

CONTRACT DOCUMENTS

FOR

ITB No. 4305

**RESIDENTIAL WATER METERS**



Due Date: Tuesday October 1, 2013 at 10:00 a.m.

**PUBLIC SERVICES AREA/CUSTOMER SERVICE**  
Administering Service Area/Unit

Issued By  
**CITY OF ANN ARBOR**  
Procurement Unit on behalf of Public Services Area/Field Operations  
301 E. Huron Street  
Ann Arbor, Michigan 48107

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ADVERTISEMENT FOR PUBLIC SERVICES FIELD OPERATIONS  
WATER MAIN LINE STOPS AND INSERTABLE VALVES  
FOR THE  
CITY OF ANN ARBOR, MICHIGAN

BID NO. ITB-4305

The Procurement Office, Fifth Floor, Larcom City Hall will receive sealed Bids, on or before 10:00 am, October 1, 2013 for the provision of water meters. All bid envelopes must be marked "ITB-4305 RESIDENTIAL WATER METERS". The City is not responsible for any bid not marked as stated above. Bids will be publicly opened and read aloud at this time.

Specifications referred to herein are used to indicate the desired type, and/or construction, and/or operation. An alternative may be offered if deviations from specifications are minor and if all deviations are property outlined on a separate sheet. Failure to outline all deviations may be grounds for rejection of your bid.

The decision of the City of Ann Arbor, acting through the Procurement Office, or authorized representative, shall be final as to what constitutes acceptable deviations from specifications.

Each proposal shall be accompanied by a certified check, or Bid Bond by a recognized surety, in the amount of 5% of the total of the bid price. A proposal, once submitted, becomes the property of the City. In the sole discretion of the City, the City reserves the right to allow a bidder to reclaim submitted documents provided the documents are requested and retrieved no later than 48 hours prior to the scheduled bid opening.

Preconditions for entering into a contract with the City of Ann Arbor are compliance with Chapter 112 of Title IX of the Code of the City of Ann Arbor. Further information is outlined in the contract documents.

After the time of opening, no Bid may be withdrawn for a period of 14 days. The City reserves the right to accept any Bid, to reject any or all Bids, to waive irregularities and/or informalities in any Bid, and to make the award in any manner the City believes to be in its best interest.

Any further information on the bid documents may be obtained from the Procurement Unit, (734) 794-6500.

CITY OF ANN ARBOR, MICHIGAN

## INSTRUCTIONS TO BIDDERS

### General

Work to be done under this Contract is generally described through the detailed specifications and must be completed fully in accordance with the contract documents. All work to be done under this Contract is located in or near the City of Ann Arbor.

Any bid that does not conform fully to these instructions may be rejected.

### Preparation of Bids

Bids shall be written in ink or typewritten. No erasures are permitted. Mistakes may be crossed out and corrected and must be initialed and dated in ink by the person signing the Bid.

Bids must be submitted on the "Bid Forms" provided, with each blank properly filled in. If forms are not fully completed it may disqualify the bid.

Each person signing the Bid certifies that he/she is the person in the Bidder's firm/organization responsible for the decision as to the fees being offered in the Bid and has not and will not participated in any action contrary to the terms of this provision.

### Questions or Clarifications on ITB

All questions regarding this ITB shall be submitted via email. Emailed questions and inquires will be accepted from any and all prospective Bidders in accordance with the terms and conditions of the ITB.

All questions shall be due on or before September 27, 2013 by 5:00 p.m and should be addressed as follows:

Technical/Specifications questions emailed to Jean Pearson at [jpearson@a2gov.org](mailto:jpearson@a2gov.org).

Process and HR Compliance questions emailed to Karen Lancaster, Finance Director at [klancaster@a2gov.org](mailto:klancaster@a2gov.org).

Any error, omissions or discrepancies in the specification discovered by a prospective contractor and/or service provider shall be brought to the attention Jean Pearson at [jpearson@a2gov.org](mailto:jpearson@a2gov.org) soon after discovery as possible. Further a contractor shall not be allowed to take advantage of errors, omissions or discrepancies in the specifications.

### Addenda

If it becomes necessary to revise any part of the ITB, notice of the Addendum will be posted to Michigan Inter-governmental Trade Network (MITN) [www.mitn.info](http://www.mitn.info) and/or City of Ann Arbor web site [www.A2gov.org](http://www.A2gov.org) for all parties to download.

Each Bidder must in its Bid, to avoid any miscommunications, acknowledge all addenda which it has received, but the failure of a Bidder to receive, or acknowledge receipt of; any addenda shall not relieve the Bidder of the responsibility for complying with the terms thereof.

The City will not be bound by oral responses to inquiries or written responses other than written addenda.

### Bid Submission

Sealed bids will be received by the City of Ann Arbor Procurement Office, Fifth Floor, Larcom City Hall, Ann Arbor, Michigan, at the time stipulated in the Advertisement, promptly after which bids will be publicly opened and read aloud. Bids submitted late or via oral, telephonic, electronic mail or facsimile **will** not be considered or accepted.

Each bid must be enclosed in a sealed envelope, marked with BID # ITB-4305 RESIDENTAIL WATER METERS

#### **Bids must be addressed and delivered to:**

City of Ann Arbor  
Procurement Unit, 5<sup>th</sup> Floor  
301 East Huron Street  
P.O. Box 8647  
Ann Arbor, MI 48107

All Bids received on or before the Due Date will be publicly opened and recorded immediately. No immediate decisions are rendered.

Bids should be date/time stamped/signed at the address above in order to be considered. Normal business hours are 8:00 a.m. to 3:00 p.m. Monday through Friday, excluding holidays. The City will not be liable to any Bidder for any unforeseen circumstances, delivery or postal delays. Postmarking to the Due Date will not substitute for receipt of the Bid. Each Bidder is responsible for submission of their Bid.

Additional time will not be granted to a single Bidder; however, additional time may be granted to all Bidders when the City determines that circumstances warrant it.

### Bid Security

Each bid must be accompanied by a certified check, or Bid Bond by a surety licensed and authorized to do business within the State of Michigan, in the amount of 5% of the total of the bid price.

### Withdrawal of Bids

After the time of opening, no Bid may be withdrawn for the period of 14 days as specified in the Advertisement.

### Award

The City intends to award a Contract(s) to the lowest responsible Bidder(s). On multi-divisional contracts, separate divisions may be awarded to separate Bidders. The City may also utilize discounts offered in the Bid Forms, if any, to determine the lowest responsible Bidder on each division, and award multiple divisions to a single Bidder, so that the lowest total cost is achieved for the City. For unit price bids, the contract will be awarded based upon the lump sum and unit prices stated by the bidder for the work items specified in the bid documents, with consideration given to any alternates selected by the City. If the City determines that the unit price for any item is materially different for the work item bid than either other bidders or the general market, the City, at its sole discretion, in addition to any other right it may have, may reject the bid as not responsible or non-conforming.

In comparing bids, the City will give consideration to alternate bids for items listed in the forms, or other alternates that the Bidder may wish to submit, but preference will be given to Base Bid.

The City intends to issue a purchase order to the selected Bidder. The City Purchase Order terms and conditions have been included with the Bid as an Appendix.

### Official Documents

The City of Ann Arbor shall accept no changes to the bid documents made by the Bidder unless those changes are set forth in the "Alternate" section of Bid form.

The City of Ann Arbor officially distributes bid documents from the Procurement Unit or through the Michigan Intergovernmental Trade Network (MITN). Copies of the bid documents obtained from any other source are not considered Official copies. Only those Bidders who obtain bid documents from MITN system are guaranteed access to receive addendum information if any issued. If you obtained City of Ann Arbor Bid documents from other sources, it is recommended that you register on [www.MITN.info](http://www.MITN.info) and obtain an official Bid.

### Human Rights Information

The City's Purchase Order standard terms and conditions, attached as Appendix A, outline the requirements for fair employment practices under City of Ann Arbor contracts. It is the responsibility of the selected Bidder to comply, when applicable, with all State, Federal and Local non-discrimination laws, including MCL 37.2209 and City Ordinance Chapter 112, Section 9:161.

To establish compliance with this requirement, a Bidder should complete and return with its bid completed copies of the Human Rights Division Contract Compliance Forms attached as Attachment A . In the event Human Rights forms are not submitted with the bid, a bidder will have 24 hours to provide once requested by the City.

### Assignment

The Contractor shall not assign this agreement or any part thereof without written consent of the City.

### Debarment

Submission of a Bid in response to this ITB is certification that the Bidder is not currently debarred, suspended, proposed for debarment, and declared ineligible or voluntarily excluded from participation in this transaction by any State or Federal departments or agency. Submission is also agreement that the City will be notified of any changes in this status.

### Disclosures

All information in a submitter's bid is subjected to disclosure under the provisions of Public Act No. 442 of 1976 know as the "Freedom of Information Act". This act also provides for the complete disclosure of contracts and attachments thereto except where specifically exempted under the Freedom of Information Act.

### Bid Protest

All Bid protests must be in writing and filed with the Purchasing Agent within five (5) business days of the award action. The vendor must clearly state the reasons for the protest. If a vendor contacts a City Service Area/Unit and indicates a desire to protest an award, the Service Area/Unit shall refer the vendor to the Purchasing Agent. The Purchasing Agent will provide the vendor with the appropriate instructions for filing the protest. The protest shall be reviewed by the City Administrator or designee who's decision shall be final.

Reservation of Rights

The City of Ann Arbor reserves the right to accept any bid or alternative bid proposed in whole or in part, to reject any or all bids or alternatives bids in whole or in part and to waive irregularity and/or informalities in any bid and to make the award in any manner deemed in the best interest of the City.



## PROPOSAL

City of Ann Arbor  
Larcom City Hall  
Ann Arbor, Michigan 48107

Ladies and Gentlemen:

The undersigned, as Bidder, declares that this Bid is made in good faith, without fraud or collusion with any person or persons bidding on the same Contract; that this Bidder has carefully read and examined the bid documents, including Advertisement, Human Rights Division Contract Compliance Forms, Instructions to Bidders, Proposal, Bid Forms, Specifications, and all Addenda and understands them. The Bidder declares that it conducted a full investigation at of the work proposed and is fully informed as to the nature of the work and the conditions relating to the work's performance. The Bidder also declares that it has extensive experience in successfully completing projects similar to this one.

The Bidder acknowledges that it has not received or relied upon any representations or warrants of any nature whatsoever from the City of Ann Arbor, its agents or employees, and that this Bid is based solely upon the Bidder's own independent business judgment.

The undersigned proposes to perform all work shown on the plans or described in the bid documents, including any addenda issued, and to furnish all necessary machinery, tools, apparatus, and other means of construction to do all the work, furnish all the materials, and complete the work in strict accordance with all terms of the Contract, of which this proposal is one part, for the amounts set forth in the Bid Forms.

The Bidder declares that it has become fully familiar with the liquidated damage clauses for completion times and for compliance with City Code Chapter 112, understands and agrees that the liquidated damages are for the non-quantifiable aspects of non-compliance and do not cover actual damages that may be shown and agrees that if awarded the Contract, all liquidated damage clauses form part of the Contract.

The Bidder encloses a certified check or Bid Bond in the amount of 5% of the total of the Bid Price. The Bidder agrees both to contract for the work and to furnish the necessary Bonds and Insurance Certificates within 10 days after being notified of the acceptance of the Bid.

If this Bid is accepted by the City and the Bidder fails to contract within 10 days after being notified of the acceptance of this Bid, then the Bidder shall be considered to have abandoned the Contract and the certified check or Bid Bond accompanying this Proposal shall become due and payable to the City.

If the Bidder enters into the Contract in accordance with this Proposal, or if this Proposal is rejected, then the accompanying check or Bid Bond shall be returned to the Bidder.

In submitting this Bid, it is understood that the right is reserved by the City to accept any Bid, to reject any or all Bids, to waive irregularities and/or informalities in any Bid, and to make the award in any manner the City believes to be in its best interest.

SIGNED THIS \_\_\_\_\_ DAY OF \_\_\_\_\_, 2013.

\_\_\_\_\_  
Bidder's Name and Federal I.D. No.

\_\_\_\_\_  
Official Address

\_\_\_\_\_  
Authorized Signature of Bidder

\_\_\_\_\_  
Telephone Number

\_\_\_\_\_  
(Print Name of Signer Above)

LEGAL STATUS OF BIDDER

(The Bidder shall fill out the appropriate form and strike out the other two.)

Bidder declares that it is:

\* A corporation organized and doing business under the laws of the state of \_\_\_\_\_, for whom \_\_\_\_\_, bearing the office title of \_\_\_\_\_, whose signature is affixed to this bid, is authorized to execute contracts.

\*If not incorporated in Michigan, please attach the corporation's Certificate of Authority

\* A limited liability company doing business under the laws of the state of \_\_\_\_\_, for whom \_\_\_\_\_ bearing the title/office of \_\_\_\_\_, whose signature is affixed to this bid, is authorized to execute contracts on behalf of the LLC.

\* A partnership organized under the laws of the state of \_\_\_\_\_, and filed with the county of \_\_\_\_\_, whose member are listed below ( list all members and the street and mailing address of each):

\* An individual, whose signature with address, is affixed to this proposal:  
(initial here)

## BID FORM

### Section 1 - Unit Prices

1. All bidders shall provide a Unit Price and Total Price for either the Base or Alternate bid items 1-5 identified.
2. Quantities included in the bid table represent estimated minimum quantities. Supplier shall be compensated for the actual quantities using the unit prices provided.
3. The City at their sole discretion may purchase a combination of manufacturers from the Base Bid and Alternate Bid price.
4. Should the manufacturers pricing change based on varying quantities (i.e. single unit, box or bulk purchase), he shall attach to his bid separate documentation showing the differences.
5. All Goods will be delivered f.o.b. point of delivery. Supplier shall select the means and methods of transportation. All transportation charges, including but not limited to switching, trucking, lighterage and special handling will be paid by supplier.
6. All pricing provided shall be guaranteed for a minimum period of two (2) years from the date of the signed

Item #	Item Description	Quantity	Unit	Unit Price *	Total Price
<b>Base Bid Items – Neptune Meter, Register: ProRead</b>					
1	5/8" Positive Displacement Water Meter	TBD*	EA	\$	\$
2	3/4" Positive Displacement Water Meter Short Lay Length	150	EA	\$	\$
3	3/4" Positive Displacement Water Meter Normal Lay Length	24	EA	\$	\$
4	1" Positive Displacement Water Meter	50	EA	\$	\$
5	1-1/2" Positive Displacement Water Meter	TBD	EA	\$	\$
6	2" Positive Displacement Water Meter	12	EA	\$	\$
7	Spare Parts: Meter Head Dials (Standard)	TBD	EA	\$	\$
8	Spare Parts: Meter Head Dials (Pit)	TBD	EA	\$	\$
9	Spare Parts: 1 1/2" Control Shaft and Chamber Rebuild Kits	TBD	EA	\$	\$
10	Spare Parts: 2" Control Shaft and Chamber Rebuild Kits	12	EA	\$	\$
11	Spare Parts: Security Tags	100	EA	\$	\$
<b>TOTAL BASE BID</b>					<b>\$</b>

\* TBD – Quantities for these items will not be purchased as part of initial bid package. Guaranteed pricing is requested for future purchases within the identified guaranteed pricing window.

<i>Alternate Bid 1 – Alternate Manufacturers (Section 02610) Name: _____</i>					
1	5/8" Positive Displacement Water Meter	TBD	EA	\$	\$
2	3/4" Positive Displacement Water Meter Short Lay Length	150	EA	\$	\$
3	3/4" Positive Displacement Water Meter Normal Lay Length	24	EA	\$	\$
4	1" Positive Displacement Water Meter	50	EA	\$	\$
5	1-1/2" Positive Displacement Water Meter	TBD	EA	\$	\$
6	2" Positive Displacement Water Meter	12	EA	\$	\$
7	Spare Parts: Meter Head Dials (Standard)	TBD	EA	\$	\$
8	Spare Parts: Meter Head Dials (Pit)	TBD	EA	\$	\$
9	Spare Parts: 1 1/2" Control Shaft and Chamber Rebuild Kits	TBD	EA	\$	\$
10	Spare Parts: 2" Control Shaft and Chamber Rebuild Kits	12	EA	\$	\$
11	Spare Parts: Security Tags	100	EA	\$	\$
<b>TOTAL ALTERNATE BID 1</b>					<b>\$</b>

<i>Alternate Bid 2 – Add price, per meter, for E-Coder or equivalent (i.e. price increase for E-Coder in lieu of ProRead)</i>					
1	Small Sizes: 5/8", 3/4", 1"	1	EA	\$	\$
2	Intermediate Sizes: 1-1/2", 2"	1	EA	\$	\$

All bidders must fill out the following table:

<b>Manufacturer</b>	<b>Local Representative/Distributor</b>	<b>Address of Local Representative</b>	<b>Distance from City of Ann Arbor</b>

All Bidders must answer the following questions:

1. Has the manufacturer furnished meters to the City previously? If so, what year?
2. Would the bidder offer an extended guaranteed pricing period with no increase in cost? If so, how long?
3. What is the typical lead time from time of purchase to time of delivery?
4. Are meters stocked at the local representative's/distributor's facility? If so, what sizes and how many?

INVOICE TERMS: Discount of \_\_\_\_\_% or \$\_\_\_\_\_ will be allowed for payment of invoice thirty (30) days from day of delivery and acceptance.

OTHER TERMS: Less than 30 days, E.O.M., Proximo, etc., will not be considered in determining award of contract.

\_\_\_\_\_  
Signature of Authorized Representative of Bidder (Date)

BID FORM

Section 2 – Delivery

All materials as specified will be delivered F.O.B. destination, freight prepaid to the following location: City of Ann Arbor 4251 Stone School Road Ann Arbor, MI 48108

The Contractor will be required to deliver materials within 30 days of award.

We can

We cannot meet the above delivery schedule but offer the following:

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\*Note: The City of Ann Arbor reserves the right to reject bids which offer an unsatisfactory delivery schedule.

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Signature of Authorized Representative of Bidder (Date)



## GENERAL CONDITIONS

1. Guaranty: Materials shall be guaranteed against defect for a period of 2 years.
2. Inspection: Any material which may be discovered to be defective within the guarantee period shall be removed and made good by the Contractor at its expense regardless of any previous inspection or final acceptance.

# DETAILED MAGNETIC WATER METER SPECIFICATIONS

## GENERAL

### DESCRIPTION OF WORK

- A. This specification covers magnetic cold water meters in sizes 5/8", 3/4", 1", 1-1/2", 2", 2-1/2", 3", 4", 6", 8", 10" and 12". Meters shall be manufactured in an ISO 9001 manufacturing facility located or assembled in the United States. Meters shall be NSF approved for potable water applications.

### SUBMITTALS

- A. Shop Drawings shall be submitted in accordance with Specification 01330 – Submittal Procedures.
- B. O&M Manuals
1. Submit data bound in 8-1/2 x 11 inch (A4) text pages, three D side ring binders with durable plastic covers.
  2. Prepare binder cover with printed title "OPERATION AND MAINTENANCE INSTRUCTIONS," title of project, and subject matter of binder when multiple binders are required.
  3. Internally subdivide the binder contents with permanent page dividers, logically organized as described below; with tab titling clearly printed under reinforced laminated plastic tabs.
  4. Contents: Prepare a Table of Contents for each volume, with each product or system description identified, typed on white paper, in three parts as follows:
    - a. Part 1: Directory, listing names, addresses, and telephone numbers of OWNER and supplier.
    - b. Part 2: Operation and maintenance instructions arranged by meter size. Identify the following:
      1. Significant design criteria.
      2. List of equipment.
      3. Parts list for each meter.
      4. Operating instructions.
      5. Maintenance instructions for meters.
      6. Maintenance instructions for special finishes, including recommended cleaning methods and materials, and special precautions identifying detrimental agents.
      7. Maintenance Schedule.
      8. Troubleshooting procedures.
      9. Spare parts.

- c. Part 3: Project documents and certificates, including the following:
  - 1. Shop Drawings and product data.
  - 2. Statement of Compatibility.
  - 3. Programming Documentation.
  - 4. Certifications.
  - 5. Photocopies of warranties and bonds.
- 5. Submit one (1) draft copy of completed volumes with the shipment of the materials. This copy will be reviewed and returned with OWNER/ENGINEER comments. Revise content of all document sets as required prior to final submission.
- 6. Submit five (5) sets of revised final volumes, within 10 days after receipt of OWNER/ENGINEER comments.

## **MANUFACTURER**

- A. Base Bid meters shall be model AquaMaster 3 manufactured by ABB. Alternate bid meters shall be manufactured by Krohne or Badger Meter and the model shall be equivalent in performance and features to the Base Bid meter.

## **WARRANTY**

- A. Meters shall be guaranteed free of defects in material and workmanship for a minimum of two (2) years after OWNER acceptance.

## **PRODUCTS**

### **GENERAL**

- A. Meters shall be of the electromagnetic type.
- B. The flow meter system shall operate on the principle of electromagnetic induction, with a pulsed DC excitation frequency, and shall produce a signal output that is directly proportional and linear with the volumetric flow rate of the liquid flowing through the metering tube.
- C. The metering system shall have the ability to incorporate a meter mounted or remote mounted amplifier.
- D. All magmeters shall be manufactured new.
- E. Prior to purchasing, manufacturer shall provide documentation that the meters are compatible with the OWNER's automatic meter reading (AMR) system and meter transmission units (MTUs). Documentation shall include, but is not necessarily limited to:
  - 1. Statement of compatibility with MTU
  - 2. Statement of programming characteristics
  - 3. Submit programming documentation

The manufacturer shall be responsible for familiarizing himself with the OWNER's existing AMR system and shall be fully responsible for complete compatibility.

## **METERING TUBE**

- A. Metering tubes 1-1/2" and greater shall be of flanged design. Flanges shall be manufactured of carbon steel and rated for a maximum allowable non-shock pressure and temperature ratings for steel pipe flanges, according to the American National Standard ANSI B16.5 Class 150 Standards. Metering tubes less than 1-1/2" shall have NPSM threaded end connections.
- B. Metering tube body shall be 304 stainless steel. Metering tube shall have an interior elastomer liner that is NSF 61 approved for potable water applications.
- C. Metering tube electrodes shall be self-cleaning and manufactured of 316 stainless steel.
- D. Metering tube shall be housed in an epoxy-coated NEMA 6P enclosure and shall be capable of continuous submergence in up to 30 feet of water.
- E. Metering tube shall be provided with 316 stainless steel grounding rings.

## **SIGNAL CONVERTER / Data Logger**

- A. The signal converter shall be housed in a NEMA 6P diecast aluminum enclosure and have the ability to be remotely or integrally mounted as specified or as indicated by the OWNER. If not specified the converter shall be remotely mounted and provided with sufficient signal cable to complete connection with no splices. The electronics shall be microprocessor controlled. A local display shall be provided capable of showing flow rate, totalization and diagnostic alarms. All operational parameters shall be user configurable via an integral pushbutton arrangement or via an external hand-held device/terminal. The 4-20 mA DC output signal proportional to flow shall be isolated and able to drive up to 800 ohm load. The unit shall be capable of accommodating unidirectional or bidirectional flow. Sensing of meter failure shall activate a user configurable zero or 100% output signal and failure alarm contact closure. An automatic empty pipe detector and low flow signal cutoff shall be provided. Signal converters shall be interchangeable without affect of meter accuracy or the need for recalibration. The signal converter if AC powered shall have a 5 day minimum power storage capability to collect water revenue during a power outage. Battery powered transmitters shall have a minimum 5 to 6 year battery life. When changing batteries, all totalizer and programming data shall be maintained. The totalizer data shall be redundantly stored in the sensor head as well as in the transmitter.
- B. Calibration
  - 1. Test Mode: Provide the ability to verify the accuracy of the unit and the integrity of the meter without any external equipment.
  - 2. Self diagnostics: Internal checks of all outputs and displays.
  - 3. Insitu Calibration Verification: This system shall be able to verify in a quantifiable manner the meters current conditions vs. the meters condition when originally manufactured. This calibration verification of the meter shall be performed without need for physical access to the meter flow tube. The calibration verification shall meet or exceed the following requirements:

The original FINGERPRINT values shall be stored on a computer disk given to the OWNER.

- a. The verification process shall consist of at least 52 meter test conditions pertaining to the primary coils, electrodes, interconnecting cable and signal converter.

- b. The coil verification shall include tests for faults of continuity, impedance, and resistance to ground, inductance, and magnetic field strength.
- c. The electrode verification shall include tests for faults in the continuity, impedance and insulation.
- d. The cable verification shall include tests for faults in the coil, electrode, driven shield and ground connections, cable cuts, cable damage, and water in the cable.
- e. Signal converter verification shall include tests for faults of current supply to coils, zero offset, span forward and reverse, electrode offset, current output, frequency output: forward and reverse, driven shield to ground, overall shield to ground and signal ground connection to ground.
- f. The calibration verification shall include testing on the following: water ingress into the primary elements, faulty electrodes, dirty electrodes, electrode leakage, corroded electrodes, high process noise, liner failure, conductive coatings on the liner, insulating coatings on the liner, and primary element damage.
- g. All tests shall be performed by means of comparison between the absolute values and change in values from the new condition.
- h. Verification standard shall certify flow meters to within  $\pm 1\%$  of the original factory calibration on meters ordered in advance with re-verification capability, or  $\pm 2\%$  for meters retrofitted in the field with re-verification capability.
- i. The software shall be Microsoft Windows based. This software shall be capable of generating a report based upon the result of the forgoing described tests. The software shall be capable of creating and storing an audit trail of the meters conditions and the meters history.
- j. The calibration verification and metering system shall meet or exceed the standards established by the National Testing Laboratories.

#### **PERFORMANCE**

- A. Meter accuracy shall be  $\pm 0.25\%$  of the flow rate for AC powered meters with capacitor backup and  $\pm 0.5\%$  of rate for Battery powered meters.

#### **EXTERNAL BATTERY PACK**

- A. External battery pack shall be ABB Model WABC2100, or equivalent for alternate bid manufacturer.

#### **PROGRAMMING CABLE**

- A. Programming cable shall be ABB Model WEBC2100, or equivalent for alternate bid manufacturer.

#### **SPARE DISPLAY CONVERTER**

- A. Spare display converter shall be ABB Model FET221.1.A0Y5G7S1M5 for AC powered meters and ABB Model FET221.1.A0Y5G5S1M5 for battery powered meters, or equivalent for alternate bid manufacturer.

### **CONNECTION CONVERSION KIT**

- A. Connection conversion kits from Aquamaster II to Aquamaster III meters shall be ABB Model WABC2035, or equivalent for alternate bid manufacturer.

### **EXECUTION**

#### **STORAGE, HANDLING AND DELIVERY**

- A. The manufacturer shall deliver meters to the OWNER in a manner to ensure that no damage is done upon the meters. The manufacturer shall instruct the OWNER in the proper handling and storage of meters in accordance with the manufacturer's operation and maintenance procedures

## City of Ann Arbor Procurement Office

### INSTRUCTIONS FOR CONTRACTORS FOR COMPLETING CONTRACT COMPLIANCE FORM

#### City Policy

The “non discrimination in contracts” provision of the City Code, (Chapter 112, Section 9:161) requires contractors/vendors/grantees doing business with the City not to discriminate on the basis of actual or perceived race, color, religion, national origin, sex, age, condition of pregnancy, marital status, physical or mental limitations, source of income, family responsibilities, educational association, sexual orientation, gender identity or HIV status against any of their employees, any City employee working with them, or any applicant for employment. It also requires that the contractors/vendors/grantees include a similar provision in all subcontracts that they execute for City work or programs.

This Ordinance further requires that each prospective contractor/vendor submit employment data to the City showing current total employee breakdown by occupation, race and gender. This allows the Human Rights Office to determine whether or not the contractor/vendor has a workforce that is reflective of the availability of women and under-represented minorities within the contractor’s labor recruitment area (the area where they can reasonably be expected to recruit employees). ***This data is provided to the City on the Human Rights Contract Compliance Forms (attached).***

#### **To complete the form:**

**1) If a company has more than one location, then that company must complete 2 versions of the form.**

- **Form #1** should contain the employment data for the **entire corporation**.
- **Form #2** should contain the employment data for those employees:
  - who will be working on-site;
  - in the office responsible for completing the contract; or,
  - in the case of non-profit grantees, those employees working on the project funded by the City grant(s).

2) If the company has only one location, fill out Form #1 only.

3) Complete all data in the upper section of the form including the name of the person who completes the form and the name of the company/organization’s president.

4) Complete the Employment Data in the remainder of the form. Please be sure to complete all columns including the Total Columns on the far right side of the form, and the Total row and Previous Year Total row at the bottom of the form.

5) Return the completed form(s) to your contact in the City Department for whom you will be conducting the work.

#### **For assistance in completing the form, contact:**

Procurement Office of the City of Ann Arbor  
734/794-6500

If a contractor is determined to be out of compliance, the Procurement Office will work with them to assist them in coming into compliance.

**CITY OF ANN ARBOR PROCUREMENT OFFICE  
HUMAN RIGHTS CONTRACT COMPLIANCE FORM**  
*Entire Organization (Totals for All Locations where applicable)*

**Form #1**

Name of Company/Organization \_\_\_\_\_ Date Form Completed \_\_\_\_\_

Name and Title of Person Completing this Form \_\_\_\_\_ Name of President \_\_\_\_\_

Address \_\_\_\_\_ County \_\_\_\_\_ Phone # \_\_\_\_\_  
(Street address) (City) (State) (Zip) (Area Code)

Fax# \_\_\_\_\_ Email Address \_\_\_\_\_  
(Area Code)

**EMPLOYMENT DATA**

Job Categories	Number of Employees (Report employees in only one category)												
	Male						Female						TOTAL COLUMNS A-L
	White	Black or African American	Asian	Hispanic or Latino	Native Hawaiian or Other Pacific Islander	American Indian or Alaska Native	White	Black or African American	Asian	Hispanic or Latino	Native Hawaiian or Other Pacific Islander	American Indian or Alaskan Native	
A	B	C	D	E	F	G	H	I	J	K	L		
Exec/Sr. Level Officials													
Supervisors													
Professionals													
Technicians													
Sales													
Admin. Support													
Craftspeople													
Operatives													
Service Workers													
Laborers/Helper													
Apprentices													
Other													
<b>TOTAL</b>													
<b>PREVIOUS YEAR TOTAL</b>													



**CITY OF ANN ARBOR PROCUREMENT OFFICE  
HUMAN RIGHTS CONTRACT COMPLIANCE FORM**

Form #2

Local Office (Only those employees that will do local or on-site work, if applicable)

Name of Company/Organization \_\_\_\_\_ Date Form Completed \_\_\_\_\_

Name and Title of Person Completing this Form \_\_\_\_\_ Name of President \_\_\_\_\_

Address \_\_\_\_\_ (Street address) \_\_\_\_\_ (City) \_\_\_\_\_ (State) \_\_\_\_\_ (Zip) \_\_\_\_\_ County \_\_\_\_\_ Phone # \_\_\_\_\_ (Area Code)

Fax# \_\_\_\_\_ (Area Code) \_\_\_\_\_ Email Address \_\_\_\_\_

**EMPLOYMENT DATA**

Job Categories	Number of Employees (Report employees in only one category)												TOTAL COLUMNS A-L
	Male						Female						
	White	Black or African American	Asian	Hispanic or Latino	Native Hawaiian or Other Pacific Islander	American Indian or Alaska Native	White	Black or African American	Asian	Hispanic or Latino	Native Hawaiian or Other Pacific Islander	American Indian or Alaskan Native	
	A	B	C	D	E	F	G	H	I	J	K	L	
Exec/Sr. Level Officials													
Supervisors													
Professionals													
Technicians													
Sales													
Admin. Support													
Craftspeople													
Operatives													
Service Workers													
Laborers/Helper													
Apprentices													
Other													
<b>TOTAL</b>													
<b>PREVIOUS YEAR TOTAL</b>													

## City of Ann Arbor: General Terms and Conditions

The following General Terms and Conditions shall apply to all purchases by or on behalf of the City of Ann Arbor unless specifically provided otherwise on the front of this Document:

**Tax Exemption:** The City of Ann Arbor is tax exempt, ID# 38-6004534.

**Acceptance of Contract:** This order is the City's contract to purchase the goods and services described on the reverse front side of this document from the Vendor. The City's placement of this order is expressly conditioned upon the Vendor's acceptance of all the terms and conditions of purchase contained on or attached to this purchase order. All specifications, drawings, and data submitted to the Vendor with this order are hereby incorporated and made part hereof.

**Amendments:** No agreement or understanding to modify this contract shall be binding upon the City unless in writing and signed by the City's authorized agent.

**Delivery:** All prices must be F.O.B. delivery point. Time is of the essence on this contract. If delivery dates cannot be met, the Vendor agrees to advise the City, in writing of the earliest possible shipping date. The City reserves the right to cancel or purchase elsewhere and hold the Vendor accountable.

**Risk of Loss:** Regardless of F.O.B. point, the Vendor agrees to bear all risk of loss, injury, or destruction of goods and materials ordered herein which may for any reason occur prior to delivery or acceptance by the City, whichever is later. No such loss, injury, or destruction shall release the Vendor from any obligations hereunder.

**Inspection:** Goods and materials must be properly packaged. Damaged goods and materials will not be accepted. The City reserves the right to inspect the goods at a reasonable time subsequent to delivery where circumstances or conditions prevent effective inspection of the goods at the time of delivery. All rejected goods shall be returned to the Vendor at no cost to the City, whether the damage is readily apparent at the time of delivery or later. The City's acceptance is conditioned on such inspection.

**Patents and Copyrights:** If an article sold and delivered to the City hereunder shall be protected by any applicable patent or copyright, the Vendor agrees to indemnify and save harmless the City, from and against any and all suits, claims, judgments, and costs instituted or recovered against it by any person whomsoever on account of the use or sale of such articles by the City in violation or right under such patent or copyright.

**Uniform Commercial Code:** All applicable portions of the Michigan Uniform Commercial Code shall govern contracts for goods with the City of Ann Arbor; except as modified by contract documents.

**Non-waiver of Rights:** No failure of either party to exercise any power given to it hereunder or to insist upon strict compliance by the other party with its obligations hereunder, and no custom or practice of the parties at variance with the terms hereof, nor any payment under this agreement shall constitute a waiver of either party's right to demand exact compliance with the terms hereof.

**Material Safety Data Sheets:** Applicable Material Safety Data Sheets, in compliance with OSHA/MIOSHA hazard communication regulations/standards, must be provided by the Vendor to the City at the time of purchase.

**Assignments:** The Vendor agrees not to assign or transfer this contract or any part thereof without the written consent of the City of Ann Arbor, acting through its authorized representative. Any unauthorized assignment may subject the contractor to immediate termination.

**Laws Governing:** This contract shall be governed by and construed according to the laws of the State of Michigan. Vendor agrees to submit to the jurisdiction and venue of the Circuit Court of Washtenaw County, MI, or if original jurisdiction is established, the U.S. District Ct. for Eastern District of MI, Southern Division. The Vendor stipulates venues referenced are convenient and waives any claim of non-convenience.

**Prevailing Wage:** It shall be the responsibility of the Vendor to comply, when applicable, with the prevailing wage requirements and/or the Davis-Bacon Act as amended.

**Living Wage:** It shall be the responsibility of the Vendor to comply, when applicable, with the City of Ann Arbor's Living Wage Ordinance as defined in Chapter 23, Section 1:811-1:821.

**Non-Discrimination:** It shall be the responsibility of the Vendor to comply, when applicable, with, all State, Federal and Local non-discrimination laws, including MCL 37.2209 and City Ordinance Chapter 112, Section 9:161.

**Indemnification:** To the fullest extent permitted by law the Vendor shall indemnify, defend and hold the City, its officers, employees and agents harmless from all suits, claims, judgments and expenses including attorney's fees resulting or alleged to result from any act or omission, associated with the performance of this contract by the Vendor or anyone acting on the Vendor's behalf under this contract. The Vendor shall not be responsible to indemnify the City for losses or damages caused by or resulting from the City's sole negligence. This indemnity survives delivery and acceptance of the Vendor's goods and services.

**Warranty:** The Vendor warrants to the City that all goods and services furnished hereunder will conform in all respects to the terms of this contract, including any drawings, specifications and standards incorporated herein. In addition, the Vendor warrants the goods and services are suitable for and will perform in accordance with the purposes for which they were intended.

**Payment Terms:** The City of Ann Arbor's payment terms are net 30. The payment date will be calculated based on the invoice receipt date or delivery date, whichever is later.

**Payments:** All invoices for goods and services shall be emailed to [accountspayable@a2gov.org](mailto:accountspayable@a2gov.org). Mailed invoices shall be addressed to the City of Ann Arbor, Accounts Payable, P.O. Box 8647, Ann Arbor, MI 48107, as indicated on the front of this purchase order. Invoices must include the Vendor's name, phone number, and clearly listed item descriptions, quantities and units of measure. The Vendor acknowledges and understands that invoices not addressed as stated above shall have the net 30 begin once the invoice is received by Accounts Payable.

**Compliance with Laws:** The Vendor certifies that in performing this contract it will comply with all applicable provisions of Federal, State and Local laws, regulations, rules and orders.

**Termination for Cause:** In the event the Vendor fails, at any time, to comply with, fully perform or strictly adhere to any covenant, condition or representation contained within the contract, the City shall have the right to give written notice to Vendor of such failure. If such failure is not cured to the City's satisfaction within ten (10) business days from the time of delivery to Vendor of such notice, the City shall have the right to terminate immediately without the requirement of a further notice.