



COVER PAGE

Bid Proposal #2004

FLOATING AERATOR ASSEMBLIES FOR WASTEWATER TREATMENT PLANT

Sealed bids and electronic submitted bids for the above will be received until **10:00 AM CDT, Tuesday, September 16, 2014**, and publicly opened 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, Acting 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, Acting City Clerk
City of Alexandria - City Hall
PO Box 71
Alexandria, LA 71309-0071

Electronic Bid Submission:

www.bidsync.com

Pursuant to Louisiana R.S. 38-2212(A)(1)(F) and R.S. 38-2212.1(B)(4), vendors/contractors have the option to submit their bids and bid bonds, electronically. To submit electronically, go to www.bidsync.com .

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:	<u>Sue Ducote, Senior Buyer</u>
Phone Number:	<u>(318) 441-6182</u>
Fax Number:	<u>(318) 619-3412</u>
E-Mail Address:	<u>sue.ducote@cityofalex.com</u>



Joe C. Despino
Purchasing Manager

City of Alexandria
Purchasing Department
P.O. Box 71
Alexandria, Louisiana
71309-0071



Office: (318) 441-6180
Fax: (318) 441-6185

Sealed bids will be received until **10:00 AM CDT, Tuesday, September 16, 2014**, and publicly opened in the Council Chambers or Council Committee Room.

City of Alexandria Bid Proposal #2004
Page: 1 of 14
Date Specifications Prepared: August 8, 2014

Bid Bond Requirements: A bid bond or check for N/A% of the total amount of bid.

Performance Bond Requirements: In the event bid is accepted, a performance bond shall be required in the amount of N/A%.

Please file bid with the following:
Donna Jones, Acting City Clerk
City of Alexandria - City Hall
915 Third Street
P.O. Box 71
Alexandria, LA 71309-0071
Phone: 318-449-5090

INTRODUCTION

Floating Aerator Assemblies for Wastewater Treatment Plant

It is the intent of the City of Alexandria to secure pricing on a minimum of six (6) – **Floating Aerator Assemblies for the Wastewater Treatment Plant**. Assemblies shall be complete units, to include motor, direct drive propeller and integral flotation unit. Bids shall be for MATERIALS ONLY, installation will not be included. The City requests that pricing be held for ninety (90) days from bid award date so that additional units may be purchased on an as needed basis.

All products shall be new and un-used. Bid prices shall be for a complete units ready for installation. 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.

All bid prices shall include any and all freight charges. All products are to be shipped F.O.B., freight pre-paid, to the City of Alexandria Wastewater Department, to the attention of Grant Magnon, Treatment Supervisor, located at 1212 Hudson Boulevard, Alexandria, LA 71302, phone 318-441-6242.

Completed bid packet should be returned as issued by the City of Alexandria with ALL PAGES intact and all specification response columns filled in. Incomplete columns or missing pages, to include addendum pages, may result in the bidder'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 Sue Ducote, City of Alexandria - Purchasing Department, P.O. Box 71, Alexandria, LA 71309-0071; Fax #318-619-3412; e-mail sue.ducote@cityofalex.com ; and must be received by Tuesday, August 26, 2014, at 5:00 PM CDT.

**CITY OF ALEXANDRIA BID SPECIFICATIONS FOR:
Floating Aerator Assemblies for Wastewater Treatment Plant**

GENERAL CONDITIONS FOR BIDDERS - PLEASE READ CAREFULLY

1. Pursuant to LA R.S 38:2212.1C(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 A.(1)(b), 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 should 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 shall 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 A.(2), the bid specifications may contemplate a fixed escalation or de-escalation in accordance with the United States Bureau of Labor Statistic's Consumer Price Index and/or Wholesale Price Index. Bids based on specifications which are subject to a recognized escalation index shall be legal and valid.
8. Pursuant to LA R.S. 39:1701-1709, 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.
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.
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 **SHALL NOT** 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.

**CITY OF ALEXANDRIA BID SPECIFICATIONS FOR:
Floating Aerator Assemblies for Wastewater Treatment Plant**

General Conditions for Bidders - Please Read Carefully (Continued)

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 taxes. A 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.

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. Contractors who are owned by, 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 (A)(1)(c)(i) (see Item #22 below).

**CITY OF ALEXANDRIA BID SPECIFICATIONS FOR:
Floating Aerator Assemblies for Wastewater Treatment Plant**

General Conditions for Bidders - Please Read Carefully (Continued)

22. All bids shall be signed by hand and in ink by an authorized company representative per LA R.S. 38:2212(A)(1)(c)(i) 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.

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

24. Pursuant to LA R.S. 38:2212 C.(2)(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 twenty-one (21) 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; or (3) hand-delivered to all prime bidders who have requested bid documents.

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.

26. 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.

**CITY OF ALEXANDRIA BID SPECIFICATIONS FOR:
Floating Aerator Assemblies for Wastewater Treatment Plant**

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 www.diversityinaction.org .

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.

Sincerely,

City of Alexandria

**CITY OF ALEXANDRIA BID SPECIFICATIONS FOR:
Floating Aerator Assemblies for Wastewater Treatment Plant**

BID SPECIFICATIONS

SCOPE: The following bid specifications are to be used as minimum and maximum standards for a minimum of four (4), Floating Aerator Assemblies for the Wastewater Treatment Plant. All bids received shall be for materials only, NO installation is required.

The Wastewater Treatment Plant has over one-hundred (100), Aqua-Lator® Aerator, 20 HP, Model 1220-SS, units in use at this time. Bids submitted should be for this brand and model number, or equal.

Unless otherwise stated, the use of manufacturer's name and product numbers are for descriptive purposes and to establish general quality levels only, they are not intended to be restrictive.

Prospective bidders are required to state exactly what they intend to furnish, otherwise, it is fully understood that they shall furnish all items as stated. Bidder should indicate in the space provided below, under "*Bidder's Response*:", the necessary information to indicate he/she is conforming with the bid specifications for each item as written. If Bidder is in complete compliance with each bid specification item as written, please write "Comply" in the space provided; if not, please indicate in this space, the necessary information on the product you are proposing. Each specification response is necessary to ensure the proper evaluation and tabulation of this bid. If each "*Bidder's Response*" section is not filled in or completed, your bid may be rejected.

=====

Bidder's Response:

1.0 General:

1.1 No bid may be withdrawn for at least thirty (30) days after the scheduled closing time for the receipt of bids. Quoted prices shall remain firm until product(s) have been accepted by the City of Alexandria as delivered.

1.2 Products shall be new, un-used only.

1.3 Two (2) copies of the Parts Manual, Service Manual, and Operator's Manual for these aerators shall be furnished by the successful bidder at the time of delivery.

1.4 **All products shall be delivered F.O.B., freight pre-paid.** City of Alexandria – Wastewater Treatment Plant, located at 1212 Hudson Boulevard, Alexandria, LA 71302. Aerators shall be fully assembled, serviced and ready for installation.

1.5 Each bidder is requested to furnish, attached to the bid, complete descriptive literature on product being quoted. Any item(s) appearing in the manufacturer's regularly published specifications as "standard" equipment are assumed to be included in the bidder's proposal.

**CITY OF ALEXANDRIA BID SPECIFICATIONS FOR:
Floating Aerator Assemblies for Wastewater Treatment Plant**

Bid Specifications (Continued)

1.0 General: (Continued)

Bidder's Response:

1.6 Each respective bidder shall be responsible for insuring that his/her product meets or exceeds specifications as described herein.

2.0 Aerator Drive Motor:

2.1 Aerator motor should deliver 20 HP at a nominal speed of 1200 RPM and should be wired for 460 volt, 3-phase, 60-cycle; minimum.

2.2 The motor shall be totally enclosed, fan-cooled type, and be rated for severe chemical duty; minimum.

2.3 The motor windings shall be non-hygroscopic and have a minimum NEMA Class F insulation.

2.4 Aerator drive motor shall be equipped with a condensate drain, located at the lowest point in the lower end-bell housing; or equal design.

2.5 Unit shall be equipped with a labyrinth seal, mechanical type seal, located below the bottom bearing to prevent moisture or leakage from penetrating into the lower bearing; or equal design.

2.6 All motor parting surfaces shall be deep registered and sealed with Permatex or equal.

2.7 All through bolts, nuts and screws shall be 18-8 stainless steel; or equal.

2.8 The motor should be Nidec Electric, Baldor-Reliance; or equal.

2.9 Each motor shall have a stainless steel nameplate securely fastened to unit. The nameplate shall indicate the following:

2.9.1. Voltage, speed, insulation class, amperage, service factor, wiring diagram, motor serial number, and the manufacturer's name and address; minimum.

**CITY OF ALEXANDRIA BID SPECIFICATIONS FOR:
Floating Aerator Assemblies for Wastewater Treatment Plant**

Bid Specifications (Continued)

2.0 Aerator Drive Motor: (Continued)

Bidder's Response:

2.9.2. The above information shall be steel stamped or otherwise permanently marked.

3.0 Motor Shaft:

3.1 Shaft shall be designed to be one-piece continuous from the upper bearings to the propeller; or equal.

3.2 The one-piece shaft should have a minimum diameter of **2.125"** and be manufactured from 17-4 PH stainless steel in the 1150°F heat treated condition; or equal material and process.

3.3 The one-piece shaft shall have a minimum 135,000 PSI yield strength.

3.4 The one-piece shaft shall be keyed and threaded to mate to a keyed propeller for ease of installation.

4.0 Motor Bearings:

4.1 The motor bearings shall be re-greaseable type, not sealed bearings.

4.2 The top and bottom motor bearings shall be the combined radial and axial thrust type; or equal, and shall be packed at the factory with Chevron Black Pearl Grease; or equal product.

4.3 The top motor bearing shall be shielded on the bottom side only, and the bottom motor bearing shall be open type - double row angular contact; or equal design.

4.4 The lower motor bearing inner race shall be locked to the motor shaft via a special washer and locking nut arrangement; or equal design. Snap ring type retainers will not be accepted.

**CITY OF ALEXANDRIA BID SPECIFICATIONS FOR:
Floating Aerator Assemblies for Wastewater Treatment Plant**

Bid Specifications (Continued)

5.0 Discharge Cone:

Bidder's Response:

5.1 The discharge cone shall be a monolithic casting of type 304 stainless steel; or equal design and material. Fabricated, welded or non-metallic discharge cones are not acceptable.

5.2 In order to minimize vibration and provide adequate strength, the discharge cone should weigh a minimum 150 pounds.

5.3 The discharge cone casting shall act as a base for the aerator motor, and alignment of the motor to this base shall be controlled by machined index fittings that engage the P-base of the motor; or equal design.

5.4 The design of the discharge cone shall be such that the liquid spray discharges at a 90° angle to the motor shaft, with 360° spray pattern in the horizontal plane.

5.5 The discharge cone shall contain an anti-deflection journal insert to limit the radial deflection of the motor shaft; or equal design.

5.6 The bottom side of the casting shall have a 90° radius transition to effect the hydraulic change in direction with a minimum head loss; or equal design.

5.7 There shall be fluid deflector located on the motor shaft, immediately below the anti-deflection journal insert and the lower portion of the discharge cone; or equal design.

5.7.1. The fluid deflector will be machined from Delrin® or equal product, and attached to the motor shaft by recessed allen-head stainless steel set screws; or equal design.

6.0 Float:

6.1 The float shall be manufactured of polyester resins and shall have a resin/glass content of 70% resin and 30% glass; or equal design.

**CITY OF ALEXANDRIA BID SPECIFICATIONS FOR:
Floating Aerator Assemblies for Wastewater Treatment Plant**

Bid Specifications (Continued)

6.0 Float: (Continued)

Bidder's Response:

- 6.2 A minimum of 0.015” thick gel coat shall cover the entire out float shell.
- 6.3 A moisture inhibitor such as N.P.G. (neopenthal glycol) or equal, and an ultraviolet inhibitor such as UV9 or equal, shall be used to protect the float from moisture and sunlight damage.
- 6.4 The construction of the float should be such that no underwater joints are used.
- 6.5 Joints used to connect the top coverlid should overlap a minimum of 1-1/2”. Both parts of all joints shall be ground to glass fiber and a resin/glass adhesive shall be applied to complete a 100% monolithic glass-to-glass bond; or equal process.
- 6.6 The float shall be a minimum of 84.5” in diameter and 14” thick, and shall be manufactured of fiberglass construction; or equal design.
- 6.7 The minimum flexural strength of the fiberglass materials shall be 28,000 psi and the minimum tensile strength shall be 11,000 psi.
- 6.8 The float should be constructed so that the volute will distribute the load of the entire motor, drive, discharge cone, and volute static load, plus the entire dynamic load from the propeller thrust and radial forces by spreading these forces uniformly around the full 360° circumference of the float’s central core.
- 6.9 The float shall have internal reinforcements to transmit mooring line tension forces such that the connections will not be allowed to flex the structure; or equal design.
- 6.10 Float shall be filled with closed-cell polyurethane foam, or equal material, that adds structural stability and prevents the possibility of sinking if damage occurs to the float exterior, and shall be completely sealed water tight.

**CITY OF ALEXANDRIA BID SPECIFICATIONS FOR:
Floating Aerator Assemblies for Wastewater Treatment Plant**

Bid Specifications (Continued)

6.0 Float: (Continued)

Bidder's Response:

6.11 Float should have six (6) mooring points, spaced for three (3) point mooring around the outer circumference. All mooring connections shall be stainless steel; or equal.

7.0 Propeller:

7.1 The propeller shall be manufactured of type 316 stainless steel, or equal material, and shall be a two-bladed marine precision casting specifically designed for this type application.

7.1.1. Aerators using inclined screw propellers will not be accepted.

7.2 The blade design shall be anti-fouling, non-cavitating for greater operational efficiency.

7.3 The propeller will have a diameter not allowing a greater clearance with the volute of 0.25".

7.4 Each propeller blade shall be pitched so that the pitch angle and rake angle is within +/- 2% of the other blade.

7.5 The propeller should be pitched so that the drive motor is loaded between 88% and 95% of full load nameplate horsepower.

7.5.1. Data confirming the pitch, diameter, and rake shall be made available upon the City's request.

7.6 The propeller shall be secured to the shaft by a stainless steel locking nut; **will not accept designs that require use of pins for glueing, peening and pounding.**

8.0 Volute:

8.1 The propeller shall operate in a round volute, made from 304 stainless steel; or equal design.

**CITY OF ALEXANDRIA BID SPECIFICATIONS FOR:
Floating Aerator Assemblies for Wastewater Treatment Plant**

Bid Specifications (Continued)

8.0 Volute: (Continued)

Bidder's Response:

8.2 The volute shall have a minimum of 3/16" wall thickness, and a minimum of four (4) full-length gussets welded on a 90° spacing around the circumference of the volute between the top and bottom flanges; or equal design.

8.3 The volute shall have a large flange manufactured from a one-piece casting at its top extremity that completely encircles the volute; or equal design.

8.3.1. This flange shall match a similar flange on the bottom of the discharge cone to provide for a bolted, machined flange-to-flange fit; or equal design.

8.4 Volute shall have a 360° machined index in the upper flange that will provide concentric alignment of the propeller in the volute by engaging the inside diameter of the mating flange on the discharge cone; of equal design.

9.0 Intake Assembly:

9.1 The intake assembly shall be fabricated of 304 stainless steel; or equal material, approximately 0.075" in thickness and having a gradually expanding opening outward to the intake end; or equal design.

9.2 The stainless steel or equal material used to fabricate the intake cone shall be structurally sufficient to support the weight of the entire aerator assembly when the aerator is free standing on dry ground.

9.3 The intake cone shall be designed so that the suction lift from the aerator propeller is vertical from the liquid depth below the aerator; or equal design.

9.4 The length and inlet diameter shall be sufficient to provide uniform inlet hydraulics so that no increase in vibration is caused due to its shape or size.

**CITY OF ALEXANDRIA BID SPECIFICATIONS FOR:
Floating Aerator Assemblies for Wastewater Treatment Plant**

Bid Specifications (Continued)

9.0 Intake Assembly: (Continued)

Bidder's Response:

9.5 The intake cone shall have anti-vortex cross vanes made from type 304 stainless steel; or equal design.

10.0 Balancing:

10.1 The entire rotating assembly including the motor, shaft, shaft accessories, and propeller shall be dynamically balanced to within 2 mils peak-to-peak displacement measured at the upper and lower motor bearings; minimum.

10.2 Measurements shall be taken at a frequency equal to **1200 RPM** and at a 2400 RPM, minimum.

10.3 Measurements shall be taken with the motor in a vertical, shaft down position with the entire motor module on resilient pads; minimum.

11.0 Mooring:

11.1 The floating aerator assemblies shall have three (3) mooring connections to secure each aerator in position.

11.2 Mooring cable shall be 7x19 strand construction, 304 stainless steel and approximately 3/16" in diameter; or equal design. **A total of 250 feet of cable will be provided for the four (4) aerators.**

11.3 The mooring hardware shall consist of the appropriate thimbles and clips constructed of type 316 stainless steel; or equal design.

12.0 Product Warranty:

12.1 Successful bidder should furnish complete warranty information for product(s) being bid, with bid proposal.

12.2 Warranty shall be for a period of one (1) year, minimum.

**CITY OF ALEXANDRIA BID SPECIFICATIONS FOR:
Floating Aerator Assemblies for Wastewater Treatment Plant**

PRICE PAGE

Bid price for a minimum of six (6), **Floating Aerator Assemblies for Wastewater Treatment Plant**, all units are new and unused, each unit completely serviced, tested and ready for use, delivered F.O.B., freight pre-paid, as per the bid specifications:

Bid Price \$ _____ **/per each X 6 each = TOTAL BID PRICE \$** _____

Manufacturer's Brand Name: _____ **Model No.:** _____

The City of Alexandria requests that pricing be held firm for ninety (90) days from bid award date to allow for additional purchases on an "as needed" basis.

Prices held firm after award of bid for a period of: _____

Bidder Information:

Company Name: _____

Address: _____

City/State/Zip: _____

Telephone #: (_____) _____ Fax #: (_____) _____

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.)