



Buyer II  
 Lisa Russell  
 (251) 694-3162 Office  
 (251) 694-3461 Fax  
[lrussell@mawss.com](mailto:lrussell@mawss.com)

Mobile Area Water and  
 Sewer System  
 207 N. Catherine St.  
 Mobile, AL 36604-1504  
  
 PO Box 2368  
 Mobile, AL 36652-2368

**INVITATION FOR BID**

January 24, 2012

<b>TO</b>	Perspective Bidders
<b>INVITATION FOR BID NUMBER</b>	IFB 12-002
<b>SEPARATE SEALED BIDS FOR</b>	Purchase of Two (2) Submersible 6" Non-clog Pumps
<b>BIDS WILL BE RECEIVED AT</b>	MAWSS Purchasing Department 207 N Catherine Street, Room 209 Mobile, AL 36604 or Mail to: MAWSS Purchasing Department PO Box 2368 Mobile, AL 36652
<b>BID OPENING DATE</b>	February 3, 2012
<b>BID OPENING TIME</b>	10:30 a.m. Central Time
<b>AWARD WILL BE MADE BY</b>	By Total Cost
<b>MATERIAL DELIVERED TO</b>	ICO Attn: Terry Herman 4725 Moffett Road Suite H Mobile, AL 36618
<b>FOR ADDITIONAL INFORMATION, CONTACT</b>	Terry Herman (251) 378-3509 or (251) 689-6962 or <a href="mailto:therman@mawss.com">therman@mawss.com</a>

Sealed bids are to 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 shall bear the name of the supplier, company address and the words "IFB 12-002 Submersible 6" Non-clog Pumps" or "IFB 12-002 NO QUOTE."** Facsimile or emails 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 owner or appropriate executive officer of the firm. Bidders must initial any changes or erasures. Bidders should retain a copy of bids for their records.

Bidders shall acknowledge receipt of any addendum to this solicitation by signing and returning the 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 the addendum contains information that substantially changes the requirements.

All bids shall be quoted F.O.B. 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 the bid process, or to terminate the bid process at any time, if deemed by MAWSS to be in the best interest of the Board of Water and Sewer Commissioners.

A Purchase Order and this "Invitation to Bid" with "Specifications and Conditions" will constitute a contract for the service to be performed.

**BOARD OF WATER AND SEWER COMMISSIONERS**

  
 Lisa Russell, Buyer II



## Princeton Woods #1 LS085

Two Submersible (6) six inch non-clog pumps, rated to deliver 400 GPM @ 90' TDH. The control and electrical cables shall be 50' feet long and all applicable control relays and complete guiderail system shall be included in quote. An access hatch cover shall be included in the quote. It will be the vendor's responsibility to make a site visit to assure their equipment that requires depth and dimension measurements meet the need of the scope of work.

### Capability:

3" minimum diameter spherical solid.

### Materials of Construction:

1. Casing - cast iron A48 Class 35C 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 internal wetted parts including volute assembly, impeller and discharge connection shall receive a 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 35B, the impeller shall not be a Vortex style.
7. O-Rings - Nitrile rubber
8. Upper Bearing - Single row deep groove ball bearing
9. Lower Bearing - Two row angular contact ball bearing
10. 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 12-002 Purchase of Two (2) Submersible 6" Non-clog Pumps  
Specifications**

**Drive Motor:**

1. \* \_\_\_\_\_ Horsepower, 240v, 60HZ 3 Phase (\*fill in your pump's hp)
2. Design – Squirrel-Cage, Induction
3. NEMA Design – Type B
4. Windings – Copper, Class F or H Insulated rated for 180 degrees C
5. Service Factor – 1.15 continuous
6. Design Temperature – 40°C ambient
7. Non-overloading at any point on pump curve
8. Explosion Proof
9. Air filled or oil motor, may have closed integral, liquid cooling system.
10. Motor Terminal Board
11. Stator shall be heat-shrink fitted
12. Motor Winding Over temperature Thermostats
13. Seal Failure Moisture Probe
14. Motor cable shall be designed for submersible duty and shall be indicated by code or legend permanently applied to cable.

**Warranty:**

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. The units shall be warranted by the manufacture for a five year period. Wear items such as seals, bearings impellers, rotors and stator may be prorated during the five year period.

**Submittals:**

Manufacturer's literature, specifications, and engineering data including dimensions, material, size and weight. Performance data and curves showing pump efficiencies, flow rate, head, brake HP, motor HP, speed and shut-off head.

Operation and maintenance manuals including complete installation, operation and maintenance data including installation and wiring diagrams.

**Manufacture(s):**

Acceptable manufactures include Flygt KSB Wilo

Manufacturer shall provide a certified pump curve for each pump provided in accordance with the Board's Standard Specifications.

**IFB 12-002 Purchase of Two (2) Submersible 6" Non-clog Pumps  
Specifications**

**Accessory Equipment:**

Provide the following for each pump as required for a complete installation:

- Pump discharge elbows
- Guide rail brackets
- Stainless steel guide rails
- Stainless steel lifting chain and hooks with SST expansion bolts
- Stainless steel expansion anchors sized to suit each individual pump installation

**Access Hatch Cover:**

A. General

The type of access hatch covers including the following:

Single and multiple door non-draining angle frame access hatch covers of aluminum construction for surface mounted installation for direct replacement of existing hatch covers of similar size openings.

B. Reference Standards: Comply with applicable provisions and recommendations of the following, except as otherwise shown or specified.

1. O.S.H.A. Standard 1919.23 (fall-through protection)
2. Aluminum Association, Inc., 5<sup>th</sup> Edition – Bridge Type Structures (safety grate design)
3. ANSI/AWS d1.2-90 Structural Welding Code for Aluminum
4. ASTM B221

C. Materials and Fabrication

1. Provide manufacturer's standard fabricated units, modified, if necessary, to comply with the requirements. Where standard units are not available for the sizes and types required, custom fabricate units to match manufacturer's similar units.
2. Fabricate each unit in the shop, complete with stainless steel anchors, gaskets, hardware and accessory items as required.

**IFB 12-002 Purchase of Two (2) Submersible 6" Non-clog Pumps  
Specifications**

3. The access covers shall be as manufactured by:
  - a. Syracuse Casting Sales Corporation
  - b. U.S.F. Fabrication, Incorporated
  - c. Or equal

**D. Covers and Frames**

1. The access hatch covers and frames shall be constructed of 6061-T6 aluminum bars, angles and extrusions and 5086 diamond pattern aluminum plate of a minimum thickness of ¼"
2. Each unit shall be designed for a minimum loading of 300 pounds per square foot. Deflection shall not exceed 1/150<sup>th</sup> of the span.
3. Frames shall be of extruded aluminum with continuous anchor flange for embedment in concrete or flange-attachment to surface of concrete, as required.

**E. Accessories**

1. Hinges shall be of heavy duty design. Hinge leaves shall be brass alloy or type 316 stainless steel. Hinge pins shall be 3/8" diameter grade 316 stainless steel. The hinges shall be bolted to the cover plates and frames with grade 316 stainless steel bolts and lock nuts.
2. Each hinged cover plate shall be furnished with a grade 316 stainless steel 'slam-lock' with keyway protected by a threaded aluminum plug. The slam-lock shall be fastened to the grade 316 stainless steel fasteners.
3. Each hinged cover plate shall be furnished with an aluminum lift handle. The handle shall rest flush with the surface of the cover plate and be withdrawn for use.
4. Each hinged cover plate shall be equipped with an automatic aluminum hold open arm. The door shall lock open in the 90 degree position. Each hold open arm shall be equipped with a red vinyl handle. The hold open arm shall fasten to the frame with grade 316 stainless steel hardware.
5. Hinged cover plates of 10 square feet, or larger, shall be equipped with stainless steel torsion bars to reduce the effort required to open the covers.

**IFB 12-002 Purchase of Two (2) Submersible 6" Non-clog Pumps  
Specifications**

**F. Fall Through Protection**

1. Each access frame and cover assembly shall be provided with fall through protection in accordance with OSHA Std. 1910.23.
2. The fall through protection shall be composed of hinged aluminum grate spanning the opening.
3. The aluminum grate shall be designed to withstand a minimum live load of 300 pounds per square foot with a deflection not to exceed 1/150<sup>th</sup> of the span.
4. The aluminum grate openings shall be approximately 5" x 5" to allow visual inspection of the wet well and adjustment of the floats switched when the cover is open.
5. Each aluminum grate shall be provided with a permanent hinging system. The grate shall lock in the 90 degree opened position.
6. Each grate shall have an opening arm, with a red vinyl handle. The opening arm shall be provided with a controlled confined space entry locking device (lock by OWNER).
7. The grate shall be painted OSHA 'safety orange'.

**G. Finish**

1. All aluminum covers shall be mill finished. Protect finish with a factory applied coating of lacquer standard with the manufacturer.
2. All surfaces in contact with concrete shall be bituminous coated.

**Any questions regarding this bid please contact as below:**

**Terry Herman**

**251-689-6962**

[Therman@mawss.com](mailto:Therman@mawss.com)

**The vendor shall have (60) Sixty days to deliver equipment to as below:**

ICO

Terry Herman

4725 Moffett Rd Suite H

Mobile AL 36618

**IFB 12-002 Purchase of Two (2) Submersible 6" Non-clog Pum  
Bid Sheet**

Price for each pump: \$ \_\_\_\_\_

Total Delivered cost for Two (2) Submersible 6" Non-clog Pumps per specifications: \$ \_\_\_\_\_

Manufacturer \_\_\_\_\_ Model \_\_\_\_\_

Delivery time after issuance of PO, \_\_\_\_\_ weeks. Payment terms \_\_\_\_\_

Company \_\_\_\_\_ by \_\_\_\_\_  
(Signature)

Phone \_\_\_\_\_ Fax \_\_\_\_\_