



354-RFB-24-21

REQUEST FOR BIDS
for
Dual Throat Wet Scrubber

To be opened 02:00 PM (ET), Thursday, June 7, 2024

Pursuant to General Statutes of North Carolina, as amended, sealed bids, subject to the conditions and specifications herein, are invited for furnishing the following apparatus, supplies, materials, equipment. All bids will be received by the Town of Cary Purchasing Division electronically until the date and time stated above, at which time the sealed bids will be publicly opened virtually and read.

BY: Kathryn McMillan, Procurement Consultant

DATE: May 15, 2024

POSITIVELY NO BIDS CONSIDERED UNLESS SUBMITTED ON THIS DOCUMENT

Please provide pricing subtotals and grand total for the option (or options) you are submitting for evaluation.

Table with 3 columns: QUANTITY, DESCRIPTION, SUBTOTAL. Includes rows for Dual Throat Wet Scrubber with Ancillary Equipment, Freight, On-site Representative for Start-up Installation, and GRAND TOTAL (ALL GOODS, SHIPPING, & FEES).

ESTIMATED DATE ALL GOODS DELIVERED
MINIMUM NUMBER OF YEARS REPAIR PARTS AND SUPPORT OF THE UNIT WILL BE AVAILABLE (IF ANY)?

Do the products submitted for bid meet the exact specifications listed herein? YES NO

This company is a certified Historically Underutilized Business (HUB) by the North Carolina Department of Administration HUB Office. YES NO

COMPANY: DATE:

AUTHORIZED SIGNATURE: TITLE:

DATE: _____

NOTICE TO BIDDERS: Do not include taxes in your bid proposal pricing. Any and all tax imposed upon any article on which you are bidding are only to be shown as separate line items on invoices, and in no case are taxes to be included with your bid price. Failure to comply with these conditions will be considered grounds for rejection.

In compliance with the above request for bids and subject to all the conditions thereof, the undersigned offers and agrees, if this bid be accepted within _____ days from the date of the opening, to furnish any or all of the items upon which prices are quoted at the price set opposite each item within _____ days after receipt of order, unless otherwise specified.

COMPANY: _____ ADDRESS: _____

TOWN: _____ STATE: _____ ZIP CODE: _____

AUTHORIZED SIGNATURE: _____ TITLE: _____

NAME PRINTED OR TYPED: _____

CONTACT NAME (if different than above): _____

TELEPHONE NO.: _____ EMAIL: _____

BIDDER'S CHECKLIST

- Be aware of the virtual bid opening date and time as indicated on the first page of this proposal.
- You must submit **bids in electronic format via eVP**. No hard copy bids will be accepted.
- All signatures must be by a company officer or agent who is authorized to enter and sign bid documents.
- Have you read and understood the "Terms and Conditions" and the "Instructions to Bidders" for submitting a bid to the Town?
- Have you read and do you completely understand all the specifications of this bid proposal?
- If an addendum to the specifications was issued, has it been returned with this bid proposal (indicating acceptance of the information contained within)? Failure to do so may result in your submittal being deemed unresponsive.
- Have you enclosed statements explaining any exceptions made to the specifications? (If applicable)
- Have you enclosed a memo identifying the manufacturer warranty of MATERIALS associated to this this bid?

INSTRUCTIONS TO BIDDERS

1. **PURPOSE:**

The purpose of this document is to provide general and specific information for the use by suppliers in submitting a bid to supply the Town of Cary with apparatus, supplies, material and equipment, and/or services listed above. All bids and contracts are governed by Town policy, and /or by Section 143-129 of the North Carolina General Statutes.

2. **BID SCHEDULE:**

Listed below are the dates and times by which stated actions must be taken or completed. The Town may determine, in its sole discretion, that it is necessary to change any of these dates and times. All listed times are Eastern standard times.

Action	Time	Date
Bid issued	----	May 15, 2024
Deadline for Questions & Approved Equals	5:00 PM (ET)	May 29, 2024
Town Responses	----	June 3, 2024
Bids Due	2:00 PM (ET)	June 7, 2024
Anticipated Award	----	June 21, 2024

3. **BIDDER QUESTIONS:**

The Town is not liable for interpretations/misinterpretations or other errors or omissions made by the Bidder in responding to this bid. The Bidder shall examine this bid to determine if the Town's requirements and terms and conditions are clearly stated. If, after examination of the various requirements and terms and conditions of this bid, the Bidder believes there are any requirements or terms and conditions which remain unclear or which restrict competition, the Bidder may request, in writing, that the Town clarify the requirement(s) and terms(s) and condition(s) specified by the Bidder. The Bidder must provide the Section(s), Subsection(s), Paragraph(s), and page number(s) that identify the requirements or conditions questioned by the Bidder.

Requests for clarification, technical questions and approval of alternate products to this bid must be received by the Town no later than the date shown above in Section 2, entitled "Bid Schedule", under *Deadline for Questions*. The Bidders' failure to request clarification and submit questions by the date in the bid schedule above shall be considered to constitute the Bidders' acceptance of all Town's requirements and terms and conditions. The Town shall issue addenda reflecting questions and answers to this bid, if any, and shall be posted to the eVP website at [North Carolina electronic Vendor Portal](#).

4. **BID CONTACT:**

Any and all questions, concerns, request for additional information, and alternate product considerations shall be directed to the Town of Cary, Utilities Department to the attention of the dedicated Project Manager:

Yang Song
Yang.Song@carync.gov

5. **HOW TO PREPARE BID PROPOSALS:**

Bidders are encouraged to carefully review all provisions and attachments of this document prior to completion. Each bid constitutes an offer and may not be withdrawn except as provided herein. Also, prices are to remain firm for the period stated herein.

- a) **PROPOSAL FORM:** Submit prices and offers on the **BID PROPOSAL FORM**(s) provided herein. All bid proposals must be submitted and signed by the supplier or their authorized representative with all erasures or corrections initialed and dated by the authorized representative of the proposal.
 - i. The bidder shall indicate an approximate delivery date for each line item detail listed on

Attachment 1.

- ii. The bidder shall submit the subtotal of all goods on the bid proposal form and attach a quote with the line item details for each line listed on Attachment 1.

- iii. The bidder shall submit the subtotal of all goods on the bid proposal form and attach a quote with the line item details for each line listed on Attachment 1.

b) **SIGNATURE**: All bids must be signed by an authorized official of the company on the **Bidders Signature Page**. A bid may be rejected if it shows omissions, alterations of form, additions not called for, conditional bid, or any irregularities.

c) **TAXES**: Do not include taxes in your bid prices. Taxes must be itemized and added to invoices separately when invoicing the Town. The Town is required to pay sales tax. The Town is exempt from Federal Excise Tax and has a Federal Tax number.

d) **MINORITY WOMEN BUSINESS ENTERPRISES (MWBE) POLICY**: The Town invites and encourages participation in this procurement process by certified Minority and Women-Owned Business Enterprises (MWBE) in accordance with North Carolina General Statute 143-129.

e) **SUSTAINABILITY**: As stated in the 2017 Cary Community Plan, the Town has a commitment to promoting green practices that will promote an environmentally safe and desirable community for future generations. As such, we recognize our responsibility to minimize negative impacts on human health and the environment while supporting a diverse, equitable, and vibrant community and economy. The Town recognizes that the types of products and services the Town buys have inherent social, human health, environmental and economic impacts, and asks that all vendors and bidders providing and proposing products and services to the Town, be mindful of the Town's commitment to sustainability and provide and propose products and services that embody this commitment whenever possible.

f) **NONDISCRIMINATION POLICY**: It is the policy of the Town of Cary to promote the fair treatment of all individuals and provide them freedom from discrimination. No member of a protected class shall be excluded from participation in, be denied the benefits of, or be otherwise subject to discrimination under any program or activity administered by Cary, including programs or activities that are funded in whole or in part with State or Federal funds, such as Coronavirus State and Local Fiscal Recovery Funds.

6. **HOW TO SUBMIT BID PROPOSALS**:

a) Upload a complete set of your bid on the **BID PROPOSAL FORM** provided herein to the NC eVP website at [North Carolina electronic Vendor Portal](#).

b) **NO PHYSICAL, EMAIL OR FAX BIDS WILL BE ACCEPTED.**

7. **BID OPENING**:

a) The bid opening shall be held virtually via Webex. The meeting is scheduled for 1:55 PM EST (5 minutes prior to the bid opening). If planning to attend, please join the meeting early in case you have trouble connecting.

b) All bidders are welcome to attend the bid opening virtually and can be accessed via the following credentials:

Meeting link:

[354-RFB-24-21 Bid Opening](#)

Meeting number:

2337 896 9735

Password:

38HtE3mmcT2

More ways to join

Join from a video or application

Dial 23378969735@carync.webex.com

You can also dial 173.243.2.68 and enter your meeting number.

Join by phone

+1-408-418-9388 United States Toll

Access code: 23378969735

- c) All bids will be opened and read at the time shown on the enclosed Bid Proposal Form. No official award will be made during the Bid Opening. **LATE BIDS WILL NOT BE OPENED OR ACCEPTED.**
- d) Bidders may not review or request copies of bids at the Bid Opening. A request must be submitted to the purchasing supervisor via email.
- e) If you have difficulty joining or trouble with sound contact Webex and provide them the Meeting number.
- f) Bids will be examined by the Purchasing Supervisor and/or Bid Agent of the using department promptly after the opening and an award made as early as possible. No bids may be withdrawn after bid opening.

8. AWARD OF BID:

- a) Standard of Bid Award Acceptance: The Town reserves the right to reject any or all bids and to waive any irregularities or technicalities in bids received whenever such rejection or waiver is in the best interest of the Town of Cary. The award shall be made to the lowest, responsive, responsible bidder, or bidders, taking into consideration quality, performance and the time specified in the bid for the performance of the contract.
 - i. Bids prices received will be viewed per option (a group of materials outlined in Attachment 1) total. The lowest price package that is received by a responsive, responsible bidder, as outlined by North Carolina State Statute, will be awarded the bid.
- b) Bid Prices: All items and products proposed in response to this Bid are to be new, in un-used condition unless otherwise noted in the Minimum Specifications. All prices proposed in response to this Bid are to include all transport, freight, fuel surcharges and other fees if applicable and be delivered **FOB destination, freight prepaid and allowed** to the location provided on the Town Purchase Order if not otherwise instructed within the specifications section. All items are to be packaged, and shipped or delivered safely in a protective carton, fully assembled and serviced, ready for use and operation where applicable or otherwise described within the specifications. All supplies, equipment, and apparatus must meet all Federal, State, and Local safety regulations, requirements, and guidelines, such as OSHA, EPA, US DOT, NC-DOT, NFPA, UL, etc., if so regulated.

- c) **Order of Precedence:** In cases of conflict between sections and provisions within the Bid document, the Order of Precedence will be 1) the Special Conditions section specific to the Bid (if present); 2) the Minimum Specifications section specific to the Bid, 3) the Town of Cary Terms and Conditions; and 4) the Instructions to Bidders section of the Bid document.
- d) **Payment Terms:** Payment terms of Net 30 days from the date of receipt of correct invoice, or upon acceptance of goods whichever is later, will apply to all invoices. Payment term discounts will be allowed for prompt payments but will not be a consideration for award. All invoices are to be emailed to or delivered to **Town of Cary, Accounts Payable Division, PO Box 8049, Cary, NC 27512.**
- e) **Bid Award Approval:** The Town Manager has delegated authority from the Town Council to award bids for supplies, equipment, and apparatus greater than \$90,000. Bids will be approved and awarded by the Town Manager or designee upon the recommendation by the Procurement Department.

9. OBJECTION TO THE SPECIFICATIONS:

It is not the intent of the bid specifications to exclude or limit competition or favor any supplier. If there is an objection to any of the specifications or requirements listed herein, the bidder must notify the Town of Cary Purchasing Supervisor, in writing, stating and listing the specifications and objections, no later than five (5) working days prior to the bid opening date. If a pre-bid meeting has been scheduled, any objections must be presented in writing at that time. The objections stated must pertain both to form and substance of the bid document. Failure to object in accordance with the above procedure shall constitute a waiver on the part of the bidder to protest the solicitation. All concerns, questions, clarifications, or other correspondence must be directed only to the Town of Cary Assistant Manager of Purchasing & Contracts. Information obtained from other sources will not be considered in the evaluation and award of this bid.

10. ERRORS IN BIDS:

Bidders or their authorized representatives are expected to understand the conditions, requirements and specifications before submitting bids. Failure to do so will be at the bidders' own risk. In case of an error in the extension of prices on the bid, the unit price shall govern.

11. BID OPTIONS:

The Town reserves the right to request pricing on optional equipment or additional items along with the pricing for the main or primary product or items when applicable. At the discretion of the Town, some or all the options requested may or may not be added and purchased based upon necessity and the availability of budgeted funds. The Bid Award will be made to the lowest, responsive, responsible bidder for the main or primary product or items listed on the Bid Proposal Form. Pricing for any additional options will be requested in a separate section of the bid and will not be included in the determination of the Bid Award.

12. QUANTITIES:

The Town of Cary reserves the right to adjust quantities as needed, and to add additional items and/or products as needed, as determined to be in the best interest of the Town. The quantities stated herein, for term or multi-year contracts are estimated, and may change to be more or less over the term of the contract.

13. PRICE ADJUSTMENTS:

For Bids with fixed price contract periods, it is the Town's intent to contract at a fixed price for a period of one (1) year, with an option to extend the contract for 2 (2) additional one (1) year periods. The price proposed by the Bidder is to remain fixed for the first sixty (60) day period of the contract. Prices for additional extension term periods may be subject to a price increase or decrease if the price adjustment mirrors and reflects a previous industry wide adjustment for the product or item(s) specified in the Bid.

Any price increase or decrease will be adjusted to the latest yearly percentage increase in the All Urban Consumers Price Index (CPI-U) (National) as published by the Bureau of Labor Statistics, U.S. Dept. of Labor, or other appropriate agreed upon price index. The amount of the increase or decrease will be determined by the difference between the latest price index available ninety (90) days prior to the end of the current contract year in effect, and the price index for the same month one year prior.

Any requested price increase must be fully documented and submitted to the Procurement Department at least sixty (60) days prior to the Bid contract anniversary date. Any approved price adjustment (increase or decrease) will then become effective upon the anniversary date of the contract at the start of the next term period.

The Town reserves the right to accept or to refuse any documented price adjustment submitted by the vendor/contractor for any reason as determined to be in the best interest of the Town. In the event the Town does not accept the proposed price adjustment for the extended term, the Bid contract will not be renewed, and the Town will rebid the product or item(s). Any Bid contract extension is subject to the continuation of need and usage by the Town and the appropriation of funds.

14. CONTRACT EXTENSIONS:

The Town reserves the right to extend all bid contracts for up to two (2) additional one (1) year periods from the date of the award of the original bid, if agreed upon in writing by the contracted vendor. The contract extension(s) may be for additional quantities or for an additional time period as agreed.

15. TRADE SECRETS:

This Bid document and all Bidders' responses and proposals received are considered public information, except for trade secrets specifically identified in writing by the Bidder, which will be handled according to State Statute or other laws. Any section of the bidder's response package that is deemed to be a trade secret by the bidder shall be submitted in an envelope clearly marked "**TRADE SECRET INFORMATION- DO NOT DISCLOSE.**" The Town shall make a good faith effort to protect such confidential information.

16. BID TABULATIONS:

Bidders wishing to obtain a bid tabulation prior to the award of the bid may view and download tabulations from the North Carolina electronic Vendor Portal (eVP) website at [eVP](#). Tabulations should be posted within 48 hours (two workdays) after the public bid opening. From the Town's homepage, select the following in order to view bid tabulations: Business and Development, Bids and Proposals, select the link to the North Carolina Interactive Purchasing System, Search Bid Number, enter the desired bid number, and select Search. Bid tabulations only reflect the bids as read at the time of the bid opening and should not be considered an award. It is the Town's policy to furnish bid tabulations to all bidders.

17. INVOICING:

For prompt payment all invoices must include an accurate Purchase Order Number. Please submit invoices to TOWN OF CARY, PO BOX 3052, OREM, UT 84057 or electronically to TownOfCaryAP@IPayables.com as a PDF attachment. Invoices not submitted following these instructions will result in delayed payment.

18. TERMS AND CONDITIONS:

Acceptance of the Town's Purchase Order includes acceptance of all applicable Terms and Conditions. The Town's Purchase Order Terms & Conditions are provided below for your information.

TOWN OF CARY PURCHASE ORDER TERMS & CONDITIONS

1. **Vendor quotes or proposals are referenced for scope and pricing only.** These Town of Cary Purchase Order Terms & Conditions exclusively govern this transaction.
2. Cary may, at any time, insist upon strict compliance with these terms & conditions, notwithstanding any previous customer, practice, or course of dealing to the contrary. Acceptance of this order includes acceptance of all Cary terms, conditions, prices, delivery instructions, and specifications as shown on this order or attached to and made part of this order.
3. The conditions of this order cannot be modified except by written amendment in the form of a "Purchase Order Change" which has been approved by Cary's Purchasing Department.
4. All invoices are to be sent by email to: TownOfCaryAP@IPayables.com; or mailed to the following address: Town of Cary, PO Box 3052, Orem, UT 84057.
5. **All invoices must include a unique invoice number and this Purchase Order number.** Invoices submitted without unique invoice number or without the correct purchase order number will result in delayed payment.
6. The Vendor must provide separate invoices for each Purchase Order number.
7. Cary is not exempt from North Carolina State Sales Tax of Wake County Sales Tax. These taxes must be correctly itemized on the invoice for payment. Taxes are not listed on the Purchase Order.
8. Cary is exempt from Federal Excise Tax. If any form of such tax is billed on the invoice, it must be shown as a separate item from other taxes. Tax Exemption Certificates will be furnished upon request.
9. **Net purchases will be paid 30 days from the date of submitted invoice or upon acceptance of goods, whichever is later.** Payment term discounts will be deducted as provided for on the front of this Purchase Order or in accordance with the terms of your official quotation or bid.
10. **All packages must bear the correct Purchase Order number on the outside of each package or shipping container.**
11. All prices must be F.O.B. Destination and delivered to the destination indicated on the front of the Purchase Order. The Vendor is to prepay the shipping charges and add them to the invoice.
12. The risk of loss and damage to goods which are the subject of this order shall be the Vendor's responsibility until the goods are delivered to the destination set out in the order and accepted by Cary or its representative.
13. Cary shall not be responsible for any goods delivered without a Purchase Order having been issued.
14. Any rejected materials will be returned to the Vendor at the Vendor's risk and expense.
15. In the event of the Vendor's failure to deliver or perform as specified, Cary reserves the right to cancel the order or any part thereof, without prejudice to its other rights. The Vendor agrees that Cary may return part or all of any shipment and may charge the vendor with all reasonable losses or expenses sustained as a result of such failure to deliver or perform.
16. In case of default of the Vendor, Cary may procure the articles or services from other sources and charge the Vendor damages for any excess costs or other damages caused by the default.
17. It is agreed that the goods, materials, equipment, or services provided shall comply with all Federal, State or local laws, and that the Vendor shall defend actions or claims brought, and hold harmless, Cary, and/or its officials or employees, from loss, cost or damage by reason of actual or alleged failure to comply with such laws.
18. The Vendor acknowledges that it is the policy of Cary to avoid commercial promotion of products used by Cary or the vendors of such products. The Vendor accordingly agrees not to solicit, use, or disseminate commercial advertisement founded upon Cary's purchase and/or use of the goods which are the subject of this order, and specifically agrees not to seek or use for advertising purposes the endorsement of goods or products by Cary officers or employees.
19. All matters relating to this Purchase Order shall be governed by the laws of the State of North Carolina, without regard to its choice of law provisions, and venue for any action relating to this Contract shall exclusively be Wake County Civil Superior Court or the United States District Court for the Eastern District of North Carolina, Western Division.
20. Notwithstanding any other provisions of this Purchase Order, this Purchase Order and all materials submitted to Cary by the Vendor are subject to the public records laws of the State of North Carolina and it is the responsibility of the Vendor to properly designate materials that may be protected from disclosure as trade secrets under North Carolina law as such and in the form required by law prior to the submission of such materials to Cary. The Vendor understands and agrees that Cary may take any and all actions

necessary to comply with federal, state, and local laws and/or judicial orders and such actions will not constitute a breach of the terms of this Purchase Order. To the extent that any other provisions of this Purchase Order conflict with this paragraph, the provisions of this section shall control.

21. **Nondiscrimination.** To the extent permitted by law, the Vendor, its officers, employees, contractors, agents, successors, or permitted assigns, shall not discriminate against any member of a protected class as defined by federal, state, or local law, including Wake County Code of Ordinances Section 34.01.
22. **Indemnity.** To the fullest extent permitted by law, except to the extent caused by the sole negligence or willful misconduct of Cary, the Vendor shall indemnify and hold and save Cary, its officers, agents, and employees harmless from liability of any kind, including all claims, costs (including defense) and losses accruing or resulting to any other person or firm or corporation furnishing or supplying work, services, materials, or supplies in connection with the performance of this Purchase Order, and from any and all claims, costs (including defense) and losses accruing or resulting to any person, firm, or corporation that may be injured or damaged by the Vendor in the performance of this Purchase Order. This representation and warranty shall survive the termination or expiration of this Purchase Order. The Vendor shall indemnify and hold and save Cary, its officers, agents, and employees harmless from liability of any kind, including all claims, costs (including defense) and expenses, on account of the use of any copyrighted material, patented or unpatented invention, articles, device or appliance manufactured or used in the performance of this Purchase Order.
23. **Force Majeure.** Except as otherwise provided in any environmental laws, rules, regulations or ordinances applicable to the parties and the services performed under this Purchase Order, neither party shall be deemed to be in default of its obligations hereunder if and so long as it is prevented from performing such obligations by an act of war, hostile foreign actions, nuclear explosion, earthquake, hurricane, tornado, or other catastrophic natural event or act of God. Either party to the Purchase Order must take reasonable measures and implement reasonable protections when a weather event otherwise defined as a force majeure event is forecast to be eligible to be excused from the performance otherwise required under this Purchase Order by this provision. Either party must resume performance of this Purchase Order as soon as is practicable after the end of a Force Majeure event.
24. **Cancellation.** Cary may terminate this Purchase Order at any time by providing written notice to the Vendor. The Vendor shall cease performance immediately upon receipt of such notice. In the event of early termination, the Vendor shall be entitled to receive just and equitable compensation for costs incurred prior to receipt of notice of termination and for the satisfactory work completed as of the date of termination and delivered to Cary. Notwithstanding the foregoing, in no event will the total amount due to the Vendor under this section exceed the total amount due to the Vendor under this Purchase Order.
25. **Miscellaneous.** The Vendor shall be responsible for the proper custody and care of any property furnished or purchased by Cary for use in connection with the performance of this Purchase Order, and will reimburse the Town for the replacement value of its loss or damage.
26. **E-Verify.** The Vendor understands that E-Verify is the federal E-Verify program operated by the United States Department of Homeland Security and other federal agencies, or any successor or equivalent program used to verify the work authorization of newly hired employees pursuant to federal law in accordance with NCGS §64-25 et seq. The Vendor is aware of and in compliance with the requirements of E-Verify and Article 2 of Chapter 64 of the North Carolina General Statutes. To the best of the Vendor's knowledge, any subcontractors employed by the Vendor as a part of this Purchase Order are in compliance with the requirements of E-Verify and Article 2 of Chapter 64 of the North Carolina General Statutes.
27. **Performance of Government Functions.** Nothing contained in this Purchase Order shall be deemed or construed so as to restrict or inhibit Cary's police powers or regulatory authority.
28. **No Waiver of Immunity.** Nothing in this Agreement shall be construed to mandate purchase of insurance by Cary pursuant to N.C.G.S. § 160A-485 or to in any way waive Cary's defense of governmental immunity from any cause of action alleged or brought against any party for any reason if otherwise available as a matter of law. No officer, agent, or employee of Cary shall be subject to any personal liability by reason of the execution of this Purchase Order or any other documents related to the transactions contemplated hereby.

MINIMUM SPECIFICATIONS

1. GENERAL

These specifications are for the purchase of a replacement Dual Throat Wet Air Scrubber, including a dual-throat separator, scrubber reservoir, fan assembly, liquid piping, baffles, mist eliminator and instruments (MATERIALS) for the South Cary Water Reclamation Facility. The selected MATERIALS shall adhere to all the following minimum specifications:

- a) The specifications were not written to intentionally eliminate any one bidder. The specifications were prepared to meet the requirements of equipment dimensions, treatment capacity, and system compatibility. Other alternatives to the MATERIALS will be considered but the equipment shall be reviewed and pre-approved by the Town as equivalent during the Question-and-Answer Period. (see schedule on page 2).
- b) Shipping, handling and any other applicable fees shall be submitted separately on the Bid submittal form. Any price discrepancies outside of the submitted bid will be at the bidders' expense.
- c) This bid is for MATERIALS only. Submitted bids shall not include any installation costs.
- d) Each bidder shall state in their submitted proposal the name of the manufacturer of the equipment being submitted for bid.
 - i) Failure to disclose this information may result in the rejection of the bid.

2. SYSTEM DESCRIPTION

The Dual Throat Wet Air Scrubber shall be designed to efficiently remove airborne particulate using a non-plugging, manually adjustable scrubbing throat. The small water droplets created by the venturi contact the airborne particulate creating a heavier mass to be centrifugally removed by the dropout, baffles, and mist eliminator section. The scrubber shall utilize up to 15 gpm of water provided at 45 psig. Spent liquid shall be collected in the scrubber pyramid hopper and drain by gravity to the existing tank. A direct drive fan assembly shall be mounted to the scrubber outlet. The design criteria and requirements of the Dual Throat Wet Air Scrubber are as follows:

- a) Design Capacity: 2500 ACFM
- b) Design Temperature: 140 °F
- c) Relative Humidity: no limit
- d) Maximum System Dimensions: 5' 6" W x 5' 6" L x 12' 6" H
- e) Approximate Operating Weight 1800-2000 Lbs.
- f) External Static Pressure Required: 15 inches W.C. for customer duct (6 inches W.C. Internal pressure)
- g) Required Scrubber Performance: 95% removal of 5 µm particulate and larger
- h) 304L Stainless Steel Construction
- i) Mist eliminators - High Density Polyethylene

3. PRODUCT SPECIFICATION

a) GENERAL

- i. All MATERIALS specified herein shall have adequate strength and stiffness and be suitable for continuous operation. MATERIALS shall be designed to facilitate inspection, repair, and adjustment.
- ii. Provide suitable attachments on all MATERIALS, which may require hoisting for installation and/or maintenance.
- iii. Attach permanent tags at the factory with the system supplier's name, model number, serial

- number, capacity, date of manufacture, and any other pertinent data per this section.
- iv. The venturi scrubber skid shall be pre-piped, pre-wired, mounted on a common skid and factory tested to form a complete, functional, and integrated package to meet the performance specified.
 - v. Refer to system description for the maximum dimensions of the skid. The Seller shall notify the Buyer if the skid boundaries exceed the requirements.

b) **MATERIALS OF CONSTRUCTION**

- i. Scrubber Vessel: 304 Stainless Steel
- ii. Baffles: 304 Stainless Steel
- iii. Chevron Mist Eliminators: HD Polyethylene
- iv. Support Legs: 304 Stainless Steel
- v. Gaskets: EPDM
- vi. Pipe and Fittings: 304 Stainless Steel

c) **SCRUBBER VESSEL**

- i. The scrubbing vessel shall be constructed from 7 gauge and ¼" 304 Stainless Steel and include flanged connections for the following at a minimum: gas inlet, gas outlet, spray header access and mist pad access.
- ii. Liquid shall be distributed within the scrubber from a system of pipe and nozzle(s) designed to evenly distribute the recirculating water across the entire venturi inlet section surface.
- iii. Liquid distributor nozzle(s) shall be selected to completely wet the top of the venturi inlet section.
- iv. Liquid distributor assembly shall include flanged connections to allow dismantling of pipe in section not to exceed 5 feet.
- v. The scrubber shall include points on housing to mount differential pressure gauge, internal structural supports, lifting and hold down lugs, gaskets, fasteners, and all other mechanical equipment necessary for correct operation.
- vi. Bolted access door shall be provided for access to scrubbing throat, scrubber reservoir, baffles, and mist eliminators for cleaning and maintenance purposes.
- vii. Following the venturi stage, the process gas should flow upwards through a series of baffles and mist eliminators to separate free water droplets from the gas stream. A minimum of two chevron type mist elimination stages shall be included.

d) **SCRUBBER RESERVOIR**

- i. The Scrubber Reservoir shall be pyramid hopper for collection and discharge of solids-laden scrubbing liquid.
- ii. The reservoir shall include a flanged and trapped drain connection.

e) **LIQUID PIPING**

- i. The Dual Throat Scrubber circulation piping shall be schedule 40 304 Stainless Steel meeting ASTM A312.
- ii. Flanges shall be per ASME B16.5, class 150.

f) **FAN ASSEMBLY**

- i. The fan shall be sized for the appropriate flow and pressure for the scrubber system and all

- ductwork under fully loaded conditions.
- ii. The fan shall be a top-mounted arrangement 4V with an estimated sound level of 85 dBA at 5 feet when fully ducted.
 - iii. Fan airstream construction to be 304 Stainless Steel.
 - iv. Fan shall be statically and dynamically balanced prior to shipment from factory.
 - v. The fan motor shall be 15 HP, 3520 RPM, TEFC, 3/60/460 premium efficiency.
 - vi. The fan shall be assembled with OSHA shaft and motor guards.

g) **INSTRUMENTATION AND ELECTRICAL DEVICES**

- i. Variable area flowmeter with transmitter for visual indication and monitoring of feed flow rate.
- ii. Flow Switch and a flow control valve.
- iii. Differential pressure switch/gauge shall be installed and piped to measure pressure drop across venturi throat and/or mist eliminators.
- iv. Manual adjustable flowmeter on unit for spray nozzles.

4. RELATED WORK

- a) Instrumentation and control shall be installed by Owner.
- b) Electrical shall be installed by Owner.

5. SUBMITTALS

Submittals to the Owner shall include the following:

- a) Complete description of all materials.
- b) Certified drawings showing details of construction, dimensions, and anchor bolt locations.
- c) Design loads to the foundation for review and approval prior to fabrication.
- d) The weight of each major component.
- e) A list of recommended spare parts.
- f) Pressure drop through the dual throat scrubber under clean and fouled conditions.
- g) Description of surface preparation and/or shop painting of painted surfaces.
- h) Control panel layout, including size, wiring, schematics, internal and external equipment, device arrangement, nameplates, and parts catalog cuts.
- i) All details on shop drawings submitted for approval shall show clearly the relations of the various parts to the main members and lines of the structure and where correct fabrication of the work depends upon field measurement.
- j) In the event that it is impossible to conform to certain details of this section, describe completely all non-conforming aspects.
- k) Operating and maintenance instructions shall be furnished to the Owner. The instructions shall be prepared specifically for this installation and shall include all required cuts, drawings, equipment lists, descriptions, etc., that are required to instruct operating personnel that are unfamiliar with such equipment.

6. REFERENCE STANDARDS

Where reference is made to one of the below standards, the revision in effect at the time of bid opening shall apply:

- a) American Society for Testing and Materials (ASTM)
- b) National Bureau of Standards (NBS)
- c) American National Standards Institute (ANSI)

- d) Occupational Safety and Health Administration (OSHA)
- e) National Electrical Manufacturers Association (NEMA)
- f) Underwriters Laboratories (UL)
- g) National Fire Protection Association (NFPA)
- h) American Bearing Manufacturers Association (ABMA)
- i) Air Movement and Control Association (AMCA)

7. QUALITY ASSURANCE

- a) All MATERIALS specified in this section shall be furnished by a single manufacturer who is fully qualified in the design, construction, and operation of Dual Throat Wet Air Scrubbers. Vessel erection, pipe assembly, live control panel test, and fan runoff shall be performed at the manufacturer's facility prior to shipment to Owner's facility. This preliminary testing schedule should be made available to the Owner so that they may visit the manufacturer's facility prior to shipment, should they choose to do so.
- b) To ensure proper system operation, the MATERIALS manufacturer/supplier shall provide written certification that the system has been coordinated and designed to operate satisfactorily with the ancillary equipment specified herein.
- c) The facility where the manufacturing and assembly of the equipment is to take place, shall have a current ISO 9001 & ISO 14001 certification. The vendor shall provide documentation of the facility's ISO 9001 & ISO 14001 certification to the Owner.

8. EXECUTION

a) SHIPPING

- i. Secure, palletize, crate, and protect all equipment as required against damage during shipment and delivery. All pipe ends and tapped holes shall be capped or plugged for shipment before equipment leaves factory. All shipping containers, pallets, or crates shall be clearly marked on the outside as to order number, contents, equipment number, and name.
- ii. Equipment is to be shipped in the largest sections possible to ease field erection and minimize the number of connections required during installation.
- iii. The MATERIALS shall be delivered between the hours of 7:00 AM and 3:00 PM Monday through Friday, excluding holidays. Should constraints prevent delivery within 72 hours of the original scheduled delivery date, the supplier shall contact the Town's primary contact and coordinate delivery as applicable.
- iv. All MATERIALS shipped by the awarded bidder will be shipped to:

ATTN: Jarrod Buchanan
Town of Cary
South Cary Water Reclamation Facility
4900 W Lake Rd, Apex, NC 27539

- v. Winning bidder shall coordinate all delivering with Jarrod Buchanan, South Cary Water Reclamation Facility Manager, via email at Jarrod.Buchanan@carync.gov.

b) INSTALLATION

- i. A factory representative who has complete knowledge of proper equipment installation shall be provided for two days (one trip) to instruct the installing contractor and representatives of the Owner on proper installation of the equipment.
- ii. Installation of the system shall be done under the direction of the factory's representative in

order to assure proper placement and assembly. The manufacturer's representative shall instruct personnel in the proper safety precautions concerning handling of any harmful materials.

c) **START-UP AND TESTING**

- i. A factory representative who has complete knowledge of proper installation, operation, and maintenance of the equipment shall be provided for two days (one trip) to inspect the final installation, supervise test runs of the equipment, and instruct representatives of the Owner on proper operation and maintenance.

9. DELIVERY REQUIREMENTS

MATERIALS shall be delivered by trucks designed and licensed to transport the corresponding MATERIALS. The truck used to deliver the equipment shall comply with all safety regulations specified by North Carolina Department of Transportation.

- a) The successful bidder shall be solely responsible for the performance of the driver(s) delivering on their behalf.
- b) When successful bidder cannot provide offloading service, then it is required to notify the Town what tools, equipment, machines will be needed to properly offload the dryer rotary drum.

10. PRODUCT INSPECTION

An affidavit from the manufacturer, certifying equipment delivered for this bid is in strict compliance to all applicable requirements of these specifications, must accompany the dual throat wet scrubber delivery. The Town reserves the right to analyze delivered material upon arrival at the destination and reject such MATERIALS for failing to meet one or more of the above-mentioned specifications or quality standards. All freight charges on rejected material shall be paid by the successful bidder.

11. ENVIRONMENTAL REGULATION COMPLIANCE

The CONTRACTOR shall, at CONTRACTOR'S expense, comply with any present or hereafter enacted environmental laws, rules and regulations, including those of the Environmental Protection Agency (EPA), the United States Occupational Safety and Health Administration (OSHA), the North Carolina Department of Transportation (NCDOT) and any other local, state or federal authority that regulates environmental matters, including environmental clean-up responsibility laws.

12. WARRANTY

The CONTRACTOR shall provide the manufacturer's standard warranty on MATERIALS purchased by Cary. The warranty must at minimum cover all parts against defects in materials and/or workmanship. The warranty shall become effective on the date of acceptance by Cary. Should any defect in MATERIALS or workmanship, except ordinary wear and tear, appear during the warranty period, the contractor shall repair or replace the item at no cost to Cary.

13. BID SPECIFICATION COMPLETION INSTRUCTIONS:

All text fields or blanks must be responded to in the returned bid submittal form (page 1). **Failure to complete this information will indicate a non-responsive bid.**

14. MEETS OR EXCEEDS SPECIFICATIONS:

Please check the appropriate "YES" or "NO" box on the bid submittal form, indicating that the items being bid does meet or does not meet the specification as written. Checking the "NO" field indicates that the bidder does not meet the specification as requested and is taking an exception. All exceptions must be explained in detail as per below.

15. EXCEPTIONS TAKEN TO SPECIFICATIONS:

Any exceptions to the original bid specifications must be submitted in writing during the question and answer period and will be approved or denied via addendum. Bidders must note clearly any and all approved exceptions taken to the specifications as an attachment within their submitted bid. The specifications were not written to intentionally eliminate any one bidder. Bidders must note differences as an "Exception" and attach detail information explaining how the exception is "equal to" or "exceeds" the intent of the specification. All exceptions and items submitted as an equal will be evaluated. The Town reserves the right to reject any and all bids and to waive any irregularities or technicalities in bids received whenever such rejection or waiver is in the best interest of the Town of Cary. All Exceptions taken to the specifications must be indicated by checking the "NO" field on the bid submittal form (page 1) and be explained individually in detail on an attached sheet and submitted with your bid. If there is an objection to any of the specifications or requirements listed herein, the bidder must notify the Town of Cary Purchasing Supervisor, in writing, stating and listing the specifications and objections, no later than five (5) working days prior to the bid opening (as per Page 5 – Sec. 9- "Instructions to Bidders").