

Oct 11, 2023

Bid: 23-05-35

Subject: Invitation to Bid

Prospective Bidders:

Sealed bid packages for Meters will be received in the Purchasing Department of the Birmingham Water Works Board, located at 3600 First Avenue North, Birmingham, Alabama 35222, until 10:00 a.m. (CST), October 11, 2023, at which time and place they will be publicly opened and read. All potential suppliers must receive an executed copy of the applicable Receipt of Bid Package from the BWW Purchasing Department before their bid package may be considered responsive, pending evaluation of appropriate staff.

"Specifications and Conditions" and "Bid Forms" are attached, and all bids shall be F.O.B. destination, freight prepaid, and at no charge. One copy of the bid form should be returned, and the bidder should retain a copy.

The Board reserves the right to reject any bids submitted, waive any informalities and technicalities. The Board reserves the right to select one or more suppliers for award by way of awarding all items to one supplier, individual line items to one or more suppliers, or subcategories of products/services to one or more suppliers when to do so is in the best interests of the Board. The Board reserves the right to award the bid on an individual or total cost of bid basis. The Board reserves the right to cancel this bid within thirty (30) days with written notice.

The Board reserves the sole right to award contracts to the lowest responsive and responsible supplier(s) as described in the solicitation documentation. The initial term of the contract shall be for a period of one (1) year from date of award and prices quoted shall remain effective for that period. The Board reserves the sole right to extend any of the applicable contracts for additional one (1) year periods or as allowable per State of Alabama law. The Board reserves the right to cancel the contract due to non-satisfactory performance or if the awarded supplier is found to violate the terms and conditions or does not correct any violations of specifications within two days after giving notice. The Board reserves the right to RE- BID. The Board reserves the right to enter into a month-to-month contract once the contract has ended, at the current prices, until the next bid has been awarded with the mutual consent of applicable parties.

All bid packages must be hand delivered to the BWW Purchasing Department, which is located at 3600 First Avenue North, Birmingham, Alabama 35222. The bid packages must be directed to the attention of the Purchasing Manager, and marked in the lower left-hand corner of the envelope as follows: "Bids for "Meters due on October 11, 2023, at 10:00 a.m. (CST)" at which time and place they will be publicly opened and read.

Cordially,

Matt Shiver, Purchasing Manager

#### **SPECIFICATIONS FOR METERS**

#### 1.0 GENERAL REQUIREMENTS

#### 1.1 DESCRIPTION/SCOPE

The Birmingham Water Works Board is sourcing Meters as specified throughout this solicitation document. Any supplier proposing to furnish any product not listed as acceptable in this solicitation, must first obtain written approval of The Birmingham Water Works Board Assistant General Manager-Engineering and Distribution, or authorized representative, prior to submission of their solicitation response.

#### 1.2 **QUALITY ASSURANCE**

The manufacturer shall upon request, furnish a notarized certification to The Birmingham Water Works Board that all items were manufactured in full compliance with these specifications.

The entire process of the manufacture of items to be furnished under this specification shall be open at all times to the inspection of The Birmingham Water Works Board Engineer or his designated alternate. All defects shall be corrected to his satisfaction, or the material will be rejected. Approval at time of plant inspection shall not prevent rejection if defects are subsequently discovered.

#### 1.2.1 REFERENCES

American Water Works Association (AWWA), C800

American National Standards Institute (ANSI), 1024, CSA B64.6

American Society of Safety Engineers (ASSE), 1024, CSA B64.6

National Sanitation Foundation (NSF/ANSI) Standard 61, Annex G

When reference is made in these specifications to American Water Works Association (AWWA), American National Standards Institute (ANSI), American Society for Testing and Materials (ASTM), American Iron and Steel Institute (AISI), American Society of Safety Engineers (ASSE), or other standards, it is understood that the latest revision thereof shall apply. The manufacturer should especially note that this part of the specifications applies to all items with additional requirements set forth for each type.

#### 1.3 **SUBMITTALS**

This solicitation contains mandatory requirements (e.g., product specifications, service or quality level specifications, staff requirements, experience, or license requirements, etc.) which must be met by the supplier in order for the supplier to be considered "responsive" and, therefore, eligible for contract award. These mandatory requirements will be defined in one or more of the following ways:

- 1. Requirements in this solicitation document
- Requirements contained in any attachment to this solicitation, such as but not limited to: Mandatory Questions, Appendixes, HUB Documents, EEO Report, Certification of Non- Discrimination, Debarment Form, any BWWB requested bonds, and the Cost Worksheet

If bidding a product manufactured by another firm, a letter must be submitted from the actual manufacturer of that product giving your company as agent authority in Birmingham, Alabama to bid that product.

The letter may be a blanket letter from the manufacturer renewable at the beginning of the calendar year giving your company authorization to bid and sell the products that are quoted. The letter may cover as many items as are requested by your company.

Any bidder proposing to furnish any product not listed as acceptable in this bid, must first obtain written approval of The Birmingham Water Works Board Assistant General Manager-Engineering and Distribution, or authorized representative, prior to submission of bid.

The BWWB reserves the right to reject any or all responses, to waive any irregularity or informality in a response, and to accept or reject any item or combination of items, when to do so would be to the advantage of the BWWB. It is also within the right of the BWWB to reject responses that do not contain all elements and information requested in this solicitation. A response will be rejected if the response contains any defect or irregularity and such defect or irregularity constitutes a material deviation from the solicitation requirements, which determination will be made by the BWWB on a case-by-case basis.

#### 1.4 RESTRICTIONS ON COMMUNICATING WITH BWWB PERSONNEL

From the issue date of this solicitation until the award is approved by the Birmingham Water Works Nine Member Voting Board of Directors, suppliers are not allowed to communicate for any reason with any BWWB Personnel except through the Issuing Officer named herein, the Issuing Officer's designee, or during the Bidders/Offerors' conference (if any), or as defined in this solicitation or as provided by existing contract(s). Prohibited communication includes all contact or interaction, including but not limited to telephonic communications, emails, faxes, letters, or personal meetings, such as lunch, entertainment, or otherwise. The BWWB reserves the right to reject the response of any supplier violating this provision.

ISSUING OFFICER- MATT SHIVER

#### 1.5 PERMITS AND LICENSING

The awarded supplier shall be responsible for obtaining all permits, licenses, certifications, etc., required by federal, state, county, and municipal laws, regulations codes, and ordinances for the performance of the work required in these specifications and to conform to the requirements of said legislation. All permit fees shall be included in the contract amount and paid by the awarded supplier.

#### 1.6 SITE VISITS AND/OR ORAL PRESENTATIONS

The BWWB reserves the right to conduct site visits, request product/work samples, or to invite suppliers and/or awarded suppliers to present their product/service solution to the evaluation teams. The supplier(s) and/or awarded supplier(s) shall provide access to all manufacturer's production, testing, storage, operation, and other areas if, and when, requested by the BWWB

#### 1.7 QUANTITIES OR ESTIMATES OF PRODUCTS AND SERVICES

The quantities specified herein are estimates based upon current consumption and projected demand for the next contract year and shall not be construed to represent an amount which the BWWB shall be obligated to purchase. The exact amounts ordered may be more or less and subject to BWWB's actual needs. The responding supplier acknowledges and agrees that the BWWB will only be responsible for the commodities and/or services actually purchased and/or consumed.

BWWB will provide the awarded supplier(s) with an ordering timeframe for items that may be ordered during the contract time. BWWB reserves the sole right to adjust the quantities and delivery dates. The awarded supplier(s) must honor their quoted delivery date(s) as referenced in their supplier provided Cost Worksheet.

#### 1.8 SUPPLIER PERFORMANCE

In the event the BWWB deems it expedient to perform service(s) or source alternate similar/like products(s) which have not been provided by the supplier as required by the awarded contract, or to correct work which has been inadequately performed by the supplier as required in the solicitation documents, BWWB reserves the sole right to procure services and/or products from another source and may charge the difference between the contract and the substitute contract to the defaulting supplier.

The BWWB reserves the right to inspect the manufacturing and/or service development process of any awarded supplier's products and/or services.

#### 1.9 **SUPPLIER WARRANTIES**

The awarded supplier represents and warrants that the goods and services provided in accordance with this solicitation will appear and operate in conformance with the terms and conditions of the finalized contract.

All goods delivered by awarded supplier to the BWWB shall be free from any defects in design, material, or workmanship. If any goods offered by the awarded contractor are found to be defective in material or workmanship, or do not conform to supplier's warranty, the BWWB shall have the option of returning, repairing, or replacing the defective goods at awarded supplier's expense. Payment for goods shall not constitute acceptance. Acceptance by the BWWB shall not relieve the awarded supplier of its warranty or any other obligation under the finalized contract.

The awarded supplier represents and warrants that title to any property assigned, conveyed or licensed to the BWWB is good and that transfer of title or license to the BWWB is rightful and that all property shall be delivered free of any security interest or other lien or encumbrance.

The awarded supplier represents and expressly warrants that all aspects of the goods and services provided or used by it shall at a minimum conform to the standards in the supplier's industry. This requirement shall be in addition to any express warranties, representations, and specifications included in the finalized contract, which shall take precedence.

#### 1.10 GENERAL PRICING RULES

By submitting a response, the supplier agrees that it has read, understood, and will abide by the following instructions/rules:

- 1. The submitted pricing must include all costs of performing pursuant to the resulting contract; and
- 2. Bids containing a minimum order/ship quantity or dollar value, unless otherwise called for in the solicitation, will be treated as non-responsive and may not be considered for award; and
- 3. The supplier is required to provide net prices. In the event there is discrepancy between a supplier's unit price and extended price, the unit price shall govern;
- 4. The prices quoted and listed in the response shall be firm throughout the term of the resulting contract, unless otherwise noted in the solicitation or contract; and
- 5. Unless otherwise specified in any terms and conditions issued by the BWWB to the solicitation, all product deliveries will be F.O.B. destination and all shipping charges must be included in the quoted cost; and
- 6. Unless expressly permitted by the solicitation, responses containing provisions for late or interest charges will not be awarded a contract. Suppliers must "redact" any such provisions in their submitted forms; and
- 7. Responses containing prepayment and/or progress payment requirements may be determined non-responsive unless otherwise permitted by the solicitation; and

- 8. Unless permitted by the solicitation, responses requiring payment from the BWWB in less than thirty (30) days will be considered nonresponsive; and
- 9. The BWWB is exempt from certain taxes and no provision for such taxes should be included in the supplier's response.

#### 1.11 SELECTION AND AWARD

It is likely that this solicitation may result in multiple awards determined by pricing and availability. Any contract award(s) resulting from the solicitation will be made to the lowest, responsive and responsible supplier(s) meeting all specifications and with whom the BWWB has reached agreement on all contract terms and conditions. The BWWB reserves the right to select one or more suppliers for award by way of awarding all items to one supplier, individual line items to one or more suppliers, or subcategories of products/services to one or more suppliers when to do so is in the best interests of the BWWB.

When selecting the lowest responsive and responsible supplier, the determination may involve all or some of the following factors: price, conformity to specifications, financial ability to meet the contract, previous performance, facilities and equipment, availability of repair parts, experience, delivery promise, terms of payments, compatibility as required, other costs, and other objective and accountable factors which are reasonable.

#### 1.12 CONTRACT TERM AND RENEWAL

The Board reserves the sole right to award contracts to the lowest responsive and responsible supplier(s) as described throughout this document. The initial term of the contract shall be for a period of one (1) year from date of award and prices quoted shall remain effective for that period. The Board reserves the sole right to extend any of the applicable contracts for additional one (1) year periods or as allowable per State of Alabama law.

All contract renewals must be approved by the Board. Before the contract end date, the BWWB shall submit a Contract Amendment Form to the awarded supplier(s). The Contract Amendment Form may include any mandatory or implicative contract changes from BWWB. Upon receipt of the Contract Amendment Form, the awarded supplier(s) may ask for price increases on their supplied goods and/or services. Suppliers can only utilize either the Bureau of Labor Statistics Consumer Price Index and/or Producer Price Index reports for pricing adjustment analysis. Upon request and adequate justification, the BWWB may grant a price increase up to 3%. The awarded supplier(s) price increase request must be based upon the most recent six (6) month's data that was published by the Bureau of Labor Statistics. If an escalation factor is applied to the contract a de-escalation shall also be considered and will be calculated at the end of the term of the agreement. Escalation or de-escalation costs will only be considered by way of requests on the Contract Amendment Form.

#### 1.13 PRIORITY CUSTOMER STATUS

By submitting a Cost Worksheet response to this solicitation, supplier understands and acknowledges that the BWWB provides water services that are essential to the health and welfare of the public. Failure of an awarded supplier to provide materials under any awarded contract issued pursuant to this solicitation may jeopardize the BWWB's ability to provide timely services, which may affect the health and welfare of the public served by the BWWB. In the event of product shortages at any level of the production to delivery chain, awarded supplier(s) agrees and affirms that the BWWB will be given the earliest possible notice of supply chain issues and the highest priority for allocation of the item(s) listed herein. To the extent that awarded supplier(s) must prioritize and/or allocate delivery among its customers, the requirements of the BWWB will be honored before contract items are provided to a customer with no obligations with regard to the public health and welfare.

#### 1.14 PRODUCT DELIVERY

Unless otherwise stated in the solicitation and any resulting contract, items shall be shipped F.O.B. Destination. The supplier shall retain title for the risk of transportation, including the filing for loss or damages. The invoice covering the items is not payable until items are delivered and accepted by BWWB. Unless the F.O.B. clause states otherwise, the seller assumes transportation and related charges either by payment or allowance.

All items shall be subject to inspection on delivery. Hidden damage will remain the responsibility of the awarded supplier to remedy without cost to the BWWB, regardless of when the hidden damage is discovered.

#### F.O.B. Birmingham Water Works 3600 First Avenue North Birmingham, AL 35222

The BWWB reserves the right to have orders delivered to different BWWB owned and/or leased locations at the awarded supplier's expense.

A packing list shall accompany every shipment. The absence of a packing slip or required shipping order information may cause refusal of the shipment. The packing list shall contain: Purchase Order number, Delivery release number, item description, quantity shipped, quantity ordered, and quantity backordered (if any).

If there is a delay in products manufacturing or shipping and/or the performance of services, the awarded supplier(s) must notify the BWWB, in writing, as soon as possible. The awarded supplier(s) must provide weekly updates, in writing, to the BWWB for any product and/or service delays.

#### 1.15 SOLICITATION CERTIFICATION

By responding to this solicitation, the supplier understands and agrees to the following:

- 1. That the submitted Cost Worksheet constitutes an offer, which if accepted in writing by the BWWB, and subject to the terms and conditions of such acceptance, will constitute a valid and binding contract between the supplier and the BWWB; and
- 2. That the supplier guarantees and certifies that all items included in the supplier's response meet all of the solicitation's identified specifications and requirements except as expressly stated otherwise in the supplier's response; and
- That the response submitted by the supplier shall be valid and held open for a period of ninety (90) days from the final solicitation closing date and that the supplier's offer may be held open for a lengthier period of time subject to the supplier's consent; and
- 4. That the supplier's response is made without prior understanding, agreement, or connection with any corporation, firm, or person submitting a response for the same materials, supplies, equipment, or services and is in all respects fair and without collusion or fraud. Supplier understands and agrees that collusive bidding is a violation of state and federal law and can result in fines, prison sentences, and civil damage awards; and
- 5. That any provision of the State of Alabama Code has not been violated and will not be violated in any respect.

#### 1.16 INVOICING

The BWWB will render payment to the awarded supplier(s) by check on a net 30day basis after receipt of the products and/or services and an invoice that has been submitted as required in this solicitation, unless the BWWB authorizes in writing. invoices terms ΑII must be accountspayable@bwwb.org. Any discrepancies noted by the BWWB must be corrected by the awarded supplier within 48 hours. The payment amount due on invoices cannot be altered by the BWWB personnel. Once disputed items are resolved, the awarded supplier must submit an amended invoice, or a credit memorandum for the disputed amount. The BWWB will not make partial payments on an invoice where there is a dispute. The BWWB will only make payments on authorized transactions.

Invoices submitted pursuant to this solicitation must include:

- ➤ Name and remittance address of supplier.
- Invoice date.
- Invoice number.
- Solicitation number.
- BWWB Issued PO number.
- Must clearly show the description of products and/or services to include the number of each product or line item fulfilled.
- Contact information of the person to be notified in event of a discrepancy in the invoice.

#### 2.0 PRODUCTS

- 2.1 <u>Meter Specifications by Type</u>
  2.1.1 Appendix One Flat Nutating Disc or Oscillating Piston Meter Туре
  - 2.1.2 Appendix Two- Multi-Jet or Single-Jet Meter Type
    2.1.3 Appendix Three- 2" Meter Type
    2.1.4 Appendix Four- 4" and Larger Meter Type

## Appendix One Flat Nutating Disc Type or Oscillating Piston Type

#### **GENERAL SPECIFICATIONS**

All meters furnished shall be manufactured in the continental United States and shall meet or exceed AWWA Standard C700 latest revision for Cold-Water Meters - Displacement Type, Metal Alloy Main Case. Meters shall meet the requirements of NSF Standard 372 and NSF Standard 61, Annex G. The meters are to be constructed so that the complete register assembly can be replaced in the field without turning the water off to the meter.

Only positive displacement meters of the flat nutating disc or oscillating piston type will be accepted.

The size, capacity, head loss, and meter lengths shall be specified in AWWA Standard C700 latest revision thereof for sizes 5/8" X 1/2", 5/8" X 3/4", 3/4", and 1".

Main cases shall be of bronze construction. Serial numbers shall be imprinted on the lower main case of meter. The main case shall be of the frost proof type. The bottom plate shall be secured by four (4) bolts on the 5/8" and 3/4" sizes, and a minimum of four (4) bolts on the 1" size.

The bottom plate shall be of corrosion protected cast iron or bronze and shall break clean when subjected to freezing pressure of approximately 500 P.S.I.

All registers covered by the specification shall be permanently sealed and suitable for flooded pit service and shall not be subject to fogging from water vapor permeation through the lens or register enclosure. The registers for each meter size shall be of the straight reading sealed magnetic drive type; and shall contain six (6) numeral wheels, 4-white, 2-black and shall have 1-Cubic Foot sweep dial. The register shall be mounted so that the reading can be taken from the outlet side of the meter. The register lenses are to me made of glass. Size, meter manufacturer, meter model, and date of manufacture shall be stamped on the register face. The size, model, and direction of flow through the meter must be permanently visible on the topside of all meter displays.

The dial shall be of the center sweep pointer type and shall contain 100 equally divided graduations at its periphery. Register must have a leak indicator dial. The register assembly shall mount in any of four (4) positions. The register shall be protected by an impact-resistant housing and cover.

All meters shall operate properly under a continuous working pressure of 150 psi without leakage or damage to any meter component.

All meters must contain a removable plastic, bronze, or stainless-steel strainer having an effective straining area at least twice the inlet opening area of the meter inlet.

All meters furnished must carry the name or trademark of the manufacturer permanently cast on the meter. Meter shall have a factory test tag indicating test flow results at low, intermediate, and high flows. Meters shall be numbered consecutively beginning with a number that shall be furnished by the Birmingham Water Works. The number must be engraved on the outside lid of the register box and on the outer main casing of the meter. The numbers in the register lid must be colored a permanent contrasting color.

All parts of the meter must be made of new materials and must not have been repaired or remanufactured in any manner.

The manufacturer shall guarantee: (1) the meters furnished hereunder to be free from defects in material and workmanship; (2) accuracy of registration for a period of five (5) years after installation; and (3) register for a minimum of 2000 ccf or 1.5 million gallons (or the volume the manufacturer guarantees if greater than 2000 ccf) after installation including a guarantee against the entry of moisture into the register.

Meters will be tested in the owner's meter shop in accordance with AWWA Standard C700 latest revision for accuracy and endurance. A minimum of thirty percent (10%) of a shipment of positive displacement meters up to and including 1" in size will be tested. If 1% of a shipment fails the tests, the entire shipment will be rejected and will be returned to the supplier at the suppliers' expense. If three or more shipments fail the tests, the contract may be terminated, and penalties may apply. If the percentage of failed meters is less than 1%, the meters that fail the test must be replaced by the supplier at their expense including cost of shipment of the defective meters and the replacement meters.

The Manufacturer's full line of meters 1" and smaller must be AWWA approved and must be compatible with currently available Automated Meter Reading (AMR) technologies. Meters not meeting this criterion will not be accepted.

Meters purchased under this bid must meet all requirements of these SPECIFICATION I - COLD-WATER METERS - DISPLACEMENT TYPE, GENERAL SPECIFICATIONS.

## Appendix Two Multi-Jet or Single-Jet Meter Type

#### GENERAL SPECIFICATIONS

All meters furnished shall be manufactured in the continental United States and shall meet or exceed either AWWA Standard C708 latest revision for Cold-Water Meters- Multi-Jet Type or AWWA Standard C712 latest revision for Cold-Water Meters — Single-Jet Type. Meters shall meet the requirements of NSF Standard 372 and NSF Standard 61, Annex G. The meters are to be constructed so that the complete register assembly can be replaced in the field without turning the water off to the meter.

Only meters of the Multi-Jet type or Single-Jet type will be accepted.

The size, capacity, head loss, and meter lengths shall be specified in either AWWA Standard C708 or C712 latest revision thereof for sizes 5/8" X 1/2", 5/8" X 3/4", 3/4", and 1". Main cases shall be of waterworks bronze construction. The main case shall be of the frost proof type. Serial numbers shall be imprinted on lower main case of meter. All materials used in the construction of meter main cases shall have sufficient dimensional stability to retain

operating clearances at working temperatures of up to 105° F (40°() and shall not permanently warp or deform when exposed to temperatures of up to 150° F (66°() for one hour.

The bottom plate shall be of corrosion protected cast iron or bronze and shall break clean when subjected to freezing pressure of approximately 500 P.S.I. The bottom place shall be secured by a minimum of four (4) bolts.

All registers covered by the specification shall be permanently sealed and suitable for flooded pit service and shall not be subject to fogging from water vapor permeation through the lens or register enclosure. The registers for each meter size shall be of the straight reading sealed magnetic drive type; and shall contain six (6) numeral wheels, 4-white, 2-black and shall have 1-Cubic Foot sweep dial. The register shall be mounted so that the reading can be taken from the outlet side of the meter. The register lenses are to me made of glass. Size, meter manufacturer, meter model, and date of manufacture shall be stamped on the register face. The size, model, and direction of flow through the meter must be permanently visible on the topside of all meter displays.

The dial shall be of the center sweep pointer type and shall contain 100 equally divided graduations at its periphery. Register must have a leak indicator dial. The register assembly shall mount in any of four (4) positions. The register shall be protected by an impact-resistant housing and cover.

All meters shall operate properly under a continuous working pressure of 150 psi without leakage or damage to any meter component.

All meters must contain a removable plastic, bronze, or stainless-steel strainer having an effective straining area at least twice the inlet opening area of the meter inlet.

All meters furnished must carry the name or trademark of the manufacturer permanently cast on the meter. Meter shall have a factory test tag indicating test flow results at low, intermediate, and high flows.

Meters shall be numbered consecutively beginning with a number that shall be furnished by the Birmingham Water Works. The number must be engraved on the outside lid of the register box and on the outer main casing of the meter. The numbers in the register lid must be colored a permanent contrasting color.

All parts of the meter must be made of new materials and must not have been repaired or remanufactured in any manner.

The manufacturer shall guarantee: (1) the meters furnished hereunder to be free from defects in material and workmanship; (2) accuracy of registration for a period of five (5) years after installation; and (3) register for a minimum of 2000 ccf or 1.5 million gallons (or the volume the manufacturer guarantees if greater than 2000 ccf) after installation including a guarantee against the entry of moisture into the register.

Meters will be tested in the owner's meter shop in accordance with either AWWA Standard C708 or AWWA C712 latest revision for accuracy and endurance. A minimum of thirty percent (10%) of a shipment of meters up to and including 1" in size will be tested. If 1% of a shipment fails the tests, the entire shipment will be rejected and will be returned to the supplier at the suppliers' expense. If three or more shipments fail the tests, the contract may be terminated, and penalties may apply. If the percentage of failed meters is less than 1%, the meters that fail the test must be replaced by the supplier at their expense including cost of shipment of the defective meters and the replacement meters.

The Manufacturer's full line of meters 1" and smaller must be AWWA approved and must be compatible with currently available Automated Meter Reading (AMR) technologies. Meters not meeting this criterion will not be accepted.

## Appendix Three 2" Meter Type

#### GENERAL SPECIFICATIONS

These specifications apply to 2" FM Static Electronic Water Meters that will be used by The Birmingham Water Works Board (BWWB) for water revenue billing. The flow meter shall consist of a flow sensor with battery-power and microprocessor- based signal converter. Insertion type flow meters will not be accepted.

#### 1.0 DETAILS OF CONSTRUCTION

- a) Meters purchased under these specifications shall be a microprocessor- based electronic water flow meter capable of monitoring flow totals and flow rate.
- b) The flow meter shall have no moving parts to ensure that there is no damage from particulate matter, e.g. stones, sticks, weeds, etc. This is to include obstructions to the flow path that may catch particulate matter or be damaged by particulate matter.
- c) The meter shall be suitable for operation using internal or external battery. The meters shall provide an operating life of at least 10 years. The meter shall incorporate a battery-management system to provide a battery replacement window of I-year minimum to ensure that there is no interruption to flow measurement. The battery shall have at least 10 years full warranty from the manufacturer.
- d) An accuracy of± 1.50% for battery-powered meters shall be achieved beginning at 15% of meter maximum flow rate and above. This performance is required for water management and/or billing purposes.
- e) An accuracy of +2.0% maximum shall be achieved for any flow rate in which the meter totalizes flow.
- f) The meter performance shall have been verified on a fully traceable test facility that is internationally accepted (such as NAMA, NIST or equivalent). Laboratory traceability packs shall be available on request.
- g) The meters shall be suitable for a maximum working temperature of 158° F (70° C) at pressures up to 350 psi or as limited by the flange rating.
- h) Meters shall have a standard laying length of 17" with 2-bolt, oval flange. 4 bolt flanges and lengths other than 17" will not be accepted.
- i) The wetted materials shall be compatible with, and suitable for, potable water. An internationally recognized body such as AWWA, NSF, WRC or equal shall certify the liner. Acceptable electrode material is 316 Stainless Steel or Hastelloy C276
- j) The flow sensor shall be intelligent such that any associated electronic display unit can be connected to it without subsequent programming.
- k) The flow sensor shall be rated to IP68 (NEMA 6P) and be suitable for indefinite submergence to a depth of up to 33 feet (10 m).
- I) An option of the meter totalizer's display and/or transmitter being remote- mounted shall be available, with remote-mounted displays suitable for installation up to JOO feet from the sensor. When remotely displayed, the meter's total reading should be readily read without a "wake-up command" or similar temporarily visible total reading. Specifics on whether the remote display should be included shall be furnished with each order. As a rule, the transmitter and/or remote display shall be remote mounted and bid prices should reflect remote mounted prices up to 16' for half of the bid quantity (300) and the other 300 being direct mount/read.
- m) The electronic display/ remote transmitter unit shall be protected to IP66.

- n) The remote mounted display must be able to provide a pulse output capable of interfacing with external data loggers, AMI devices and 4-20mA Frequency to Analog converters. The pulse output need not be included, only available.
- o) Dual alphanumeric displays shall indicate user defined flow rate and flow total units. Flow totals (totalizers) should be available in thousands of gallons or hundreds of cubic feet with the totals reading clearly and directly without need for conversion outside of the meter display (no dropping or adding of numbers to read). Flow rates shall be in user selectable US gallons per minute (US-GPM) or US million gallons per day (US-MGD) The device shall incorporate a menu selection allowing range, units, etc., to be made. Most meters will be ordered in CCF.
- p) The meter software shall incorporate password protection to prevent inadvertent or fraudulent programming or units of measurement changes. The totalizer functions shall be user selectable (resettable or non-resettable) by means of software programming. At least 3 copies of the necessary software and all necessary proprietary cables and/or programmers shall be provided upon bid awarding.
- q) All volume totalizer values shall be backed up in the intelligent sensor for total security.
- r) Communication must be possible (but not necessarily included) via absolute digital encoder compatible with Sensus protocol.
- s) The sensor shall have a multiple tariff feature such that accumulated flow volume is routed to one of two tariffs. Tariffs shall be user programmable for time of day, day of week or date during the year.
- t) The meter shall be compatible with electronic meter reading systems, including hand-held scan reading and Walk-by, Drive-by and Fixed Network Advance Metering infrastructure (AMI) systems. The meter shall also have the ability to provide an absolute digital encoded output for interfacing with AMI devices.
- u) The meter shall be designed and manufactured under the ISO 9000 series of quality standards.
- v) The meter must have a built-in or external datalogger. This datalogger shall be able to record totalizer readings once a day for a year (365 days). It shall also have two other separate memory slots were flow rates shall be stored using different time intervals. The minimum memory capacity for any of these two slots shall be three months (90 days) worth of flow rates every 15 minutes. Data should be recoverable though a laptop or similar field-appropriate devices. Prices, if in addition to the meter cost, should be listed in the bid package.
- w) The meter body and flanges shall be stainless steel or Epoxy coated cast iron or Carbon steel to prevent corrosion.
- x) Customer provided meter serial numbers shall be recessed into the lid of the meter in contrasting colors to the lid (white letters on black lid, for example). In addition, the meter number should be etched or stamped onto the flange, body, or other metallic surface of the meter in such a way to discourage tampering. Meter numbers shall be 8 digits and provided to the winning bidder by The BWWB prior to ordering.

#### 2.0 CALIBRATION AND FIELD TESTING

- a) Each flow sensor shall be calibrated by the manufacturer and the calibration information shall be stored internally in the signal converter for the lifetime of the meter. A certificate of calibration shall accompany each flow sensor.
- b) The objectives of field verification of meter are to compare the performance of the flow meters relative to the manufacturer's stated range of meter capabilities and

intended applications. The field verification of flow meters shall include demonstration of the accuracy of the flow sensors. The Verification of meter accuracy shall be relative to accepted reference methods over a range of flow conditions including response to changes in flow. Verification shall be available for testing in the field without taking the meter out of service, such as with a laptop of other field verification device other than basic indicators of operations (i.e., power is on, so it must be working correctly or lack of error indicators).

- c) A Software application must be provided by a flowmeter manufacturer and shall be verified for ease of application, flexibility, and compatibility with Windows- based operating systems.
- d) Awarded Supplier(s) must provide three (3) separate, consecutive on-site training courses for installation, maintenance, battery replacement, and programming for BWWB technicians.
- e) All responding suppliers must have a **MANUFACTURING** representative demonstrate the operational capabilities of the field verification device to applicable **BWWB STAFF**. This presentation shall be a part of the bid evaluation. Preference shall be given to suppliers who are be able to demonstrate the ability to test and efficiently and effectively field verify the accuracy and performance of their meters.

#### 3.0 QUALITY ASSURANCE

- a) The manufacturer shall, upon request, furnish a notarized certification to The BWWB that all items were manufactured in full compliance with these specifications.
- b) Service Conditions/Design Criteria
  - All awarded 2" FM Static Water Meters must conform to the requirements of AWWA, NEMA and ANSI, latest revision and specific requirements of these specifications and conditions
  - ii. All awarded 2" FM Static Water Meters must be manufactured, tested, and approved to meet or exceed all requirements of AWWA, NEMA, FM, and ANSI latest revision. The meters must be suited for metering in fire suppression situations.
- c) Tests are performed on every shipment that comes to the board. Criteria for passing or failing a shipment of meters are set by the BWWB and are subject to change without notice, but the vendor shall be informed within 30 business days in case this happens. To begin, failures above 1% of total bid quantity shall constitute grounds to reject further shipment and bid invalidation.
- d) Reference Standards: Comply with the applicable provisions and recommendations of the following, except as otherwise shown or specified
  - i. NSF/ANSI Standard 61(Drinking Water System Components Health Effects)
  - ii. ANSI/NSF Standard 61 Annex G.
  - iii. IP68/NEMA 6P enclosure (Prevent Ingress of foreign matter during Occasional or prolonged submersion)
  - iv. American National Standards Institute (ANSI) B16.5, Bl.20.1
  - v. Federal Law No. 111-380 (The Reduction of Lead in Drinking Water Act)

Meters listed above are supplied to the Birmingham Water Works by the individual manufacturer.

If there is any discrepancy between the meter and the Design Criteria/Details of Construction in this specification, the bidder is to notify the Birmingham Water Works for clarification before a bid is submitted. In addition, if any discrepancy within the specification itself is found, the bidder is to notify the Birmingham Water Works for clarification before a bid is submitted

## Appendix Four 4" and Larger Meter Type

#### **GENERAL SPECIFICATIONS**

These specifications apply to 4" and Larger FM Static Electronic Water Meters that will be used by The Birmingham Water Works Board (BWWB) for water revenue billing. The flow meter shall consist of a flow sensor with battery-power and microprocessor-based signal converter. Insertion type flow meters will not be accepted.

#### 1.0 DETAILS OF CONSTRUCTION

- Meters purchased under these specifications shall be a microprocessorbased electronic water flow meter capable of monitoring flow totals and flow rate.
- b) The flow meter must have no moving parts to ensure that there is no damage from particulate matter, e.g. stones, sticks, weeds, etc.
- c) The meter shall be suitable for operation using replaceable internal or external battery. The meters shall provide an operating life of 20 years. BWWB and/or a BWWB contractor must be able to change the batteries in the field. The meter shall incorporate a battery-management system to provide a battery replacement window of I-year minimum to ensure that there is no interruption to flow measurement. The battery shall have at least 10 years full warranty from the manufacturer.
- d) An accuracy of ±0.50% for battery-powered meters shall be achieved beginning at 15% of meter maximum flow rate and above. This performance is required for water management and/or billing purposes.
- e) An accuracy of +2.0% maximum shall be achieved for any flow rate in which the meter totalizes flow.
- f) The meter performance shall have been verified on a fully traceable test facility that is internationally accepted (such as NAMA, NIST or equivalent). Laboratory traceability packs shall be available on request.
- g) The meters shall be suitable for a maximum working temperature of 158° F (70° C) at pressures up to 350 psi or as limited by the flange rating.
- h) Meters sizes greater than 2" shall have a laying length of no more than the meter length specified by AWWA C700, C701 most recent revision.
- i) The wetted materials shall be compatible with, and suitable for, potable water. An internationally recognized body such as AWWA, NSF, WRC or equal shall certify the liner. Acceptable electrode material is 316 Stainless Steel or Hastelloy C276
- j) The flow sensor shall be intelligent such that any associated electronic display unit can be connected to it without subsequent programming.
- k) The flow sensor shall be rated to IP68 (NEMA 6P) and be suitable for indefinite submergence to a depth of up to 33 feet (10 m).
- I) An option of the display being either sensor-mounted or remote-mounted shall be available, with remote-mounted displays suitable for installation up to 250 feet from the sensor. When remote mounted, the meter's total reading should be readily read without a "wake-up command" or similar temporarily visible total reading. Specifics on whether the display should be remote mounted, or transmitter mounted shall be furnished with each order.
- m) The electronic display unit shall be protected to IP68 (NEMA 6P) with the capability for submergence up to 4.9 feet (1.5 m) for up to 12 months to facilitate installations in vaults and pits that are liable to flooding.

- n) The remote mounted display must be able to provide a pulse output capable of interfacing with external data loggers, AMI devices and 4-20mA Frequency to Analog converters.
- o) Dual alphanumeric displays shall indicate user defined flow rate and flow total units. Flow totals should be available in thousands of gallons or hundreds of cubic feet with the totals reading clearly and directly without need for conversion outside of the meter display. Flow rates shall be in user selectable US gallons per minute (US-GPM) or US million gallons per day (US-MGD) The device shall incorporate a menu selection allowing range, units, etc., to be made. Data shall be stored in a non-volatile memory for a minimum retention of 10 years.
- p) The meter software must incorporate password protection to prevent inadvertent or fraudulent programming or units of measurement changes. The totalizer functions shall be user selectable (resettable or non-resettable) by means of software programming. At least 3 copies of the necessary software and all necessary proprietary cables and/or programmers shall be provided upon bid awarding.
- q) There shall be independent totalizer displays to give forward total, reverse total, net totals, time and date. All volume totalizer values shall be backed up in the intelligent sensor for total security.
- r) Communication must be possible via absolute digital encoder compatible with Sensus protocol.
- s) The sensor shall have a multiple tariff feature such that accumulated flow volume is routed to one of two tariffs. Tariffs shall be user programmable for time of day of week or date during the year.
- t) The meter must be compatible with electronic meter reading systems, including hand-held scan reading and Walk-by, Drive-by and Fixed Network Advance Metering infrastructure (AMI) systems. The meter shall also have the ability to provide an absolute digital encoded output for interfacing with AMI devices.
- u) The meter must be designed and manufactured under the ISO 9000 series of quality standards.
- v) The meter must have a built in datalogger. This datalogger must be able to record totalizer readings once a day for a year (365 days). It must have two other separate memory slots were flow rates shall be stored using different time intervals. The minimum memory capacity for any of these two slots shall be three months (90 days) worth of flow rates every 15 minutes.
- w) The meter body and flanges shall be stainless steel or Epoxy coated cast iron or Carbon steel to prevent corrosion.
- x) Meter numbers shall be recessed into the lid of the meter in contrasting colors to the lid (white letters on black lid, for example). In addition, the meter number should be etched or stamped onto the flange, body, or other metallic surface of the meter in such a way to discourage tampering. Meter numbers shall be 8 digits and provided to the winning bidder by The BWWB prior to ordering.

#### 2.0 CALIBRATION AND FIELD TESTING

- a) Each flow sensor shall be calibrated by the manufacturer and the calibration information shall be stored internally in the signal converter for the lifetime of the meter. A certificate of calibration shall accompany each flow sensor.
- b) The objectives of field verification of meter are to compare the performance of the flow meters relative to the manufacturer's stated range of meter capabilities and intended applications. The field verification of flow meters shall include demonstration of the accuracy of the flow sensors. The Verification of meter

accuracy shall be relative to accepted reference methods over a range of flow conditions including response to changes in flow. Verification shall be available for testing in the field without taking the meter out of service, such as with a laptop of other field verification device other than basic indicators of operations (i.e., power is on, so it must be working correctly or lack of error indicators).

- c) A Software application must be provided by a flowmeter manufacturer and shall be verified for ease of application, flexibility, and compatibility with Windowsbased operating systems.
- d) Awarded Supplier(s) must provide three (3) separate, consecutive on-site training courses for installation, maintenance, battery replacement, and programming for BWWB technicians.
- e) All responding suppliers must have a <u>MANUFACTURING</u> representative demonstrate the operational capabilities of the field verification device to applicable **BWWB STAFF**. This presentation shall be a part of the bid evaluation. Preference shall be given to suppliers who are be able to demonstrate the ability to test and efficiently and effectively field verify the accuracy and performance of their meters.

#### 3.0 QUALITY ASSURANCE

- a) The manufacturer shall, upon request, furnish a notarized certification to The BWWB that all items were manufactured in full compliance with these specifications.
- b) Service Conditions/Design Criteria
  - i. All awarded 4" FM Static Water and Larger Meters must conform to the requirements of AWWA, NEMA and ANSI, latest revision and specific requirements of these specifications and conditions
  - ii. All awarded 4" FM Static Water and Larger Meters must be manufactured, tested, and approved to meet or exceed all requirements of AWWA, NEMA, FM, and ANSI latest revision. The meters must be suited for metering in fire suppression situations.
- c) Tests are performed on every shipment that comes to the board. Criteria for passing or failing a shipment of meters are set by the BWWB and are subject to change without notice, but the vendor shall be informed within 30 business days in case this happens. To begin, failures above 1% of total bid quantity shall constitute grounds to reject further shipment and bid invalidation.
- d) Reference Standards: Comply with the applicable provisions and recommendations of the following, except as otherwise shown or specified
  - i. NSF/ANSI Standard 61(Drinking Water System Components Health Effects)
  - ii. ANSI/NSF Standard 61 Annex G.
  - iii. IP68/NEMA 6P enclosure (Prevent Ingress of foreign matter during Occasional or prolonged submersion)
  - iv. American National Standards Institute (ANSI) B16.5, BI.20.1
  - v. Federal Law No. 111-380 (The Reduction of Lead in Drinking Water Act)

Meters listed above are supplied to the Birmingham Water Works by the individual manufacturer. If there is any discrepancy between the meter and the Design Criteria/Details of Construction in this specification, the bidder is to notify the Birmingham Water Works for clarification before a bid is submitted. In addition, if any discrepancy within the specification itself is found, the bidder is to notify the Birmingham Water Works for clarification before a bid is submitted.

### **Birmingham Water Works Receipt of Bid Package**

Time	Receipt of Response (BWW Time Stamp)
	Bid Name:
	Bid No:
	Issuing Officer:
	Company:
	Name of Delivery Agent:
	Signatures
	Delivery Agent Signature:
	Purchasing Department Signature:

The BWW Purchasing Department shall retain all hard copies of each applicable receipt of bid package(s). The BWW Purchasing Department must have an applicable, executed receipt of bid package per terms and conditions of the applicable solicitation for a potential supplier's bid to be considered responsive, pending evaluation of appropriate staff.

### THE WATER WORKS BOARD OF THE CITY OF BIRMINGHAM HISTORICALLY UNDERUTILIZED BUSINESS PROGRAM

#### **General Mission Statement**

The Water Works Board of the City of Birmingham ("BWWB") has adopted a voluntary Historically Underutilized Business ("HUB") Program designed to encourage the participation of HUB firms in construction projects and goods and services. To that end, the BWWB will not exclude any firm from participation in, deny any person benefits of, or otherwise discriminate in connection with the award and performance of BWWB construction contracts and goods and services bids based on racial, gender, social, or economic status.

It is the intent of the BWWB to foster competition among contractors, suppliers and vendors that will result in better quality and more economical services for the BWWB. Under this program, the BWWB has established a goal of 30% participation of HUB firms for services required for BWWB construction projects and goods and services. The BWWB's stated goal will not be the determining factor in construction and goods and services contract awards; rather bidders must demonstrate compliance with the Good Faith Efforts, more particularly outlined below, toward meeting said goal.

Failure on the part of a bidder to fully submit the information required herein may be considered by the BWWB in evaluating whether the bidder is responsive to bid requirements.

NOTE: If Bidder is a direct manufacturer/direct supplier of the goods or services sought in this Bid and has no opportunities for HUB participation, Bidder should fill out the Direct Manufacturer/Supplier Certification Form 6.

#### **Program Goals**

- To ensure nondiscrimination in the award and administration of BWWB construction contracts and goods and services.
- To help to remove barriers to the participation of HUB firms in receiving BWWB construction contracts and bids for goods and services.
- To create a level playing field on which HUB firms can compete fairly for BWWB construction contracts and bids for goods and services.

#### **Definitions**

- Historically Underutilized Business (HUB): A business formed for the purpose of making a profit and
  is at least 51% owned, operated and/or controlled by one or more American citizens or permanent
  resident aliens who are: Minority Business Enterprise (MBE); Women's Business Enterprise (WBE);
  Disadvantaged Business Enterprise (DBE) and Disable Veteran Business Enterprise (DVBE); (herein
  sometimes collectively referred to as HUB).
- 2. Minority Business Enterprise (MBE): A business that is formed for the purpose of making a profit and is at least 51% owned, operated and/or controlled by a person who is a member of the following groups: African/Black Americans; Hispanic Americans; Asian Pacific Americans; Subcontinent Asian Americans; Native Americans or American Women.

- 3. Disadvantaged Business Enterprise (DBE): A business that is formed for the purpose of making a profit and is at least 51% owned, operated and/or controlled by one or more socially and/or economically disadvantaged individuals. A socially disadvantaged individual is one who has been a subject of racial, ethnic or gender bias because of their membership in a group. An economically disadvantaged individual is one whose ability to compete in the free enterprise system is impaired due to diminished opportunities to obtain capital and credit.
- 4. Women's Business Enterprise (WBE): A business enterprise formed for the purpose of making a profit and is at least 51% owned, operated and/or controlled by American citizens or permanent resident aliens who are women.
- 5. Birmingham Construction Industry Authority (BCIA): The BCIA (Website <a href="www.bcial.org">www.bcial.org</a>) is a voluntary program developed to maximize HUB participation in the construction industry of the Birmingham area. Owners of construction projects in both the public and private sector participate in the BCIA's efforts to increase the participation of HUB in their construction projects. HUB firms are certified as MBE, DBE or WBE by the BCIA and receive business counseling and technical assistance provided by the BCIA staff.

#### Resources for Identifying HUB Participants

Each bidder/prime contractor must contact BCIA for assistance in identifying HUB participants. In addition to the BCIA, the following are resources for identifying HUB participants. Each bidder/prime contractor must show proof that where appropriate, these other resources were contacted for assistance in identifying Hub participants. The other resources are:

- 1. **Alabama State Black Chamber of Commerce**; Jerry Mitchell, Email: wehelp@alblackcc.org; Website: admin@naaachamber.org; Phone: (256) 551-0673
- 2. Alabama Department of Economic and Community Affairs, Office of Minority Business Enterprise, Mr. Scott Stewart, Manager; Phone (334) 353-3966; FAX (334) 353-4311 Email; Scott.stewart@adeca.alabama.gov
- 3. **Birmingham Airport Authority**; Phone (205) 595-0533; FAX (205) 599-0538 Website: info@flybirmingham.com
- 4. **Alabama Department of Transportation Disadvantaged Business Enterprises**; Walter Carr Phone: (334) 242-6242; FAX (334) 242-6256; Email: carrw@dot.state.al.us Website: www.dot.state.al.us
- 5. **Department of Innovation & Economic Opportunity;** Coreata Houser, Deputy Director Phone (205) 254-2799; FAX (205) 254-7741; Email: coreata.houser@birmingham.al.gov
- 6. **Alabama Department of Transportation**; Phone (334) 244-6261 Website: <a href="https://www.dot.state.al.us">www.dot.state.al.us</a>
- 7. Governor's Office of Minority and Women's Business Enterprises Phone 1-800-447-4191 and (334) 242-2220; FAX (334) 242-4203
- 8. **U.S. Department of Commerce Minority Business Development Agency** Phone: (404) 730-3300; FAX (404) 730-3313; Website; www.mbda.gov
- 9. **U.S. Small Business Administration, Alabama District Office**Phone: (205) 290-7101; FAX (205) 290-7404; Email: Carol.house@sba.gov
  Website: www.sba.gov/offices/district/al/birmingham

- 10. U.S. Department of Transportation Office of Small and Disadvantaged Business Utilization Phone: (202) 366-7228; FAX (202) 366-7228
- 11. National Association of Minority Contractors; Website: www.namc-atl.org
- 12. **BCIA** (Birmingham Construction Industry Authority) Contact: Kimberly Baylor Bivins, kbaylorbivins@bcial.org; or Ashley Orl, aorl@bcial.org
- 13. **Minority Supplier Development Council Southern Regions;** Contact Mark Samuels; Phone (504) 293-0404; FAX (504) 293-0401; Email: <a href="mailto:msamuel@srmsdc.org">msamuel@srmsdc.org</a>
- 14. **Birmingham Business Resource Center;** Website: <a href="www.mybbrc.biz">www.mybbrc.biz</a>; Contact: Brandon Pettagrue, <a href="brandon@bbrc.biz">brandon@bbrc.biz</a> or Bob Dickerson, <a href="bdickerson@bbrc.biz">bdickerson@bbrc.biz</a>, 205-250-6380 ext. 6610
- 15. Department of Veterans Affairs; Brandon Miller, brandon.miller@va.alabama.gov

#### Affirmative Steps for Good Faith Solicitation

All bidders must submit to BWWB in their sealed bids evidence of the following Affirmative Steps taken to utilize HUB's. These Affirmative Steps are required methods to ensure that HUB's have the opportunity to compete for contracts with BWWB.

It is up to BWWB to make a fair and reasonable judgement whether a bidder/prime company made adequate good faith efforts. The BWWB will consider the quality, quantity, and intensity of the different kinds of efforts that the bidder/prime company made. The efforts employed by the bidder/prime company should be those that one could reasonably expect a bidder/prime company to take if the bidder/prime company were actively and aggressively trying to obtain HUB participation sufficient to meet the HUB Program goals.

Below is a list of types of steps that BWWB will consider as part of the bidder's/prime company's good faith efforts to obtain HUB participation. It is not intended to be a mandatory checklist, nor is it intended to be exclusive or exhaustive. Other factors or types of efforts may be relevant in appropriate cases:

- 1. Ensure HUB's are made aware of contracting opportunities to the fullest extent practicable through outreach and recruitment activities. Soliciting through all reasonable and available means (e.g. attendance at pre-bid meetings, advertising, written notices and notifying BCIA, or other available sources) the interest of all certified HUB's who have the capability to perform the work of the contract. The bidder/prime company must solicit this interest within sufficient time to allow the HUB's to respond to the solicitation. The bidder/prime company must determine with certainty if the HUB's are interested by taking appropriate steps to follow up initial solicitations.
- 2. Make information on forthcoming opportunities available to HUB's and arrange time frames for the submission and finalization of contracts and established delivery schedules, where the requirements permit, in a way that encourages and facilitates participation by HUB businesses in the competitive process. This includes, at a minimum, seeking and receiving solicitations for contract bids or proposals 2 calendar days before sealed bids are due to BWWB.
- 3. Once the contract has been awarded, the prime company should continue to use its best efforts to further increase HUB participation toward reaching the BWWB stated goal.
- 4. Consider in the bidding process when competing for large contracts the possibility of dividing total requirements whenever economically feasible into smaller tasks or quantities to permit maximum participation by HUB's in the competitive process.

- 5. Encourage contracting with a consortium of HUB's when a contract is too large for one such firm to handle individually.
- 6. Negotiate in good faith with interested HUB sub-companies. Evidence of such good faith negotiations should include the names, addresses, and telephone numbers of HUB sub-companies that were considered; a description of the information provided regarding the request for proposal, request for qualifications, plans and specifications for the work selected for contracting; and evidence as to why additional agreements could not be reached for HUB sub-companies to perform the work.
- 7. Use the resources of the BCIA and the other resources identified above.
- 8. Provide documented proof of steps taken to comply with items 1 through 7 above.

#### Bidders/Prime companies must submit or provide the following HUB Forms as outlined below:

- 1) <u>Acknowledgement of HUB Program (HUB Form 1).</u> All bidders are to read, sign and <u>include in their sealed bid</u> the Acknowledgement of HUB Program, indicating that they fully understand and will voluntarily participate in and follow the guidelines and instructions included in the BWWB HUB Program.
- 2) <u>HUB Compliance Form (HUB Form 2).</u> This form must be completed <u>and included with all sealed bids</u> for goods and services/public works with the BWWB.
- 3) HUB BID SOLICITATION NOTICE (HUB FORM 3). All bidders shall complete this form and submit to the BWWB and the BCIA no later than seven (7) days after the scheduled date of the pre-bid conference. This form may be submitted in person at the pre-bid conference. Prospective bidders are to submit with their bid documents a copy of their HUB Form 3 with acknowledgement of receipt box completed by BCIA. (This form is used for Public Works bids only)
- 4) <u>HUB Sub-company Participation Form (HUB Form 4).</u> This form gives a HUB sub-company the opportunity to describe the work the HUB sub-company received from the bidder/prime company, how much the HUB sub-company was paid, and any other concerns the HUB sub-company might have. Bidder/prime company shall provide copies of **HUB Form 4** to all HUB sub-companies.
- 5) <u>HUB Sub-company Performance Form (HUB Form 5).</u> This form captures an intended HUB sub-company's description of work to be performed for the bidder and the price of the work proposed to be performed by the HUB sub-company. This form is to be provided by the bidder to each HUB sub-company and submitted along with the HUB Compliance Form included in the bid documents.
- 6) <u>HUB Direct Manufacturer/Supplier Certification (HUB Form 6)</u>. This form captures the direct manufacturers or suppliers of goods and services sought in the bid and have no distributors, wholesalers, retailers or other intermediaries, and thus do not have any opportunities for HUB participation in this Bid. (This form is used for Goods and Services bids only)

7) <u>HUB Sub-company Utilization Form (HUB Form 6).</u> This form captures the bidder's/prime company's intended use of an identified HUB sub-company and the estimated dollar amount of the work. This form is to be completed by the bidder/prime company and submitted with the HUB Compliance Form included in the bid documents.

(This form is used for Public Works bids only)

8) <u>Changes to Approved HUB Compliance Form (HUB Form 7).</u> If any changes, substitutions, or additions are proposed to the sub-company identified in the bid or any other time during the work, the bidder/prime company must submit this information to BWWB for prior written approval. No changes to the sub-company can occur without the BWWB's prior written consent.

(This form is used for Public Works bids only)

- 9) Monthly Report Form (HUB Form 8). With each monthly pay request submitted to BWWB, the prime company is required to submit updated monthly HUB Form 8 reports which identify HUB firms' participation. Monthly pay requests will not be processed without the updated list of HUB firms.

  (This form is used for Public Works bids only)
- 10) Project Close-out Report (HUB Form 9). Upon completion of the contract and prior to final payment or release of retainage, the prime company is required to submit a HUB Form 9 Project Close-Out Report that includes a final listing of all HUB participants on the project. The Project Close-Out Report, with documented HUB participation, is a prerequisite to process the final pay request.

(This form is used for Public Works bids only)

Sub-companies must be certified as HUBs in order to be counted toward the bidder's/prime company's HUB accomplishments.

The documentation of the good faith solicitation efforts must be detailed in order to allow for satisfactory review. Such documentation might include fax confirmation sheets, copies of solicitation letters/emails, printouts of the online solicitations, printouts of online search results, affidavits of publication in newspapers, etc. The bidder/prime company is strongly encouraged to follow up on each written, fax, or email solicitation with at least one logged phone call.

The bidder/prime company must employ the affirmative steps set out above to subcontract with HUB, even if the bidder/prime company has met its goal of HUB participation.

If a HUB sub-company fails to complete work under the subcontract for any reason, the prime company must notify BWWB in writing prior to any termination and must employ the good faith efforts described above if using a replacement sub-company. Any proposed changes from an approved HUB sub-company must be reported to BWWB on the Changes to Approved HUB Compliance Form (HUB Form 7) prior to initiation of the action.

#### **HUB FORM 1**

#### **HUB PROGRAM ACKNOWLEDGEMENT**

The Water Works Board of the City of Birmingham ("BWWB") has initiated a program to encourage the participation of HUB companies (as that term is defined in the HUB Program) on BWWB's Goods and services/Public works bids. This signed statement serves as an acknowledgement by the undersigned bidder/Prime company that it fully understands and will voluntarily participate in and follow the guidelines and instructions included in the BWWB HUB Program.

Submitted by:	Company:	
Signed by:		

#### **HUB COMPLIANCE FORM 2 INSTRUCTIONS**

#### Please submit the following with the HUB COMPLIANCE FORM:

- (1) List of all committed and uncommitted subcontractors by trade, including company name, address, telephone number, contact person, dollar amount of subcontract, and HUB status. Indicate in writing if no solicitations were made because the contractor intends to use only its own forces to accomplish the work.
- (2) Proof of HUB certification for each subcontractor listed as a HUB.
- (3) Documentation of solicitation effort for prospective HUB firms, such as fax confirmation sheets, copies of solicitation letters/emails, printout of the online solicitations, printouts of online search results, affidavits of publication in newspapers, etc. The prime contractor is strongly encouraged to follow up each written, fax, or email solicitation with at least one logged phone call.
- (4) Justification for not selecting a certified HUB subcontractor that submitted a low bid for any subcontract area.
- (5) HUB Form 5 HUB Subcontractor Performance Form.
- (6) HUB Form 6 HUB Subcontractor Utilization Form.

#### **HUB FORM 2**

#### **HUB COMPLIANCE FORM**

ALL INFORMATION OUTLINED ON THIS FORM IS REQUIRED FOR HUB COMPLIANCE. THE PROPOSED BIDDER/PRIME COMPANY SHOULD ENSURE THAT THIS INFORMATION IS COMPLETE PRIOR TO SUBMITTAL.

#### **CERTIFICATIONS:**

I certify that the information submitted on and with this form is true and accurate and that this firm has met and will continue to meet the conditions of this contract regarding HUB solicitation and utilization. I further certify criteria used in selecting sub-companies and suppliers were applied equally to all potential participants and that HUB Sub-company Participation Form (HUB Form 4) and HUB Sub-company Performance Form (HUB Form 5) were distributed to all HUB contractors.

Date: (Bidder/Prime Company signature)		
(Bidder/Prime Company signature)		
(Printed name and title)		
GENERAL INFORMATION:		
Owner contact:		
Owner phone number/email:		
Bidder/prime company:		
Bidder/prime company contact:		
Bidder/prime phone number/email:		·
Bidder/prime company bid amount: \$		
Proposed HUB Sub-company participation amount: \$	Percentage	e: % Goal: 30%

#### **HUB FORM 3**

## THE WATER WORKS BOARD OF THE CITY OF BIRMINGHAM HUB BID SOLICITATION NOTICE

(This form is used for Public Works Bids Only)

BWWB Pl	ROJECT:
LOCATIO	ON: Birmingham, Alabama
BID DATI	E:
601 Bir BC We kba	rmingham Construction Industry Authority (BCIA) 1 37 <sup>th</sup> Street South rmingham, Alabama 35222 CIA Fax: (205) 324-6210 ebsite: www.bcial.org aylorbivins@bcial.org or aorl@bcial.org
cc:	: Fax # or email for Buyer
list Off Ple	ting of construction specialties. In order to be considered, proposals must be received in the fice of the General Contractor on or before the below listed date and time.  Ease contact the following for additional information and assistance:  Eneral Contractor/Contact:
Ad	ldress:
Tel	lephone: Fax:
DEADLIN	NE FOR RECEIPT OF PROPOSALS FROM HUB firms:
Date:	Time:
General Co	ontractor Signature and Date
	FOR BCIA USE ONLY
	Date Received:By:

# HUB BID FORM 3 SOLICITATION NOTICE CATEGORIES (Only for Public Works Bids)

Check all categories that apply to the referenced project:

()	Demolition:
	Dewatering:
()	
()	Material Testing:
()	Site Clearing and Grubbing:
()	
()	Erosion Control/Silt Fence:
( )	Fencing:
()	
()	Landscaping/Plantings:
( )	Pavement Striping/Marking:
()	T.V. Inspection:
( )	Prep Manholes for Rehabilitation:
()	Pipe Point Repairs:
( )	Hauling/Trucking:
( )	
()	Concrete Sidewalks:
()	Pour & Finish Concrete Flat Work:
()	Concrete Formwork:
	Install Reinforcing Steel:
()	Point, Patch & Rub Concrete:
	Cementious Coatings:
( )	Masonry Work:
()	Wood Cabinets:
()	
()	Built-up Roofing:
()	· · · · · · · · · · · · · · · · · · ·
( )	•
()	
( )	Insulation:
()	
()	NOTE AND CONTRACT AND DESCRIPTION OF THE PROPERTY OF THE PROPE
	Ceramic/Quarry Tile:
	Resilient Flooring:
	Acoustical Ceilings:
()	Carpet:
	Wall Coverings:
	Painting:
( )	HVAC:
	Plumbing:
	Electrical:
( )	Underground Duct Banks:
	Material Supply:
( )	Other:

## HUB FORM 4 HUB Sub-Company Participation Form

Bidders/prime companies must provide this form to its HUB sub-companies. This form gives a HUB sub-company the opportunity to describe work received and/or report any concerns regarding the project (e.g., in areas such as termination by prime company, late payments, etc.). The HUB sub-company can complete and submit this form to BWWB at any time during the project period of performance.

Sub-Company Name:		Bid Name:			
Bid/Proposal No.			<u> </u>	Point o	f Contact:
Address:				1	
Telephone No.			Email Address:		
Prime Company N	lame:				
Contract Item Number		iption of Work Receiving Construction, Ser			Amount Received by Prime Company
Please use the space	e below	to report any concern	s regarding the above	project:	
Sub-C	ompan	y Signature		Print N	lame
	Titl	e		Dat	e

#### **HUB Form 5**

#### **HUB Sub-Company Performance Form**

This form is intended to capture the HUB Sub-company's description of work to be performed and the price of the work submitted to the HUB. Bidder/Prime company must require its Sub-company to complete this form and include all completed forms in the sealed bid package.

Bid Name:

Point of Contact:

Sub-Company Name:

Bid/Proposal No.

Address:			
Telephone No.		Email Address:	
Bidder Name:		<u></u>	
Contract Item Number	Description of Work Submar Company Involving Construct Suppl	ion, Services, Equipment or	Price of Work Submitted to Bidder/ Prime Company
not signify a conevent of a replace program.	enalty of perjury that the forgoir mmitment to utilize the Sub-cor cement of a Sub-company; it will	npany above. Bidder/Prime of adhere to the replacement re	company is aware that in the quirements set forth in HU
Bidder/	Prime Company Signature	Print	t Name
	Title	D	Pate
Su	b-company Signature	Print	t Name
	Title	D	Pate

#### Form 6

#### HUB Sub-Company Utilization Form (Only for Public Works Bids)

This form is intended to capture the bidder's/Prime company actual and/or anticipated use of identified certified HUB Sub-company, the date the HUB Sub-company submitted the bid or proposal, and the estimated dollar amount of each contract. This form must be completed and included in the sealed bid package. Bidder/Prime company should also maintain a copy of this form on file.

Company Name:		Bid Name:		l Transfer	
Company Name.		Did Ivallie.			
Bid/Proposal No.		Point of Contact	t:		
Address:	-				
Telephone No.		Email Address:			
I have identified potential HUB certified Sub-companies		O Yes		O No	
If yes, please comp	lete the table below. If no,	please explain:			2
Sub-Company Name/ Company Name	Company Address/	Phone/Email	Solicitation Date	Est. Dollar Amt.	Currently HUB Certified Y/N

I certify under penalty of perjury that the forgoing statements are true and correct. Signing this form does not signify a commitment to utilize the Sub-company above. I am aware of that in the event of a replacement of a Sub-company; I will adhere to the replacement requirements set forth in HUB Program.

Print Name
Date

#### **HUB Form 7**

## Changes to Approved HUB Compliance Form (Only for Public Works Bids)

#### **CERTIFICATIONS:**

I certify that the information submitted on and with this form is true and accurate and that this firm has met and will continue to meet the conditions of this contract regarding HUB solicitation and utilization. I further certify that criteria used in selecting Sub-companies were applied equally to all potential participants.

	Date	
(Prime Company signature)		
(Printed name and title)		

#### **GENERAL INFORMATION:**

- (1) If an approved Sub-company is terminated or replaced, please identify this company and briefly state reason.
- (2) For new or additional Sub-companies, list name, trade, address, telephone number, contact person, dollar amount of contract, and HUB status.
- (3) Attach proof of HUB certification for each Sub-company listed as a HUB.
- (4) Attach documentation of solicitation effort for prospective HUB firms, such as fax confirmation sheets, copies of solicitation letters/emails, printouts of the online solicitations, printouts of online search results, affidavits of publication in newspapers, etc. The prime company is strongly encouraged to follow up each solicitation with at least one logged phone call.
- (5) Provide justification for not selecting a certified HUB Sub-company that submitted a low bid for any contract area.

#### **HUB Form 8**

(Only for Public Works Bids)

#### THE WATER WORKS BOARD OF THE CITY OF BIRMINGHAM

#### MONTHLY REPORT FORM

#### (TO BE SUBMITTED WITH EACH MONTHLY PAYMENT REQUEST)

#### **HUB DOCUMENTATION**

GENERAL CONTRACTOR:	
CONTACT:	
NAME OF PROJECT:	
TOTAL PROJECT AMOUNT \$	
SUBMITTED WITH PAYMENT REQUEST NUMBER:	
DATE SUBMITTED:	

List Each HUB Firm Utilized	Original Contract Amount	BILLINGS		
	(\$)	Previous (\$)	This Period (\$)	Total (\$)
			(4)	
			4	
9				
Tota	nls			

#### **Instructions:**

- 1. Complete this form regarding the HUB firm's utilized on the specified project.
- 2. Submit completed form with each monthly payment estimate to BWWB.
- 3. Submission of this form is a prerequisite for processing the monthly payment estimate.
- 4. If no HUB firm is utilized, write/type "N/A" in the first blank in the left-hand column.

#### **HUB FORM 9**

(Only for Public Works Bids)

### THE WATER WORKS BOARD OF THE CITY OF BIRMINGHAM

#### PROJECT CLOSEOUT REPORT

GENERAL CONTRACTOR:	
CONTACT:	
NAME OF PROJECT:	
TOTAL PROJECT AMOUNT \$(BID AMOUNT)	
FINAL PROJECT AMOUNT \$	
(FINAL AMOUNT INCLUDING CHANGE ORDERS)	*
DATE SUBMITTED:	

List Each HUB Firm Utilized	Original Contract Amount (\$)	Final Contract Amount (\$)	Changes in Original and Final Contract Amounts (\$)
			10.00
Totals	1		

#### Instructions:

- Complete this form regarding the HUB firm's utilized upon completion of the specified project.
   Submit completed form to BWWB with request for release of retainage.
   If no HUB firm is utilized, write/type "N/A" in the first blank in the left-hand column.

Select Appropria  JOB CATEGORIES	deplay the Environment	
JOB CATEGORIES	1. Select Appropri	a
JOB CATEGORIES		
	JOB CATEGORIE	

#### BWWB CONTRACTORS EEO REPORT

1. Select Appropriate Response	2. COMPANY NAME, CITY, STATE:	3. BWWB PROJECT/WORK LOCATION (CITY, COUNTY AND STATE)

TABLE A													TAE	SLE B								
JOB CATEGORIES		TAL LOYED	RACIAI	OTAL L/ETHNIC ORITY	AFR	CK OR ICAN RICAN		NIC OR	INDI	RICAN AN OR A NATIVE	AS	IAN	HAWA! OTHER	TIVE IIAN OR PACIFIC NDER		R MORE CES	WI	IITE	APPRE	NTICES		HE JOB INEES
	М	F	M	F	М	F	М	F	М	F	M	F	М	F	М	F	М	F	М	F	M	F
OFFICIALS																						
SUPERVISORS																						
FOREMEN/WOMEN																						
CLERICAL																						
EQUIPMENT OPERATORS																						
MECHANICS																						
TRUCK DRIVERS																						
IRONWORKERS																						
CARPENTERS																						
CEMENT MASONS																						
ELECTRICIANS																						
PIPEFITTERS/PLUMBERS																						
PAINTERS																						
LABORERS - SEMI SKILLED																						
LABORERS - UNSKILLED																						
TOTAL																						
			T				<u> </u>															
APPRENTICES			1																			
OTJ TRAINEES																						
4. PREPARED BY: (Signature and Title of Contractor Repr	resentative)						5. DATE			6. REVIE\ (Signature			presentativ	e)						7. DATE		



### **Supplier Diversity/Community Involvement Program Questionnaire**

Supplier Diversity Program (SDP) promote supplier diversity in public contracting in a manner that develops, strengthens and increases business opportunities for Disadvantaged Business Enterprise (DBE), Minority Business Enterprise (MBE), Women Business Enterprise (WBE), and Veteran Business Enterprise (VBE). Please fill-out the following information on your company's SDP.

1.	Supplier Name:
2.	Contact Person and Title:
3.	Contact Person's Email:
4.	Contact Person's Office#:
5.	Does your company have a Supplier Diversity Program:  a. If yes, please provide your website or any information pertaining to your SDP.

6. Community involvement is the **power to bring positive**, **measurable change to both the communities in which you operate and to your business**. Please provide any involvement with the community that your company participates in: Ex: charities, scholarships, etc. (United Way, Salvation Army, Children's Hosp., H2O Foundation, etc.)

3. Please provide a list of Minority vendors your company receives services or products from. Identify if the vendor is a MBE, WBE or DBE. Example: Jones Janitorial Services – MBE; Summer Office Supplies - WBE

Company Name	Company Contact Person	Company Contact Email	HUB Designation



### **Supplier Self Verification of Submitted Documents**

Supplier Name:	
<b>Solicitation Name:</b>	
Bid Closing Date: _	

	Document Name	Submitted with Proposal
1	Mandatory Questions Form (If Applicable)	•
2	Cost Work Sheet	
3	HUB Form 1 (Acknowledgement)	
4	HUB Form 2 (Compliance Form)	
5	HUB Form 3 (BCIA Solicitation Notice) Only for Public Works	
6	HUB Form 4 (Subcontractor Participation Form)	
7	HUB FORM 5 (Subcontractor Performance Form)	
8	HUB FORM 6(Subcontractor Utilization Form) Only for Public Works	
9	HUB FORM 6 (Direct Manufacturer/Supplier Certification Form) Only	
	for Goods and/or Services	
10	HUB FORM 7 (General Contactor (Prime) and/or Subcontractor	
	Changes to HUB % Status) Only for Public Works	
11	HUB FORM 8 (General Contractor (Prime) Monthly Report) Only for	
	Public Works	
12	HUB FORM 9 (General Contractor (Prime) Close out Report) Only for	
	Public Works	
13	EEO Report	
14	Supplier Diversity Program Questionnaire	
15	Certification of Non-Discrimination	
16	Debarment Form	
17	Bid Bond (If Applicable)	
18	Performance Bond (If Applicable)	
19	Payment Bond (If Applicable)	
20	Signed and Acknowledged Addendums (If Applicable)	
21	Certificate of Insurance (If Applicable and Requested by BWWB)	

### CERTIFICATION REGARDING DEBARMENT

(		)
	Bid Name and Nu	mber
The below-signed Bidder a stockholders, and its principals:	t this moment certifie	es that it, its officers, directors, owners,
` '	-	d, proposed for debarment, declared usiness with any Federal department or
proposed for debarment, de with any Federal departmen against them for the commi obtaining, attempting to ob- transaction or contract; viol	eclared ineligible, or vent or agency; or convision of fraud or a cretain, or performing a lation of Federal or Stry, bribery, falsification	g this bid been: debarred, suspended, voluntarily excluded from doing business letted of or had a civil judgment rendered iminal offense in connection with public (Federal, State, or local) tate antitrust statutes or commission of on or destruction of records, making false
	al, State, or local) with	erwise criminally or civilly charged by a th the commission of any of the offenses
Executed on this the	day of	, 20
		BIDDER
		By: Its:
THE STATE OF ALABAMA	)	
COUNTY )		
		ounty, in said State, here by certifies that of on, is signed to the foregoing instrument,
and who is known to me, acknowle	edged that on this day	on, is signed to the foregoing instrument, that being informed of the contents of executed the same voluntarily for and as
Given under my hand, this	day of	
		Notary Public
		My commission ends:



#### NON-DISCRIMINATION POLICY

The Birmingham Water Works Board (BWWB) values the diversity of the people with whom we work and the contributions they make. Accordingly, the BWWB is committed to providing an inclusive and welcoming environment for all members of our staff, clients, volunteers, independent contractors, and vendors.

The BWWB is an equal opportunity employer and all decisions regarding recruiting, hiring, promotion, assignment, training, termination, selection of volunteers and vendors, and other terms and conditions of employment will be made without consideration of age, sex, race, color, religion, gender, gender identity or expression, national origin, sexual orientation, disability, marital status, veteran status, pregnancy status, political opinion, work-related injury, or any other factor, characteristic or trait protected by applicable national, state or local laws.

Members of our community are encouraged to raise concerns or make complaints regarding discrimination or harassment under this policy without the fear of retaliation. It is a violation of BWWB policy to retaliate against an individual for raising a good-faith concern regarding workplace discrimination or harassment; filing a complaint for discrimination or harassment; or, for cooperating in an investigation of alleged discrimination or harassment. Any person found to be in violation of this policy is subject to disciplinary action.

Discrimination, harassment, disrespectful or inappropriate behavior, unfair treatment or retaliation of any kind will not be tolerated. This policy applies not only to BWWB employees but also to the volunteers, independent contractors, and business partners with whom we work. BWWB employees, volunteers, independent contractors, and other constituents, whenever and wherever those individuals are conducting BWWB business or participating in BWWB events or activities, shall maintain an environment free of discrimination, harassment, and retaliation.

Any employee who has a question or concern regarding any type of discrimination or harassment is encouraged to bring it to the attention of his/her manager or the Human Resources Department.

Vendor agrees and warrants that contractor does not discriminate or permit discrimination against any employee or applicant for employment on the grounds of race, color. religion, gender, sexual orientation. gender identity or national origin.



### **NON-DISCRIMINATION POLICY**

Executed	
Contractor's Name:	
Authorized Signature:	
Printed Name and Title of Person Signing:	
Date Signed:	