BID SOLICITATION



City of Chattanooga 101 East 11th Street, Suite G13 Chattanooga, TN 37402

SEALED BIDS

Mail or submit two (2) signed copies of bid form to this office in the enclosed envelope. Retain one copy for your file.

V E N D	RFQ
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BID OPENING DATE AND TIME:

05-MAR-20 at 2:00 PM

BID NUMBER: 305797

BUYER:

PHONE #: (423) 643-7230 DELIVERY REQUIRED:

M	City of Chattanooga
A	101 East 11th Street, Suite G13
1	Chattanooga, TN 37402
L	
Т	
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Item Class-Item Quantity Unit Unit Price Total

Requisition No.: 194513

Bid No: 305797

Ordering Dept.: Waste Resources Division, Public Works

Buyer: Amanda Berkowitz Phone No.: (423) 643-7233

Email: aberkowitz@chattanooga.gov

Items Being Purchased: Remote Monitoring Services for Cryogenic Oxygen Generation System

A Pre-Bid Will Be Held 10:00 AM EST February 27, 2020 at: Moccasin Bend Wastewater Treatment Plant - Training Center 455 Moccasin Bend Rd. Chattanooga, TN 37405

This Shall Be A Twelve (12) Month Blanket Contract To Supply Remote Monitoring Services for Cryogenic Oxygen Generation System. The Contract Term May Be Renewed For An Additional Two (2) Twelve (12) Month Term Under The Same Terms And Conditions By Mutual Agreement. The City Of Chattanooga And The Contractor May Bilaterally Extend The Contract By Providing Written Confirmation Of Agreement

By Both Parties At Least 30 Days Prior To The Contract's Current Expiration Date Into Any Successive Term As Provided Herein.

QUANTITIES ARE ESTIMATES ONLY THE CITY OF CHATTANOOGA SHALL GUARANTEE NO MINIMUM OR MAXIIMUM AMOUNT PURCHASED DURING THE LIFETIME OF THE CONTRACT.

**** BID MUST BE RECEIVED NO LATER THAN ***
*** 2:00 PM EST ON MARCH 5, 2020 ***

ATTACHMENTS

Specifications (6 pgs)
Affirmaive Aciton Plan (2pg)
Iran Divestment Act (1 pg)
No Contact/No Advocacy Statement (1 pg)
City of Chattanooga (COC) Terms and Conditions posted on Website
http://www.chattanooga.gov/purchasing/standard-terms-and-conditions
If you can't download call buyer for a copy.

NOTE

ALL BIDS MUST BE SIGNED

All bids received are subject to the terms and conditions contained herein and as listed in the above referenced website. The undersigned Bidder acknowledges having received, reviewed, and agrees to be bound to these terms and conditions, unless specific written exceptions are otherwise stated.

Any manufacturer;s names, trade names, brand names, or catalog numbers used in the specifications are for the purpose of describing and establishing general quality levels. Such references are not intended to be restrictive. Bids will be considered for any brand which meets or exceeds the quality of the specifications listed for any item.

The City of Chattanooga reserves the right to reject any and/or all bids, waive any informalities in the bids received, and to accept any bid which in its opinion may be for the best interest of the city.

The City of Chattanooga will be non-discriminatory in the purchase of all goods and

BID SOLICITATION



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LTO	Chattanooga	, TN 37402			
ity	Unit	Unit Price	Total		

ltem	Class-Item		Quantity	Unit	Unit Price	Total
services on the ba	sis of race, color, or national origin.					
**** NOTE ****						
	E US WITH THE FOLLOWING INFOR	RMATION:				
Company Name_						
Address						
		-				
Phone/Toll-Free N	0					
eMail Address						
Contact Person's N	Name					
Estimated Delivery	1					
Minority-Owned Bเ	usiness Small Business	Veteran				
Minority Woman-O	wned BusinessDisabled Vetera	an				
Woman-Owned Bu	usiness					
**** ALL ITEMS MI	JST BE QUOTED F.O.B. DESTINATION	ON ****				

NOTE: ALL BIDS RECEIVED ARE SUBJECT TO	THE TERMS AND	CONDITIONS
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ALL BIDS MUST BE SIGNED – The undersigned offers the above quoted prices under the conditions contained herein,

The City is Exempt from all Federal and State Tax, Bids will be received at the above mentioned address.

COMPANY: _____

TERMS OF PAYMENT: ___

SIGNATURE:

TELEPHONE NUMBER: _____

NAME AND TITLE:

BID SOLICITATION



City of Chattanooga 101 East 11th Street, Suite G13 Chattanooga, TN 37402

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BID OPENING DATE AND TIME:

05-MAR-20 at 2:00 PM

BID NUMBER: 305797

BUYER:

PHONE #: (423) 643-7230 DELIVERY REQUIRED:

M A	City of Chattanooga
l L	101 East 11th Street, Suite G13 Chattanooga, TN 37402

14				19	<u> </u>
Item	Class-Item	Quantity	Unit	Unit Price	Total
1	Emergency Field Service Assistance	6	Day		
2	Quarterly Inspection: Troubleshooting & Training Visits	8	Quarter		
3	Communications Network and Remote Monitoring Services	12	Month		
				u	

NOTE: ALL BIDS RECEIVED ARE SUBJECT TO THE TERMS AND CONDITIONS

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ALL BIDS MUST BE SIGNED – The undersigned offers the above quoted prices under the conditions contained herein.	
COMPANY:	
SIGNATURE:	
NAME AND TITLE:	

The City is Exempt from all Federal and State Tax. Bids will be received at the above mentioned address.

TERMS OF PAYMENT:

TELEPHONE NUMBER: ___

Request for Bid

REMOTE MONITORING SERVICES FOR THE CRYOGENIC OXYGEN GENERATION SYSTEM MOCCASIN BEND WASTEWATER TREATMENT PLANT

City of Chattanooga, Tennessee

January, 2020

Remote Monitoring Services City of Chattanooga, TN Page 2 of 6 January, 2020

REQUEST FOR BID

REMOTE MONITORING SERVICES FOR THE CRYOGENIC OXYGEN GENERATION SYSTEM MOCCASIN BEND WASTEWATER TREATMENT PLANT CITY OF CHATTANOOGA, TENNESSEE

(January, 2020)

1.0 INTRODUCTION AND BACKGROUND

A. GENERAL

The City of Chattanooga (City) is requesting bids from qualified firms for the purpose of selecting a contractor to provide the Public Works Department with uninterrupted remote monitoring of the City's cryogenic oxygen generation system operating data and additional related services as described herein.

B. OPERATIONAL SUMMARY

The City's Waste Resources Division (WRD) operates and maintains the 140 million gallon per day (mgd) Moccasin Bend Wastewater Treatment Plant (MBWWTP). The plant utilizes a high purity oxygen activated sludge process consisting of a Linde U-145 cryogenic air separation plant along with the UNOX aeration process constructed by Union Carbide Corporation in 1982. The plant is designed to provide 145 tons per day of gaseous oxygen or 125 tons per day of gaseous oxygen in combination with 3 tons per day of liquid oxygen. Oxygen purity averages 98 to 99 percent. The plant has two 3,000 hp centrifugal air compressors, one rated for 100 percent production and the other rated for 70 percent production. Two 50,000 gallon horizontal cryogenic storage tanks are provided for liquid oxygen storage. An electrically heated, water bath vaporizer is provided for liquid vaporization. Liquid oxygen boil-off on the storage tanks is approximately 2 tons per day.

Between January 2008 and June 2009 the oxygen generation plant was rehabilitated. The plant instrumentation/control system was updated to a programmable logic controller (PLC) based system. This permitted remote monitoring of the plant condition and operation as a means for a consultant/contractor to advise and assist City personnel in addressing operational problems and optimizing plant performance.

B. CURRENT PRACTICES

There is currently a network connection through an independent EPB communication box located in the operator control room.

The Contractor will set up a new lease or use current lease if applicable to connect to the Watch Guard model FS1E5W VPN.

The Watch Guard VPN then connects to a Phoenix Contact FL Switch SFN 5TX.

Remote Monitoring Services City of Chattanooga, TN Page 3 of 6 January, 2020

This Ethernet Switch is then routed to a Phoenix Contact FL Switch SFN 8X which connects it to the PLC Network for communication with the GE Fanuc PLC and the Automation Direct Touch Screens monitoring and controlling the plant.

1.1 PURPOSE OF REQUEST AND PROJECT SCOPE

Contract services are required to continue uninterrupted remote monitoring of the City's cryogenic oxygen generation system operating data, to provide advice and assistance to City personnel in addressing operational problems and optimizing plant performance, to provide quarterly on-site inspection, troubleshooting, and training, and to provide emergency on-site operational assistance on an as-needed basis. These services are described as follows:

A. PROVISION OF COMMUNICATIONS NETWORK

- 1. The Contractor will provide a telecommunications provider for a data monitoring plan that will allow a transfer of up to 5 gigabytes of data per month. Any additional data transfer beyond the 5 gigabyte plan allowance will be billed as a separate item to the City.
- 2. The Contractor will maintain the communication network as required to provide continuous uninterrupted monitoring of the cryogenic operating data.

B. REMOTE MONITORING SERVICES

- 1. Contractor will provide daily review of selected operating parameters for the cryogenic oxygen plant and inform the City immediately of any conditions that would require attention of the City's personnel.
- Contractor will provide plant personnel with email and cell phone contact information for staff that will enable immediate communication with regard to any operational parameters of concern to plant staff or which require immediate attention. City will provide contractor with plant staff contact information for the same purpose.
- 3. Contractor will provide a written monthly summary of selected operating parameters for the oxygen facility, submitted electronically by the tenth (10th) day of each month for the previous month's data, to persons designated by WRD. Monthly summary will include the following information:
 - a. Operating trends for energy conservation:
 - b. Safety-related operating conditions;
 - c. Indications of preventive or corrective maintenance suggested by operating parameters.

C. QUARTERLY INSPECTION, TROUBLESHOOTING, AND TRAINING VISITS

Contractor will provide quarterly service visits to assist City in increasing plant reliability and to provide operator, maintenance, and instrumentation hands-on training.

During the quarterly visit the following tasks would be performed:

- 1. 90 day Cold End Gel Trap Regeneration
- 2. Hands-On operator, maintenance, and instrumentation training in Cryogenic Plant re-starts, optimizing plant operation, understanding/troubleshooting cryogenic plant alarms, and operation and maintenance of the UNOX process.
- 3. Inspection of Cryogenic Plant and associated equipment, MAC#1, MAC#2, Expansion Turbine, Driox Area, Cooling Tower.
- 4. Follow-up report of action items needing attention in each plant area with "tickler file" of outstanding items from trip to trip.

Each quarterly visit would typically be from Monday through Friday for 40hrs. Cost for quarterly visit and training as indicated on the proposal shall include all travel expenses, training materials, and incidentals.

D. EMERGENCY FIELD SERVICE ASSISTANCE

Contractor will provide on-site emergency field service visits on an as-needed basis to respond to plant operational issues. The City expects on-site service visits will not exceed five (5) days per year. These visits will be billed on a daily basis as per the schedule of values completed in accordance with Section 3.7 and included on the proposal.

2. FACILITY VISIT

A pre-bid will be scheduled prior to the bid opening. It is highly recommended that each Bidder visit the site and familiarize themselves with the cryogenic oxygen generation system, the instrumentation, and the equipment for remote monitoring. Failure of Bidder to familiarize themselves with the equipment and conditions of provision of these services will not relieve Bidder of any obligations included in these services.

3.1 GENERAL INFORMATION

The Bidder shall provide the following general information:

- A. Identify the name, address, telephone, e-mail address (if available), and facsimile numbers of the Bidder and the principal contact person.
- B. Identify the type of firm or organization (corporation, partnership, joint venture, etc.) and describe the entity that will serve as the contracting party.
- C. Bids shall identify and describe the contractual relationships for the portions of the work that will be undertaken directly by the Bidder and what portions of the work will be subcontracted, including on-site services and training.
- D. Describe the history of the relationships among the team members, including a description of past working relationships.
- E. Provide the history, ownership, organization, and background of the Bidder. If the Bidder is a joint venture, the required information must be submitted for each member of the joint venture firm. Include the following:
 - 1. Names of partners, and company officers who own 10 percent or more of the shares;
 - 2. If the Bidder or joint venture is a subsidiary of a parent company, state when the subsidiary was formed and its place in the corporate structure of the parent company. If a subsidiary is newly created for the purposes of responding to this Bid, the reasons for this action must be fully disclosed; and
 - 3. Identify any lawsuits or litigation, permit violations, and contract disputes for other projects developed and/or operated by the Bidder or other projects owned and operated by the Bidder's personnel.

3.2 QUALIFICATIONS AND EXPERIENCE- Cryogenic Oxygen Generation System Operation, Service, and Training

The Bidder shall provide the following regarding technical qualifications and experience dealing with the remote monitoring, operational assistance, on-site services, and training for the cryogenic oxygen generation plant:

A. General Experience

Provide a summary of the experience of the Bidder's Project Team working together with cryogenic oxygen generation system operation, troubleshooting, and training. Note in particular experience with similar Union Carbide plants and/or with the City of Chattanooga U-145 plant.

Remote Monitoring Services City of Chattanooga, TN Page 6 of 6 January, 2020

B. Project Team Members Experience

Provide a one (1) page max resume of each of the Bidder's Project Team including the Project Manager, on-site Technical Services Manager, and any other key technical or operations personnel as applicable to their Bid. The resume should include past experience on similar jobs, degrees, certifications, and training that pertain to this work in a similar-sized municipality.

C. Previous Experience With Similar Projects

Provide a list of at least three (3) cryogenic operational monitoring and training services that the Bidder has performed within the past five (5) years or that key members of the Bidder's Project Team have been involved in, providing the following information for each:

- a. Name, address, and phone number of the Owner.
- b. Name and phone number of a representative of the Owner who is knowledgeable about the project.
- c. Brief description of the services provided
- d. The duration of the contract
- e. The approximate value of the contract.
- f. The contract completion date.

3.3 PROJECT APPROACH

The Bidder shall describe its overall approach for conducting the remote monitoring of the cryogenic oxygen generation system, for responding to requests from City staff for resolution of operational problems, for notification to City staff of observed issues requiring immediate attention, for completion of monthly reports, for providing quarterly visits as described herein, and for providing emergency on-site services when requested by the City.

3.4 CITY SUPPLIED SERVICES

The City will provide the following as a part of the project:

- A. Provide designated City personnel to coordinate the project with Bidder/Contractor, including 24-hour contact information.
- B. Provide reasonable access to the MBWWTP and to the remote access equipment for the Bidder to perform the work.
- C. Inform Bidder/Contractor prior to planned or unplanned outages or maintenance to the oxygen generation system as soon as practical.
- D. Provide the Bidder reasonable access to all available plans and specifications for its oxygen generation system at MBWWTP.
- E. Provide training facilities for both classroom and on-site training.

Affirmative Action Plan

The City of Chattanooga is an equal opportunity employer and during the performance of this Contract, the Contractor agrees to abide by the equal opportunity goals of the City of Chattanooga as follows:

- 1. The Contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, national origin, or handicap. The Contractor will take affirmative action to ensure that applicants are employed, and the employees are treated during employment without regard to their race, color, religion, sex, national origin, or handicap. Such action shall include, but not be limited to, the following: employment, upgrading, demotion, or transfer, recruitment or recruitment advertising, layoff or termination, rates of pay, or other forms of compensation, and selection for training, including apprenticeship. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices setting forth the provisions of this nondiscrimination clause.
- 2. The Contractor will, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, national origin, or handicap.
- 3. The Contractor will send to each labor union or representative of workers with which he/she has a collective bargaining agreement or other contract or understanding, a notice advising the said labor union or workers' representatives of the Contractor's commitments under this section, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.
- 4. During the term of this contract the following non-discriminatory hiring practices shall be employed to provide employment opportunities for minorities and women:
 - a. All help wanted ads placed in newspapers or other publications shall contain the phrase "Equal Employment Opportunity Employer."
 - b. Seek and maintain contracts with minority groups and human relations organizations as available.

- c. Encourage present employees to refer qualified minority group and female applicants for employment opportunities
- d. Use only recruitment sources which state in writing that they practice equal opportunity. Advise all recruitment sources that qualified minority group members and women will be sought for consideration for all positions when vacancies occur.
- 5. Minority statistics are subject to audit by City of Chattanooga staff or other governmental agency.
- 6. The Contractor agrees to notify the City of Chattanooga of any claim or investigation by State or Federal agencies as to discrimination.

(Signature of Contractor)	γ,
(Title and Name of Company)	0
(Date)	

Chapter No. 817 (HB0261/SB0377). "Iran Divestment Act" enacted. <u>Vendor Disclosure and Acknowledgement</u>

By submission of this bid, each bidder and each person signing on behalf of any bidder certifies, and in the case of a joint bid each party thereto certifies as to its own organization, under penalty of perjury, that to the best of its knowledge and belief that each bidder is not on the list created pursuant to § 12-12-106.

(SIGNED)	
(PRINTED NAME)	
(BUSINESS NAME)	
(DATE)	

For more information, please contact the State of Tennessee, Central Procurement Office https://www.tn.gov/generalservices/procurement/central-procurement-office--cpo-/library/public-information-library.html

No Contact/No Advocacy Statement

City of Chattanooga Purchasing Division

For Submission with Sealed RFP, RFQ, Sealed Bid Responses:

State of	
County of	_
	(agent name), being first duly sworn, deposes and says that:
(1) He/She is the owner, partner,	officer, representative, or agent of
19	_ (business name), the Submitter of the attached sealed solicitation
response to Solicitation #	officer, representative, or agent of
(2)has taken notice, and will abid	(agent name) swears or affirms that the Submitter de by the following No Contact and No Advocacy clauses:
directly or indirectly contacting any (posting of this solicitation, a potential submitter is prohibited from City of Chattanooga representative concerning the subject matter of s made with the Purchasing Division.
and/or individuals submitting sealed s	nsure the integrity of the review and evaluation process, companies solicitation responses, as well as those persons and/or companies a submitters, may not directly or indirectly lobby or advocate to any
Any business entity and/or individu Advocating policies may be subject from consideration.	to the rejection or disqualification of its solicitation response
Submitter Signature:	Printed Name:
Title	