

( ) Published in The Wichita Eagle, Thursday, September 15, 2016.

## **FORMAL BID – FB640186**

Sealed bids will be received in the office of the City Purchasing Manager, 12th Floor, City Hall, 455 North Main, Wichita, Kansas, prior to **TEN O’CLOCK A.M., FRIDAY, SEPTEMBER 30, 2016.** "Request for Formal Bid" form **MUST** be used to submit your bid unless you are submitting your bid on our website at (<https://ep.wichita.gov>) using your secure login/password:

### **PUBLIC WORKS & UTILITIES DEPARTMENT/SEWAGE TREATMENT DIVISION**

#### **Furnish & Install Two (2) Rotary Distributors of the Hydraulic Reaction-Driven Type**

AS PER SPECIFICATIONS

F.O.B. – Wichita, Kansas

Bids will be opened after ten o'clock a.m., in the Board Room, 1<sup>st</sup> Floor, City Hall, 455 North Main, Wichita, Kansas.

Specifications and bid forms are on file in the office of the City Purchasing Manager, 12th Floor, City Hall, 455 N. Main, Wichita, Kansas 67202, (316) 268-4636. This information may also be obtained on our website above.

A **PRE-BID CONFERENCE** will be held at the Sewage Treatment Plant No 2, 2305 E. 57<sup>th</sup> St So, Wichita, Kansas, on **Thursday, September 22, 2016 at 10:00 a.m.**

**BID SECURITY** in the amount of five per cent (5%) of the bid **MUST** be submitted with each bid. Bid Security shall be by a **Bid Bond ONLY**, written by a Bonding Company approved by the United States Treasury Department and licensed to do business in the State of Kansas. **Electronic Bids online (<https://ep.wichita.gov>) must have the Bid Bond submitted to the City Purchasing Manager prior to bid opening. Bid Bond envelope must be marked "BID BOND ENCLOSED", reference the formal bid number and the due date.**

**PERFORMANCE BOND FORMS**, included in the bid package **are to be used**, in the amount of one hundred per cent (100%) of the contract must be furnished by the successful vendor.

A **LABOR & MATERIAL PAYMENT BOND FORMS**, included in the bid package **are to be used**, running to the State of Kansas in a sum of not less than the total of the contract, must be furnished by the successful vendor.

Dated at Wichita, Kansas this 12th day of September, 2016.

Melinda A. Walker  
Purchasing Manager

# ATTENTION

A PRE-BID CONFERENCE WILL BE HELD AT

**THE SEWAGE TREATMENT PLANT NO 2**

**2305 E. 57<sup>th</sup> ST SOUTH.,**

WICHITA, KANSAS

**AT 10:00 A. M.**

**ON**

**THURSDAY, SEPTEMBER 22, 2016**

THE PURPOSE OF THE MEETING WILL BE TO REVIEW  
REQUIREMENTS AND SPECIFICATIONS  
CONTAINED IN THIS BID PACKAGE AND TO CORRECT  
ANY ERRORS OR TO MAKE ANY NECESSARY CHANGES.

ATTENDANCE AT THIS PRE-BID IS **RECOMMENDED**

FOR THOSE FIRMS SUBMITTING BIDS

AS A PRIME CONTRACTOR.

\* \* \* \* \*

## NOTICE...NOTICE...NOTICE

### NON-DISCRIMINATION/EQUAL EMPLOYMENT OPPORTUNITY

#### AFFIRMATIVE ACTION PROGRAM REQUIREMENTS

1. It is the policy of the City of Wichita to require that all contracts of the City and its agencies include provisions to ensure that applicants for employment with its contractors, subcontractors, vendors and suppliers are selected and employees are treated during employment, without regard to race, color, sex, religion, national origin, ancestry, disability, or age except where age is a bona fide occupational qualification.

2. The Kansas Act Against Discrimination (Kansas Statutes Annotated 44-1001 et. seq., as amended) requires every person who enters into a contract with the City of Wichita for construction, alteration or repair of any public building or public work or for the acquisition of materials, equipment, supplies or services to:

- a. Observe the provisions of the Kansas Act Against Discrimination and not to discriminate against any person in the performance of work under the present contract because of race, religion, color, sex, disability, or age unrelated to such person's ability to engage in the particular work.
- b. In all solicitations or advertisement for employees, the contractor shall include the phrase "EQUAL OPPORTUNITY EMPLOYER" or a similar phrase to be approved by the Kansas Human Rights Commission.
- c. Upon request, inform the Kansas Human Rights Commission and/or the City Of Wichita Finance Department in writing the manner in which such person will recruit and screen personnel to be used in performing the contract.
- d. Contractor shall include the provisions of Paragraphs (a), (b), (c), and (d) of this Paragraph 2, in every subcontract or purchase order so that such provisions will be binding upon such subcontractor or vendor.
- e. EXEMPTED from these requirements are:
  - (1) Any contractor who has already complied with the provisions set forth in these sections by reason of holding a contract with the federal government or a contract involving federal funds. (Proof of compliance is required).
  - (2) Contracts entered into by any contractor who employs fewer than four (4) employees during the term of such contract.
  - (3) Contractors who hold contracts with the City of Wichita with a cumulative total value of five thousand dollars (\$5,000.00) or less during the City fiscal year.
- f. Reports requested by the Kansas Human Rights Commission shall be made on forms prepared by the Commission, copies of which are available from the Kansas Human Rights Commission, Contract Auditor, 900 S.W. Jackson Street, Suite 851 S., Topeka, Kansas, 66612.

3. During the performance of any City contract or agreement, the contractor, subcontractor, vendor or supplier of the City shall comply with all the provisions of the Civil Rights Act of 1964, as amended; The Equal Employment Act of 1972, Executive Orders 11246, 11375, 11141, Part 60 Title 41 of the Code of Federal Regulations; the Age Discrimination in Employment Act of 1967, the Rehabilitation Act of 1973, The Americans with Disabilities Act and/or any law, regulation or amendments as may be promulgated thereunder.

4. Failure of any contractor, subcontractor, vendor or supplier to report to the Kansas Human Rights Commission as required by K.S.A. 1976 Supp. 44-1031 as amended or State statutes, Federal statutes or regulations pertaining to discrimination, which finding or decision or order has become final, shall be a breach of contract and any such contract may be canceled, terminated or suspended in whole or in part by the City or its contracting agency.

5. Compliance with the Equal Employment Opportunity requirements of the City of Wichita does not relieve the contractor, subcontractor, vendor or supplier of the necessity of also complying with the Kansas Act Against Discrimination.

Exemptions Claimed: Four (4) Employees or less; Federal Contract, Contract less than \$5,000.00.

**NOTE: You will be contacted if you are the successful vendor and do not have a current EEO/AA submittal on file with the Purchasing Office and/or have not REGISTERED VIA THE CITY'S WEB SITE: <https://ep.wichita.gov> . Questions about the City of Wichita's EEO/AA submittal requirements should be directed to (316) 268-4417.**

**FORMAL BID**

**FB640186**

**Water Sewage Treatment Division**

*Furnish & Install Rotary Distributors*

**Responses are due before:**

**Friday, September 30, 2016 10:00:00AM**

**RETURN TO:**

City of Wichita  
Purchasing Manager  
City Hall, 12th Floor  
455 N Main  
Wichita KS 67202



**CONTACT INFORMATION:**

Contact: Jason Brogden

Phone: (316) 268-4429

Fax: (316) 219-6208

455 North Main  
12th Floor  
Wichita, KS 67202

e-mail: jbrogden@wichita.gov

**DELIVERY INFORMATION**

**Deliver To:** SEWAGE TREAT PLANT #2  
ROBIN RANNEY - STOREKEEPER  
2305 E 57TH ST S

Phone: (316) 303-8790

Fax: (316) 303-8709

e-mail: lshelley@wichita.gov

WICHITA, KS 67216-4605

**PLEASE QUOTE DELIVERED PRICES ON THE EQUIPMENT, MATERIAL OR SERVICES LISTED BELOW**

**GROUP 1**

**Item Description**

1 Provide Labor, Material, and Equipment to Furnish & Install two (2) Rotary Distributors of the Hydraulic Reaction-Driven Type at Sewage Treatment Plant No 2, 2305 E 57th St South., Wichita, KS 67216 as per Specifications.

**Qty U.O.M. Unit Price Extended Amount**

1.00 LS \_\_\_\_\_

**GROUP 1 TOTAL**

**Solicitation Total:**

\$ \_\_\_\_\_

Vendor Name

Telephone Number (including area code)

Vendor Address

Fax Number (including area code)

Vendor City/State/ZIP

E-mail Address

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Vendor TIN/FEIN/SSN

\_\_\_\_\_  
Printed Name

\_\_\_\_\_  
Billing Terms

\_\_\_\_\_  
Title

\_\_\_\_\_  
Delivery or Completion Date

IN SUBMITTING THE ABOVE, THE VENDOR EXPRESSLY AGREES THAT, UPON ACCEPTANCE OF ANY OR ALL ITEMS, UNDER THE TERMS AND CONDITIONS SHOWN ABOVE AND ATTACHED TO THIS FORM, BY THE CITY OF WICHITA, A CONTRACT SHALL THEREBY BE CREATED.  
**THIS FORMAL BID FORM MUST BE SIGNED!**

**SPECIFICATION**  
**Mast-type Rotary distributor hydraulically driven**

**CITY OF WICHITA**  
**SEWAGE TREATMENT PLANT NO.2**  
**FURNISH AND INSTALLATION OF**  
**TWO NEW REACTION-DRIVEN ROTARY DISTRIBUTOR**  
**Mast-type Rotary distributor hydraulically driven**

**DESCRIPTION**

- A. There shall be furnished two (2) rotary distributors of the hydraulic reaction-driven type, suitable for installation on the existing trickling filters 200 feet in diameter. Each distributor shall be designed to handle a maximum flow of 7,000 gpm (10.08 MGD) and a minimum flow of 4,200 gpm (6.04MGD). The hydraulic head required for the operation of each distributor, as measured from top of filter media to the water level in the center well, shall not exceed 36 inches at the maximum flow rate. The maximum velocity of the flow in each of the arms shall not exceed 4 feet per second.
- B. The equipment furnished for each rotary distributor shall include the center assembly with bearings and seals, distribution arms with flow spreaders, tie rod arm supports, assembly and anchor bolts.
- C. The equipment shall be designed to uniformly distribute wastewater over the surface of the filter media.
- D. The material of construction of all major rotary distributor components shall be hot dipped galvanized steel. Fasteners and anchor bolts shall be Type 304 stainless steel unless a specific connection requires high strength fasteners.
- E. All shop welding shall conform to the latest standards of the American Welding Society, Code AWS D-1.2.
- F. All exceptions must be clearly noted and detailed. The City of Wichita reserves the right to reject any bid due to exception.

**REFERENCES**

- A. ASTM A240/A276 Stainless Steel Specification
- B. ASTM 304 Bolt Specification
- C. AWS American Welding Society  
Current Standards
- D. AFBMA L-10 Ball Bearing Specification

## **QUALITY ASSURANCE**

- A. Equipment shall be furnished by a single manufacturer who is fully experienced, reputable and qualified in the manufacture of the equipment to be furnished.
- B. The equipment supplier shall have at least ten (10) years' experience in the design, fabrication, application, and supply of hydraulic rotary distributor equipment including both lower and top-bearing center columns and distributor arms. The equipment supplier shall submit a list of not less than five (5) operating installations with similar designs, diameters of not less than 150 feet, and design flow rates of not less than ten (10) million gallons per day (MGD). Installation lists verifying this experience level shall be included as part of the submittal documents if requested
- C. The rotary distributor mechanism shall be of the mast type as manufactured by Ovivo USA, WesTech, or Approved Equal includes equipment manufacture equipment that will fully perform the duties specified will be considered 'equal,' provided the proof that such equipment is of equivalent substance and function and is approved by City of Wichita Sewage Treatment Division contact Rebecca Lewis Superintendent 316-303-8702 rlewis@wichita.gov Requests for the approval of 'or equal' shall be submitted at least five business days prior to bid opening. During the bidding period, all approvals shall be issued by City of Wichita Purchasing office in the form of addenda prior to the bid opening date.

## **SUBMITTALS**

**The equipment supplier will submit drawings for record only within four (4) weeks after receipt of acknowledgement of an approved purchase order.**

**The equipment supplier will ship all Products within sixteen to twenty (16 to 20) weeks after receipt of approved purchase order.**

## **DELIVERY**

- A. Fabricated assemblies shall be shipped in the largest sections permitted by carrier regulations, properly match-marked for ease of field erection.
- B. The units shall be erected and lubricated in strict accordance with the instructions of the manufacturer's field engineer.

## **PRODUCTS**

Hot dipped galvanized steel material fabrication

Center assembly, completely shop-assembled, including

Stationary mast.

Center well with arm attachment flanges.

Center well support.

Maintenance access ladder and platform.

Stabilizer bearing, bronze brushed & split, with split grease seal, bearing house, split seal retainer and grease fittings.

Thrust bearing (upper), spherical roller type, L-10 life 200,000 hours.

Liquid seal, neoprene with 304 stainless steel seal surface.

### **Field Installed Components:**

Four (4) arms, with support pads.

Vertical and horizontal tie rods with couplers and clevises.

Polyethylene spreaders and orifice plates (front and rear mounted).

Flushing gates.

Vent pipes.

Anchor bolts.

Assembly bolts.

Gaskets, neoprene.

Equipment identification plate.

Record drawing package.

Operation and Maintenance manuals.

Field Service, as noted in the FIELD SERVICE.

- A. The distributor shall be of the hydraulic or reaction-driven type. The flow to the mechanism passes through the center mast and enters the center well. Flow then passes into the arms and is uniformly distributed over the surface of the filter media by means of flow spreaders which are strategically located along the length of the arms.
- B. All equipment shall be sub-assembled in the manufacturer's shop to insure proper fitting of parts, then match-marked for erection and disassembled for shipment.
- C. The equipment shall be designed so that there will be no bearings or other operating mechanism component in contact with the liquid being processed.
- D. All fabricated carbon steel components of the Rotary distributor mechanisms shall be hot-dip galvanized (HDG) after fabrication per ASTM A-123. No field welding on hot-dip galvanized equipment will be permitted. Minor defects in the hot-dip galvanizing coating caused by shipping, handling, or installation shall be repaired after equipment installation. The defects shall be thoroughly cleaned and wire brushed to remove all foreign substances, wiped clean with a suitable solvent, thoroughly dried, and coated with at least 3 mils of a zinc rich compound (supplied by Contractor) specifically formulated for touch-up of galvanizing and conforming to USN Specification MIL-P-21035 or USAF Specification MIL-P-26915A. All fabricated members delivered to the project site shall be stored by the Contractor in a position where they are raised off the ground and well separated to provide ventilation and drainage.

## **DESIGN REQUIREMENTS**

Each rotary distributor mechanism shall be designed to meet the following requirements.

- 1. The distributor shall be structurally designed for an unbalanced load equal to 300 pounds applied at the end of an arm or a 2-inch liquid depth differential in opposing arms, whichever is greater.
- 2. The distributor arms and supports shall be designed to carry maximum operating loads, dead loads and liquid loads at maximum flow, and a 5-pound per square foot ice load on the top surface of each arm.
- 3. The deflection at the tip of the distributor arms shall not exceed 1/480 of the arm length, due to structural deflections and bearing clearances measured from the centerline of the center well connection.

## **CENTER ASSEMBLY**

- A. The center assembly shall consist of a stationary mast, neoprene liquid seal, thrust and stabilizing bearings, centerwell support cage, rotating centerwell, and suitable lubrication fittings.
- B. The center assembly must be completely assembled and tested at the rotary distributor manufacturer's facility prior to shipment. The center assembly will be shipped as a complete unit and will require no field assembly. Field installation, leveling and grouting will be required as specified in the manufacturer's installation instructions.

- C. The stationary mast shall be designed to support the entire rotating mechanism and shall be bolted to the concrete center pier. The center of the mast shall be open to allow passage of the flow into the distributor centerwell. The base of the mast below the influent openings shall be provided with a neoprene liquid seal to seal the mast to the rotating centerwell. The mast shall be flanged at the base for anchorage to the center pier.
- D. The rotating centerwell shall receive flow from the stationary mast and shall be sized for the maximum flowrate. Flanged openings shall be provided around the centerwell to allow passage of the flow into the attached distribution arms. The centerwell shall be provided with a minimum of 12" of free board over the maximum operating liquid level.
- E. The centerwell support shall be of truss design, shall hang from the turntable at the top of the mast and shall support the centerwell and the inner portion of the distribution arms. It shall have connections for the tie rod arm supports.
- F. A ladder shall be provided on the centerwell or centerwell support for access to the upper bearing. The ladder shall be equipped with safety clips. A top platform 16-inches wide x 14-inches deep shall be provided as a landing for use when servicing the upper bearing assembly.
- G. The upper bearing shall be an oil-lubricated spherical thrust roller bearing supported by the stationary mast. The bearing shall accommodate all concentric and eccentric operating loads. The upper bearing shall have an AFBMA L-10 life of 200,000 hours. Easily accessible lubricant fittings shall be provided. A dust seal shall be provided around the bearing assembly.
- H. A sturdy turntable shall be mounted to the bearing and shall support the rotating components of the rotary distributor mechanism. The turntable shall be attached to the centerwell support using adjustable bolts to provide a leveling
- I. A mid-mast stabilizing bearing assembly shall be located at the top of the centerwell to provide horizontal stability for the rotating mechanism. The stabilizing bearing assembly shall be a two-piece (split) bronze bushing that shall be grease lubricated and contained in a split housing. The stabilizing bearing housing shall be provided with upper and lower split grease retaining seals to prevent contamination of the bronze bushing. A split retainer ring shall be provided at the upper seals. The stabilizing housing, grease seals, retaining ring and bronze bushing shall be split to enable replacement without disassembly of the distributor center support or tie rod assemblies. Stabilizing bearing assemblies or guide blocks located below the center well liquid level, or four-point contact slewing ring bearings will not be acceptable. Any stabilizer bearing design must allow for complete bearing replacement without major disassembly of the mechanism.
- J. The seal provided between the mast and the rotating center well shall be designed to withstand the full hydraulic head of the water in the centerwell. The seal shall consist of a replaceable molded annular ring of neoprene, attached to the stationary mast with two stainless steel band clamps, with the outer portion resting on a polished, non-corrosive wear surface either integral with or attached to the rotating centerwell.

- K. A lower bearing assembly shall be provided for future replacement on an existing mechanism. The lower bearing assembly shall consist of a stationary base, main bearing, rotating turntable and suitable lubrication fittings. The lower bearing assembly must be completely assembled and tested prior to shipment. The lower bearing assembly will be shipped as a complete assembly and will require no field assembly. Field installation and leveling will be required as specified in the manufacturer's installation instructions.

**Stationary Base:** The stationary base shall be of cast iron. The cast base must be designed to support the bearing and provide a rigid support structure to transmit the load into the concrete pier without causing any eccentric loading on the bearing.

The stationary base is to be designed to provide for a bearing chamber that will contain the bearing and provide for oil bath lubrication of the bearing balls. Easily accessible lubrication fill and drain pipes will be provided with necessary fittings and oil level indicator.

The center of the stationary base shall be open to allow passage of the flow from the center pier through the center assembly and into the distributor center well.

The base shall be provided with neoprene seals to prevent entry of dust into the bearing chamber. The base shall have a liberal passageway to allow normal seal leakage to pass through the base without entering the bearing chamber.

The lower support flange of the stationary base shall be anchored to the concrete pier with the existing anchor bolts and leveling nuts. Refer to the manufacturer's installation manual for final leveling instructions.

**Main Bearing Assembly:** The main bearing shall be a precision anti-friction four point contact ball bearing, running in oil. The bearing assembly shall be supported by the stationary base and shall be designed to resist an overturning moment created by a 300 lb. load acting at the end of one arm.

The bearing shall be designed for an AFBMA life of 200,000 hours based on thrust loading at maximum operating weights. Bearing rings must be constructed of AISI 4150 steel or as required to achieve the required core hardness level.

The bearing races must be hardened to RC 58-63 with a minimum 0.125 case depth. The races must be finish ground after hardening. The bearing angle of contact must be between 35 degrees to 45 degrees. The bearing assembly must be attached to the stationary base. Bearing bolts must be Grade 8 and must be torqued per the bearing manufacturer's requirements at the time of assembly.

Rotating Turntable: The rotating turntable shall be fabricated of steel A36 at 1-1/4" minimum thickness and shall support the existing center well.

The turntable shall rotate on the main bearing assembly. The turntable shall be bolted to the rotating bearing race. Bolts must be Grade 8 and must be torqued per the bearing manufacturer's requirements at the time of assembly.

The bearing mounting surface of the turntable must be machined to provide a level surface for mounting to the bearing race.

The rotating turntable shall be provided with drilled and tapped holes for bolting down the existing fabricated center well.

The turntable shall be provided with a drip lip to prevent liquids from entering the main bearing oil chamber.

A seal shall be provided between the stationary assembly and the existing rotating center well and shall be designed to withstand the full hydraulic head in the center well. The seal shall consist of a replaceable molded annular ring of neoprene, attached to the stationary base, with the outer portion resting on a machined replaceable corrosion resistant seal surface attached to the rotating turntable.

## **DISTRIBUTION ARMS**

- A. There shall be provided four (4) arms for each Rotary distributor mechanism, fabricated, 1/4" wall thickness. Arms shall be rectangular design and shall be reduced in flow area along the arm length and provided with vent pipes and end flushing gates. Each arm shall be equipped with orifices, polyethylene orifice plates and polyethylene spreaders, and horizontal and vertical tie rod arm supports.
- B. The arms shall be provided with support pads for holding the arms in position during bearing and seal replacement.
- C. The cross-sectional opening of the distributor arms shall be designed to handle the rated capacity such that the flow velocity into each arm does not exceed 4 feet per second at any point along the arm at maximum design flow. The arms shall be attached to the center assembly by heavy flange connections and stainless steel bolts. The arms shall be mounted to provide six (6) inches clearance above the media.
- D. Each arm shall have openings for attachment of the spreaders that uniformly distribute the flow over the filter media at the hydraulic loadings specified. Front mounted reaction nozzles shall be provided to reduce the mechanism's forward motion, as required by the manufacturer's design.
- E. All horizontal weld seams on the distributor arms shall be of the corner-to-corner type. The weld joint shall have a minimum of 1/2" extension past the vertical arm plates.
- F. The arms shall be supported vertically by an adequate quantity of adjustable tie rods connecting the arms to the center column mast. The arms shall be laterally braced by horizontal tie rods. The use of cables for vertical or horizontal arm supports is not acceptable.

- G. The arms and tie rods shall be designed for a maximum load, consisting of their own weight, the weight of arms, the weight of the liquid in the arms when full, and a live load of 300 pounds at any point on any arm.
- F. A wedge-tight, quick opening flush gate with handle shall be provided at the end of each arm. Each gate shall have a 3/4-inch diameter drain plug.
- G. Vent Pipes: Each arm shall be provided with 3/4-inch diameter vent pipes to prevent air binding in the arms.

### **FLOW DISTRIBUTION**

- A. Liquid distribution shall be accomplished by means of spreaders and orifice plates. The spreaders and orifice plate shall be corrosion-resistant and shall be polyethylene plastic with ultraviolet inhibitors. Spreader made of polycarbonate or other fragile material shall not be acceptable. Spreader shall be easily removable for cleaning. The orifice openings shall be provided with plastic plates which are adjustable to control the flow. Orifices shall be capable of distributing flow evenly over spreader plates without obstructing the flow. Orifices shall be designed to minimize clogging. The manufacturer shall size and locate orifices on the arms to give uniform distribution over the entire area of the filter bed without need for field adjustments.
- B. Any leading orifices shall be of the same size as the rear-mounted and shall use the same size spreaders and orifice plates. Each front-mounted opening shall be paired with a rear opening. The quantity of leading and trailing orifices shall be balanced as required to meet the required rotational speed.

### **LUBRICATION**

- A. The upper bearing shall run in an oil bath. Readily accessible lubricant fill, drain pipe and valve with necessary fittings shall be provided.

### **SPARE PARTS**

The intent of this specification is to provide equipment for long non-interrupted continuous operation.

The manufacturer shall supply any spare parts that are required for a minimum time frame.

The following spare parts shall be furnished as a minimum:

1. One (1) complete set of seals and gaskets.
2. One (1) lot of discharge nozzles/orifices, plates/spreaders equal to ten (10) percent of the total number installed.

## **SERVICE**

The equipment manufacturer shall provide a field service technician, properly trained in inspection and operation of the mechanism, to approve the installation, test the equipment's operation and instruct the owner's personnel on maintenance and operation. This service shall be done in the form of four (4) eight-hour days of service in two (2) trips to the site.

Any additional service shall be provided by the contractor at his expense for improper installation, delayed check-out or operator training.

## **FIELD TESTS**

Each rotary distributor mechanism shall be tested after erection and mechanism inspection. Field tests shall be witnessed by the Contractor, Plant personnel and authorized factory representative. Prior to testing, the factory-authorized representative for the mechanism shall certify that the distributor mechanisms are installed in accordance with these specifications, the manufacturer's recommendations, and the approved shop drawings. If the mechanisms fail to perform due to faulty installation procedures, the Contractor shall correct said defect and shall bear all costs of retesting. Each rotary distributor shall be tested for the following items:

1. The maximum rotational speed of the distributor arms.
2. The mechanism shall operate without excessive vibration or noise and shall be properly balanced and installed.
3. The Contractor shall run a pan test to check the distribution of flow on the filter bed. Pans shall be provided by the Contractor. The rotary distributor shall perform so that approximately uniform distribution is obtained for each unit area of exposed filter media. The test shall run at or near the maximum design flow and will conform to the following procedure:
  - a. Pans at least 24 inches x 14 inches x 8 inches deep shall be set flush with the top of the filter media on a radial line extending from the distributor pedestal to the wall of the trickling filter.
  - b. The test period for the distributor shall include a minimum of three revolutions. The test shall not be conducted when the wind velocity exceeds 10 miles per hour.
  - c. The rate of distribution at maximum design flow for any unit area shall not vary from the mean rate of distribution by more than plus or minus 10%.
  - d. Orifice plates shall be adjusted as necessary until satisfactory distribution is obtained over the entire filter bed.

## **INSTALLATION SERVICES**

Installation contractor will provided supervision, labor, service and equipment necessary to complete this Rotary Distributor Installation project.

The equipment shall be erected in strict accordance with manufacturer's recommendations.

Site mobilization.

Demolition and removal of the existing Rotary Distributor mechanisms.

Installation of new Rotary Distributor mechanisms.

Support of equipment as needed.

Crane, mats, rigging and related equipment.

Demobilization of personnel and equipment.

Pan test and operational assessment and adjustment of mechanisms.

Bonds.

**There shall be no additional costs to the Owner considered for changes or Modifications necessary for the installation of an approved alternate. Any and all Additional costs including but not limited to, engineering design, review, excavation, Concrete, piping, electrical, etc. shall be borne by the Bidder**

- END OF SECTION -

## BOND REQUIREMENTS

### LABOR AND MATERIAL PAYMENT SURETY BOND

- A. A LABOR AND MATERIAL PAYMENT SURETY BOND: running to the State of Kansas in a sum not less than the sum total of the purchase order/contract, conditioned that the Contractor or a Subcontractor of the Contractor shall pay all indebtedness incurred for labor furnished, materials, equipment, or supplies used or consumed in connection with or in or about the construction improvements or repairs per the specifications.
- B. Said Bond shall be approved by and filed with the Clerk of the District Court, Sedgwick County Courthouse, 11th Floor, 525 North Main, Wichita, Kansas, 67203, and the filing fee will be paid by the Contractor. In order to be acceptable, this Bond must be issued by a bonding company authorized to do business in Kansas by the Kansas State Department of Insurance. The Bond must delete any reference to a notice period or claims period that is less than the five (5) year statute of limitations applicable under Kansas law.
- C. The receipt for the filing of the Bond shall be furnished within ten (10) working days to the City Purchasing Manager, City Hall, 12th Floor, Wichita, Kansas, 67202, before the purchase order/contract is issued.

### PERFORMANCE BOND

- A. A PERFORMANCE BOND, acceptable to the City of Wichita, in the amount of one hundred percent (100%) of the total bid must be furnished by the successful bidder. In order to be acceptable, this Bond must be issued by a bonding company authorized to do business in Kansas by the Kansas State Department of Insurance. The Bond must delete any reference to a notice period or claims period that is less than the five (5) year statute of limitations applicable under Kansas law.
- B. Said Bond shall be furnished, within ten (10) working days to the City Purchasing Manager, City Hall, 12th Floor, 455 North Main, Wichita, Kansas 67202, before the purchase order/contract is issued.

(01-01-03)

# BOND TO THE CITY OF WICHITA

Bond # \_\_\_\_\_

KNOW ALL MEN BY THESE PRESENTS: That we \_\_\_\_\_  
of the State of \_\_\_\_\_ in the City of \_\_\_\_\_ and having authority to do business  
in the State of Kansas, as principal, and \_\_\_\_\_  
a surety corporation of \_\_\_\_\_  
and authorized to do business in the State of Kansas, as surety hereon, are held and firmly bound  
unto the City of Wichita in the just and lawful sum of \_\_\_\_\_  
Dollars, good and lawful money of the United States of America, to the payment of which the  
said principal hereby binds itself, its heirs, administrators, executors, successors, trustees, and  
assigns, and the said surety hereby binds itself, its successors, trustees, and assigns, all jointly  
and severally, firmly by these presents.

Signed, sealed, and dated at \_\_\_\_\_, this \_\_\_\_\_ day of \_\_\_\_\_  
\_\_\_\_\_ A.D.

THE CONDITION OF THE ABOVE OBLIGATION is such that whereas the said  
principal, \_\_\_\_\_  
of \_\_\_\_\_ has this \_\_\_\_\_ day of \_\_\_\_\_  
\_\_\_\_\_ A.D. entered into a contract with the City of Wichita to furnish all of the materials  
and labor necessary to construct and complete a certain public improvement in the City of  
Wichita, as follows: \_\_\_\_\_  
\_\_\_\_\_ according to the plans  
and specifications therefore, heretofore approved by the City Council of the City of Wichita, and  
on file in the Purchasing Office of the City of Wichita, and within the time and in compliance  
with every provision of said contract, and to maintain the same for a period of \_\_\_\_\_ years  
from date of completion, all in accordance with and as provided in said contract.

NOW THEREFORE if said principal shall well and faithfully and fully comply with all the requirements in the contract for said improvement, and shall complete same according to the terms thereof, and shall maintain said improvement in the manner and form set forth and required by said contract for the period of \_\_\_\_\_ years from date of completion, and shall save and hold the City of Wichita harmless for all claims and suits brought against it, or the City of Wichita for damages to property or injury to persons occasioned by or growing out of the construction of said improvement, or the failure or neglect of said principal to carry out said contract, or to complete and maintain said improvement and the works thereon as provided by the terms and provisions of said contract, then in that case, the obligation to be void; otherwise to be and remain in full force and effect.

The said surety, for value received, hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the Contract or to the work to be performed thereunder or the specifications accompanying the same shall in any way affect its obligations on this bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the Contract or to the work or to the specifications.

IN WITNESS WHEREOF, The said principal has executed and surety has caused these presents to be signed by its duly authorized Attorney-In-Fact the day and year herein written.

\_\_\_\_\_  
Principal

By \_\_\_\_\_  
(Signature)

\_\_\_\_\_  
(print or type name and title)

\_\_\_\_\_  
City Attorney

\_\_\_\_\_  
Surety

Approved as to form: \_\_\_\_\_

By \_\_\_\_\_

**BOND TO THE STATE OF KANSAS**

**STATUTORY PAYMENT BOND**

(G.S. Kan. 60-1111, as amended)

Bond # \_\_\_\_\_

KNOW ALL MEN BY THESE PRESENTS, That we \_\_\_\_\_

\_\_\_\_\_

as Principal, and \_\_\_\_\_

\_\_\_\_\_

as Surety, are jointly and severally bound unto the State of Kansas in the sum of \_\_\_\_\_

\_\_\_\_\_

Dollars (\$ \_\_\_\_\_), for the use and benefit of persons entitled theretofor which  
Payment shall well and truly be made, we hereby bind ourselves, our successors, heirs and  
executors and administrators, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH, THAT

WHEREAS, the said \_\_\_\_\_

has entered into a written contract with the City of Wichita, Kansas, for certain work in  
connection with the \_\_\_\_\_

District Court Bond # \_\_\_\_\_

Wichita, Kansas, under date of \_\_\_\_\_

NOW, THEREFORE, if the said Principal or the subcontractor or subcontractors of said Principal shall pay all indebtedness incurred for labor furnished, materials, equipment, or supplies used or consumed in connection with or in or about the construction of or in making such public improvement, this obligation shall be void; otherwise, it shall remain in full force and effect.

The said surety, for value received, hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the Contract or to the work to be performed thereunder or the specifications accompanying the same shall in any way affect its obligations on this bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the Contract or to the work or to the specifications.

IN WITNESS WHEREOF, the parties hereto have caused this instrument to be executed and delivered this \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_.

WITNESS:

\_\_\_\_\_

\_\_\_\_\_  
Principal

By \_\_\_\_\_  
(Signature)

\_\_\_\_\_  
(print or type name and title)

\_\_\_\_\_  
Surety

By \_\_\_\_\_  
Attorney-In-Fact



## GENERAL SPECIFICATIONS

### BID FORMS

Unless bidding on-line, all bids MUST be submitted on the enclosed "Request For Formal Bid" form and signed by an officer or employee authorized to sign bids. Any exceptions, to the specifications, terms and/or other conditions concerning the bid, must be noted on the front of the "Request For Formal Bid" form to be considered. The "Request For Formal Bid" form is to be submitted in the enclosed pre-address envelope.

Bidders are requested to submit current literature or brochures relating to their bid.

### LICENSE

Vendors bidding on commodities or services for the City of Wichita must be currently licensed by the City of Wichita or the State of Kansas, where applicable, before a purchase order or contract will be issued.

### BILLING TERMS

Discounts for prompt payment will be considered in the evaluation of your bid. The discount time will not begin until the City receives all of the commodities or services. If testing is required, the discount time will begin upon completion of the testing. Billing terms must be noted on the bid form to consider the deduction in the award.

### CONTRACT

The successful bidder agrees to enter into a contract with the City, and when required, as per specifications, to furnish bond by a surety company authorized to do business in the State of Kansas.

### EMERGING & DISADVANTAGED BUSINESS ENTERPRISE PARTICIPATION ENCOURAGEMENT

**The City of Wichita encourages all bidders to include emerging and disadvantaged business participation in their bid.**

### ARBITRATION PROVISIONS

"Notwithstanding anything to the contrary contained in these bid documents or the contract to be awarded herein, the City shall not be subject to arbitration and any clause relating to arbitration contained in these bid documents or in the contract to be awarded herein shall be null and void."

### ANTITRUST LITIGATION CLAUSE

"For good cause, and as consideration for executing a purchase order/contract, the contractor, acting therein by and through its authorized agent, hereby conveys, sells, assigns, and transfers to the City of Wichita, all rights title and interest in and to all causes of action it may now or hereafter acquire under the antitrust laws of the United States and the State of Kansas, relating to the particular product, products, or services purchased or acquired by the City of Wichita, Kansas, pursuant to a purchase order/contract.

### CONSTRUCTION - PAVING PROJECTS

On construction or paving projects, contractors **MUST** contact the City Controller's Office, City Hall, 12th Floor, 455 North Main Street for a Kansas Sales Tax Exemption Certificate prior to starting work. Contractors will be responsible for paying Kansas Sales Tax on any purchase for these projects made before the certificate is issued.

### RESTORATION

"Contractor shall, as a condition of final payment, restore all right-of-way and adjacent private property which has been disturbed, damaged or otherwise affected by construction to a condition equal to or better than existed prior to the commencement of construction. Such restoration shall include but not be limited to regrading and seeding of areas where grass was planted and growing prior to construction; provided, however, such regrading and seeding of lawn areas, when completed, shall be considered to be restoration of an area to a condition equal to or better than previously existing grass growth and Contractor shall have no responsibility to ensure growth of such seeded area(s). This restoration shall be considered part of the contract work and Contractor shall be responsible for the performance of such restoration work in the same manner as it is responsible for the performance of the contract work."

### FEDERAL EXCISE TAX

The articles specified in this bid are for the exclusive use of the City of Wichita, Kansas. Therefore, Federal Excise Tax shall not be imposed. The City of Wichita, Kansas Federal Excise Tax Exemption Certificate Number is 48 77 0021K.

### ESTIMATED QUANTITIES

If estimated quantities are shown, on the "Request For Formal Bid" form, they are used to evaluate the bid only. The figure(s) listed is the estimated usage only and is not intended to limit or guarantee in any way, the amount the City may purchase under the purchase order/contract.

### CITY OF WICHITA CREDIT CARD

Presently, many City Agencies use a City of Wichita Procurement Card (Visa) in lieu of a City warrant to pay for some of its purchases. No additional charges will be allowed for using the card.

### DELIVERY

Delays in delivery caused by bona fide strikes, government priority or requisitions, riots, fires, sabotage, acts of God or any other delays deemed by the Board of Bids and Contracts to be clearly and unequivocally beyond the contractor's control, will be recognized by the City, and the contractor will be relieved of the responsibility of meeting the delivery time, as stipulated in the contract, upon contractor's filing with the Board of Bids and Contracts a notarized just and true statement signed by a responsible official of the contractor's company, giving in detail all the essential circumstances which, upon verification by the City, justifies such action by the Board of Bids and Contracts.

### AWARD

The City, through its Board of Bids and Contracts reserves the right to accept or reject any or all bids and any part of parts of any bid and to waive formalities therein to determine which is lowest and best bid. Any bid which is incomplete, conditional, obscure, or which contains additions not called for or irregularities of any kind, may be cause for rejection of the bid. All bids are awarded subject to a check of the computations shown on the "Request For Formal Bid" form. In the event of a discrepancy in the extension(s) or total for the item(s), the unit cost shall prevail.

If there are tie bids, the Board of Bids and Contracts will recommend the successful bidder, and final determination will be made by the City Council.

## **THE AWARD WILL BE BASED ON THE LOWEST AND BEST TOTAL NET BID.**