

# **COVER PAGE**

# **Bid Proposal #2322**

# One (1) Hydraulic Driven Portable Storm Water Pump With Trailer For Emergency Standby Flood Protection

Sealed bids and electronic submitted bids for the above will be received until <u>10:00 AM CST, Tuesday</u>, <u>March 23, 2021</u>, and <u>publicly opened</u> in the City of Alexandria Council Chambers or Council Committee Room.

Please file bid by one of the following means:

## Hand-Delivered or Express Delivery:

Attention: Donna Jones, City Clerk City of Alexandria - City Hall 915 Third Street, First Floor Alexandria, LA 71301 Phone: 318-449-5090 Mailed via USPS:

Attention: Donna Jones, City Clerk City of Alexandria - City Hall PO Box 71 Alexandria, LA 71309-0071

# Electronic Bid Submission: Central Bidding

Pursuant to Louisiana R.S. 38:2212 B.(6)(a) through E. (1-7) and R.S. 38:2212.1 B.(4)(a), vendors/contractors have the option to submit their bids and bid bonds electronically. Bids and bonds to be filed electronically shall be posted with **Central Bidding** at <u>www.centralauctionhouse.com</u> (phone 1-225-810-4814). Registration will need to be completed prior to posting of bid.

Complete bid specifications are available for viewing and downloading at the City of Alexandria's website **www.cityofalexandriala.com**; on the left hand side of the opening page, go to the heading "*Business*" then drop down to "*RFP/RFQ/Bids*"; the current bids will be listed for your convenience.

City of Alexandria Buyer Name: Phone Number: Fax Number: E-Mail Address:

Christine Sims, Senior Buyer (318) 441-6183 (318) 619-3414 Christine.sims@cityofalex.com

Wilma Kelly Purchasing Manager	<b>City of Ale</b> Purchasing Do P.O. Box Alexandria, I 71309-0	epartment x 71 Louisiana	Office: (318) 441-6180 Fax: (318) 441-6185				
Sealed bids will be received unt <b>Tuesday, March 23, 2021</b> , and the Council Chambers or Counc	publicly opened in	City of Alexandria Bid <b>#2322</b> Page: 1 of 13 Date Specifications Prepared: February 3, 2021					
Bid Bond Requirements: A bid for <u>N/A%</u> of the total amount of <u>Performance Bond Requiremen</u> is accepted, a performance bond in the amount of <u>N/A%</u> .	f bid. <u>ts:</u> In the event bid d shall be required	Don City o Alex	file bid with the following: nna Jones, City Clerk f Alexandria - City Hall 915 Third Street P.O. Box 71 candria, LA 71309-0071 Phone: 318-449-5090				
	INTROD	UCTION					

# ONE (1) HYDRAULIC DRIVEN PORTABLE STORM WATER PUMP WITH TRAILER FOR EMERGENCY STANDBY FLOOD PROTECTION

It is the intent of the City of Alexandria to secure pricing for a minimum of ONE (1) HYDRAULIC DRIVEN PORTABLE STORM WATER PUMP WITH TRAILER, for use by the City of Alexandria Wastewater Department for the purpose of additions to the emergency stand by flood protection system. Bid proposals shall be for one (1) hydraulic driven portable storm water pump with trailer and all ancillary equipment.

All products shall be new and of current model year manufacture. Each unit shall be equipped with the manufacturer's equipment and accessories which are included as "standard" in the advertised and published literature for the unit. No such item of equipment shall be removed or omitted for the reason that it was not specified in the bid documents.

Bid prices shall remain in effect for a period of twelve (12) months from bid award date. Orders shall be for a minimum of one (1) pump; the City reserves the right to requisition additional pumps on an "as needed" basis.

## All bid prices shall include any and all freight, delivery, and setup charges.

<u>Completed bid packet should be returned as issued by the City of Alexandria with ALL PAGES intact</u> and all specification response columns filled in. Incomplete columns or missing pages, to include addendum pages, may result in the bidder's (proposer's) entire bid being rejected.

Questions and/or clarifications of bid specifications are to be in written form only, either mailed, faxed, or e-mailed to the attention of James C. Graham, City of Alexandria Wastewater Department, P.O. Box 71, Alexandria, LA 71309-0071; Fax #318-441-6246; e-mail james.graham@cityofalex.com; and must be received by 5:00 P.M., CDT, <u>Thursday, March 11, 2021</u>.

### **GENERAL CONDITIONS FOR BIDDERS - PLEASE READ CAREFULLY**

1. Pursuant to LA R.S 38:2212.1. C.(1)(2), any manufacturer's preference in this proposal is descriptive, but non-restrictive, and is used only to indicate minimum requirement for type, grade and quality unless otherwise specified.

2. Pursuant to LA R.S. 38:2212 B.(1), the provisions and requirement of this bid shall not be considered as informalities and shall not be waived by the City of Alexandria. Therefore, conditions and specifications on this bid form shall be strictly enforced and any and all alterations, deviations, and non-compliance to said conditions and specifications, either on the bid form or by separate attachment, shall be grounds for immediate disqualification.

3. Preference shall be given to bidders quoting F.O.B. Destination (the City of Alexandria using department), FREIGHT PREPAID, unless otherwise requested.

4. Each bidder shall submit his proposal on the proposal form furnished by the City of Alexandria Purchasing Department. The complete bid package must be returned as issued by the City with all pages intact and all specification response columns filled in. Incomplete columns or missing pages, to include addendum pages, shall result in the vendor's entire bid package being rejected.

5. Literature, brochures, and other related paperwork attached to the bid should be identified with the name of the bidder and bid item number.

6. In case of a mathematical discrepancy between unit price and extensions, the unit price shall prevail.

7. Pursuant to LA R.S. 38:2212 F., the bid specifications may contemplate a fixed escalation or deescalation in accordance with the United States Bureau of Labor Statistic's Consumer Price Index or the Producer Price Index. Bids based on specifications which are subject to a recognized escalation index shall be legal and valid for any item of a public work, at the discretion of the City.

8. Pursuant to LA R.S. 38:2212.1. F., any public procurement unit may participate in a cooperative purchasing agreement with the City of Alexandria to acquire quantities of the above listed items under a contract with the City of Alexandria for items awarded by public bid, pursuant to the cooperative purchasing provisions of Part VII of Chapter 17 of Subtitle III of Title 39 of the Louisiana Revised Statures of 1950, R.S. 39:1701 et seq.

9. The City of Alexandria reserves the right to award by item or by total bid, unless otherwise specified in the bid specifications. (Price(s) should be itemized.)

10. All erasures or corrections on the bid form must be initialed and the City of Alexandria may rely on the apparent authority represented by the initials.

11. The City of Alexandria reserves the right to reject for cause any and all bids or parts of bids, or accept bids most beneficial to the City.

# **<u>General Conditions for Bidders - Please Read Carefully</u> (Continued)**

12. Any bid submitted which contains additions, conditional or alternate bids, or irregularities which may make the proposal incomplete, indefinite, or ambiguous as to its meaning, thus requiring clarification after the specified date and time of bid opening shall be rejected.

13. Bids shall be opened publicly in the City Council Chambers or Council Committee Room.

14. Cash discounts may be accepted, but <u>SHALL NOT</u> be considered in making award.

15. Regarding a bid for purchase of materials, supplies or services, not to include construction of any public works, a written notice of acceptance mailed or otherwise furnished to the successful bidder shall result in a binding contract without further action by either party.

16. When any bid is accepted for the construction or doing of any public works, a written contract shall be executed by and between the City of Alexandria and the Contractor. No contract shall be binding upon the City until it has been executed by the City and delivered to the successful bidder. Should the bidder to whom the contract is awarded fail to execute the contract, the award shall then be made to the next lowest responsible bidder, or re-advertised for public bid, said decision to be in the sole judgment of the City of Alexandria. This action may result in the loss of bidding privileges for a period of one (1) year.

17. The City of Alexandria shall schedule for payment the invoices for articles or services purchased under this bid within thirty (30) days after due and proper delivery accompanied by invoice.

18. The City of Alexandria is exempt from all sales taxes. A sales tax exempt form shall be furnished by the City of Alexandria Purchasing Department, if requested.

19. Bidder(s) awarded item(s) by the City of Alexandria shall be responsible for supplying all products at the awarded price(s). Failure may result in the City's cancellation of the remaining items awarded.

20. Regarding Service Contracts and Procurement Contracts, the terms of the contract shall be binding upon any and all parties involved until goods and supplies are delivered, services have been rendered, and/or work has been completed and accepted by the Mayor on behalf of the City of Alexandria and all payments required to be made to the Contractor have been made. However, a contract may be terminated under any and all of the following conditions:

(a) By mutual agreement and consent of either party upon thirty (30) days written notice to the other party;

(b) By the Mayor, on behalf of the City of Alexandria, as a consequence of the failure of the Contractor to comply with the terms and conditions of the contract or the progress or quality of work to be performed in a satisfactory manner, proper allowance being made for circumstances beyond the control of the Contractor; or

(c) By satisfactory completion of all services and obligations described in the contract.

#### **General Conditions for Bidders - Please Read Carefully (Continued)**

If the contract is terminated for any of the terms and conditions authorized in sub-paragraph (b) above, Contractor shall be formally notified in writing by the City of Alexandria Purchasing Department by means of certified mail informing him of cancellation of the contract, giving specific reasons for said cancellation. Contractor shall have the right to appeal to the City Council within ten (10) days from the date that said notification is placed in the U.S. Mail. Contractor's appeal shall be accomplished by means of a letter addressed to the City Council and delivered to the City Clerk, stating that an appeal to the decision of cancellation is desired. The City Council shall thereafter hold a hearing on the appeal, giving all parties the opportunity to present any and all evidence concerning the decision of cancellation. After hearing the appeal, the city Council may, by a majority vote, sustain, modify, or reverse the findings for said decision and shall provide, if requested by Contractor, a written determination of its findings.

21. Contractors submitting bids for Public Works construction projects in excess of \$1.00 must show his Contractor's License Number on the front of the bid envelope, except for certain projects for which a Contractor's License Number is not required by the State Contractor's Licensing Board. Failure to comply with this directive shall result in automatic bid rejection, furthermore, any Contractor who submits a bid for a type of construction for which he is not properly licensed shall be acting in violation of LA R.S. 37:2163, and shall be subject to all provisions for violation and penalties thereof. <u>Contractors who are owned by</u>, and are submitting a bid as a subsidiary of a parent company, whose name is listed in the State of Louisiana's Roster of Licensed Contractors, may do so by including a letter of proof of ownership from the parent company with the submitted bid package. The letter must be signed as per LA R.S. 38:2212 B.(5)(a)(b)(c) (see Item #22 below).

22. <u>All bids submitted via USPS (registered or certified), overnight courier or hand delivered, shall be</u> signed by hand and in ink by an authorized company representative per LA R.S. 38:2212 B.(5)(a)(b)(c), which states:

(c)(i) Evidence of agency, corporate, or partnership authority shall be required for submission of a bid to the division of administration or the State of Louisiana. The authority of the signature of the person submitting the bid shall be deemed sufficient and acceptable if any of the following conditions are met:

(aa) The signature on the bid is that of any corporate officer listed on the most current annual report on file with the Secretary of State, or the signature on the bid is that of any member of a partnership or partnership in commendam listed in the most current partnership records on file with the Secretary of State.

(bb) The signature on the bid is that of an authorized representative of the corporation, partnership, or other legal entity and the bid is accompanied by a corporate resolution, certification as to the corporate principle, or other documents indicating authority which are acceptable to the public entity.

(cc) The corporation, partnership, or other legal entity has filed in the appropriate records of the Secretary of State in which the public entity is located, an affidavit, resolution, or other acknowledged or authentic document indicating the names of all parties authorized to submit bids for public contracts. Such document on file with the Secretary of State shall remain in effect and shall be binding upon the principal until specifically rescinded and canceled from the records of the office.

#### **<u>General Conditions for Bidders - Please Read Carefully</u> (Continued)**

23. In-State preferences shall not apply to procurements involving federal funds.

24. Pursuant to LA R.S. 38:2212 O.(2)(a)(b), any modifications of plans and specifications will be made through an addendum. No addendum shall be issued within seventy-two (72) hours of the bid opening, excluding weekends and legal holidays, without the extension of the bid opening date. An extension of at least seven (7) but no more than thirty (30) working days is required but, re-advertising is not required. The addendum shall be transmitted by any one of the following methods: (1) facsimile transmission; (2) e-mail; (3) by hand; or (4) posted on the City of Alexandria's website (www.cityofalexandriala.com) and posted on Central Bidding's website (www.centralauctionhouse.com) if applicable.

25. All Federal Transit Administration (FTA) funded procurements, including operating assistance funding contracts, are to follow the *Master Agreement*, to include all applicable federal clauses.

a. Any bidder that is found listed on the Federal Government's *System for Award Management* (SAM) website, at <u>www.sam.gov/portal/sam</u>, under the advanced search feature for *Excluded Parties List System* (EPLS), shall automatically be rejected for the award of this bid, by Category and/or in its entirety. This applies to any portion of the bid that is a procurement funded by FTA.

26. Under the City's AFEAT (Alexandria Fairness, Equality, Accessibility, and Teamwork Program), participation by minority and/or disadvantaged business enterprise firms is encouraged. Inquiries about the AFEAT Program should be directed to the Division of Finance. As a part of its RFP response, each Bidder <u>shall</u> submit documentation of its bona fide effort to secure subcontractors that meet the City's AFEAT goals. Each bidder <u>shall</u> also submit proof of engagement of any subcontractor selected because of its solicitations. The Bidder's bona fide efforts and engagement(s) are a consideration in bid review and rating.

# Alexandria Fairness, Equality, Accessibility and Teamwork Program (AFEAT)

Dear Vendor:

Under the City's AFEAT (Alexandria Fairness, Equality, Accessibility, and Teamwork Program), participation by minority and/or disadvantaged business enterprise firms is encouraged. The AFEAT Program should be inquired about through the Division of Finance. The goals for qualifying disadvantaged, minority and female owned business in the use of professional service agreements with prime contractors will help effectuate the goals of increasing: the competitive viability of small business, minority, and women business enterprise by providing contract, technical, educational, and management assistance; business ownership by small business persons, minority persons, and women (including professional service opportunities); and the procurement by the City of professional services, articles, equipment, supplies, and materials from business concerns owned by small business concerns, minority persons, and women.

Prime contractors offering subcontracting should take specific action to ensure that a bona fide effort is made to achieve maximum results towards meeting the established goals. Primes shall document efforts and shall implement steps at least as extensive as the following in a good faith effort to reach or exceed the established goals:

- A. Establish and maintain a current list of minority and female owned businesses in Alexandria, in Rapides Parish, and in the State of Louisiana.
- B. Document and maintain a record of all solicitations of offers for subcontracts from minority or female construction contractor and suppliers in Alexandria, in Rapides Parish, and in the State of Louisiana.
- C. Secure listing of minority and women owned businesses from the City of Alexandria Purchasing Department, the Central Louisiana Business Incubator, and the State of Louisiana Department of Minority Affairs.
- D. Participate in associations which assist in promoting minority and women owned businesses such as the Central Louisiana Business League, the Central Louisiana Business Incubator, and the Entrepreneurial League System.
- E. Designate a responsible official to monitor all activity made in the effort to achieve or exceed the established goals; record contacts made, subcontracts entered into with dollar amounts, and other relevant information.

For more information on AFEAT and the City of Alexandria's Diversity in Action Initiative, and to explore a local and statewide directory of minority businesses, please visit <u>www.diversityinaction.org</u>. Should you have any questions or comments, please do not hesitate to contact our Finance Department at 318-449-5091 or our Purchasing Department at 318-441-6180.

As a part of its RFP response, each Bidder <u>shall</u> submit documentation of its bona fide effort to secure subcontractors that meet the City's AFEAT goals. Each bidder <u>shall</u> also submit proof of engagement of any subcontractor selected because of its solicitations. The Bidder's bona fide efforts and engagement(s) are a consideration in bid review and rating.

Sincerely,

City of Alexandria

# **ID SPECIFICATIONS**

#### I. GENERAL

The work under this section shall consist of providing all pumping equipment including the hydraulically driven axial flow pumps, drive units, and all piping, appurtenances and mechanical system as specified herein. The manufacturer shall be ISO9001-2008 certified. This unit must be able to be installed on the permanent pumps discharge pipe within 24 hours in case of an emergency.

#### **II. DESIGN DATA**

The Contractor shall furnish with the bid, guaranteed pump performance curves based on shop tests of pumps in accordance with procedures as specified by Standards of Hydraulic Institute. A professional engineer, registered in the state where the tests are conducted and employed full time by the pump manufacturer, shall certify curves. Any bid not including such curves shall be considered non-responsive and shall not be accepted.

- 1. Quantity of Pumps 1 2. Design Capacity Ea. 4,000 gpm 3. Design TDH 15"
- **Operation Head:**
- Minimum propeller size 12" 4.
- 5. Maximum pump rpm 1520 rmp
- Minimum submergence at shut-off 28" 6.
- 7" 7. Distance off the sump bottom

The pump and drive equipment to be furnished under this contract shall be made by a manufacturer regularly engaged in such work, and who has furnished like equipment and specialties for at least five (5) similar installations which have been continuously operating successfully for not less than five (5) years.

Evidence of this experience and data on the equipment and its operation in those installations shall be made available to the CITY at their request to determine whether the equipment and specialties offered meet the requirements of these specifications.

Pump bowls, propellers and hydraulic power units shall be the product of a single manufacturer and interchangeable between units.

#### **III. PUMP MATERIAL AND DESIGN**

The pumps to be furnished under this specification shall be hydraulically driven, axial flow propeller, completely submersible with propeller bowl assembly, hydraulic motor assembly, suction bell assembly and discharge tube.

A. SUCTION BELL - The suction bell assembly shall be manufactured from alloy steel, 3/16" thick and conforming to ASTM A242, and shall have a maximum inlet diameter of 1.5 times the propeller diameter. The inlet bell shall be constructed to minimize vortex formation by maintaining equal pressures and velocities across the entrance. Bars shall be placed across the bell mouth to prevent entrance of large sticks, logs or debris. Inlet bell face shall be parallel to

the water surface regardless of the angle of installation. The intake must be able to be removed without disconnecting the hydraulic lines.

- B. PUMP BOWL The propeller bowl assembly section shall be a single stage, shop assembled unit consisting of a venturi housing, stainless steel liner, propeller shaft, bearings and stainless steel propeller blades. The venturi housing shall be manufactured from 1/4" thick alloy steel conforming to ASTM A242 and shall be fitted with a machined, removable housing liner of 300 series stainless steel of not less than 3/16" thickness and a liner length of not less than the pitch length of the propeller. Pumps without replaceable liners will not be accepted
- C. PROPELLER and SHAFT The pump propeller blades shall be manufactured using ASTM A304 stainless steel. The propeller shall be balanced and secured firmly to the taper shaft with alignment key and locknut. The propeller shaft shall be machined from solid stainless steel bar stock and shall conform to ASME Code for transmission shafting to transmit full load torque and shall have additional safety factor for shock loads.
- D. BEARINGS The propeller shaft shall be supported and contained in place by three multiple angular contact bearings. The shaft bearings shall be designed for an  $L_{10}$  life of 50,000 hours and lubricated by low pressure hydraulic oil. The propeller shaft and bearing assembly shall be contained in a machined bearing housing centrally supported by flow straightening vanes in the propeller bowl assembly and sealed using a silicon carbide mechanical seal. A lip seal shall be utilized to protect against sand particle intrusion. The bearings shall be designed to accept thrust in either direction. A non-reverse rotation mechanism will be included (except in two way pumping applications).
- E. DISCHARGE TUBE The discharge tube and head assembly shall be manufactured as shown on the drawings and the material shall be abrasive resistance steel conforming to ASTM A242 with a minimum wall thickness of 3/16". The complete pump assembly shall be painted inside and outside with Mo-tar 47.
- F HYDRAULIC MOTOR The hydraulic motor assembly section shall consist of the assembly housing, hydraulic motor, propeller shaft coupling and inlet and outlet port pipe connections. The assembly housing shall be manufactured from 1/4" thick alloy steel conforming to ASTM A242. The housing assembly shall contain a hydraulic motor coupled to the propeller shaft. The hydraulic motor, bearings, shaft and coupling shall be enclosed and sealed to permit totally submerged operation in any position. The hydraulic motor shall be provided with inlet and outlet pipes extending from hydraulic motor through the assembly housing and terminate with quick coupling connections. No hydraulic lines will be located below the impeller. The hydraulic motor shall be mounted on the discharge side of the propeller as to minimize NPSH requirements, avoid clogging of the intake and induce more efficient oil cooling. Suction side installations shall not be permitted.

## IV. DIESEL DRIVE UNIT

Pumps will be supplied with a diesel power unit. The drive units shall be manufactured and tested at the same factory as the pumping unit to provide a single source of responsibility and for the proper coordination of all

components of the system. The unit shall consist of a 10 gallon oil reservoir, variable displacement hydraulic pump/motor, diesel engine and interconnecting piping, valves, and accessories, mounted on a fabricated steel base with lifting eyes.

- A. Hydraulic pump shall be a variable displacement hydraulic piston pump capable of continuous operation.
- B. The diesel power source shall be a Tier 3 diesel engines for Emergency Standby flood control, rated 62 BHP at 1,800 rpm having a continuous duty rating. The unit shall be fully equipped with radiator, batteries and cable, safety shutdown switches and exhaust system and silent type enclosure.
- C. Power units shall be factory assembled and skid-mounted. Hydraulic equipment shall include but not be limited to: a full flow oil filter, adjustable pressure relief valves at each pump outlet, pressure and temperature gauges, automatic engine controls, quick connect couplings and safety shut down controls for low oil pressure and high oil temperature. All systems shall be assembled, piped and tested prior to delivery to the site.
- D. A hydraulic system monitoring device to allow diagnosing hydraulic system behavior even while pump is still submerged shall also be included.
- E. The drive system shall include a starting system which allows the prime mover to start under a no-load condition and gradually engage the load over a 3 to 5 second time period. The system shall be used to gradually disengage the load prior to shut-off of the prime mover. An automatic system is included.
- F. Sufficient hydraulic oil cooling capacity shall be provided to sustain direct sunlight radiation as well as ambient temperatures up to 122°F (50°C).
- G. Units shall be delivered filled with biodegradable hydraulic oil.

# V. HYDRAULIC PIPE AND HOSE

Hydraulic lines connecting the power unit to the pumping unit shall be a combination of black steel pipe and reinforced hose and shall be installed as specified herein. Supply pipe shall be ASTM-A106, Schedule 80 seamless black steel pipe, and return pipes shall be ASTM-A106, Schedule 40 seamless black steel pipe. All hydraulic pipe shall be pickled, oiled and plugged (P.O.P.). All reinforced supply hose shall be double wire braid reinforcement and shall have minimum safe working pressure of 3000 psi. All pipe fittings shall be socket weld type (with socket weld to thread fittings at conversion point of pipe to reinforced hose). Quick connect couplings shall be provided at connection points of drive unit and water pump. Supply piping shall be 1.25" and case drain shall be <sup>3</sup>/<sub>4</sub>" and internal velocities shall not exceed 15 fps (as indicated in drawing). Hose lengths shall be a minimum of 50".

#### CITY OF ALEXANDRIA BID SPECIFICATIONS FOR:

# ONE (1) HYDRAULIC DRIVEN PORTABLE STORM WATER PUMP WITH TRAILER FOR EMERGENCY STANDBY FLOOD PROTECTION

#### VI. PUMP TESTING

- A. Each pump and hydraulic power transmission system shall be factory pressure tested to maximum design psi for a minimum of 10 minutes at design operating temperatures with every plumbing connection checked for possible leaks. In the event a leak is observed or detected, it shall be repaired and the test be repeated until all leaks are eliminated.
- B. The Pump shall be full size factory tested in a vertical configuration, per HI 14.6, at the manufacturer's facility in an open sump with sufficient capacity for accurate pump testing. Testing shall include but not be limited to design head vs. design capacity and mechanical integrity. All tests shall be in accordance with the Hydraulic Institute Standards and performed by a Professional Engineer employed full time by the manufacturer. Evidence of this experience may be requested at time of award. Model test are not acceptable.
- C. A field test shall be witnessed by the CITY. All plumbing fittings and hydraulic equipment shall be inspected again for leakage. Should leakage be detected or observed, repairs shall be made and tests performed again until all leaks or losses are detected and repaired.

#### **VII. INSTALLATION AND SUPERVISION**

- A. The manufacturer will include three (3) days of start-up services and onsite training for the customer.
- B. The pump manufacturer shall provide for final inspection and testing of the system and shall make necessary adjustments to the control system prior to actual start-up tests. Start-up tests and demonstration shall be performed by the pump manufacturer's representative. Three (3) sets of operating and maintenance manuals and start-up procedures shall be provided to the city.

#### VIII. WARRANTY

The hydraulic propeller pump system and controls shall be warranted for one (1) year by the manufacturer against defects in material and workmanship, under normal use and service from the date of shipment from the factory as described in the warranty certificate.

#### **IX. SUBSTITUTION OF MATERIALS OR EQUIPMENT**

All variations of the proposed substitute from that specified shall be identified on the Bid Form.

## X. MANUFACTURER'S SUBMITTALS

Each manufacture shall include the following with its bid response:

- 1. Certification by Chief Engineer that manufacturer's pump testing facilities meets all requirements of the Hydraulic Institute Standards.
- 2. Specific acknowledgment that all testing shall be conducted in accordance with procedures described in the "Hydraulic Institute Standards" USA.\
- 3. A representative list of manufacturer's experience in the furnishing of hydraulically driven axial flow pumps of similar sizes or larger to those specified for this project, permanently installed and presently operating shall be furnished and include the names, addresses and telephone numbers of the consulting engineers, owners and operators of the system. The dates of installations shall also be included.
- 4. Three (3) copies of certified pump performance curves of the unit will be furnished. The curve shall be stamped as certified (correct) by a Registered Professional Engineer in the state in which the pumps are tested and manufactured.
- 5. The curve shall show the pump capacity, discharge head, speed, and horsepower requirements.
- 6. Bidders shall also submit for evaluation:
  - Three original copies of manufacturer's complete engineering catalogues for pumps.
  - Three certified copies of installation and operation manuals for permanent pump systems.
  - Three descriptive brochures showing photographs and/or describing the pump unit.
  - Three copies of all pump "Bill of Materials" of the unit's construction, cut-a-way drawings, and dimensions as offered to confirm compliance with the specifications.
- 7. Prior to shipment, the entire pumping system shall be factory tested at the manufacturer's place of business by a Registered Professional Engineer. The pump manufacturer shall be required to provide to the Owner's satisfaction that all materials used in the manufacture of equipment and its performance meet and are being furnished as specified.

### XI. TRAILER

The trailer shall be a minimum 6 foot wide x 16 foot long, heavy duty utility trailer with carrying capacity of 8000 lbs.

- A. The unit shall have a minimum of 5200 lb. axles.
- B. The unit shall have sealed beam rubber mounted LED lights. They shall consist of a minimum of eight (8) LED side marker lights, two (2) LED tail lights, and three (3) LED rear marker lights.
- C. The unit shall have a 7 way rv style plug or equal design.
- D. The unit shall have reflective tape on sides and back of trailer, minimum.
- E. The unit shall have a minimum of 2 and 5/16 heavy duty, bulldog style coupler with full wrap tongue made from 6 inch channel iron or equal. Tongue shall have heavy duty safety chains.
- F. The unit shall have a 7000 lb. drop foot jack set back to allow for tailgate opening.
- G. The unit shall have a break away safety device.
- H. Unit shall have heavy duty, diamond tread plate fenders.
- I. Unit shall have a minimum of 8 ply tires.
- J. Frame shall be made of a minimum of 6 inch channel iron; cross members made of a minimum of 3 inch channel iron on 18 inch centers; uprights should be 2x3x3/16.
- K. Top rail of trailer shall be made of a minimum of 3 inch square tubing and tongue should be made of a minimum of 6 inch channel iron.
- L. Trailer floor shall be made of a minimum of 3/16 inch, heavy duty, diamond tread plate metal.
- M. The successful bidder shall be responsible for obtaining permanent license plate(s) and registration(s) for awarded vehicles and/or equipment (if applicable). Registration documents shall be dropped off at the time of delivery, to the City of Alexandria Motor Pool located at 2021 Industrial Park Road, Bldg. V, Alexandria, LA 71303. A temporary tag shall be delivered if permanent license plate has not come in from DMV due to COVID delays.

END OF SPECIFICATIONS

<b>ONE (1) HYDRAULIC DRIVEN PORTABLE STORM WATI</b>	A BID SPECIFICATIONS FOR: ER PUMP WITH TRAILER FOR EMERGENCY STANDBY FLOOD DTECTION
	E PAGE
	C DRIVEN PORTABLE STORM WATER PUMP WITH D PROTECTION, new and unused, complete unit ready for specifications:
TOTAL BID PRICE FOR PUMP AND TRAILER	R\$
Manufacturer's Brand Name Pump:	Model No.:
Manufacturer's Brand Name Trailer:	Model No:
	hs from bid award date to allow for additional purchases on
Estimated delivery time after receipt of order:	/days
Warranty Emplacement/Service Site:	
Please list your <u>factory authorized</u> warranty empl	acement or service site below.
Company	
Name:	
	City/State/Zip:
Phone No.:	Fax No.:
Attention:	Title:
Bidder Information:	
Company Name:	
Address:	
City/State/Zip:	
Telephone #: ()	Fax #: ()
Email	
Authorized Printed Name and Title:	
Authorized Signature:	

(Per LA R.S. 38:2212(A)(c)(i) - See General Conditions Item #22, Page 4 of these bid specifications.)

# Hydraflo Water Pump - Single Stage Physical Data



														5	90				
		HOUSING INTAKE DIAMETER OPENING DIAMETER		INTAKE FLANGE OUTER DIAMETER		E STANDARD VERTICAL INTAKE FLANGE TO FLANGE		PUMP HOUSING FLANGE TO FLANGE		STANDARD INTAKE Flange to Discharge flange		HORIZONTAL INTAKE FLANGE TO DISCHARGE FLANGE		INTAKE FLANGE TO HOUSING CENTERLINE		CENTERLINE CENTERLINE TO VERTICAL DISCHARGE FLANGE			
		A	В		C		D (Note 1)		E (Note 3)		F		G		H H			I	
	in,	mm,	ln,	mnı.	in.	mm.	ln.	mm,	in.	mm.	in.	mm,	in.	IIIm.	in,	mm,	ín.	mm.	
HAC308	8.75	222	12	305	16	405	6.375	162	17.5	445	23.875	606	28.75	730	9.13	232	29.06	738	
HAC312	13	330	18	457	22	559	6.375	162	22.25	565	28.625	727	37.63	956	11.63	295	35.44	900	
HAC316	16.75	425	24	610	28	711	8.375	213	24.5	622	32.875	835	42,31	1075	15.38	391	42.38	1076	
HAC320	20,75	527	30	762	34	864	8.375	213	30.5	775	38.875	987	50.81	1291	17.00	432	50.63	1286	
HAC324	25	635	36	914	39.5	1003	11	279	30.5	775	41.5	1054	52.44	1332	20.38	518	54.75	1391	
HAC330	31	787	45	1143	50	1270	12.5	318	39.25	997	51.75	1314	66.38	1686	23.50	597	67.81	1722	
HAC336	37.25	946	54	1372	60.125	1527	14.75	375	48.375	1229	63.125	1603	81.50	2070	27.38	695	81.50	2070	
HAC342	43.25	1099	63	1600	70.25	1784	14.75	375	49	1245	63.75	1619	82.44	2094	31.50	800	88.31	2243	
HAC348	49.75	1264	72	1829	78.25	1988	17	432	60	1524	77	1956	102.50	2604	35.00	889	104.69	2659	
HAC354	56.25	1429	81	2057	89.25	2267	21.75	552	60	1524	81.75	2076	102.50	2604	36.88	937	106.31	2700	
HAC360	62	1575	90	2286	98.125	2492	24.75	629	60	1524	84.75	2153	105.06	2669	39.50	1003	113.13	2873	

			HOUSING CENTERLINE HOSE CONNECTION TO PLUMBING GUARD DIAMETER OF HOSE					DISC	STANDARD VERTICAL Pump Volume		STANDARD VERTICAL PUMP WEIGHT					
		J	K	K L M						APPRO	XIMATE	APPROXIMATE				
	In.	mm,	SUPPLY	RETURN	CASE DRAIN	NUMBER OF HOLES	NUMBER DIAMETER OF HOLES BOLT CIRCLE DIJTER DIAMETER DF HOLES în. mm. DIAMETER în. mm.							cu.ints.	lbs.	kg.
HAC308	10	254	0.75	1	-	8	0.5625	14.29	10.75	273	12.75	324	4.42	0.125	170	77
HAC312	12	305	1	1.25	0.75	12	0.5625	14.29	14.875	378	16	406	8.02	0.227	300	136
HAC316	15	381	1.25	1.5	0.75	12	0.5625	14.29	19	483	20.8125	529	17.1	0.484	550	249
HAC320	19	483	1.25	1.5	0.75	18	0.5625	14.29	22	559	24.125	613	227.7	6.448	925	420
HAC324	22	559	1.5	1.5	0.75	20	0.5625	14.29	26.375	670	28.625	727	44.24	1.253	1500	680
HAC330	26	660	1.5-2.0	2.0	0.75	24	0.5625	14.29	32.75	832	34.125	867	95	2.690	2200	998
HAC336	30	762	1.5-2.0	2.0	0.75	- 28	0.75	19.05	40.625	1032	43.125	1095	158.21	4,480	3400	1542
HAC342	33	838	1.5-2.0	2.0	0.75	30	0.75	19.05	45.5	1156	49.5	1257	215	6.088	4000	1814
HAC348	40	1016	1.5-2.0	2.0	0.75	24	0.875	22,23	51.625	1311	54.1875	1376	604	17.103	7000	3175
HAC354	45	1143	(2)2.0	(2)2.0	(2) 75 (1)1 0	24	0.875	22.23	57.625	1464	60.1875	1529	604	17.103	8500	3856
HAC360	48	1219	(2)2.0	(2)2.0	(2).75 (1)1.0	50	0.8124	20.64	63	1600	66.125	1680	604	17.103	10000	4536

Note 1: Strainer bars (intake screen) extend beyond intake flange (variable up to 2 inches). Dimension to intake flange is utilized here as a guide for spacing of opening to sump bottom. Note 2: Intake bells are available as 45° and 90° as well as the standard vertical unit. (Consult factory for other available Intakes.) All intakes can be provided with a stand to support water pump and ensure minimum inlet water requirements.

Note 3: If there are dimension limitations, consult factory as a shorter

Ketter 4: Optimical A.S.A. and A.M.S.L. diameter and neilling the available to realch customer's execting page. Carsolis



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#### MOVING WATER INDUSTRIES CORPORATE HEADQUARTERS

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