



# JEFFERSON PARISH

## DEPARTMENT OF PURCHASING

CYNTHIA LEE SHENG  
PARISH PRESIDENT

RENNY SIMNO  
DIRECTOR

June 03, 2025

### **ADDENDUM # 1**

**Bid Number: 50-00147735**

**Bid Opening Date: June 17, 2025 at 2:00 pm cst**

**Two Year Contract for Electric Motor Repairs for the Jefferson Parish Department of Public Works – Sewerage and all Jefferson Parish Agencies and Municipalities**

---

#### **NOTIFICATION:**

**Bid Specifications has been revised – please see attached Revised per Addendum 1 Specifications. Surety bond amount has been changed from \$500.00 to \$50, 000.00 of the total bid..**

**Please acknowledge Addendum 1 when submitting the bid packet.**

Sincerely,

A handwritten signature in black ink that reads "Donna Evans".

---

Donna M. Evans  
Purchasing Specialist II

**Bidders must acknowledge all addenda on the bid form. Bidder acknowledges receipt of this addendum on the bid form by indicating the addendum number listed above. Failure to list each addenda number on the bid form will result in bid rejection.**

**This addendum is a part of the contract documents and modifies the original bidding documents and specifications. The contents of this addendum shall be included in the contract documents. Changes made by this addendum shall take precedence over the documents of earlier date.**

JOSEPH S. YENNI BUILDING - 1221 ELMWOOD PARK BLVD - SUITE 404 - JEFFERSON, LA 70123 - PO BOX 10242 JEFFERSON, LA 70181-0242  
OFFICE 504.364-2678

GENERAL GOVERNMENT BUILDING - 200 DERBIGNY ST — SUITE 4400 — GRETN, LA 70053 - PO BOX 9 — GRETN — LA 70054  
OFFICE 504.364.2678

EMAIL: [PURCHASING@JEFFPARISH.NET](mailto:PURCHASING@JEFFPARISH.NET)

WEBSITE: [WWW.JEFFPARISH.NET](http://WWW.JEFFPARISH.NET)

**SPECIFICATIONS AND PROPOSAL GUIDE FOR**  
**ELECTRIC MOTOR REPAIRS**

**A TWO (2) YEAR CONTRACT FOR ELECTRIC MOTOR**  
**REPAIRS FOR THE**  
**JEFFERSON PARISH DEPARTMENT OF PUBLIC WORKS**  
**- SEWERAGE AND ALL JEFFERSON PARISH AGENCIES**  
**AND MUNICIPALITIES**

**BOND:**

**Surety Bond:**

A surety bond in the amount of \$50,000.00 of the total bid is required with bid submission.

**Performance Bond:**

A performance bond will be required for this bid. The performance bond in the amount of \$100,000.00 shall be supplied at the signing of the contract.

**Payment Bond:**

A Labor and Materials payment bond will be required for this bid. The payment bond in the amount of \$150,000.00 shall be supplied at the signing of the contract.

1. SCOPE

This specification sets forth the requirements for inspection, testing, reconditioning, rewinding and related repair work of and for electric motors for all departments of Jefferson Parish.

2. GENERAL CONDITIONS AND REQUIREMENTS

Firm bids are requested from qualified electric motor repair service contractors who are Underwriters Laboratories (UL) listed and who are competent with the electrical, mechanical and physical make up and operation of electric motors as may be required on motors owned by Jefferson Parish.

The performance bond shall be structured to cover and apply from the date of contract execution through the applicable end of warranty period.

The terms and conditions of resolution 136353, as amended, will be considered a part of the bid whether attached or not. A copy may be obtained from the office of the Parish Clerk, General Government Building, Suite 6700, Gretna, Louisiana 70053.

All prices quoted shall encompass pick-up and delivery of motors from the East and West Bank warehouses, except as noted in Section 11. Quotes shall also include the Estimate of Repair, all necessary repairs as needed, and the

preparation of all necessary repair and transmittal report forms as attached herewith.

The regular Jefferson Parish work day schedule shall be from 7:00 A.M. to 5:00 P.M., Monday through Friday. All work performed during the time period shall be performed on a straight time basis. Overtime will apply only when work is performed on weekends, Jefferson Parish legal holidays or before 7:00 A.M. and after 5:00 P.M. Authorization for overtime work shall be obtained by procedures established in Section 7.

Contractors should be aware that adherence to this specification at the time of bid opening is necessary, and that future changes in repair procedures and/or facilities will not be accepted in lieu of compliance at the time of bid opening.

Under no circumstances should contractors assume that there will be the opportunity for multiple motor repairs in a given H.P. / R.P.M. range. Such multiple repairs in a given H.P. / R.P.M. range cannot be anticipated or predicted and therefore any bid price discounts for such multiple motor repairs are not allowed nor acceptable. This is a unit price contract.

The cost of a motor repair shall be paid at the unit price of a listed motor in the nearest HP and RPM range.

Contractor must be able to respond to any request and be on site within one hour of said request.

### 3. WARRANTY AND PERFORMANCE BOND

The contractor shall warrant that all work performed under this contract shall be performed in a good and workmanlike manner, that all materials furnished shall be of good merchantable quality and that the contractor's performance shall be free of defects. All repair work shall be guaranteed for a period of one year from date of completion of repair. Any failure during the warranty period resulting from defective material and/or poor workmanship shall be repaired at the expense of the contractor, F.O.B. Jefferson Parish's facility.

### 4. AUDIT OF CONTRACT

Jefferson Parish, its employees, and/or its appointees reserve the right to audit the contractor's books at any time during the contract period for any matters relating to contractor's billing for payment by Jefferson Parish. Additionally, contractor agrees to maintain such books and records for a period of three years from the date such costs were incurred by Jefferson Parish and to make those books and records available to Jefferson Parish at any reasonable time within the three-year period.

### 5. TERMINATION AND BREACH OF CONTRACT

This section is in addition to any other termination rights in the bid or resolution No. 136353

Should the contractor breach any provision of this contract, Jefferson Parish reserves the right to notify the contractor of the deficiency or deficiencies in writing and contractor shall be given the opportunity to correct such deficiency or deficiencies within the time constraints as per Section 6. Time for performance under this provision shall begin upon certified mail notification. After notification of deficient performance, Jefferson Parish reserves the right to cancel this contract. Notice of contract cancellation shall be given to the contractor in writing. Jefferson Parish shall have the right to cease forwarding motors to the contractor for repair, and remove all motors currently in the contractor's possession at that time. The failure of Jefferson Parish to assert a breach of contract for the failure of the contractor to perform at any time shall not be construed to be a waiver of Jefferson Parish's rights hereunder.

## 6. REPAIR COMPLETION TIME AND LIQUIDATED DAMAGES

All motor repairs shall be completed within the following time periods subject to the provisions of Section 11:

### Recondition:

1/2 H.P. – 75 H.P.	4 working days
100 H.P. and up	5 working days

### Rewind:

1/2 H.P. – 75 H.P.	5 working days
100 H.P. and up	6 working days
For coil wound motors 10 working days	

Contractor assumes all responsibility to ensure that repairs are completed within the above time periods. Any deviation shall be explained by the contractor in writing and attached to the billing invoice. Failure on the part of the contractor to provide justification for delay as well as poor explanation for delay, as determined by Jefferson Parish shall result in actions as outlined in Section 5.

Liquidated Damages will be assessed against the billing invoice in the amount of fifty dollars (\$50.00) per day for each and every working day beyond the repair completion times as listed above for unjustified delays in the completion on repairs.

## 7. OVERTIME

In the event of overtime, emergency, repairs are required, the contractor will be required 24 hours/day, seven days a week to repair the motor.

Overtime repair work shall be authorized in the event of severe weather conditions, threats to continuity of public utility service or other extraordinary circumstances as deemed necessary by Jefferson Parish. Under no circumstance shall the contractor assume overtime work without written authorization as indicated on the Electric Motor Repair Request Form, Attachment B (page 202), or verbal authorization by a representative of Jefferson Parish. Verbal authorization shall be noted on the Electronic Motor Repair Data Sheet, Attachment B (page 201), and attached to the contractor's billing invoice.

Overtime rate shall be paid in accordance with the percentage adder as indicated in Section 23 if the additional specs. The percentage of base rewind or recondition price shall be paid to the contractor for work performed during the normal business hours as well as Jefferson Parish legal holidays, weekdays, or before or after normal business hours in order to expedite repair work for justifiable reasons as noted previously. However, overtime labor rates shall be paid only for actual hours worked on holidays, weekends, or before or after normal business hours. The contractor assumes the responsibility to document overtime labor hours by submitting a copy of the relevant employee's shop time card, complete with the date and the employee's job title, as evidence of overtime. This documentation shall be attached to the contractor's billing invoice for payment by Jefferson Parish.

Under no circumstances will the contractor be paid overtime rates for the acquisition or procurement of repair materials.

## 8. SUBCONTRACTORS

The contractor may complete his bid by the utilization of subcontractors; however, no payment will be made by Jefferson Parish to the subcontractor for any work performed under the terms of this contract. The contractor assumes all responsibility for the work performed by his subcontractors. The cost of any incidental drayage between the contractor and his subcontractor shall be absorbed by the unit bid prices and the time required therefore will not be considered as work time for payment. Under the terms of this contract, subcontractor effort shall be limited to a maximum of thirty percent (30%) of total work performed. Additionally, all subcontract work shall be governed by all provisions of this contract.

Special circumstance: in the rare event that frame restacking becomes necessary as confirmed by the contractor, Jefferson Parish Inspector, and as evidenced by a core loss repair, then Jefferson Parish will direct the contractor to subcontract such restacking repair work to a third-party invoice. Inspection requirements for frame restacking subcontractors will be the same as those required elsewhere in this specification.

## 9. ESTIMATE OF REPAIR

Under the terms of this contract, contractor shall provide a written estimate of repairs for all motors which are sent to him. These estimates will be used as an input to Jefferson Parish's financial management system as well as to determine the economic feasibility of repairing a particular motor. A copy of this Motor Repair Estimate is attached herein, Attachment B (page 203). If the decision not to repair the motor is made, Jefferson Parish reserves the option to retain motors deemed not repairable. If the motor is to be repaired, the contractor will be paid according to his base unit repairs price for rewind or recondition. There will be no payment made to the contractor for the preparation and submittal of estimates.

Storage fees- the contractor will be allowed to charge storage fees for motors which have a written estimate of repair, Attachment B (page 203). The relevant departmental personnel have been contracted but authorization has not been given to repair the motor. Said charges shall begin ten working days after date of

estimate. Storage fees will be five dollars per working day and will be added to the contractors billing invoice as stated in line-item no. 0370.

Estimates shall be prepared utilizing the unit price of a motor in the nearest HP and RPM range.

#### 9.1 ESTIMATE OF REPAIR (WARRANTY)

Should a warranty repair request be necessary, the contractor will be required to provide a written estimate for repairs, documenting the nature of the failure and what will be done to remedy the failure. Additionally, the contractor must contact the relevant departmental personnel to arrange a meeting to discuss repairs prior to any work being done.

### 10. PAYMENTS TO CONTRACTORS

The contractor shall submit all invoices to the Jefferson Parish Engineering Department, c/o Contract Administrator, 1221 Elmwood Park Blvd., Suite 801, Harahan, LA 70123. Invoices will be checked and verified for accuracy and compliance with the terms of this contract. Any errors may be discussed via telephone with the contractor and corrections will be made either on the invoice received or by the submission of a new invoice by the contractor, whichever is agreeable to both Jefferson Parish and the contractor. All invoices shall contain the following:

- A. Contractor's invoice in triplicate
- B. Contractor's dray ticket
- C. Electric Motor Repair Request Form
- D. Electric Motor Data Sheet, completed in its entirety, signed by the contractor and Jefferson Parish inspector or superintendent
- E. Motor Repair Estimate Sheet
- F. Electric Motor Data Sheet and Mechanical Data sheet, pages 204 and 205, are to be completed whenever tests are indicated, specified, or performed
- G. Valid material invoices from third parties with verifiable tracking numbers for audit purposes, supply vendors, subcontractors, UL charges
- H. Copy of employee's time card, for overtime labor verification
- I. Service call time sheet or sheets for labor at field locations. The time sheet or sheets shall be signed by the appropriate Jefferson Parish authority for each contractor's employee for each day or partial day's work at each location. Multiple employees and/or multiple day sheets will not be allowed for payment.

Invoices which received without all proper documentation will be returned to the contractor or held until such documentation is received.

Invoices submitted covering work not addressed under the terms of this contract will not be paid and will be returned to the contractor.

Invoices for payment on complete and accepted work shall be submitted within or before thirty days from date of delivery or pick-up. There will be no partial payments made to the contractor for work in progress. Payment terms shall be net 60 days.

## 11. TRANSPORTATION

Contractor shall pick up motors from and deliver motors to the east and west bank warehouses. The pickup time shall be within four working hours from the time of notification. See Section 2 for normal working hours. The contractor shall be paid labor time for removal, pickup, delivery, and installation of large motors requiring lifting equipment at the field location of the motor in accordance with hourly rates quoted by the contractor in Bid Item Numbers 0359 and 0362.

Additionally, contractor shall list equipment rental rates necessary to remove and install large motors in the field, Bid Item Numbers 0363 and 0364. All equipment not listed which is utilized by the contractor shall be paid at the contractor's actual rental cost as a third-party invoice. In the event of emergency, overtime, or for convenience, Jefferson Parish personnel may deliver and/or pick up motors at contractor's repair facility.

## 12. INSPECTION

Jefferson Parish personnel, or their appointee, reserve the right to visit contractor's repair facility, without notice, to inspect any motor repair process in progress, at any time, during normal business hours or after hours, overtime repairs only, for the duration of the contract.

A Jefferson Parish Inspector will be visiting the contractor's shop on a regular basis to monitor work in progress on Jefferson Parish motors and to sign off on the Motor Repair Data Sheet, Attachment B (page 201), upon completion of repairs.

## 13. REPAIR VERIFICATION

Jefferson Parish reserves the right to appoint an independent motor repair shop to disassemble and verify that repairs performed by the contractor were done in proper fashion. At such time, the contractor, or his representative, shall have the opportunity to be present for such verification. Upon examination of discrepancies between the work which was claimed by the contractor to have been done, based on the information contained on the Electric Motor Data Sheet, and actual findings will be dealt with as outlined in Section 5.

## 14. REPAIR DOCUMENTATION AND TRANSMITTAL FORMS

The following forms/reports shall be completed as requested and/or needed in order to facilitate smooth and orderly work progression:

- A. Electric Motor Repair Request Form, Attachment B (page 202): to be completed by Jefferson Parish personnel, warehouse personnel or department superintendent, Section 15, at the time of motor failure. Contractor shall not begin repair of any motor until he has this request form in his possession.
- B. Motor Repair Estimate Sheet, Attachment (page 201): to be completed by the contractor in accordance with Section 9. Upon completion, contractor shall contact either the respective warehouse or superintendent listed in section 15 for authority to proceed with repair or not to repair the motor.

- C. Electric Motor Data Sheet, Attachment (page 201): to be completed and signed by the contractor and Jefferson Parish Inspector upon completion of repairs. One copy is to be returned with the repaired motor and a second copy is to be attached to the contractor's billing invoice.
- D. Electric Motor Data Sheet and Mechanical Data Sheet, Attachment (page 204 and 205): are to be completed whenever tests are indicated, specified or performed to verify that these tests have been performed. Additionally, the contract administrator may require the signature of the Jefferson Parish Inspector for verification purposes.
- E. Contractor's dray ticket: to be filled out by the contractor for his own use within his shop, with one copy attached to his billing invoice with acceptance signature of Jefferson Parish's representative.

## 15. CONTACT PERSONNEL

After contract award, the successful contractor will be given a list of contact personnel for the various departments within Jefferson Parish who will utilize this contract.

The contractor must appoint at least one contact person who will interface with Jefferson Parish personnel and who must be familiar with all aspects of this contract, including repair procedures, status of motors being repaired, paperwork submittals, and invoice billing. The contact person must be available at all times during normal business hours, as well as be able to be contacted for emergency situations after hours.

After contract award, contractor shall submit the name or names of their contact person or persons. Information submitted must include phone numbers, fax numbers, and e-mail addresses.

## 16. FACILITIES

The following equipment shall be available and properly maintained by the contractor or subcontractor, if used, in accordance with Section 8.

- A. Test facilities for 4160 voltages
- B. Two tank VPI system, vacuum pressure impregnation, for varnish resin systems only. For contractors utilizing DIP tank impregnating resin systems as manufactured by Epoxylite, Esterlite number 605, technical service bulletin number 605 shall be followed. Other manufacturer's product and procedures shall be on an approved equal basis. Both systems shall be capable of P to A 1000 H.P. motor.
- C. Electronic static and dynamic balancing equipment to accommodate motor size up to 700 H.P.
- D. Machinery for rebabbiting bearings
- E. Burning oven capable of maintaining constant burning temperature up to 800 degrees Fahrenheit max. Oven shall be equipped with water quenching device to prevent temperature runaway.
- F. Baking oven to accommodate motors up to 1000 H.P.
- G. Adequate Hi-Pot facility, surge tester, and core loss tester
- H. An FFT, Fast Fourier Transform, type vibration analyzer with 400 lines of resolution or greater and a frequency range of 0.4 x running speed to



2000 HZ the transducer shall be either the velocity type or the accelerometer type with a magnetic mount, hand held pickups are not acceptable.

## 17. REPAIR MATERIALS

Repair materials which are used on the job shall be paid at the contractor's wholesale unit cost without mark up or increase. These third-party invoices shall be attached to the contractor's billing invoice for payment. Materials approved for payment are items such as bearings, seals, in-line splice kits, gaskets, heater strips, etc. Items which will not be allowed for payment are shop supplies common to many motors such as O- Rings, glue, tape, nuts, bolts, oil, etc. This contract is a labor-intensive type contract; therefore, contractors should consider all matters of labor and overhead and build his or her necessary profit into his or her prices for rewinding and reconditioning of motors.

All repair materials used to replace worn or damaged parts shall be new, i.e., not used, and be of equal or better quality as original parts.

Jefferson Parish reserves the right to supply repair materials to the contractor when it is deemed to be in the best interest of Jefferson Parish.

All worn and damaged parts, including bearings, which are replaced shall be tagged and returned with the repaired motor and also be listed on the billing invoice as having been returned. If the contractor does not return the replaced parts, including bearings, he will not be paid for the replacement parts.

Additionally, the contractor agrees to tag and store the crown of every rewind job in a suitable location on his or her premises for 13 months from date of the invoice and allow Jefferson Parish employees or their appointees' access to these crowns. After this time period has expired, the crowns become the property of the contractor.

## 18. MOTOR RECONDITIONING

General:

Motor reconditioning, see Section 24 for percentage of rewind prices, shall be performed in accordance with the relevant manufacturer's specifications and procedures for each and every motor unless otherwise specified. Reconditioning shall include but not necessarily be limited to disassembly, cleaning, mechanical and electrical inspection, varnish treating windings, baking, replace bearings if necessary, check balancing, check coupling, greasing, assembly, testing and painting.

In the case of UL listed motors, the contractor shall contact relevant department for instructions as to whether or not to repair the motor in accordance with UL procedures. Jefferson Parish will pay to the contractor all usual and customary UL charges for inspection services.

Motor Preliminary Inspection and Testing:

Visually inspect all components, test stator for core loss, report stator damage and any core loss greater than 10 percent of original design.

The insulation resistance of all windings shall be measured and recorded as follows:

Use a 500-volt insulation resistance tester, megger for all 480-volt motors, and measure this insulation resistance turn to ground.

#### Rotor Reconditioning:

Steam clean, and dry by heating in oven.

If the rotor core laminations are found damaged, loose and/or shorted, they shall be repaired. Minor repair shall consist of separating the lamination and filling with mica and a class H varnish, etching, and hand filing. Major damage may require restacking of lamination. Hot spots shall be repaired. The hot spot temperature shall not be allowed to exceed 10 degrees Celsius above the average temperature.

Visually inspect for damage to air fans. If any exists, repair prior to varnishing the rotor.

Check rotor bars and resistance rings, for cage rotors, for open circuit by either a growler or a sonic test. Rotor bar movement, if minimal, shall be corrected by giving the rotor a bonding resin treatment and curing. Glass banding will also be considered for restricting bar movement.

At the conclusion of repairs, a dye penetrate shall be used over the short-circuiting ring to inspect for cracked bars.

Additional repairs, if required, shall be done prior to the rotor being sprayed with a coat of an air-drying varnish. If openings are found in an aluminum cast rotor, the rotor shall be replaced.

Collector rings shall be examined for pitting, roundness and burning. Perform repairs, if required, otherwise polish the rings by strapping. Do not use emery paper.

The end ring connections to the rotor bars must be of such quality that uniform resistance and continuity is maintained.

#### Stator Reconditioning:

The acceptable values for insulation resistance to ground are shown below:

Motor Voltage in Volts AC	Test Voltage in Volts DC	Resistance (1 min.) in Megohms
480	500	15
2300	2500	25
4160	5000	50

If the megger readings obtained from the stator are higher than the above minimum values and the polarization index (P.I.) is greater than 2, Hi-Pot test the winding to ground at 0.6 (2E plus 1000) volts AC for one minute.

Note: whenever a stator alone is to be high-potted prior to assembling the motor, the test shall be done either with the end windings wrapped with aluminum foil and the foil grounded.

Perform a three-phase balance test at about one-fifth rated voltage. Line currents should balance within 2-5 percent (depending on the motor size).

Steam clean to remove oil, grease, salt, and other unwanted deposits from windings. Do not pressure wash.

Dry the windings by heating it in an oven for 4-6 hours at about 200 degrees Fahrenheit. Visually inspect for signs of physical damage and/or deterioration to the winding, core lamination and other abnormalities. Inspect all machine and mating surfaces to make sure they are free of nicks, burrs, and all other foreign material.

Core lamination damage or shorts, if any exist, can be repaired either by etching, hand filing or separating lamination and filling the interspace with mica and a class H insulating varnish. Major damage may require restacking/replacing the lamination. A core test shall invariably be performed on all motors. A core loss in excess of ten percent shall be reported on the Motor Repair Estimate Sheet (page 203) and Motor Repair Data Sheet (page 201). Hot spot temperature shall not be allowed to exceed 10 degrees Celsius above the average core temperature.

All broken ties, blocks and wedges shall be replaced. The loose blocks and wedges shall be tightened using an approved adhesive with a filler material or replaced in kind.

Inspect and clean ventilation passages.

Inspect the terminal leads for damage.

Deterioration and/or burning. All leads shall be marked in accordance with NEMA standard and be EXAR or equal. Leads shall be a minimum of one foot long of stranded copper cable and shall be sufficient durability to withstand moist environment.

Connectors shall be inspected for damage and/or burning signs. The damaged and/or burnt connectors shall be replaced with those having the following characteristics:

Suitable for either aluminum and/or copper cables

Suitable for compression filled with Penetrox in their barrels. Solder type connectors shall not be used.

Have two holes in the tongue area.

Have inside diameter of the barrel equal to outside diameter of the lead.

Nicks and burrs from the machined surfaces shall be removed by carefully filing them. All the rust shall be removed from the motor body either by sanding, using an approved solvent or strapping.

Heaters and their wiring shall be checked for proper insulation level (a few megohms at 500-volt megger), tight connections and open circuiting of the heaters. Repair if damage or deterioration is present.

After the above work has been completed, treat the motor with a coat of baking type H varnish or class H impregnating resin as manufactured by Epoxylite (Esterlite number 605) as outlined in Epoxylite's technical bulletin number 605 or approved equal.

Retest the insulation resistance to ground together with P.I. test for the minimum acceptable values as listed previously.

If satisfactory values are attainable, perform a hi-pot test on assembled motor for one minute at 0.6 (2E plus 1000) volt AC and record the leakage currents. The hi-pot test on the assembled motor is required to ascertain the insulation was not damaged during the assembly.

If there is no significant insulation resistance improvement and if the reading remains less than the minimum values then the stator shall be rewound (see Section 19).

## 19. MOTOR REWINDING

### General:

Motor rewinding shall be performed in accordance with the relevant manufacturer's specifications and procedures for each and every motor unless otherwise specified. Rewinding shall include but not necessarily be limited to disassembly, cleaning, removal of old windings, mechanical and electrical inspection, rewinding with class H insulation, one dip and bake for 75 H.P. and smaller V.P.I. dip and bake for 100 H.P. and larger followed by a second dip and bake (including all form coil wound motors), machine work (if necessary) and other parts, greasing, new leads (included in rewinding price), assembly, testing and painting.

Nameplate: In the event of winding change, the original nameplate will remain on the motor and a new nameplate mounted adjacent to the original nameplate with the words REDESIGNED or CHANGED and then the new characteristics are to be stamped fully and completely on the new nameplate.

This new nameplate should also state the name of the company who originated or engineered the new characteristics.

In the event that a motor received by the contractor without a nameplate or with a nameplate with data which is not easily readable, then the contractor must replace said nameplate in accordance with the manufacturer's specifications and Bid Item 0358.

Nameplate data must reflect the motor characteristics as repaired, performed and delivered by the contractor and as reflected by the billing invoice and relevant documentation.

In the case of a UL listed motor, the contractor shall contact relevant department for instructions as to or not to repair the motor in accordance with UL procedures. Jefferson Parish will pay all usual and customary UL charges for inspection services. The existing winding shall be completely removed in such a manner that no damage is done to the laminations or frame and without impairing the magnetic characteristics of the core. No torches, chemical strippers, or burners that utilize a direct flame on the stator shall be used. Burning must be done in a temperature-controlled oven capable of maintaining constant burning temperature at no more than 800 degrees Fahrenheit.

The crown of the winding shall be cut for every rewind job and be tagged and stored in a suitable location for the warranty period.

The interior, exterior, and all parts of the motor made of cast iron or steel shall be thoroughly cleaned and sandblasted to white metal prior to rewinding.

All materials used shall be new and of first grade quality. Conductor shall be of the same size as the original or an equivalent cross-sectional area which will not increase the current density. Copper materials shall be the only materials used for rewinding and shall be Phelps Dodge Hapt or approved equal. Connections shall be silver brazed or copper welded. Dine leads may be high temperature soldered.

## 20. STATOR AND WOUND ROTOR REWINDING:

All winding data such as wire size, number of turns, throw of windings, connections, coil dimensions, end bell clearances and lead length etc. shall be recorded prior to stripping off the winding and such records shall be reported with the billing invoice.

The crown of the winding shall be cut for every rewind job and be tagged and stored in a suitable location for the warranty period.

The interior, exterior, and all parts of the motor made of cast Iron or steel shall be thoroughly cleaned and sandblasted to "white" metal prior to rewinding.

All materials used shall be new and of first grade quality. Conductor shall be of the same size as the original or an equivalent cross-sectional area which will not increase the current density. Copper materials shall be the only materials used for rewinding and shall be Phelps, Dodge, Hapt, or approved equal. Connections shall be silver brazed or copper welded. Fine leads may be high temperature soldered.

Old windings shall be roasted out of stator in an oven with adequate temperature controls to provide uniform heating and cooling to prevent warping and cracking of the frame and impairment of the magnetic quality of the core. The burn out shall be done by first maintaining at a temperature of 500 degrees F for 3-4 hours

and then slowly increasing to a temperature of 700 degrees F maximum. The burnout temperature of 700 degrees F shall not be exceeded. Other stripping methods such as water blast or cold strip will be permitted when necessary.

After the winding has been removed from the roasted stator, the laminations will be thoroughly cleaned blowing out with compressed air and removing any remaining foreign matter by hand. The slots shall be clean and free of sharp edges or particles.

All old windings shall be removed and bore frame thoroughly cleaned using bead blast. Use only glass beads.

Laminations shall be inspected for damage. Repairs can be performed either by separating the laminations and filling the interspaces with mica and a class "H" insulation, etching or hand filing. Major damage may require restacking/replacing of the laminations.

The repaired stator shall be ring checked when core damage has occurred, and hot spots corrected.

A core test shall be performed on all motors 50 hp and above prior to rewinding. Hot spot temperature shall not be allowed to exceed 10 degrees C above the average core temperature.

Remove all rust by sanding using an approved solvent or scraping.

Inspect and clean all ventilation passages.

Spray the stator bore area with an air-drying varnish.

Rewinding shall be done using copper wire coils designed for continuous duty. The copper size to be used shall conform to the motor manufacturer's latest specifications.

## 21. BALANCING, RUNNING VIBRATION AND MACHINE WORK

Electronic static and dynamic balancing and vibration testing shall be performed on all motors to assure acceptable vibration levels as specified hereafter. However, there will be no payment made for balancing and vibration testing under the terms of this contract.

Machine and welding work necessary to properly repair motors will be paid to the contractor on an hourly basis for actual work hours performed. The contractor shall quote hourly labor rates as listed in Bid Items 0359-0362. Work deemed by Jefferson parish to be excessive shall be justified in writing by the contractor prior to payment.

Each motor rotor shall be dynamically balanced on an appropriate balancing machine. The rotor balancing precision shall meet an assembled motor running vibration test noted in the next paragraph.

Complete motors shall be assembled and test run after repairs. The maximum

measured vibrational velocity shall not exceed the following:

#### MAXIMUM PERMISSIBLE VELOCITY OF VIBRATION - INCHES PER SECOND

MOTOR ON ELASTIC MOUNTING	MOTOR ON RIDGE MOUNTING	MOTOR SHAFT IN SLEEVE BRS.
OVERALL LEVEL		
0.1	0.15	0.15

#### MAXIMUM PERMISSIBLE VIBRATION LEVELS:

FREQUENCY RANGE	AMPLITUDE (IN/SEC)
1-10 HZ	.06
10-80 HZ	.10
80-150 HZ	.08
150-2000 HZ	.02

All vibration measurements will be made with an FFT (Fast Fourier Transform) analyzer utilizing 400 lines of resolution or greater and a frequency range of 0.4 x running speed of 2,000 hz. Each measurement will consist of 4 averages (linear, non-overlapping) using a hanning window. The transducer used during the test will be either a velocity transducer or accelerometer type transducer with a magnetic mount (hand-held pickups are not acceptable for measurement under this specification).

#### THE BALANCE FOR INTEGRAL HORSEPOWER MOTORS BUILT IN A 153 AND LARGER FRAME SHALL BE AS FOLLOWS:

SOURCE	MAXIMUM
SPEED, RPM*	INCHES+
3,000 - 4,000	0.001
1,500 - 2,999	0.0015
1,000 - 1,499	0.002
999 AND BELOW	0.0025

\* For ac motors use the highest synchronous speed + amplitude as used in this paragraph means total peak to peak displacement.

All rotors and armatures must be centralized laterally on the shaft so as to eliminate end thrust pressure against either bearing and should float between bearings.

Total end play in sleeve bearing motors must be approximately 1/16" per inch diameter of shaft.

## 22. GENERATORS

All generators shall be repaired as motors based on their equivalent horsepower

rating and are to be calculated according to the following formula:

Generator kw = kva x p.f (power factor)

Generator equivalent h.p. = kw x 1.34

The cost of repair of generator equivalent horsepower not listed in the motor bid forms shall be based on the closest motor horsepower listed on these forms.

## 23. INSURANCE

The responsibility of the contractor for damage, theft or loss of motors or generators while in the contractor's possession and/or control shall be as set forth in the Louisiana Civil Code and jurisprudence thereunder for compensated depositories.

Jefferson parish council resolution 136353 (09/16/2020) sets forth the insurance requirements for this contract. Copies are available at the council clerk's office.

## 24. REWINDING SPECIAL MOTORS

When the special motors listed below require repair, the appropriate special motor item shall be used in conjunction with the standard motor base rewind item. Special motor items shall be a percentage of the standard motor price as detailed below:

1. \*T.E.F.C. MOTOR (Special Motor Adder)
  - a. The maximum final invoice amount for item shall not exceed 10% of the standard motor base rewind price.
2. \*EXPLOSION PROOF MOTOR (Special Motor Adder)
  - a. The maximum final invoice amount for item shall not exceed 15% of the standard motor base rewind price.
3. \*VERTICAL MOTOR (Special Motor Adder)
  - a. The maximum final invoice amount for item shall not exceed 15% of the standard motor base rewind price.
4. \*"U" FRAME (Special Motor Adder)
  - a. The maximum final invoice amount for item shall not exceed 15% of the standard motor base rewind price.
5. \*PRE-"U" FRAME (Special Motor Adder)
  - a. The maximum final invoice amount for item shall not exceed 40% of the standard motor base rewind price.
6. PUMP, GEAR MOTOR PLUS PUMP, GEAR ASSEMBLY (Special Motor Adder)
  - a. The maximum final invoice amount for item shall not exceed 25% of the standard motor base rewind price.
7. SUBMERSIBLE PUMP (COMPLETE), RE-POUR POT HEAD WHEN NECESSARY (Special Motor Adder)



- a. The maximum final invoice amount for item shall not exceed 30% of the standard motor base rewind price.
8. SUBMERSIBLE PUMP (STATOR W/HOUSING), RE-POUR POT HEAD WHEN NECESSARY (Special Motor Adder)
- a. The maximum final invoice amount for item shall not exceed 20% of the standard motor base rewind price.
9. TWO SPEED MOTOR (Special Motor Adder)
- a. The maximum final invoice amount for item shall not exceed 50% of the standard motor base rewind price.
10. FORM COILS (Special Motor Adder)
- a. The maximum final invoice amount for item shall not exceed 55% of the standard motor base rewind price.
11. EPOXY COIL COATING (Special Motor Adder)
- a. The maximum final invoice amount for item shall not exceed 12% of the standard motor base rewind price.
12. EPOXY ENCAPSULATION, FORMED OR MOLDED (Special Motor Adder)
- a. The maximum final invoice amount for item shall not exceed 50% of the standard motor base rewind price.
13. REWIND ROTOR OF WOUND ROTOR INDUCTION MOTOR (Special Motor Adder)
- a. The maximum final invoice amount for item shall not exceed 80% of the standard motor base rewind price.
14. \*IF MOTOR IS T.E.F.C., VERTICAL AND U-FRAME (Special Motor Adder)
- a. The maximum final invoice amount for item shall not exceed 15% of the standard motor base rewind price.
15. \*IF MOTOR IS T.E.F.C. AND VERTICAL (Special Motor Adder)
- a. The maximum final invoice amount for item shall not exceed 15% of the standard motor base rewind price.
16. \*IF MOTOR IS EXPLOSION PROOF AND U-FRAME (Special Motor Adder)
- a. The maximum final invoice amount for item shall not exceed 15% of the standard motor base rewind price.
17. OVERTIME WORK (EA) (Special Motor Adder)
- a. Overtime work associated with special motors shall be bid at a special hourly rate with the maximum final invoice amount not exceeding 50% of the standard motor base rewind price.

NOTE: ONE (1) SPECIAL MOTOR ITEM ALLOWED PER MOTOR REPAIR EXCEPT FOR OVERTIME WORK WHERE APPLICABLE.

## 25. STATOR ONLY WORK

When motor repair work only involves the stator, the final invoice amount shall be 90% of the standard motor base rewind price.

## 26. RECONDITION PRICES

Recondition prices (includes disassembly, cleaning of all parts, sandblasting, dip in class "h" varnish, bake, reassembly and testing, bearings and parts extra) shall be priced as a percentage of rewind stator prices (Items 0001-0285) according to the following hp ranges:

1/3-20	HP	50%
25-125	HP	50%
150-300	HP	40%
350-500	HP	30%