, and any recurring status meetings throughout the contract period.

2.4.5. The County is responsible for all meter replacements.

2.4.6. The County's Project Officer will provide support and intervention to reduce roadblocks caused by customers or external parties that prevent the meter testing from occurring.

# Pricing Matrix - Pricing Based on Arlington County Meters

**Provide bid pricing for each line item. All line items must be priced in accordance to the technical specifications detailed in Sections 2. Do not modify the pricing matrix. Optional Pricing can be submitted in Section E.**

| SECTION A -- Testing Program and Project Management | | |
|---|---|---|
| Item No | Description | Annual Fixed Price |
| 1 | Testing Program and Project Management (See Section 2.2) - Includes annual kickoff and closeout | $14,200.00 |

| SECTION B -- Large Meter Testing | | | | | |
|---|---|---|---|---|---|
| Item No | Description (Meter Being Tested) | Estimated Quantity | Unit Cost | Total Cost | Comments / Assumptions |
| 2 | 3" Meter Single Register | 0 | $ 455.00 | $ - | |
| 3 | 3" Meter Compound - Two Registers | 82 | $ 455.00 | $ 37,310.00 | |
| 4 | 3" Meter - Turbine | 0 | $ 455.00 | $ - | |
| 5 | 4" Meter Single Register | 0 | $ 455.00 | $ - | |
| 6 | 4" Meter Compound - Two Registers | 165 | $ 455.00 | $ 75,075.00 | |
| 7 | 4" Meter - Turbine | 0 | $ 455.00 | $ - | |
| 8 | 6" Meter Single Register | 0 | $ 455.00 | $ - | |
| 9 | 6" Meter Compound - Two Registers | 202 | $ 455.00 | $ 91,910.00 | |
| 10 | 8" Meter Single Register | 0 | $ 525.00 | $ - | |
| 11 | 8" Meter Compound - Two Registers | 9 | $ 525.00 | $ 4,725.00 | |
| 12 | 8" Meter Compound - Three Registers | 0 | $ 555.00 | $ - | Compound or Fire line meters |
| 13 | 10" Meter Single Register | 0 | $ 525.00 | $ - | |
| 14 | 10" Meter Compound - Three Registers | 0 | $ 555.00 | $ - | Compound or Fire line meters |
| | | **458** | | **$ 209,020.00** | |

| SECTION C -- Large Meter Repair/Calibration & Retest | | | | | | |
|---|---|---|---|---|---|---|
| Item No | Description (Meter Being Repaired, Calibrated, Retested) | Quantity | Unit Cost (Materials and Equipment) | Unit Cost (Labor Only) | Total Unit Cost | Comments / Assumptions |
| 15 | 3" Meter Single Register | 1 | $ 205.00 | | $ 205.00 | |
| 16 | 3" Meter Compound - Two Registers | 1 | $ 205.00 | | $ 205.00 | |
| 17 | 3" Meter - Turbine | 1 | $ 205.00 | | $ 205.00 | |
| 18 | 4" Meter Single Register | 1 | $ 220.00 | | $ 220.00 | |
| 19 | 4" Meter Compound - Two Registers | 1 | $ 220.00 | | $ 220.00 | |
| 20 | 4" Meter - Turbine | 1 | $ 220.00 | | $ 220.00 | |
| 21 | 6" Meter Single Register | 1 | $ 245.00 | | $ 245.00 | |
| 22 | 6" Meter Compound - Two Registers | 1 | $ 375.00 | $375.00/hr | $ 375.00 | Hr. fee based on 2 person crew |
| 23 | 8" Meter Single Register | 1 | $ 375.00 | $375.00/hr | $ 375.00 | Hr. fee based on 2 person crew |
| 24 | 8" Meter Compound - Two Registers | 1 | $ 375.00 | $375.00/hr | $ 375.00 | Hr. fee based on 2 person crew |
| 25 | 8" Meter Compound - Three Registers | 1 | $ 375.00 | $375.00/hr | $ 375.00 | Hr. fee based on 2 person crew |
| 26 | 10" Meter Single Register | 1 | $ 375.00 | $375.00/hr | $ 375.00 | Hr. fee based on 2 person crew |
| 27 | 10" Meter Compound - Three Registers | 1 | $ 375.00 | $375.00/hr | $ 375.00 | Hr. fee based on 2 person crew |

| SECTION D -- Equipment Replacement and Other Work - Price shall include parts & labor for work itemized in this section | | | | | | |
|---|---|---|---|---|---|---|
| Item No | Description (Repairs at Meter set & Other Work) | Quantity | Unit Cost (Materials and Equipment) | Unit Cost (Labor Only) | Total Cost | Comments / Assumptions |
| 28 | Confined Space (Price adder) | 1 | N/C | | $ - | Included in test fee |
| 29 | Inside meter (Price adder) | 1 | N/C | | $ - | Included in test fee |
| 30 | Traffic control (Price adder) | 1 | N/C | | $ - | Included in test fee |
| 31 | Inside Meter Site Survey only | 1 | $ 415.00 | | $ 400.00 | |
| 32 | Outside Meter Site Survey only | 1 | $ 415.00 | | $ 415.00 | |

| Item No | Description | Unit Cost |
|---|---|---|
| 33 | Site Visit (no test performed) | $ 415.00 |
| | | |
| | | |

| SECTION E -- Optional Pricing - add any number of rows below | | |
|---|---|---|
| Item No | Description | Unit Cost |
| 34 | Attempted test but could not complete (broken valve, etc.) | $ 455.00 |
| 35 | Missed Appointment by Water Customer | $ 455.00 |
| 36 | 1 - 3/4 in meter test | $ 455.00 |