



**MONROE COUNTY
BID PROPOSAL**

Division of Purchasing
County Office Building, Room 200
39 West Main Street
Rochester, NY 14614
(585) 753-1100

BID PROJECT NUMBER: 1104-08

BID TITLE: Motor Repair

BUYER: Mary Ann Wood

BID TIME: 11:00 am

PHONE: 585/753-1135

BID DATE: November 24, 2008

BID SECURITY REQUIRED: No: Yes, in the amount of _____ as specified herein

ITEM AND/OR GROUP NO.	ESTIMATED QUANTITY	ARTICLES OR SERVICES	UNIT PRICE	EXTENSION
		Motor Repair (per attached specifications)		
		Total from Unit Price Sheet		\$ <u>30,236.00</u>
Please include two (2) copies of bid proposal package at the time of bid opening.				

I have received, read and agree to the terms and conditions as set forth in General Terms and Conditions, Monroe County, attached, and any special terms and conditions set forth in the General and Technical Specifications herein. I have read, understand and agree to all instructions to Bidders (including the Non-Collusion Bidding Certification) on the reverse hereof. I hereby recognize and agree that upon execution of this document by an authorized officer of Monroe County, that this document, together with the Contractor's bid as accepted by Monroe County and all other documents prepared by or on behalf of Monroe County for this bid solicitation, shall become the binding contract between the parties for the services to be provided in accordance with the terms and conditions set forth herein.

FIRM NAME Auburn Armature, Inc.

SIGNED BY *John Lemczak*

ADDRESS 70 Wright Circle
Auburn, NY 13021-0870

PRINTED NAME John Lemczak
TITLE Apparatus Services Mgr.

FEDERAL ID NO. 16-0972853

PHONE NO. 315-253-9721 x117

E-MAIL ADDRESS john.lemczak@aainy.com

FAX NO. 315-253-2051

BID ACCEPTANCE AND CONTRACT AWARD

The above bid is accepted, except as noted, and the contract is awarded to you for the following item(s):
Entire Contract

Authorization to furnish supplies/services will be made via Purchase Order, as appropriate, signed by the Monroe County Purchasing Manager, or designated agent. Contract period from 01/01/09 to 12/31/09 w/Options.

Date: 12/01/08

BY: *Dawn C. Staub*
Dawn C. Staub, Purchasing Manager, Monroe County

TERMS AND CONDITIONS

BID ITEM: MOTOR REPAIR

FOR: DEPARTMENT OF ENVIRONMENTAL SERVICES (DES)

DEPARTMENT CONTACT: Kevin Blackburn, (585) 753-7656

DUPLICATE COPIES: PLEASE SUBMIT YOUR BID IN DUPLICATE: THE ORIGINAL AND ONE (1) COPY.

BID INFORMATION: At the time of bid, the bidder shall supply detailed specifications covering the item(s) contained herein and shall clearly indicate any areas in which item or items offered do not fully comply with the specifications contained herein.

SUBMITTAL OF FORMAL PROPOSAL: Bid proposal must be legible and submitted in the original form, bearing an original signature. **COPIES AND FACSIMILES ARE NOT ACCEPTABLE.**

All bidders must submit proof that they have obtained the required **Worker's Compensation and disability benefits** coverage or proof that they are exempt.

SPECIFICATION ALTERATIONS: Specifications will be construed to be complete and be considered the entire description of the goods or services upon which Monroe County is now seeking bids. Only formal written addenda can materially alter this set of specifications. No verbal statement made by a Monroe County employee or anyone else is binding nor shall such statement be considered an official part of this public bid proposal.

WAGE RATES: Contractor agrees to comply with the provisions of the New York State Labor Law relating to the payment of prevailing wage rates to the extent that such rules may be applicable to the Contractor. Wage rates may be obtained at www.labor.state.ny.us.

QUANTITIES: The quantities listed on the unit price sheet are the **estimated total requirements**. These estimates should not be construed to represent guaranteed maximum or minimum quantities to be purchased during the contract period. All unit prices bid will be extended for the actual number of units serviced.

QUALIFIED BIDDER: Each bidder must be prepared to present satisfactory proof of his capacity and ability to perform this contract. Such proof may include, but is not limited to, an inspection of the bidder's facilities and equipment, financial statements, references and performance of similar contracts. **The Purchasing Manager reserves the right to reject any bid where the bidder cannot satisfy the County as to their ability to perform. Monroe County reserves the right to reject any and all bids if the Monroe County Purchasing Manager deems said action to be in the best interest of Monroe County.**

**EMERGENCY WORK
REQUESTS:**

The Contractor must maintain a telephone number when he can be reached twenty-four (24) hours per day, seven (7) days per week.

METHOD OF AWARD:

Monroe County intends to award one contract the lowest responsive and responsible bidder(s). Bidders must bid on every item in order to be considered. The County reserves the right to reject any and all bids if the Purchasing Manager deems said action to be in the best interest of the County.

CONTRACT TERM:

Contract will start with the date of the contract award and run through **December 31, 2009** with the option to renew the contract up to four (4) additional twelve (12) month periods at the mutual consent of both parties.

PRICE CHANGES:

Price changes may be proposed by either party no later than forty-five (45) days prior to contract extension, based upon manufacturer price changes which must be supported with documentation. Should price changes not be acceptable to both parties, the contract will not be extended. Prices may change only at the time of extension

MINIMUM ORDER:

No minimum order is specified for this contract. Agencies must be able to order as needed. **Political subdivisions and others authorized by law may participate in this contract.**

DELIVERY:

All deliveries to be F.O.B. Monroe County to agency as specified by a Purchase Order. Delivery costs must be built into the unit prices bid. Deliveries must be made within **two (2) weeks** after receipt of purchase order number. The County reserves the right to terminate the contract in the event the specified delivery time is not met.

**PURCHASE ORDER
ISSUANCE:**

No work shall proceed against nor shall any items be delivered against this contract until the Contractor has received a purchase order or a purchase order number. **Items supplied or services rendered that are not part of this contract will not be paid for by Monroe County.**

MATERIAL COSTS:

All materials for emergency work shall be itemized on each invoice and billed at **five percent (5%)** above the Contractor's cost. Each item must include the full description including manufacturer, stock number, and unit price as well as a copy of the invoice paid. The County will reimburse the Contractor for incoming freight charges for items needed for emergency repairs. There will be no surcharge for freight. The County reserves the right to audit the Contractor's records to determine that the County is being charged no more than five percent (5%) of the Contractor's cost.

WRITTEN ESTIMATES:

In every instance that the Contractor anticipates that an emergency job may cost \$1000.00 or more, the Contractor must, prior to commencing work, give a written estimate for the work to the department, at no charge to the ordering agency. The estimate must show labor and materials cost. The County reserves the right to independently purchase any equipment or supplies needed to execute an emergency job. The Contractor may not proceed with the work until approval is given by the department. If the estimate is considered too high, the County maintains the option of obtaining open market quotations, providing materials or changing the scope of the work. The County maintains the right to cancel a request.

BILLING PROCEDURE:

All invoices for items sold any authorized agency as a result of this contract must be billed in the following manner: Purchase Order #, Quantity, Description of Item Purchased, Stock or Catalog #, List Price, Discount, Extension and Total. **ALL INVOICES MUST BE MARKED WITH THE PURCHASE ORDER NUMBER. INVOICES WITHOUT THIS INFORMATION WILL NOT BE PROCESSED FOR PAYMENT**

WARRANTY/GUARANTEE:

All warranties by manufacturer shall apply. Bidder shall, as part of its proposal, furnish its warranty/guarantee for all goods/services to be furnished hereunder. As a minimum, Bidder shall warrant all goods for a period of two (2) years from date of acceptance. Bidder shall be obligated to repair or replace all defects in material or workmanship which are discovered or exist during said period. All labor, parts and transportation shall be at Bidder's expense.

SECURITIES AND INSURANCE:

Any Certificate of Insurance, Bonds or other forms of security required by this bid are to be submitted to the Purchasing Manager no later than ten (10) normal business days following the date of notification of award. Documents must be received by the close of business, 5:00 PM, on that day.

UNCONTEMPLATED PURCHASES:

Monroe County reserves the right to request separate bids for such quantities of items on this contract that may be best procured via separate public bid offering and to otherwise act in furthering its own best interests.

COMPLIANCE WITH THE LAW:

The Contractor agrees to procure all necessary licenses and permits. The Contractor shall comply with all laws, rules, and regulations pertaining to the payment of wages and all other matters applicable to the work performed under this contract.

SUBCONTRACT:

The Contractor shall not subcontract any work without first obtaining the written consent of the Purchasing Manager of Monroe County.

RELATED ITEMS:

The County reserves the right to add related items to this contract during the contract term upon agreement by both parties as to the price. Approval must be given in writing by the Purchasing Manager or his Designee.

**REPORT OF
PURCHASE:**

The Contractor must, upon request, provide the County purchasing Manager with detailed information showing how much of each item was delivered, to any and all agencies under this contract. This includes deliveries to not only the County but any other municipality or agency which orders from this contract.

OTHER AGENCIES:

The Contractor(s) must honor the prices, terms and conditions of this contract with political subdivisions or districts located in whole or in part within Monroe County. In addition, the contractor may, but is not required to, extend the prices, terms and conditions of this contract to any political subdivision or district located in New York State. Usage of this contract by any of these other political subdivisions or districts will have to be coordinated between that subdivision or district and the contractor. Orders placed against this contract between any subdivision or district will be contracts solely between the Contractor(s) and those entities. Monroe County will not be responsible for, nor will it have any liability or other obligation for, such contract between the Contractor(s) and any third party.

INDEMNIFICATION:

The Contractor agrees to defend, indemnify and save harmless the County, its officers, agents, servants and employees from and against any and all liability, damages, costs or expenses, causes of action, suits, judgments, losses and claims of every name not described, including attorneys' fees and disbursements, brought against the County which may arise, be sustained, or occasioned directly or indirectly by any person, firm or corporation arising out of or resulting from the performance of the services by the Contractor, arising from any act, omission or negligence of the Contractor, its agents and employees, or arising from any breach or default by the Contractor under this Agreement. Nothing herein is intended to relieve the County from its own negligence or misfeasance or to assume any such liability for the County by the Contractor.

BP#1104-08
MOTOR REPAIR & VIBRATION ANALYSIS
SPECIFICATIONS

SECTION 1: MOTOR REPAIR

I. GENERAL:

A. Scope:

The Monroe County Department of Environmental Services (DES) is seeking a qualified electrical motor shop to repair electrical motors in the fractional to 500 H.P. range. In addition, bidder must be able to perform vibration analysis and motor trending.

B. Locations:

Frank E. Van Lare Facility (FEV)
1574 Lakeshore Blvd.
Rochester, NY 14617

Buttonwood Pump Station (BWPS)
15 North Greece Road
Hilton, NY 14468

Irondequoit Bay Pump Station (IBPS)
100 Edgerton Drive
Rochester, NY 14617

Flynn Road Pump Station (FRPS)
599 Flynn Road
Hilton, NY 14468

Northwest Quadrant Facility (NWQ)
170 Payne Beach Road
Hilton, NY 14468

Island Cottage Pump Station (ICPS)
390 Island Cottage Road
Rochester, NY 14612

Fleet Center
145 Paul Road
Rochester, NY 14624

Resource Recovery Facility (RRF)
1845 Emerson Street
Rochester, NY 14606

GCO Pump Station (GCOPS)
145 Paul Road
Rochester, NY 14624

C. Pre-Bid Inspection:

It is strongly recommended that the bidder arrange a pre-bid inspection of the gear to be maintained and to review all available data. Any failure by the bidder to acquaint himself with all available information will not relieve him from responsibility of carrying out the work intended by this contract.

For an appointment, contact:

*Kevin P Blackburn
Frank E. Van Lare Wastewater Treatment Facility
1574 Lakeshore Blvd
Rochester, NY 14617
Telephone: 585/753-7656*

D. Experience:

Bidders shall submit with their bid a description of their firm as it pertains to the repair, service, testing and vibration analysis of electrical motors.

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II. QUALITY ASSURANCE:

A. **Applicable codes, Standards and References:**

1. American National Standards Institute (ANSI)
2. Institute of Electrical and Electronic Engineers (IEEE)
3. National Electrical Manufacturers Association (NEMA)
4. Anti-Friction Bearing Manufacturers Association (AFBMA)
5. Electrical Apparatus Service Association (EASA)
6. International Electrical Testing Association (NETA)

B. **Standard Products:**

All replacement materials, retrofit equipment and accessories shall be new. Remanufactured equipment may be acceptable in some cases but only with the approval of the County. Parts shall be the standard products of a manufacturer regularly engaged in the production of such material or equipment.

C. **Quality Standards:**

1. The successful bidder shall submit to the County the applicable Quality Assurance (QA) and Quality Control (QC) policies and associated procedures.
2. The successful bidder shall comply with all current applicable codes and standards, including but not limited to those referenced in this specification.

III. EQUIPMENT AND BID INFORMATION:

A. **Price Quotes:**

Upon receiving a motor from the County, the shop shall tear it down for evaluation. The shop shall then quote a price for parts and labor to repair the motor in accordance with these specifications.

The County will make a determination based on the shop's quote. The vendor will then be contacted and told whether to proceed with the repair, return the motor (disassembled) to the County or to scrap the motor.

Under no circumstances will the shop proceed with the repair before receipt of a Purchase Order number.

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IV. WORK TO BE PERFORMED:

A. The motor repair work outlined in this section is for the motors listed on the Unit Price Sheet and for other motors of similar size, type and make that may need repair. The description is general only and shall not be construed as a complete listing of every item of work which may be required.

1. Pick up via your truck. No charge will be made for motor pick up or delivery.
2. If the motor is shipped with coupling on the shaft, the coupling locations shall be marked before it is removed. The coupling must be replaced in the same exact position when balancing the rotor and before returning the motor.

Steps 3 thru 16 are for motors requiring a general reconditioning but not a rewind:

3. Bake all windings at 275 degrees F in a temperature-controlled oven to infinity ground.
4. Perform complete electrical tests on stator and rotor winding. Tests to be conducted at double the rated winding voltage plus 1,000 volts (NEMA standard).

Perform the following tests: Insulation resistance, dielectric absorption, polarization index (10:1 minute ratio), DC over-potential and phase balance (low voltage). Surge comparison is to be run before and after the shop test run on rewind and before dismantling on non-rewinds. Core loss test shall be run before and after the stator burnoff. Record all values and include them in final report to the County.

5. Inspect stator and rotor core for any loose or damaged lamination, rotor pullover or loose or damaged supports. Report any deteriorated components and any condition that will warrant immediate repair. Report any condition that may cause a problem at a later date. The Supervisor of Electrical Operations or his designee reserves the right to inspect the motor at this time.
6. If any looseness is found in step #5, the component will have to be solvent cleaned, preheated to 150 degrees F and dipped in Class "H" epoxy resin varnish. Both stator and rotor will be baked at 275 degrees F for a minimum of twelve (12) hours.
7. If no problems are found in step #5, then both the stator and rotor are to be heated to 150 degrees F and may be sprayed with Class "H" epoxy resin varnish. Both stator and rotor will be baked at 275 degrees F for a minimum of twelve (12) hours.
8. Rotor to be lathe mounted and shaft machined and polished to minimum runout. Scoring and grooving in the vicinity of the bearings and seals shall be repaired. Bearing journals will be micrometer checked and brought to a high polish. Check shaft for trueness.
9. Check bearing housings, using inside micrometers and compare against factory clearance limits. All rabbets and shaft paths to be checked for fit and distortion and repairs shall be made.

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10. For all motors of 25 H.P. or greater, mount shaft/rotor assembly in 5,000 lb. Stewart-Warner balancer or equal and dynamic balance to factory specifications or better. If the motor was shipped with a coupling half on the shaft, the coupling must be mounted on the exact same location before balancing.
11. Install new drive end and opposite end bearings with 200 or 300 series, C-3 fit ball bearings. The new bearings shall be sealed. Check bearing dimensions and mate bearings to bearing housings. The motor shall have a tag or plate affixed to it indicating that it has sealed bearings. The bearing grease shall lubrication engineer's type 1275.
12. Replace connection box, cover and/or gasket if damaged or missing.
13. Replace connection box gasket.
14. Check fan blades for missing blades, damaged blades or any unacceptable imbalance.
15. The motor shall be painted G.E. blue-gray, USAi paint code #24.
16. The work on each motor must be completed and the motor returned within five (5) working days if no parts other than bearings are required.

If motor is known to require a rewind, then the following work instructions will apply: (Insert at step #3 and omit steps #3 thru 7 listed above).

3. Motor shall be rewound with United Technologies Essex MR 200 Magnet Wire or equivalent. This wire is for motor applications subject to moisture. It must have a dielectric strength at the rated temperature of 4275 volts minimum. The thermal class under U.L. listing MW-35C shall be 200 degrees centigrade.
4. Insulating materials will be class H.
5. The rotor shall be dipped in Class "H" epoxy resin varnish. The stator shall be sealed against moisture by vacuum impregnation (V.P.I.) using epoxyite polyester resin. The stator and rotor shall be baked at 275 degrees F for a minimum of twelve (12) hours.
6. Bring out leads to _____* inch length without terminations.
7. When the stator is to be rewound, bring out the three leads for _____* volts only.

* To be specified by the County at the time of repair.

Special Instructions for "Explosion-Proof" Motors:

This motor operates in a Class I, Division I, Group D atmosphere. Your motor shop must be U approved to re-certify this motor for use in the explosive atmosphere described above.

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Be advised that this motor must have a "U Rebuilt Motor" listing mark and must be rebuilt accordingly. The motor will need rewinding and new bearings.

16. No additional work will be authorized without the written consent of the County. Any such unauthorized work will result in forfeiture of payment. If you have any problems with the work, you must contact: Kevin P Blackburn, Principal Senior Station Mechanic or his designee at 585/753-7656.
17. Contractor must give the County twenty four (24) hours notice as to when the motor will be returned.
18. Return old parts to County when requested.

V. TESTING:

- A. Test run the motor in the Contractor's shop at full voltage and until it reaches operating temperature. Check voltage and current balance. Perform a complete vibrational analysis: Radial in two (2) perpendicular planes, two (2) points in each plane and one (1) axial point. Perform gear spike energy analysis on both bearings.
- B. The Principal Senior Station Mechanic or his designee reserves the right to be present and to observe these tests; therefore, it will be necessary to notify him twenty four (24) hours in advance of any test run.
- C. Acceptance of the installation will occur after the motor has been installed, meggered and current and voltage reading taken under expected load.
- D. All test results shall be reported on forms as recommended by the National Electrical Testing Association. The results shall be in the proper units for dimensions. The Contractor shall submit with his schedule a list of all tests to be performed by any independent testing firm or by the Contractor's staff. Additionally, the Contractor shall submit samples of each of their report forms for the County's approval. The report forms shall include a discussion of the acceptable ranges and limits of each parameter.

VI. FINAL REPORT:

The Contractor shall be required to furnish a final report giving all the as-found and as-left test measurement values. The report must be reviewed and signed by the Contractor's engineer or shop foreman.

The original copies of all as-built drawings, wiring diagrams, schematics, O & M manuals and literature furnished by the County used by the Contractor to perform the work must be returned to the County within ten (10) days of final acceptance.

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VII. WARRANTY:

All replacement parts and workmanship shall be warranted for two (2) years. The warranty document shall be detailed as specified. The motor shop shall be prepared to provide evidence of strength supporting their capability to provide adequate warranty support. This may be accomplished by a shop visit in the case of shops performing motor repairs for the first time for the County.

SECTION 2: VIBRATION ANALYSIS

I. GENERAL:

A. **Scope:**

Bidder must be qualified to perform Vibrational Analysis, Laser Alignment, Balancing and Troubleshooting.

B. **Service Description:**

The service will consist of acquisition of baseline data, troubleshooting, balancing and alignment at an hourly rate. The acquisition of trending data shall be at a per point rate with the frequency to be determined by the County. The successful Bidder must supply a qualified technician to operate the equipment and make on site evaluations of the testing.

C. **Equipment:**

1. **Vibrational Equipment:**

- a. Vibration data shall be acquired with a "State of the Art" Data Collector capable of collecting data in route from at a minimum of 800 lines of resolution.
- b. Instrument should be in good working order and on a semi-annual basis have documented calibration to N.I.S.T. standards.
- c. Instrument should be capable of reading amplitude (Displacement in Mils P-P, Velocity in inches per second peak, Acceleration in G-Peak), Spike energy and phase of vibration.
- d. Instrument should have adequate data storage capacity at 800 lines of resolution so as to be able to capture 1,000 trending points and not require downloading more than once a day at the work locations.
- e. Instrument should be capable of capturing transient data and be able to perform start-up and coast down data acquisition to confirm possible natural frequency problems in equipment or supporting structures.
- f. Instrument should be I.B.M. compatible and DOS based.

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- g. Transducer shall be an accelerometer with capabilities for magnetic mounting, stud mounting or threaded hole mounting.

2. Laser Alignment Equipment:

- a. Alignment system shall operate on a reflected laser beam.
- b. The transducer system, which houses the laser diode and position detector, shall attach to the shaft of the stationary piece of equipment with a quick mounting system.
- c. The reflecting prism shall attach to the shaft of the moveable piece of equipment with a quick mounting system.
- d. The position detector shall automatically enter measurements into the microprocessor which shall calculate misalignment from the beam deflection and then display corrective measures for misalignment at the shaft coupling and machine feet to 0.0005 inch.
- e. Machine shall be capable of measuring soft foot and determine corrective actions.
- f. Machine shall operate with a Class 1 laser safety rating.

3. Balancing Equipment:

Equipment shall be capable of performing in-place dynamic balancing, utilizing the same instrumentation as used to detect imbalance through vibration analysis or with another instrument capable of balancing parts to a vibration velocity level of less than .1 inches per second at rotational frequency.

D. Reports:

- 1. Reports shall be delivered within ten (10) working days following completion of the work.
- 2. Reports shall be supplied in the following quantities.
 - a. Three (3) hard copy, bound reports.
 - b. One (1) report on computer disk, readable by the County's equipment.
- 3. Reports shall contain the following:
 - a. A narrative, describing the fault in layman's terms and a suggested corrective action.
 - b. A Statistics Report showing time and date of data collection, number of missed points, number of inactive points and number of points where data was collected.

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- c. An Exception Report showing the name of the machine tested, the current vibration levels, the previous levels, the percentage of change, the first and second alarm levels and the date of measurement.
- d. A Plotted trending graph for each major component of each piece of equipment with no more than five (5) trends per graph.
- e. An Alarm Report showing all points that exceed alarm levels.

E. Software:

Software is to be 100% I.B.M. compatible in a commonly recognized database or spreadsheet to be approved by the County.

F. Division of Responsibility:

- a. The successful Bidder shall verify a suitable and stable source of electrical power to each test site and provide one if none is found. The testing firm shall specify the specific power requirements.
- b. The County shall notify the successful Bidder when the equipment becomes available for acceptance tests. Work shall be coordinated to expedite project scheduling.
- c. The successful Bidder shall notify the County prior to commencement of any testing.
- d. Any system, material or workmanship which is found defective on the basis of acceptance tests shall be reported to the County.

G. The Principal Types of Work are Described Below:

1. Vibration Analysis:

- a. The equipment shall be tested under normal operating conditions and load.
- b. The equipment shall be tested in accordance with current industry standards.
- c. Measurements shall be taken on the bearings in the horizontal, vertical and axial directions. If the bearings are inaccessible, then the measurement location shall be rigid part of the machine as close as possible to the bearing.
- d. The vibration amplitude at all frequencies from 1 Hz to 50Z running speed shall be continuously monitored and recorded for a minimum of 30 seconds. If the amplitude at any frequency fluctuates wildly, i.e., more than 50 percent, then the peak amplitude shall be recorded for the 30 second monitoring period.

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- e. During the testing period, the equipment shall have normal freedom of movement. Any vibration isolators shall be functioning normally with no binding.
- f. Variable speed equipment shall be tested for compliance throughout the entire speed range.

2. Laser Alignment:

- a. The equipment shall be aligned in a static position and shaft rotation shall only be by hand.
- b. The successful Bidder shall provide all necessary equipment, tools, shims and manpower necessary to complete the job.
- c. The equipment shall be aligned in accordance with manufacturer's parameters for alignment and if there is a difference in tolerances between the manufacturer of the driven piece of equipment, coupling manufacturer or driver; then the closest tolerance shall be held.

3. Balancing:

- a. The successful Bidder shall be able to perform in-place dynamic balancing utilizing the same equipment used to detect unbalanced through vibration analysis or with another instrument capable of balancing parts to a vibration velocity level less than .1 inches per second at rotational frequency.
- b. It is the responsibility of the Contractor to permanently attach balance weights and to guarantee their adherence under all conditions.
- c. The equipment shall be tested under normal operating conditions and load.
- d. The equipment shall be tested in accordance with current industry standards.

E. Safety and precautions:

- 1. Safety practices shall include but are not limited to the following requirements:
 - a. Occupational Safety and Health Act
 - b. Accident Prevention Manual for Industrial Operations, National Safety Council
 - c. Applicable state and local safety operating procedures
 - d. National Fire Protection Association - NFPA 70E
 - e. American national Standards for Personal Protection

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2. The successful Bidder shall have a designated safety representative on the project to supervise the testing operations with respect to safety.

ITEM	DESCRIPTION	UNIT PRICE
01	15 HP HORIZONTAL MOTOR REFURBISH ONLY;	\$186.00
02	15 HP HORIZONTAL MOTOR REFURBISH/REWIND	\$329.00
03	20 HP HORIZONTAL MOTOR REFURBISH ONLY;	\$186.00
04	20 HP HORIZONTAL MOTOR REFURBISH/REWIND	\$371.00
05	20 HP VERTICAL MOTOR REFURBISH ONLY;	\$276.00
06	20 HP VERTICAL MOTOR REFURBISH/REWIND	\$540.00
07	25 HP EXPLOSION PROOF HORIZONTAL MOTOR REFURBISH/REWIND	\$625.00
08	25 HP EXPLOSION PROOF HORIZONTAL MOTOR REFURBISH ONLY;	\$260.00
09	25 HP HORIZONTAL MOTOR REFURBISH ONLY;	\$224.00
10	25 HP HORIZONTAL MOTOR REFURBISH/REWIND	\$432.00
11	30 HP HORIZONTAL MOTOR REFURBISH ONLY	\$224.00
12	30 HP HORIZONTAL MOTOR REFURBISH/REWIND	\$495.00
13	40 HP HORIZONTAL MOTOR REFURBISH ONLY	\$304.00
14	40 HP HORIZONTAL MOTOR REFURBISH/REWIND	\$550.00
15	50 HP HORIZONTAL MOTOR REFURBISH ONLY;	\$304.00
16	50 HP HORIZONTAL MOTOR REFURBISH/REWIND	\$605.00
17	75 HP HORIZONTAL MOTOR REFURBISH ONLY;	\$391.00
18	75 HP HORIZONTAL MOTOR REFURBISH/REWIND	\$934.00
19	75 HP VERTICAL MOTOR REFURBISH ONLY;	\$611.00
20	75 HP VERTICAL MOTOR REFURBISH/REWIND	\$1,095.00
21	100 HP HORIZONTAL MOTOR REFURBISH ONLY;	\$488.00
22	100 HP HORIZONTAL MOTOR REFURBISH/REWIND	\$1,168.00
23	125 HP HORIZONTAL MOTOR REFURBISH ONLY;	\$575.00
24	125 HP HORIZONTAL MOTOR REFURBISH/REWIND	\$1,440.00
25	200 HP HORIZONTAL MOTOR REFURBISH ONLY;	\$811.00
26	200 HP HORIZONTAL MOTOR REFURBISH/REWIND	\$1,770.00
27	VIBRATION ANALYSIS MOTOR-TRENDING/POINT	\$1.50
28	VIBRATION ANALYSIS OF MOTOR-COST PER HOUR	\$50.00
29	HOURLY RATE FOR ADDITIONAL REPAIRS	\$50.00