

BID SOLICITATION



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

BID OPENING DATE AND TIME:

24-AUG-16 at 2:00 PM

BID NUMBER: 304351

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.

BUYER:

PHONE #: (423) 643-7230

DELIVERY REQUIRED:

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

Item	Class-Item	Quantity	Unit	Unit Price	Total
Requisition No.: 139564 Ordering Dept.: Waste Resources Buyer: Geoffrey Hlpp 423-643-7233 ***** DESCRIPTION: Cooling Tower Media Replacement per specifications ***** ATTACHMENTS: - Specifications - Affirmative Action Plan - Insurance Requirements - Iran Divestment Act - Standard Terms and Conditions: (http://www.chattanooga.gov/purchasing/standard-terms-and-conditions) ***** *** BIDS MUST BE RECEIVED NO LATER THAN *** ***** 2:00 PM ON AUGUST 24, 2016 ***** ***** PLEASE SUBMIT BIDS IN DUPLICATE INDICATING BID NUMBER (304351) ON OUTSIDE PACKAGING ALL ITEMS MUST BE QUOTED F.O.B. DESTINATION, FREIGHT ALLOWED. ***** NOTE: 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. 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 services on the basis of race, color, or national origin. ***** PLEASE PROVIDE US WITH THE FOLLOWING INFORMATION: Company Name _____ Address _____ Phone/Toll-Free No. _____ Fax No. _____ E-Mail Address _____ Contact Person's Name _____ Estimated Delivery _____ Minority-Owned Business ____ Small Business ____ Veteran ____ Minority Woman Owned Business ____ Disabled Veteran ____ Women-Owned Business ____					

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

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: _____

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Item	Class-Item	Quantity	Unit	Unit Price	Total
1	Delivery and installation of Fill Media Replacement in O2 Plant Cooling Tower per Attached Specs	1	Each	_____	_____

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**SPECIFICATIONS FOR
PURCHASE OF COOLING TOWER FILL MEDIA REPLACEMENT
MOCCASIN BEND WASTEWATER TREATMENT PLANT
CHATTANOOGA, TENNESSEE
JULY, 2016**

1. GENERAL INFORMATION

This specification is for the purchase and installation of fill media replacement at a cooling tower located at the Moccasin Bend Wastewater Treatment Oxygen Plant. The building is located at 455 Moccasin Bend Road, Chattanooga, Tennessee 37405. The City is taking bids on a firm price basis to supply and install replacement of the fill media that meets all specifications listed below.

2. GENERAL SPECIFICATIONS

2.1 Scope

The existing cooling tower is a Marley Cooling Tower, Model Number NC6221BM, Serial Number 150996-002-99.

The vendor shall provide all supervision, labor, tools and material to perform the following:

1. Remove the existing fill media and fill partition walls; and
2. Install new Marley (or equivalent) OEM fill media to include new stainless steel fill support tubes, stainless steel fill partitions and all attaching hardware.

The fill media shall be a complete and exact replacement of the existing tower fill material. This tower is FM approved. In order to maintain FM approval, Marley OEM parts must be utilized during replacement. Vendor pricing shall include all field installation, freight, delivery, materials and labor. The existing fill is hung inside the tower which allows dirt and debris to flow underneath the fill into the plenum area of the tower where it can be removed. Bottom supported fill packs sit on the basin floor and trap dirt and debris where it cannot be removed. Bottom supported fill packs are not allowed.

2.2 City Responsibility

The City shall place containers for all waste material in close proximity to the tower. Vendor personnel shall place all waste material into containers provided by the City. The City shall haul off the containers and dispose of the contents.

The City shall provide a forklift to unload the pallets of material when delivered.

The City shall drain and isolate all collection basin(s), as needed. The City shall isolate and secure all supply valves and chemical feed lines, as needed.

The City shall de-energize all fan motors, heaters, heat trace tape and other sources of electrical energy, as needed.

The City shall provide a laydown area in close proximity to the tower large enough for all materials.

2.3 Pricing

The vendor's time to complete the work shall be stated in the bid. This is the time that the tower will be out of service.

Vendors are required to examine the cooling tower by contacting the Waste Resources Division Maintenance Manager to arrange a site visit at 423-643-7088, extension 3336. All other questions should be directed to Geoffrey Hipp with the City's Purchasing Department at ghipp@chattanooga.gov.

The price shall include all freight and taxes of any kind.

All work shall comply with OSHA regulations. Vendor and onsite vendor personnel shall comply with the City's Safety Directives at all times and are subject to monitoring by the onsite Occupational Safety Specialist.

The City does not anticipate any significant scaffolding, crane/boom truck or other rental equipment will be needed. In the instance these items are required, it will be the Vendor's responsibility to supply such.

3. DETAILED SPECIFICATIONS

3.1 Fill Properties

Base Material:
Polyvinyl Chloride (PVC) Sheets

Material Properties:	
Tensile Strength:	6,300 psi (at room temperature)
Tensile Modulus:	325,000 psi
Specific Gravity:	1.50
Drift Eliminator Configuration:	3 pass
Typical Drift Rate:	0.005% of circulating gpm
Max Continuous Water Temperature:	125°F
Sheet Thickness:	15 mils (0.015")
Sheet Spacing:	0.75"
Weight/cf of Completed Fill Packs:	1.93/lb/ft ³ @15 mil
Heat Transfer Area (Wetted Surface):	51.2 ft ² /ft ³

3.2 Construction and Materials

The fill material will be installed in a crossflow cooling tower.

The fill will be film-type, Marley MX75 or approved equal. Integral louvers and eliminators shall be thermoformed integrally with each fill sheet. The fill will consist of 15 mil (0.015") thick polyvinyl chloride sheets. Flame spread rating of the material must not exceed 25, per ASTM E-84. The fill must comply with CTI Standard 136. The fill sheets must be shelf-spacing on minimum 0.75" centers.

3.3 Configuration

The fill must be designed specifically for crossflow cooling tower applications. It must contain a minimum of 51 square feet of wetted heat transfer surface per cubic foot of fill material.

The fill supplier will determine the total volume of fill required to achieve the specified thermal performance.

Fill shall be suspended from structural tubing supported from the upper tower structure and shall be elevated at least 2" above the floor of the cold water basin to facilitate cleaning. Structural tubing material shall be appropriate for the application. Air inlet faces of the tower shall be free of water splash-out. Drift eliminators shall be triple-pass and shall limit drift losses to no more than 0.005% of the design gpm flow rate. Air from the drift eliminators will discharge at a minimum angle of 45° from the horizontal.

3.4 Supports

The fill supplier will review the details of the existing tower structure by physical inspection. Based on this review, the fill supplier will provide fill support and sealing design details appropriate for the existing tower structure.

3.5 Hot Water Distribution

The fill supplier will define any necessary changes to assure uniform water distribution to all areas of the fill section.

3.6 Fill Depth (Air Travel)

The fill depth will be chosen to provide the proper thermal performance. If a fill height greater than the maximum height of available fill packs is required, a second layer of fill packs may be added, but no more.

3.7 Performance

The Vendor will supply a fill characteristic line based on the CTI method of analysis to demonstrate the fill capacity at the required design conditions. The Vendor will guarantee fill performance as installed.

4. **WARRANTY**

The Vendor shall warrant and guarantee the fill material for a period of twelve (12) months against defective workmanship and materials.

5. **COORDINATION OF DELIVERY**

Vendor must reference City of Chattanooga Purchase Order Number on all correspondence and documentation. Vendor will bring all necessary delivery documentation with the shipment. Vendor driver or representative shall confirm delivery location, date and time within 2-4 hours prior to arrival by phone by calling 423-757-5026, ext. 3260.

If Delivery Location is other than the Warehouse at Moccasin Bend Waste Water Treatment Plant, Vendor shall contact Inventory Coordinator at Moccasin Bend Wastewater Treatment Plant to coordinate delivery by emailing MBAcctspayable@chattanooga.gov to set up delivery location, date, and time.

Chapter No. 817 (HB0261/SB0377). "Iran Divestment Act" enacted.

Vendor Disclosure and Acknowledgement

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) _____

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 that 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 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 all construction contracts or subcontracts in excess of \$10,000 to be performed for the City of Chattanooga, 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)

(Title and Name of Company)

(Date)

REQUIREMENTS FOR INSURANCE COVERAGE

Contractor shall purchase and maintain during the life of this Agreement, insurance coverage which will satisfactorily insure Contractor against claims and liabilities which arise because of the execution of this Agreement, with the minimum insurance coverage as follows:

- a. Commercial General Liability Insurance, with a limit of \$1,000,000 for each occurrence and \$2,000,000 in the general aggregate.
- b. Automobile Liability Insurance, with a limit of \$1,000,000 for each accident, combined single limit for bodily injury and property damage.
- c. Worker's Compensation Insurance and Employer's Liability Insurance, in accordance with statutory requirements, with a limit of \$500,000 for each accident.
- d. Professional Liability Insurance, with a limit of \$1,000,000 for each claim and aggregate.

If any of the above cited policies expire during the life of this Agreement, it is the Contractor's responsibility to forward renewal Certificates within ten (10) days after the renewal date containing all the aforementioned insurance provisions.

Certificates must specifically cite the following provisions:

- i. City of Chattanooga, its agents, representatives, officers, directors, officials and employees must be named an Additional Insured under the following policies:
 - a) Commercial General Liability
 - b) Auto Liability
 - c) Worker's Compensation Insurance and Employer's Liability Insurance
 - d) Professional Liability Insurance
- ii. Contractor's insurance must be primary insurance as respects performance of subject contract.
- iii. All policies, except Professional Liability Insurance, if applicable, waives rights of recovery (subrogation) against City of Chattanooga, its agents, representatives, officers, directors, officials and employees for any claims arising out of work or services performed by Contractor under this Agreement.