ST. TAMMANY PARISH

MICHAEL B. COOPER
PARISH PRESIDENT

NOTICE TO BIDDERS

ST. TAMMANY PARISH

Sealed bids will be received by the Department of Procurement, until 2:00 p.m., **Tuesday, May 4, 2021,** and then opened and read publicly at that time by the Procurement Staff for the following project:

Bid # 21-13-2 – Submersible Wastewater Pumps

Each paper bid must be submitted in a sealed envelope. The outside of the envelope shall show the Name and Address of the Bidder, the State Contractor's License Number of the Bidder (if the work is estimated at $50k or more), the Bid Name and the Bid Number.

This bid package is available online at http://www.stpgov.org/ or at www.bidexpress.com.

It is the Bidder's responsibility to check the Parish website frequently for any possible addenda that may be issued. The Parish is not responsible for a Bidder's failure to download any addenda documents required to complete a submission.

Bids will be received at 21454 Koop Dr., Suite 2F, Mandeville, LA 70471 from each bidder or his agent and given a written receipt, by certified mail with return receipt requested, or electronically at www.bidexpress.com.

Due to the COVID-19 pandemic, and in an effort to help slow the spread of the virus, Openings will take place outside at the "Pavilion" of Building B located at 21454 Koop Drive, Mandeville, La. 70471. Any questions regarding this should be directed to the Department of Procurement via email at purchasing@stpgov.org. Please call the Procurement office at 985-898-2520 and we will meet you at the front entrance of Building B to collect bids and issue a receipt.

Procurement Department

Submersible Wastewater Pumps
Bid # 21-13-2

I. Bid General Conditions

Prices remain in effect and firm through December 31, 2021, with the option to extend for one (1) additional year by written agreement of both parties. Any delivery and/or service charges must be included in the bid price. Quantities may vary; minimum orders shall not be required. St. Tammany Parish Government (Parish) reserves the right to award materials in whole, in part and/ or to multiple vendors. Bids must be submitted on the Pricing Sheet provided.

All fields must be filled in. No blanks will be permitted. If the item is unavailable, not applicable or if no bid will be offered, please enter "NO BID" or "N/A".

The Parish reserves the right to reject any or all Bids for just cause in accordance with the Public Bid Law, LSA-R.S. 38:2214(B). Incomplete, informal, illegible, or unbalanced Bids may be rejected. Reasonable grounds for belief that any one Bidder is concerned directly or indirectly with more than one Bid will cause rejection of all Bids wherein such Bidder is concerned. If required, a Bidder shall furnish satisfactory evidence of its competence and ability to perform the Work stipulated in its Proposal. Incompetence will constitute cause for rejection. If the Parish determines that the bidder is not responsive or responsible for any reason whatsoever, the bid may be rejected in accordance with State law.

Protests based on alleged solicitation improprieties that are apparent before bid opening, or the time set for receipt of initial proposals must be filed with and received by the Procurement Department BEFORE these times. Any other protest shall be filed no later than ten (10) calendar days after: the opening of the bid; the basis of the protest is known; or the basis of the protest should have been known (whichever is earlier).

II. Bid Specifications

The Parish, as a function of Tammany Utilities, owns and operates approximately fifty (50) wastewater treatment plants, forty (40) water wells, and over two-hundred (200) sewage lift stations, water distribution lines and sewage collection lines. The Parish routinely requires submersible centrifugal pumps designed for pumping untreated, unscreened, municipal wastewater as specified (Attachment "A").

It is the intent of the Parish to secure pricing for the submersible wastewater pumps. The items will be ordered on an "as needed" basis for locations throughout the Parish.

Submersible Wastewater Pumps

Reference Item No.	Pump Size	Horsepower	Make and Model or Prior Approved Equivalent	
			Barnes Model Number	Hydromatic Model Number
SUBPUMP-01	3 inch	0.5	3SHVR20N4	S3N100
SUBPUMP-02	3 inch	1	3SHVR20N4	S3N100
SUBPUMP-03	3 inch	1.5	3SHVR20N4	S3N200
SUBPUMP-04	3 inch	2	3SHVR20N4	S3N200
SUBPUMP-05	3 inch	3	3SHVR30N4	S3N300
SUBPUMP-06	4 inch	5	4SHDF50N4	S4N500
SUBPUMP-07	4 inch	7.5	4SHDF75N4	S4N750
SUBPUMP-08	4 inch	10	4SHDF100N4	S4M1000
SUBPUMP-09	4 inch	15	4SHDG150N4	S4M1500
SUBPUMP-10	6 inch	20	6SHDO20084	S6L2000
SUBPUMP-11	6 inch	25	6SHDO25044	S6L2500
SUBPUMP-12	6 inch	30	6SHDO30084	S6L3000
Pumps shall be 1750 rpm, 230/460 volt, with standard impellers for each model. Pumps shall be in full compliance with the Technical Specification for Submersible Wastewater Pumps (Attachment "A").				

III. Prior Approved Equivalents and Inquiries

All products shall be new and of current manufacture. Where specified on the bid sheets, prices shall be for the approved Make/Brand or a Prior Approved Equal by the Parish. Where the specifications do not indicate an Approved Make/Brand for an item, the Parish has no preference. The name of any manufacturer mentioned in the specifications is for the purpose of establishing a minimum acceptable standard of quality desired by the Parish. All products bid must have prior approval as "Prior Approved Equivalents".

Should the Bidder desire to submit inquiries and/or request approval of an alternative product, Bidder to submit: make, model, supply catalog cut sheets and descriptive literature for the alternative product, and a copy of the bid which clearly identifies the item(s) for which the equivalent item is being requested to the Procurement Department, purchasing@stpgov.org, by 2:00 PM within seven (7) business days prior to the bid opening. The Parish shall review the inquiry and/or request for "approved equivalent" and issue an addendum within three (3) business days prior to the bid opening if prior approval submission is accepted as an equivalent and/or respond to inquiries.

IV. Delivery Location:

- Tammany Utilities Maintenance Warehouse, St. Tammany Parish Government, 636 W. 26th Avenue, Covington, LA 70433.

Submersible Wastewater Pumps
Bid # 21-13-2
Unit Pricing Sheet

Bidder must acknowledge all addenda by entering the number the Parish assigned to EACH of the addenda that the Bidder is acknowledging.

The Bidder acknowledges receipt of the following: ADDENDA: _____.

All fields must be filled in. No blanks will be permitted.

In the "Unit Price" field, please enter the bid price or "NO BID"/ "N/A".

"Unit Price" shall represent the cost for the specified item as well as any delivery charges (if applicable) to the location(s) indicated in this bid.

Reference Item No.	Bid for Specified Make & Model or Prior Approved Equivalent Price/Each
SUBPUMP-01	**$**
SUBPUMP-02	**$**
SUBPUMP-03	**$**
SUBPUMP-04	**$**
SUBPUMP-05	**$**
SUBPUMP-06	**$**
SUBPUMP-07	**$**
SUBPUMP-08	**$**
SUBPUMP-09	**$**
SUBPUMP-10	**$**
SUBPUMP-11	**$**
SUBPUMP-12	**$**

Company: _____

Signature: _____

Printed Name: _____

Title: _____

Address: _____

Telephone: _____

Email: _____

Date: _____

Attachment “A”

TECHNICAL SPECIFICATION

FOR

SUBMERSIBLE WASTEWATER PUMPS

ST TAMMANY PARISH GOVERNMENT DECEMBER 2018

STATE OF LOUISIANA
PHIL O. NELSON
License No. 22826
PROFESSIONAL ENGINEER
12-4-18

PREPARED BY:

PRINCIPAL *Engineering,* Inc.

1011 N. Causeway Blvd., Suite 19

PART 1 - GENERAL

1.01 SCOPE OF SUPPLY

Provide submersible centrifugal pumps designed for pumping untreated, unscreened, municipal wastewater as specified herein. Pump models shall be as shown on the St. Tammany Parish Government (Parish) Bid Schedule, for pump size and motor horsepower. Impeller size and style shall be as required at the time of supply for each pump.

1.02 WARRANTY

The pump unit or any part thereof shall be warranted against defects in material or workmanship within one (1) year from date of installation and shall be replaced at no charge with a new or manufactured part, F.O.B. factory or authorized warranty service station. The warranty shall not assume responsibility for removal, reinstallation, or freight. The warranty shall not apply to damage resulting from accident, alternation, design, misuse, or abuse.

1.03 SUBMITTALS

A. The Manufacturer's Bid submittal for establishing compliance to this specification shall include the following items:

1. Table of contents
2. A complete and detailed list of any and all variations to this specification
3. Scope of supply
4. Descriptive literature, bulletins, and/or catalog cut sheets of the equipment.
5. Data sheets for each model showing at least the following:
   a. Pump model name
   b. Motor size
   c. Discharge connection size and type
   d. Operating voltage required
   e. Dimensions
   f. Weight
   g. Submergence Required
6. Manufacturer's standard performance curves showing flow in gpm, pressure in feet of water, efficiency, and pump horsepower required, for each model.
7. Motor manufacturer's data sheet showing at least the following:
   a. Motor manufacturer's name and model number
   b. Amp draw: FLA, LRA
   c. Motor RPM
   d. NEMA code letter
8. Paint specification
9. Maintenance overview
10. Pump startup check list
11. Warranty information

B. For each pump supplied, provide a submittal for approval by the Parish prior to shipment, including the following items:
   1. The pump performance data curve showing head, capacity, horsepower demand, and pump efficiency over the entire operating range of the pump.
   2. Catalog cut sheets of the equipment.
   3. Pump data sheet as descried in Paragraph 1.03.A.5 above.

4. Motor data sheet as descried in Paragraph 1.03.A.7 above.
5. Warranty information

C. With each pump supplied, provide two copies, one paper copy and one digital copy, of the Manufacturer's Operation and Maintenance Manual which shall include the following sections:
1. Technical Data
2. Safety and Responsibility
3. Design and Function
4. Installation and Operating Conditions
5. Installation Procedures
6. Initial Start-up
7. Operation
8. Maintenance
9. Spare parts and Service
10. Decommissioning, Storage and Transport
11. Drawings and Diagrams

1.04 FACTORY TESTING AND SHIPMENT

A. Pumps shall be factory tested prior to shipment, including:

1. Verification of the pump curves by testing flow, head, and motor current.

2. Verification of cavitation-free service and absence of motor overheating during conditions simulating the actual operating conditions after installation.

B. Parts shall be properly lubricated and protected so that no damage or deterioration will occur even during a prolonged delay from the time of shipment until installation is completed and the pumps are ready for operation.

C. Each pump shall be properly crated to protect against damage during shipment. All crates shall be identified with contents and weight. Pumps shall be shipped to the address provided by the Parish at the time of supply.

PART 2 – PRODUCTS

2.01 MANUFACTURER

Pumps shall be Hydromatic, Barnes, or prior approved equivalent. Prior approval does not relieve the manufacturer from meeting all conditions and requirements as specified herein.

2.02 OPERATING CONDITIONS

A. The pumps shall be capable of continuous operation at full load, fully submersed, without cavitation or overheating of the motor.

B. Pump performance data curves shall show head, capacity, horsepower demand, and pump efficiency over the entire operating range of the pump. The equipment manufacturer shall separately indicate the head, capacity, horsepower, overall efficiency, and minimum submergence required at the design flow condition and the maximum and minimum flow conditions, if such conditions are provided by the Parish.

C. The manufacturer shall indicate the limits recommended for stable

operation without surge, cavitation, or excessive vibration on the submittal performance curves.

2.03 CONSTRUCTION

A. The pump volute, motor, and seal housing shall be high quality gray cast iron, ASTM A-48, Class 30. Pump flanged discharge connections shall be standard ASA flange. Pump threaded discharge connections shall be NPT.

B. All external mating parts shall be machined and nitrile rubber O-ring sealed on a beveled edge. Gaskets shall not be used. All fasteners exposed to the pumped liquids shall be 300 series stainless steel.

C. The pump shall be designed with the submerging liquid used as an adequate cooling system. Pumps requiring water jackets or closed loop cooling systems shall not be used.

2.04 BEARING AND SHAFT

A. An upper bearing and a lower bearing shall be used. These shall be heavy-duty single or double row ball bearings, which are permanently lubricated by the dielectric oil, which fills the motor housing. Sealed grease packed bearings shall not be used. Bearings requiring lubrication according to a prescribed schedule shall not be used. The upper radial bearing shall have a minimum B-10 life at the specified condition of 40,000 hours and the lower thrust bearing shall have a minimum B-10 life at the specified condition of 40,000 hours. Bearings shall be locally available.

B. The shaft shall be machined from a solid 416 series stainless steel forgoing and shall be a large diameter design with minimum overhang to reduce shaft deflection and prolong bearing life.

2.05 SEALS

A. The pump shall have two mechanical seals, mounted in tandem, with an oil chamber between the seals. Seals shall have rotating faces of silicon carbide or carbon, and stationary faces of silicon carbide or ceramic. The lower seal shall be replaceable without disassembly of the seal chamber and without the use of special tools. Pump-out vanes shall be present on the backside of the impeller to keep contaminates out of the seal area. Seals shall not be proprietary, and shall be commercially available in the local market.

2.06 IMPELLER

A. Impeller shall be of the two-vane, enclosed, non-clogging design and have pump-out vanes on the front and backside of the impeller to prevent grit and other materials from collecting in the seal area. The impeller shall be manufactured from ASTM A-536 Class 65 Ductile Iron. Impellers on 4 inch and larger pumps shall allow a full 3-inch diameter spherical solid to pass. Impellers on 3-inch pumps shall allow a full 2.5-inch diameter spherical solid to pass.

B. Impellers shall be dynamically balanced. The tolerance values shall be as listed below according to the International Standard Organization grade 6.3 for rotors in rigid frames:

RPM	Tolerance
3500	.010 in. – oz. /lb. of impeller weight
1750	.020 in. – oz. /lb. of impeller weight
1150	.026 in. – oz. /lb. of impeller weight
870	.030 in. – oz. /lb. of impeller weight

C. Where required, vortex impellers shall be used. Vortex impellers shall be multi vane, recessed design.

2.07 CASING

A. The casing shall be of the end suction volute type having sufficient strength and thickness to withstand all stress and strain from service at full operating pressure and load. The casing shall have feet for pump support, and flanged or threaded discharge connections. The casting shall be accurately machined and bored for register fits with the suction and casing covers. The pump shall be supplied with volute axial type wear rings of stainless steel or bronze material suitable for contact with untreated municipal wastewater. Wear rings shall be easily replaceable in the field.

2.08 PAINTING AND LABELLING

A. The pump shall be painted after assembly, and testing, with the manufacturer's standard epoxy coating system. This coating system shall be suitable for constant submersion in the pumped liquid. The paint shall cover all exterior ferrous surfaces.

B. Pumps shall be equipped with stainless steel nameplates. Nameplates shall have model number, serial number, motor size, and motor speed clearly indicated. The pump shall be manufactured or assembled in the USA, and shall bear a manufacturer's nameplate stating such.

2.09 ELECTRICAL POWER CORD

A. Electrical power cord shall be water resistant 600V, 60°C., UL and CSA approved and applied dependent on amp draw for size. The power cord shall be provided by the pump manufacturer, and shall be in a length sufficient to reach the control panel without splicing. Cord shall be in a minimum length of 30 feet.

B. The pump shall be protected with a compression fitting and epoxy potted areas at the power cord entry to the pump. Separation between the junction box areas of the pump and the motor by a stator lead sealing gland or terminal board shall not be used.

C. The power cord entry into the cord cap assembly shall first be made with a compression fitting. Each individual lead shall be stripped down to bare wire at staggered intervals, and each strand shall be individually separated. This area of the cord cap shall then be filled with an epoxy compound potting which shall prevent water contamination to gain entry even in the event of wicking or capillary attraction.

D. The power cord leads shall be connected to the motor leads with extra heavy connectors.

E. The cord cap assembly where bolted to the connection box assembly and the

connection box assembly where bolted to the motor housing shall each be sealed with a nitrile rubber O-ring on a beveled edge to assure proper sealing.

F. The power cord entry water seal design shall be such that it precludes specific torque requirements to ensure a watertight and submersible seal. It shall permit no entry of water into any high voltage area even if the cable is severed below the water level.

2.10 MOTOR

A. The stator, rotor and bearings shall be mounted in a sealed and dielectric oil filled submersible type housing. The stator windings shall have a minimum Class F insulation. Motors shall be of NEMA B design. For 15 horsepower and smaller motors, the service factor shall be 1.2 or greater. Motors shall be 230/460-volt 1750 rpm.

B. The motor stator shall be dry press or slip fit mounted into the watertight casing. Heat shrink motor fits shall not be used. Motors shall be capable of being repaired or rewound at local motor service facilities. No special tools shall be required for pump and motor disassembly.

C. Motor shall be equipped with integral heat sensors, one for each phase (three phase motor). The heat sensor shall be a low resistance, bi-metallic disc that is temperature sensitive. They shall be mounted directly on the stator windings.

PART 3 – EXECUTION (NOT USED)

END OF TECHNICAL SPECIFICATION