

**INVITATION FOR BID**  
**January 23, 2023**

<b>INVITATION FOR BID NUMBER</b>	<b>IFB 23-008</b>
<b>NAME OF BID</b>	<b>Purchase of Submersible Pump</b>
<b>BIDS WILL BE RECEIVED AT</b>	<b>MAWSS Bid Box  Donaghey Business Entrance  4725A Moffett Road                      or                      PO Box 180249  Mobile, AL 36618</b>
<b>BID OPENING DATE</b>	<b>February 8, 2023</b>
<b>BID CLOSING TIME</b>	<b>10:30 am Central Time</b>
<b>AWARD WILL BE MADE BY</b>	<b>Total Cost, Lead Time &amp; Pump Specs</b>
<b>MATERIAL DELIVERED TO</b>	EM Stickney Water Treatment Plant 4800 Moffett Rd Mobile, AL 36618
<b>ADDITIONAL INFORMATION CONTACT</b>	Markus Moore (251) 721-0828 Email: <a href="mailto:mamoore@mawss.com">mamoore@mawss.com</a> John Jordan (Stickney WTP) 251-378-3492 Email: <a href="mailto:jjordan@mawss.com">jjordan@mawss.com</a>
<b>APPLICABLE SDP POLICY</b>	<b>None</b>

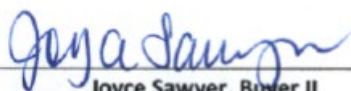
Sealed bids must be in the Purchasing Department no later than the time specified in order to be considered. Submissions received after the deadline will not be considered. Envelopes must bear the name of the supplier, company address and the words **“IFB 23-008 Purchase of Submersible Pump”** or **“IFB 23-008 NO QUOTE.”** Facsimile or email bids will not be accepted.

All bids must be submitted on the attached forms or your bid will be disqualified. Bidder shall furnish all the information required by the solicitation. The bidder’s name must be typed or printed on the bid sheet, and signed by the bidder or appropriate authorized executive officer of the bidder’s company. Bidders must initial any changes or erasures. Bidders should retain a copy of bids for their records.

Bidders shall acknowledge receipt of all addenda to this solicitation by signing and returning each addendum or by identifying the addendum number and the date on the bid form. Failure to acknowledge receipt of any addendum by a bidder will result in rejection of the bid if MAWSS determines that the addendum contains information that materially changes the requirements.

All bids shall be quoted FOB Destination, freight prepaid with no additional charges. Unless otherwise specified in the bid, all prices will be on a firm-fixed price basis and are not subject to adjustments based on costs incurred. MAWSS reserves the right to reject any or all bids submitted, to waive any informality in any bid or in the bid process, or to terminate the bid process at any time, if deemed by MAWSS to be in MAWSS’s best interest.

**A Purchase Order** and this “Invitation for Bid” with “Specifications,” “Conditions,” “Bid Form,” signed by the successful bidder’s authorized representative, and all attached drawings and other documents furnished by MAWSS to the bidders with the Invitation for Bid in order to illustrate the contract requirements, will constitute a contract for the goods and/or services to be purchased.

  
Joyce Sawyer, Buyer II  
Board of Water and Sewer Commissioners

## **IFB 23-008 PURCHASE OF SUBMERSIBLE PUMP CONDITIONS**

The Board of Water and Sewer Commissioners of the City of Mobile will accept bids for the Purchase of a Submersible Pump in our Purchasing Department Bid Box located at 4725 Moffett Road Suite A, Mobile, AL 36618 no later than 10:30 a.m. local time on **February 8, 2023**. Award will be by **Total Cost, Lead Time & Pump Specs by Owner's Discretion. Pump curves must be included**. The bidder offers and agrees, if this bid is accepted, to furnish the items as defined in the specifications for the unit price set opposite each item. Pricing shall be FOB Mobile, Alabama. All items shall be delivered to our **EM Stickney WTP located at 4800 Moffett Rd Ext, Mobile, AL 36618** or to the job site as needed. The bidder shall state the expected length of delivery time on the Bid Form.

Bidder understands and agrees that manufacturer and part numbers are provided for descriptive purposes only. Items of equal or better quality will be considered but must be approved by MAWSS in writing. Upon delivery, if the quality, durability or performance of any product represented as equal or better is determined by MAWSS to be unsatisfactory, MAWSS will require a suitable substitute or will require that the originally specified item be delivered, at the unit price originally offered by bidder. No substitution for items to be provided pursuant to this contract shall be permitted during the contract period without the express written consent of MAWSS. All items provided shall be for commercial use and for the purposes reflected in the contract documents.

No bid on closed out or discontinued item(s) will be accepted. Item(s) that have a determinable shelf life must be disclosed at the time of bid submittal. Bidder understands that his/her bid shall be good and may not be withdrawn for a period of sixty (60) calendar days after the scheduled closing time for receiving bids.

Bidder understands and agrees that quantities will be purchased by MAWSS on an "as needed" basis to replenish inventory. MAWSS shall not be committed to the purchase of a pre-established minimum quantity for any one item.

A bidder may not modify its bid after bid opening. Errors in the extension of unit prices stated in a bid or in multiplication, division, addition or subtraction in a bid may be corrected by the MAWSS Purchasing Buyer prior to award. In such cases, unit prices shall not be changed.

It is the responsibility of the bidder to determine prior to the bid opening whether any amendment, additions, deletions or changes of any type have been made to this Invitation for Bid, Conditions, Specifications, Bid Form or any of the or bid documents. Bid documents and any amendments made to this bid will be posted on our website at [www.mawss.com](http://www.mawss.com).

**END OF CONDITIONS**

## IFB 23-008 PURCHASE OF SUBMERSIBLE PUMP SCOPE OF WORK

### PART 1 – GENERAL

#### 1.1 DESCRIPTION

- A. The Supplier shall furnish one (1) pump for the Stickney Plant Equalization Basin meeting the operating conditions and requirements of this specification.
- B. The Supplier shall mount customer supplied Wilo sliding bracket
- C. The Supplier shall provide a Seal Leakage Relay to be mounted in existing control panel
- D. One day of startup assistance

#### 1.2 QUALITY ASSURANCE

- A. Reference Standards: Comply with applicable provisions and recommendations of the following, except as otherwise shown or specified:
  - 1. Standards of the Hydraulic Institute
  - 2. National Electric Code
  - 3. Standards of National Electrical Manufacturers Association
  - 4. Institute of Electrical and Electronic Engineers
  - 5. American National Standards Institute
  - 6. Standards of American Water Works Association

#### 1.3 SUBMITTALS

- A. Shop Drawings: Submit the following for approval:
  - 1. Performance data and curves showing overall pump efficiencies, flow rate, head, brake horsepower, motor horsepower, speed and shut-off head.
  - 2. Guarantee and warranty in accordance with MAWSS standards.

#### 1.4 WARRANTY

- A. Warranty: The pumping unit shall be warranted by the manufacturer for a five-year period. Wear items such as seals, bearings, impellers, rotors and stator may be prorated during the five-year period. The warranty shall be 100% (parts and labor) for the first year, 50% from the beginning of the second year to the end of the fifth year (parts and labor).

### PART 2 – PRODUCTS

#### 2.1 SERVICE CONDITIONS

- A. Pump shall be submersible end suction centrifugal guide rail type. The pump shall be specially designed, constructed, and installed for pumping raw water with the following characteristics:
  - temperature = 40°C, pH value = 5.0 to 14.0.
- B. Liquid pump down elevation for these lift stations shall be 1'-6" above the wet well floor. The pump motors shall be guaranteed to operate in this partially or non-submerged condition, without risk of damage, indefinitely.

## 2.2 DETAILS OF CONSTRUCTION

### A. General

1. The pump, with motor cable, appurtenances and lifting cable, shall be designed for continuous operation under submergence, without leakage, in water to a depth of sixty-five (65) feet.

### B. Pump Design

1. The hydraulic section shall be designed to reduce risk of clogging. Open or closed, single or multi-vane designs are approved. Recessed impellers are not approved for these installations. The pump shall be designed to pass a minimum 3" diameter spherical solid.

### C. Materials of Construction

1. See Part 4, Pump Specification Sheet

### D. Motors

1. Motor shall be solid stainless-steel shaft, ball bearing type. Motor casing shall be oil-filled, or air-filled and watertight with moisture resistant Class F 155 C insulation.
2. Motor shall be NEMA Design B, normal starting torque, normal slip, squirrel cage induction motor, continuous duty.
3. Cable entry shall be isolated with an internal terminal board.
4. Motor shall be designed for continuous operation in a non-submerged or partially submerged condition without damage.
5. Motor shall be non-overloading for the entire pump operating curve.
6. Pump motor cable shall be designed for submersible duty and shall be indicated by code or legend permanently applied to cable.
7. Motor shall be provided with a service factor of 1.15.
8. Motor thrust bearings shall be designed for continuous thrust loads under all conditions of pump operation from zero head to shut-off. The anti-friction bearings shall be rated for a B-10 life of 40,000 hours.

### E. Motor Cooling Systems

1. Air-filled or oil-filled motors will be accepted. The motors may be fitted with an internal closed-loop fluid cooling system. The cooling system fluid shall not come in contact with the pumped media. Pumps with motor cooling jackets, whether using recirculated pumped product or any outside cooling source will not be considered.

F. Product and Manufacturer: The owner has developed training standards and spare parts inventory to maintain and support a limited number of pumps installed in the system. The Supplier shall provide submersible, non-clog, end suction pumps as manufactured by one of the following manufacturers only:

1. WILO
2. Flygt Corporation
3. KSB

\*\*Consideration or submittals from other pump manufacturers will not be reviewed unless written approval is received from the Owner prior to bidding the entire project.

**END OF SCOPE OF WORK**

**IFB 23-008 PURCHASE OF SUBMERSIBLE PUMP  
PUMP SPECIFICATIONS**

Tag No.: P-101 & P-102 Spare

Service: Raw Water

Location: Stickney Plant Equalization Basin

Type of Pump: End Suction Centrifugal, Non-Clog, Submersible Pump  
WILO FA 20.54 E or Approved Equal

Solids Handling Capacity: 3" minimum diameter spherical solid

Motor: WILO FK 27.1- 6/24 or approved equal

Impeller # & Dia.: EN-GJL-500-7, 11 <sup>7</sup>/<sub>8</sub> in.

Materials of Construction:

1. Casing - Grey cast iron ASTM A-48 Class 3.5 C or 40
2. All Exposed Bolts & Nuts – 316 stainless steel
3. Pump Exterior Coating - Factory applied primer and finish coat to suit pumped media
4. Pump Interior Coating - All interior wetted parts including volute assembly, impeller, and discharge connection shall receive a factory applied ceramic-epoxy coating a minimum of 40 mils dry film thickness.
5. Shaft & Sleeve – Stainless steel AISI 431 OR 420
6. Impeller – Grey cast iron ASTM A-48 Class 35 B, the Impeller shall not be a Vortex style
7. O-Rings – Nitrile rubber
8. Upper Bearing – Single deep groove ball bearing
9. Lower Bearing – Two row angular contact bearing
10. Guide Rails – Type 316 stainless steel
11. Cables- Control and Electrical cables shall be 50' long with all applicable control relays
12. All mating surfaces where watertight sealing is required shall be machined and fitted with nitrile rubber o-rings. Fitting shall be such that sealing is accomplished by metal-to-metal contact between machine surfaces. This will result in controlled compression of nitrile rubber o-ring without requirement of a specific torque limit.

**IFB 23-008 PURCHASE OF SUBMERSIBLE PUMP  
PUMP SPECIFICATIONS (Cont'd)**

Drive Motor:

1. Rated Power 31 hp, 460V, 60Hz, 3 Phase
2. Shaft Power: 20.5 hp
3. Power Input: 24 hp
4. Design - Squirrel cage rotor, induction
5. NEMA Design - Type B
6. Windings - Copper, Class F or H Insulated rated for 180<sup>0</sup> C (356<sup>0</sup> F)
7. Combined Service Factor - 1.15 Minimum
8. Design Temperature (Pumped Media) – 40<sup>0</sup> C (104<sup>0</sup> F)
9. Non-overloading at any point on the pump curve
10. Explosion Proof
11. Air filled or motor cooling jacket, may have closed integral liquid cooling system
12. Motor terminal board
13. Stator shall be heat-shrunk fitted
14. Motor winding over temperature thermostats
15. Seal failure moisture probe

<u>Performance:</u>	<u>GPM</u>	<u>TDH</u>	<u>RPM</u>	<u>EFF</u>
Design	1500	40'	TBD	75.1%

Warranty: The pump manufacture shall warranty the unit being supplied to the Owner against defects in workmanship and material for a period of five (5) years or 10,000 hours.

**END OF SPECIFICATIONS**

**IFB 23-008 PURCHASE OF SUBMERSIBLE PUMP  
INSURANCE REQUIREMENTS**

- A. **General:** The Supplier shall provide insurance in accordance with the required specifications. A current certificate of insurance must be provided with your bid. MAWSS does not need to be named as an additional insured on this certificate.
- B. **Supplier Coverage:** The Supplier shall not commence work under this Contract until he has obtained all insurance required under the following paragraphs and until such insurance has been approved by the Owner, nor shall the Supplier allow any subcontractor to commence work on his subcontract until all similar insurance required of the subcontractor has been obtained and approved. If the subcontractor does not take out insurance in his own name, the Supplier shall provide such insurance protection for the subcontractor and such subcontractor's employees.
- C. **Casualty Insurance:** The following insurance coverages (with limits not less than specified herein) shall be maintained by the Supplier for the duration of the Contract, affording coverage for any claim arising out of Supplier's operations herein, whether by the Supplier or by any subcontractor or by any Employee or Agent of either:
1. Claims of employees under Worker's Compensation and other similar employee benefit acts, including claims because of bodily injury, occupational sickness or disease, or death.
  2. Claims arising out of bodily injury, sickness, disease, or death of any person other than employee.
  3. Claims for damages arising out of libel, slander, false arrest, detention or imprisonment, malicious prosecution, defamation or violation of right of privacy, wrongful entry or eviction or other right of private occupancy, including claims as a result of an offense related to the employment of a claimant by Contractor (so-called "Personal Injury").
  4. Claims arising out of damage to or destruction of tangible property, including loss of use.
  5. The Supplier shall furnish certification of insurance and policies verifying that the above coverages are in effect before commencing any work, and that each policy is endorsed to give the Owner 30 days notice in writing in the event of cancellation or material change therein.

Policies of Insurance shall state that the Owner and the Owner's employees be named as additional insureds on the Supplier's Automobile Liability and Commercial General Liability policies. In respect to Worker's Compensation, a Waiver of Subrogation shall be issued in favor of the Owner. Where applicable, the U.S. Longshore and Harborworkers Compensation Act Endorsement shall be attached to the policy. Where applicable, the Maritime Coverage Endorsement (to include coverage under Jones Act) shall be attached to the policy. Both the U. S. Longshore and Harborworkers and the Maritime Coverage shall have limits equal to or greater than the employer's liability coverage.

6. Rated by AM Best – A- or better. For nonadmitted companies, a rating of A or better by AM Best.
  - a. At the discretion of the Board, worker's compensation insurance may be placed through a qualified worker's compensation self-insurance fund.



b. **Limits of Liability:**

<b>Worker's Compensation</b>	Statutory
<b>Employers' Liability</b>	\$500,000 Each Accident \$500,000 by Disease, Policy Limit \$500,000 by Disease, Each Employee
<b>Commercial Automobile</b>	\$1,000,000 Each Accident Bodily Injury and Property Damage Combined Business Auto Includes All Owned, Leased, Hired and Non-Owned Automobiles
<b>Commercial General Liability</b>	\$1,000,000 per Occurrence \$1,000,000 Personal & Advertising Injury \$2,000,000 General Aggregate per Project \$2,000,000 Products & Completed Operations Aggregate \$100,000 Fire Damage Liability

**Umbrella Liability:** In addition to the basic limits previously set out for Commercial General Liability, Products and Completed Operations, Automobile Liability and Worker's Compensation, coverage shall be issued with a "pay on behalf of" wording, including Personal Injury and other extensions, and provide coverage at least as broad as that afforded by the primary insurance policies.

**Extensions (only if applicable):**

Blanket Contractual Liability	Blanket Collapse and Underground Coverage
Personal Injury	Broad Form Property (including Completed Operations)
Host Liquor Liability	Employees as Additional Insureds
Non-owned Watercraft Liability	Incidental Medical Malpractice
Worldwide Products	Extended Bodily Injury (Assault and Battery)
Fire Legal Liability	
Newly Acquired Organizations	

When and if the use of explosives for blasting purposes appears necessary or desirable, such methods shall not be undertaken without written authorization of the Owner, and then only provided that acceptable extensions of liability coverage have been obtained specifically to include the explosion ("X") hazard and the collapse ("C") hazard. The policy of general liability shall include the special underground property damage coverage (providing the so-called "U" hazard) on a blanket basis.

- D. **Owner's Protective Liability:** The Supplier shall furnish from a carrier acceptable to the Owner, a policy of liability insurance, commonly called "Owner's Protective Liability" in the name of the Board of Water and Sewer Commissioners of the City of Mobile, d/b/a MAWSS, providing "Independent Contractor's Coverage" for the operations embraced by this Contract with limits of \$1,000,000 bodily injury and \$1,000,000 property damage. Policy shall be endorsed that the premium is to be paid by the named Supplier.

**END OF INSURANCE**

**IFB 23-008 PURCHASE OF SUBMERSIBLE PUMP  
BID SHEET**

**Total Cost**                    \$ \_\_\_\_\_

**Manufacturer of Unit:** \_\_\_\_\_

**Model & Year of Pump:** \_\_\_\_\_

**Delivery (ARO):**  
**(After receipt of order)** \_\_\_\_\_

**Payment Terms**                    \_\_\_\_\_

**Company Name** \_\_\_\_\_

**Address** \_\_\_\_\_

**City, State, Zip** \_\_\_\_\_

**Submitted By** \_\_\_\_\_ **Title** \_\_\_\_\_  
Please Print

**Phone** \_\_\_\_\_ **Email Address** \_\_\_\_\_  
Please Print

The signer declares under penalty of perjury that she/he is authorized to sign this document and bind the company or organization to the all of the terms and conditions of this agreement.

**Signature** \_\_\_\_\_ **Date** \_\_\_\_\_