



CONTRACT DATA SHEET

Monroe County Division of Purchasing
200 County Office Building, Rochester NY 14614

TITLE: VIBRATION ANALYSIS

PUBLIC BID #: BP#0202-16

CONTRACT DATES: 03/21/2016-03/31/2017

BUYER: Greg Hart
PHONE: 585-753-1135
FAX: 585-324-1379

VENDOR(S):

- 1.) GOOD VIBRATIONS **Contract #4700007332**
832 SHUMWAY RD.
BROCKPORT, NY 14420
PHONE: 585-392-1400
- 2.) 4X DIAGNOSTICS **Contract #4700007333**
405 MALLOCH RD.
CHURCHVILLE, NY 14428
PHONE: 585-293-3234
FAX: 585-413-4370
- 3.) OSS, ON SITE SOLUTIONS, LLC **Contract #4700007331**
6811 BALDWIN RD.
CAYUGA, NY 13034
PHONE: 315-604-0923
- 4.) VISUAL INSPECTION SYSTEMS **Contract #4700007334**
P.O. BOX 1961
CRANBERRY TWP., PA 16066
PHONE: 724-742-2720
FAX: 724-742-2726

Greg Hart
Buyer

XC: BP FILE
BUYER
VENDOR
S. WILCOX

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TERMS AND CONDITIONS

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 where he can be reached twenty-four (24) hours per day, seven (7) days per week.

METHOD OF AWARD:

Monroe County intends to award one or more contract(s) to the lowest responsive and responsible bidder(s) as determined by applying discounts to price list columns on the Discount Price Sheet. **The County reserves the right to award the bid as a whole or by Group, depending on whichever method results in the lowest overall cost to the County. Separate awards will be considered only when the price offered is great enough to offset the additional costs inherent to multiple contracts. Bidders are not required to bid on every Group included in the bid, but must bid on every item in a group. 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 March 31, 2017 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.**

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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 **one (1) year** 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 her Designee.

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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.

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VIBRATION ANALYSIS
SPECIFICATIONS

GENERAL:

A. Scope:

The Monroe County Department of Environmental Services (DES) is looking for a qualified contractor to supply vibration analysis services for various sized equipment at various Monroe County facilities. Prospective bidders may bid on one or all groups on the unit price sheet.

B. Locations:

Various locations throughout Monroe County.

C. Pre-Bid Inspection:

The County shall conduct a pre-bid meeting. The date, time and location of the meeting will be **Wednesday, February 3, 2016 at 9:00 AM**, at the Frank E. VanLare Treatment Plant, 1574 Lake Shore Blvd., Irondequoit, NY 14617.

This will be the only opportunity for the prospective bidders to meet with the County. Bidders shall notify the County by contacting Greg Hart by Email: ghart@monroecounty.gov if they will be attending the pre-bid meeting.

D. Experience:

1. All Bidders shall submit with their bid a description of their firm as it pertains to the Diagnostic Measurement and Analysis of similar systems and devices including their experience in performing work of similar size and scope.
2. The bidder must have experience in and have the capability of analyzing collected data and generating reports and recommendations on expected bearing life, bearing faults, resonant and natural frequencies compared to normal operating speeds, imbalance, misalignment, mechanical looseness and cavitation. Monroe County reserves the option to request and review report examples from bidders for specific diagnostic tests as may be requested during the bid review process.
3. Bidders on items 2, 3, 4 & 5 must be Cat 3 certified according to ISO 18436-1 and ISO 18436-2. Bidders on items 1 & 6 must be at least Cat 1 certified.
4. Failure to submit this documentation may be grounds to reject the bidder.

E. Vibration Testing Equipment:

1. Vibration data shall be acquired with a CSI 2130 or 2140 Vibration Analyzer or equivalent capable of route based data collection at a minimum of 800 lines of resolution.
2. Shaft Alignment shall be done using a Ludeca Smart align or equivalent laser alignment system.

F. 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 0.1 inches per second at rotational frequency. The equipment shall be capable of performing single plane, two plane and cross phase balancing utilizing vector diagrams.

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G. Applicable Codes, Standards and References:

1. Mobius Institute.
2. ISO 18436-2.
3. Vibration Institute.

H. Typical Machinery To Be Tested:

1. Centrifugal pumps, motors and gearboxes up to 1500 horsepower.
2. Centrifuges up to 200 horsepower.
3. Machine speeds up to 2500 rpm.

I. Work To Be Performed:

1. **Route based** vibration analysis.
2. Machinery **Health check** analysis to include bearing defect analysis, natural and resonant frequency analysis on specific targeted machine.
3. **Operational Deflection shape** (ODS) analysis and Modal Analysis along with animated computer models of the equipment being tested.
4. Portable **On-line monitoring** (short term) and analysis to include all equipment necessary for multiple point data logging.
5. **Balancing** to include single plane, two plane and cross phase techniques.
6. **Laser Alignment**.

J. Principal Types of Work:

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 on a rigid part of the machine as close as possible to the bearing.
 - d. The vibration amplitude at all frequencies from 1 Hz to 60 times running speed shall be continuously monitored and recorded for a minimum of thirty (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 thirty (30) second monitoring period.
 - e. During the testing period, the equipment shall have normal freedom of movement. Any vibration isolators shall be functioning normally with no binding.

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f. Variable speed equipment shall be tested for compliance throughout the entire speed range.

2. Balancing:

- a. The successful Bidder shall be able to perform in-place dynamic balancing utilizing the same equipment used to detect unbalance through vibration analysis or with another instrument capable of balancing parts to a vibration velocity level less than 0.1 inches per second at rotational frequency.
- b. The successful Bidder must be competent at performing balancing on high speed centrifuges using single plane, two plane and cross phase balancing using vector diagrams.
- c. It is the responsibility of the Bidder to permanently attach balance weights and to guarantee their adherence under all conditions.
- d. The equipment shall be tested under normal operating conditions and load.
- e. The equipment shall be tested in accordance with current industry standards.

3. Laser Alignment:

The successful bidder shall be able to provide on-site laser alignment services to the equipment listed in this specification. The laser alignment shall encompass horizontal, vertical and soft foot measurement, alignment and correction to industry wide specifications.

K. Reports:

Reports shall contain the following:

- 1. 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.
- 2. An Exception Report showing the name of the machine tested, the current vibration levels, the previous levels and the percentage of change, the first and second alarm levels and the date of measurement.
- 3. A Plotted trending graph for each major component of each piece of equipment with no more than five (5) trends per graph.
- 4. An Alarm Report showing all points that exceed alarm levels.

L. Emergency/Overtime Service:

The Bidder will be required to provide vibration analysis overtime and emergency service to Monroe County as needed. The technician must have all required tools.

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Response Time: The bidder shall arrive at the emergency site according to the following:

- a. Within three (3) hours from receipt of the emergency call Monday-Friday, 7:00 AM to 3:00 PM. (straight-time).
- b. Within three (3) hours from receipt of the emergency call Monday-Friday, 3:00 PM to 12:00 AM and Saturdays. (time and a half).
- c. Within four (4) hours from receipt of the emergency call Sundays and holidays. (double-time).

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AWARD SHEET

<u>ITEM #</u>	<u>DESCRIPTION</u>	<u>UNIT PRICE/HR</u>	<u>AWARDED TO</u>
1.	Route Based Vibration Analysis MM# 1041196	\$83.00/hr	On Site Solutions
2.	a.) Machinery Health Check- Normal Hours MM# 1041197	\$100.00/hr	Good Vibrations
	b.) Machinery Health check- Emergency Hours MM# 1041198	\$120.00/hr	Good Vibrations
3.	ODS & Modal Vibration Analysis MM# 1041199	\$125.00/hr	4X Diagnostics
4.	Portable On Line Monitoring Vibration Analysis MM# 1041200	\$90.00/hr	Visual Insp. Sys.
5.	a.) ON-Site Balancing-Normal Hours MM# 1041201	\$100.00/hr	4X Diagnostics
	b.) On-Site Balancing-Emergency Hours MM# 1041202	\$125.00/hr	4X Diagnostics
6.	a.) Laser Alignment-Normal Hours MM# 1041203	\$83.00/hr	On Site Solutions
	b.) Laser Alignment- Emergency Hours MM# 1041204	\$83.00/hr	On Site Solutions