



354-RFB-25-11

REQUEST FOR BIDS

for

Inductively Coupled Plasma (ICP) Mass Spectrometer

To be opened 02:00 PM (ET), Friday, February 21, 2025

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: January 17, 2025

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.

QUANTITY	DESCRIPTION	SUBTOTAL
1	ICP Mass Spectrometer as per Attached Specifications, Terms and Conditions	
	Freight	
	Installation & Oversight	
	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? (Section 12)
- ☐ Have you included at least three (3) references? (Attachment 1)

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	----	January 17, 2025
Deadline for Questions & Approved Equals	5:00 PM (ET)	January 29, 2025
Town Responses	----	February 4, 2025
Bids Due	2:00 PM (ET)	February 7, 2025
Anticipated Award	----	March, 2025

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 the UNIT.

- 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-25-11 Bid Opening](#)

Meeting number:

2344 494 4534

Password:

kbKWxgcP435

More ways to join

Join from a video or application

Dial 23444944534@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: 23444944534

- 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.
- 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 the Town of Cary Project Manager.
- 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 the Project Manager identified as part of this solicitation.

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 AND CONDITIONS

By acceptance of the Purchase Order to which these terms are attached ("Purchase Order"), the vendor or Seller, ("Seller"), declares that the goods or services ("Goods and/or Services") Seller is to provide pursuant to the Purchase Order shall be provided according to the following terms and conditions:

1. Purchase Order Number: The purchase order number must appear on all invoices, packing slips, correspondence, and bills of lading. Cary shall not be responsible for Goods and/or Services provided without a purchase order.
2. Invoices: Each purchase order shall be invoiced separately. Invoices for partial shipments will be accepted and final invoices shall indicate completion of order. The Purchase Order Number shall be referenced on all invoices.
3. Sales Tax: Cary's purchase orders do not show North Carolina (NC) sales tax; however, Cary is not tax exempt and does pay NC sales tax. NC sales tax must be listed separately on the invoice. Cary does not pay Federal Excise Tax.
4. Risk of Loss: The risk of loss and damage to Goods which are the subject of this order shall remain with the Seller until Goods are delivered to the destination set out in the order and accepted by Cary.
5. Quantity: The specific quantity ordered must be delivered in full and will not be changed without Cary's consent. Any unauthorized quantity is subject to rejection and return at Seller's expense.
6. Freight And Packaging: Price quotations shall include freight, transportation, shipping, handling and similar charges. Collect freight shipments shall be refused. Seller shall absorb any increase in rates becoming effective after the date of Purchase Order. Seller agrees to assume and pay all extra expense occurring on account of improper packaging.
7. Failure to Deliver: If Seller fails to provide Goods and/or perform Services as and when specified, Cary reserves the right to cancel the order, or any part thereof, without prejudice to its other rights, and Cary may return part or all of any shipment so made and may charge Seller with any loss or expense sustained as a result of such failure to provide.
8. Cash Discounts: All cash discounts shall be effective from the date of actual receipt of a correct and approved invoice by Cary.
9. Responsibilities of Seller: Seller represents and warrants that it is fully qualified, skilled, and capable of providing the Goods and/or Services in a fully competent, professional, and timely manner; shall provide Goods and/or Services in accordance with industry standards; shall use best efforts and exercise reasonable care and diligence in providing Goods and/or Services and shall act in the best interest of Cary; perform other actions required to remain in good standing with the North Carolina Secretary of State; and possesses all necessary qualifications, licenses, and certifications. Seller shall be responsible for all errors, omissions, or mistakes in providing Goods and/or Services and shall correct at no additional cost to Cary any and all errors, omissions, or mistakes.
10. Insurance: If Seller is to provide Services of any kind pursuant to Purchase Order, Seller shall maintain at its own expense: (a) Commercial General Liability Insurance in an amount not less than \$1,000,000 per occurrence and \$2,000,000 in the aggregate for bodily injury, property damage, and personal advertising and injury; Cary shall be named as additional insured, and a waiver of subrogation shall be included; (b) Professional Liability insurance in an amount not less than \$1,000,000 per claim - if providing professional services; (c) Workers Compensation Insurance as required by the general statutes of the State of North Carolina or as required per state law and Employer's Liability Insurance not less than \$500,000 each accident for bodily injury by accident, \$500,000 each employee for bodily injury by disease, and \$500,000 policy limit. A waiver of subrogation shall be included; (d) Commercial Automobile Insurance applicable to bodily injury and property damage, covering all owned, non-owned, and hired vehicles, in an amount not less than \$1,000,000 combined single limit as applicable. Cary shall be named as additional insured, and a waiver of subrogation shall be included; (e) Umbrella/Excess Liability Insurance in an amount not less than \$1,000,000 per occurrence and \$1,000,000 in the aggregate. Cary

shall be named as additional insured, and a waiver of subrogation shall be included, or the policy shall state it is follow form. Certificates of Insurance shall be furnished prior to the commencement of Services.

11. State and Federal Funds. Seller shall work in good faith with Cary to meet requirements imposed by the federal or state government or other funding entity if grants are used to fund any portion of a purchase order. If the source of funds is Federal funds, the following Federal provisions apply pursuant to 2 C.F.R. § 200.326 and 2 C.F.R. Part 200, Appendix II (as applicable), unless a more stringent State or local law or regulation is applicable: Equal Employment Opportunity (41 C.F.R. Part 60); Davis-Bacon Act (40 U.S.C. 3141-3148); Copeland "Anti-Kickback" Act (40 U.S.C. 3145); Contract Work Hours and Safety Standards Act (40 U.S.C. 3701-3708); Clean Air Act (42 U.S.C. 7401-7671q.) and the Federal Water Pollution Control Act (33 U.S.C. 1251-1387); Debarment and Suspension (Executive Orders 12549 and 12689); Byrd Anti-Lobbying Amendment (31 U.S.C. 1352); Procurement of Recovered Materials (2 C.F.R. § 200.322); Record Retention Requirements (2 CFR § 200.324); Prohibition on Certain Telecommunications and Video Surveillance Goods and/or Services or Equipment (2 C.F.R § 200.216); Domestic Preferences for Procurements (2 C.F.R § 200.323); Employment Eligibility Verification (FAR 52.222-54); and Whistleblower protections (41 U.S.C. 265 and 10 U.S.C. 2408). Seller further represents that, prior to accepting any purchase order that is funded by Federal funds, Seller:

- a. Is not presently debarred, suspended, proposed for debarment, or declared ineligible for the award of contracts by any Federal Government agency and not included in the Excluded Parties List System;
- b. Has not, within the preceding three-years, been convicted of or had a civil judgment rendered against it for: commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State, or local) contract or subcontract; violation of Federal or State antitrust statutes relating to the submission of offers; or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, tax evasion, violating Federal criminal tax laws, or receiving stolen property; and
- c. Is not presently indicted for, or otherwise criminally or civilly charged by a governmental entity with, fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State, or local) contract or subcontract; violation of Federal or State antitrust statutes relating to the submission of offers; or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, tax evasion, violating Federal criminal tax laws, or receiving stolen property.

12. Indemnification.

- a. Indemnification; General. To the fullest extent permitted by applicable laws and regulations, Seller shall indemnify, protect, defend, and hold harmless Cary, its elected officials, officers, employees, agents, and volunteers (collectively, "Cary Indemnitees") from and against any and all claims, costs, civil penalties, fines, losses, liabilities, injuries (including death), demands, damages (including but not limited to all professionals' fees and charges and all court or other dispute resolution costs), actions, causes of action, suits, proceedings, judgments, and expenses, including reasonable attorneys' fees, court costs, and other legal expenses and including, without limitation, those costs incurred at the trial and appellate levels and in any bankruptcy, reorganization, insolvency, or similar proceeding and other legal expenses (collectively and separately, "Claims") by whomsoever brought or alleged, arising out of, resulting from, or in connection with:
 - i. The provision of Goods and/or Services by Seller;
 - ii. Any breach or violation by Seller of any applicable law or regulation; or
- b. Indemnification; Intellectual Property. Seller shall indemnify, protect, defend, and hold harmless Cary Indemnitees from and against any and all Claims arising out of, related to, or resulting from any claim, action or proceeding by a third party alleging that any deliverables or work product created or reduced to practice by or on behalf of Seller in connection with providing the Goods and/or Services, or any use of such deliverables or work product, infringes or misappropriates or otherwise violates any intellectual property right (including, without limitation, any patent, copyright, trademark, or trade secret) or other proprietary right of any third party.

13. No Consequential or Indirect Damages. Except for Seller's indemnification obligations hereunder or any

liability arising out of Seller's negligence, willful misconduct, violation of law, or infringement or misappropriation of intellectual property rights, in no event shall either Party be liable to the other for consequential, indirect, incidental, special, exemplary, punitive or enhanced damages, lost revenues or diminution in value, arising out of, relating to, or in connection with Seller's provision of Goods and/or Services, regardless of whether such damages were foreseeable, whether said Party was advised of the possibility of such damages, and the legal or equitable theory upon which the claim is based.

14. Public Records and Dissemination of Information. Seller acknowledges that records in the custody of Cary are public records and subject to public records requests. Cary may provide copies of such records, including copyrighted records, in response to public record requests.

Seller shall not publicly disseminate any information concerning the provision of Goods and/or Services to Cary without prior written approval from Cary. Any approval given by Cary may be given with certain stipulations, such as Cary participation in the creation of the public product or Cary review and the option to refuse public release of the final product(s) should such product(s) fail to meet Cary's standards and goals. Publicly disseminate means, but is not limited to, electronic, video, audio, photographic, or hard copy materials serving as, in whole or part, advertising, social media posts, sales promotion, professional papers or presentations, news releases, articles, or other media products, and/or Seller's business collateral pieces. Notwithstanding the foregoing, with Cary's written consent, Seller may list Cary as a reference in response to requests for proposal and may identify Cary as a customer in presentations to potential customers. Any permitted use of Cary's trademarked materials (including, without limitation, Cary's logo in its various forms) must be in compliance with the guidelines outlined at <https://brand.carync.gov/>.

15. Documents and Deliverables. If Seller's provision of Goods and/or Services results in the creation of drawings, specifications, plans, surveys, reports, technical memoranda, testing protocol, designs, electronic databases, written materials, work papers, manuals, and other documents or instruments identified as 'Deliverables' herein or which, by their nature, are to be owned by Cary, Cary shall be granted, at no additional cost, ownership of all such Deliverables. Cary is and will be the sole and exclusive owner of all right, title, and interest in and to all Deliverables and associated work product, including all Intellectual Property Rights therein. Seller acknowledges and agrees that any and all work product that may qualify as "work made for hire" as defined in the Copyright Act of 1976 (17 U.S.C. § 101) is hereby deemed "work made for hire" for Cary and all copyrights therein shall automatically and immediately vest in Cary. In the event Seller creates Deliverables or work product that requires a license, Seller will convey with the ownership of Deliverables or work product, a perpetual license required for the operation of the Deliverables or work product.

Seller shall provide all Documents and Deliverables in electronic form to the Cary in read-only MS-Windows compatible format (including either screen readable .pdf or HTML formats). In addition, all drawings shall be CAD generated and shall be provided on electronic media downloadable onto an AutoCAD based system. All Deliverables (draft and final) intended for presentation on Cary's website must be provided in a manner and format compatible, consistent, and in compliance with the U.S. Department of Justice's current accessibility requirements applicable to local government websites and all Cary technology standards, including but not limited to such material must be provided in screen readable PDF or HTML versions, be screen-reader friendly and contain alternate text tags of no more than 34 characters. In the event that Seller notices any errors in electronic data provided to the Cary under this Agreement, Seller shall immediately notify Cary, and if Seller provided such electronic data, Seller shall immediately replace same with correct versions thereof.

16. Independent Seller. Seller is acting as an independent Seller, and not as an employee, partner, or agent of Cary. Seller has no authority to commit, act for or on behalf of Cary, or to bind Cary to any obligation or liability. Seller shall not be eligible for and shall not receive any employee benefits from Cary and shall be solely responsible for the payment of all taxes, FICA, federal and state unemployment insurance contributions, state disability premiums, and all similar taxes and fees relating to the provision of Goods and/or Services by Seller.
17. Nondiscrimination. To the extent permitted by law, neither Party, their officers, employees, Sellers, agents, successors, or permitted assigns shall 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.

18. Compliance with Applicable Law; Conduct. In providing Goods and/or Services, Seller and its officers, employees, agents, and subSellers shall comply fully with all applicable Federal and State laws and regulations, including but not limited to Article 2, Chapter 64, of the North Carolina General Statutes regarding verification of work authorization; and laws related to gifts and favors, conflicts of interest and the like, including N.C.G.S. §§ 14-234, 133-1, and 133-32.
- Seller's officers, employees, agents, and subSellers who come onto Cary property to provide Goods and/or Services shall comply with the same health and safety requirements that Cary has implemented for its employees through ordinance, policy, procedure, directive of the Cary Manager, or other means, as may be amended or enacted from time to time.
19. No Waiver of Immunity. Nothing in these terms 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.
20. Severability. If any provision of these terms are held as a matter of law to be invalid or unenforceable by a court of competent jurisdiction, the remainder of the terms shall remain enforceable, and such invalid or unenforceable provision shall be enforced by such court to the maximum possible extent, provided that both Cary and Seller preserve the substantial benefits of the terms.
21. Survival. All representations, indemnifications, and other terms and conditions of these terms which by their nature should survive the completion of the provision of Goods and/or Services by Seller shall survive completion of the provision of Goods and/or Services by Seller.
22. Jurisdiction. These terms shall be governed by the substantive provisions of North Carolina law without regard to conflict of laws provisions. The Parties agree that any legal action or proceeding with respect to the provision of Goods and/or Services by Seller shall be brought exclusively in the State courts of Wake County, North Carolina.
23. Performance of Government Functions. Nothing contained herein shall be deemed or construed so as to restrict or inhibit Cary's police powers or regulatory authority.

CONSTRUCTION SERVICES

If the Purchase Order governed by these terms is for the provision of construction Services, Seller shall provide such Services in compliance with the following terms and conditions in addition to the preceding terms and conditions:

1. Seller represents and warrants that it possesses all necessary licenses and certifications including those required by required trades.
2. All Services shall be accomplished so as to minimize inconvenience to Cary.
3. Access as required by Cary shall be maintained by Seller throughout construction.
4. Seller shall keep the work site free from accumulations of waste materials and rubbish caused by Seller and its employees or the Services at the end of each day and, at the completion of the Services, shall remove all rubbish, waste, tools, scaffolding, and surplus materials and shall leave the site "broom clean" or its equivalent. Seller shall provide signs, barricades, and warning devices to ensure safe passage of both vehicular and pedestrian traffic at all times, if applicable.
5. Seller shall make provision for protecting structures and property and surrounding area from damages arising out of or related to performance of the Services and shall fully restore the site and surrounding area in the event of such damages.
6. All damage to the site or to adjacent property shall be repaired or replaced by Seller to the satisfaction of Cary or to any affected adjacent property owner.
7. The Seller shall not permit any tolls, equipment, or premises involved in the performance of the Services to be used in a manner that would endanger its safety, intended performance, or configuration while

under construction.

8. Unless a specific warranty is provided for a greater period of time, all Services are warranted and guaranteed to be free of defects in materials, equipment, and workmanship for a period of one (1) year following acceptance of the Services by Cary. Any and all manufacturers' warranties shall be assigned to and provided to Cary at the conclusion of Work.
9. If Services performed are subject to N.C.G.S. § 143-128(f1) and a dispute arises with an amount in controversy that exceeds \$15,000.00, Seller shall participate in the Town's dispute resolution process.

INFORMATION TECHNOLOGY SERVICES

If the Purchase Order governed by these terms is for the provision of information technology Services, Seller shall provide such Services in compliance with the following terms and conditions in addition to the preceding terms and conditions:

1. **Seller Warranties.** Seller represents and warrants that:
 - a. For the duration Services are being provided, the Services will fully comply all applicable federal, state, and local laws and regulations, that the functionality of the Services will not decrease, and that Seller shall promptly either repair or replace any defective Services at no additional charge to Cary. If Seller is unable to totally cure any defective Service within thirty (30) days after receipt of notice from Cary, Cary shall have the right to immediately terminate the Services by written notice to the Seller and to obtain a full refund of the fees paid in connection with the Services (including but not limited to any implementation, maintenance, and training fees).
 - b. Seller owns all right, title and interest in and to the Services and has full legal right to license all the Intellectual Property Rights necessary to grant any applicable licenses in the Services, providing Services will not violate or constitute a breach of any agreement binding upon Seller, and as of the date on which Seller provides the Services there is no claim or litigation regarding Seller's ownership or the right to license all the Intellectual Property Rights necessary to grant any applicable licenses in the Services.
 - c. Seller's performance and the Services to be provided hereunder shall comply with all applicable rules, regulations related to privacy, confidentiality, consumer protection, electronic mail, and data security, including, as applicable, the Health and Insurance Portability and Accountability Act of 1996 (42 U.S.C. §1320d) ("HIPAA"), the Health Information Technology for Economic and Clinical Health Act of 2009 (42 U.S.C. §17935) ("HITECH Act"), the American Recovery and Reinvestment Act of 2009 (Pub. L. 111-5) ("ARRA"), if applicable, the California Consumer Privacy Act of 2018 (Cal. Civ. Code. §1798.100 et seq.) ("CCPA") (and as amended from time to time, including the California Privacy Rights Act of 2020, when in effect),(collectively, the "Privacy and Security Laws").
 - d. Seller's Services complies with Section 508 of the Rehabilitation Act of 1973, as amended, with respect to accessibility for individuals with disabilities, if applicable. If Cary receives a complaint or concern regarding the accessibility of the product or service, Seller agrees to promptly responds and resolve such concerns. Seller further agrees to indemnify and hold Cary harmless for any claims arising from the inaccessibility of its product or service.

If the information technology Services being provided involve Seller hosting or accessing Cary data or systems, Seller shall provide such Services in compliance with the following terms and conditions in addition to the preceding terms and conditions:

2. **Security Breaches**
 - a. If Seller discovers, suspects, or is otherwise made aware of (a) any unauthorized disclosure of, use of, or access to Cary data or systems, or any other compromise of Cary data or systems ("Security Breach"), or (b) any condition that is likely to result in Security Breach, Seller shall promptly report (but in no event more than twenty-four (24) hours following discovery or suspicion) the Security Breach or likely Security Breach to Cary.
 - b. Seller shall mitigate, in a timely manner and to the extent practicable, any harmful effects of any

Security Breach. Seller shall cooperate with Cary in investigating and responding to any Security Breach, including, without limitation, observing any reasonable requests made by Cary to ensure compliance with applicable law, and providing any notices that Cary deems appropriate.

- c. To the extent any Security Breach is attributable to a breach by Seller or Seller personnel, and applicable law requires Cary, or other affected individuals be notified of a security incident involving Cary Data, Cary shall have the exclusive right to determine whether notice will come from Cary or Seller. In any event, the content, timing, and other details of the notice are subject to Cary's approval, in Cary's sole discretion.
 - d. Seller shall bear the costs incurred in complying with its legal obligations relating to the Security Breach, and in addition to any other damages for which Seller may be liable under this Agreement, Seller shall bear the following costs which may be incurred by Cary in responding to the breach, to the extent applicable: (a) the cost of providing notice to affected individuals, government agencies, credit bureaus, and other required entities (which may include, without limitation, print services, postage, and obtaining contact information for affected individuals); (b) the cost of providing affected individuals with credit monitoring services and identity theft mitigation services for a specific period to the extent Cary determines the incident could lead to a compromise of the affected individuals' credit or credit standing or identity theft, or if required by applicable law; (c) the cost of call center support for affected individuals; (d) forensics services; (e) fines imposed by credit card associations, merchant banks or financial account institutions and costs passed on by individual card companies, banks, and other financial institutions; (f) the cost of any other measures required under applicable law; and (g) any other losses for which Seller would be liable under the Agreement.
3. Cary Data Portability. Upon the completion of Sellers provision of Services, Seller will make all Cary data available to Cary for export or download in commercially accessible formats at no cost to Cary. Seller shall not delete or destroy any Cary data in its systems or otherwise in its possession or control, unless and until it has received written acknowledgment from Cary that Cary has exported or downloaded Cary data it requires.

MINIMUM SPECIFICATIONS

1. GENERAL

These specifications are for the purchase of one replacement ICP mass spectrometer (UNIT) for the South Cary Water Reclamation Facility, which is currently using NexION 300X model. The selected replacement UNIT 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, system compatibility, Town standard operating procedures and internal controls.
- b) Other alternatives to the UNIT 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).
 - The bidder shall send their question to the bid contact where it will be reviewed and answered in the form of an addendum at the conclusion of the Q&A Period.
- c) 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.
- d) Installation & Startup costs shall be submitted as a separate line item on the bid submittal and not factored into the item price. Any price discrepancies outside of the submitted bid will be at the bidders' expense.
- e) The equipment manufacturer shall have a minimum of five (5) years of design and manufacturing experience with ICP mass spectrometer.
- f) A copy of the instrument hardware manual, specification sheet and dimensional drawings must all be submitted with the bid.

2. REFERENCES

The bidder shall include a minimum of three (3) local municipalities or state agencies using the system being submitted for bid (see attachment 1).

3. SYSTEM REQUIREMENTS

A) GENERAL REQUIREMENTS:

The UNIT must be able to meet method performance standards and minimum MDL and PQL requirements not only for the current permit and long term monitoring program (LTMP), but also account for the possibility of lower requirements in the next 10 years. For economical purpose, Town plans to continue using the existing computer (Windows 10 Enterprise LTSC V1809, 64-bit operating system, Intel Core i5-8500 CPU @ 3.00 GHz, RAM 8.00GB), auto-sampler (SC2-DXS, Elemental Scientific Inc.), and chiller (DuraChill, PolyScience). Therefore, the proposed UNIT shall be compatible with the existing items. Exceptions may be granted with the proposed new computer, auto-sampler, and/or chiller depending on the bid price. The UNIT/system must include the following components:

- a) All items and accessories for automated turn-key operations
- b) RF plasma ion source
- c) Maintenance free RF coil

- d) Liquid sample introduction system
- e) Triple cone interface
- f) Quadrupole Ion Deflector
- g) Quadrupole with a 90 degree ion beam path
- h) Quadrupole-based Universal Cell to eliminate spectroscopic interferences using either collision gases with KED or pure reaction gases such as ammonia and oxygen for DRC Mode with Dynamic Bandpass Tuning
- i) Quadrupole mass filter
- j) Mass range must be to 285 amu or greater
- k) Simultaneous dual stage discrete dynode detector
- l) System must include all items and accessories for automated turn-key operations (instrument, cables, software(s), etc.). Note Town plans to continue using the existing computer, auto-sampler, and chiller.
- m) Full system must use single-phase power and remains in specification as laboratory temperature varies 10 to 35°C at up to 2°C per hour.
- n) System must be fully compliant with US EPA methodology for Method 200.8 and Method SW 846-6020
- o) UNIT/system must have a full color plasma view window for useful visuals on the sampler cone, plasma color and injector tip
- p) UNIT must be a bench top design with a utility free rear, enabling it to be placed directly against the wall (some service procedures may require movement from wall)
- q) Maintenance free system must not require any periodic maintenance (cleaning) or replacement of:
 - a. Extraction lenses
 - b. Focusing lenses
 - c. Collision, collision/reaction, or universal cell
 - d. Main filtering quadrupole for the system's lifetime by the user or the manufacturer's service engineers.
- r) Both collision cell and reaction cell capability
- s) UNIT/system must include line conditioner to condition electrical power from brown outs/spikes
- t) UNIT/system must be able to use existing NexION instrument bench (30-in X 60-in) or supply a new bench.
- u) UNIT/system must be able to use existing vacuum pump dolly or supply a new dolly.
- v) UNIT/system must include all of the following list of consumables with delivery.

QTY	DESCRIPTION
2	FIXED 2.0 MM INJECTOR QUARTZ TORCH (BLUE MARK)
2	TORCH INJECTOR NUT
1	GLASS CYCLONIC HIGH SENSITIVITY SPRAY CHAMBER WITH MATRIX GAS PORT
2	THREADED SPRAY CHAMBER DRAIN LINE
2	NICKEL SKIMMER CONE
2	NICKLE SAMPLER CONE
1	HYPER SKIMMER CONE
3	SAMPLER CONE GASKET
2	HYPER SKIMMER O-RING
2	GREY PUMP TUBING
2	GREY PUMP TUBING MP2
4	FLARED PVC 0.51 MM ORANGE/YELLOW PUMP TUBING
1	DRAIN TUBING (6 FEET)

12	SAMPLE UPTAKE TUBING
1	SAMPLE INTRODUCTION LINE FOR CONCENTRIC NEBULIZER
4	FEMALE BARB CTFE FITING
4	MALE BARB CTFE FITTING
2	INSTRUMENT FILTER (LEFT)
2	INSTRUMENT FILTER (RIGHT)
2	INSTRUMENT FILTER (REAR)

B) EPA 200.8 MINIMUM REQUIREMENTS

- a) System must be fully compliant with US EPA methodology for Method 200.8 and SW 846-6020.
- b) Quadrupole Mass Spectrometer having a minimum resolution capability of 1 amu peak width at 5% peak height.
- c) Unit and software must be able to recognize and account for related interferences including isobaric elemental interferences and interferences from polyatomic ions derived from the plasma gas, reagents or sample matrix.
- d) Instrumental drift as well as suppressions or enhancements of instrument response caused by sample matrix (in this case wastewater influent, effluent, mixed liquors and pretreatment samples) must be corrected for by the use of internal standards.
- e) Instrument may be fitted with a conventional or extended dynamic range detection system.
- f) Radio-frequency generator compliant with FCC regulations.
- g) Argon gas supply- High Purity-
- h) A variable speed peristaltic pump is required for solution delivery to the nebulizer.
- i) A mass-flow controller on the nebulizer gas supply is required. A water cooled spray chamber may be of benefit in reducing some types of interferences.
- j) Software must be able to perform required data analysis and calculation required.

C) SAMPLE INTRODUCTION REQUIREMENTS

- a) For general sample workload, low flow (0.25 ml/minute) sample introduction system with no O-rings: concentric nebulizer, cyclonic spray chamber, and quartz injector
- b) Close coupled, three-channel peristaltic pump, computer controlled, must be integrated within the ICP-MS system that can be optionally upgraded with additional channels
- c) Cassette style torch mount where entire torch and injector assembly can be easily removed together with one hand
- d) Optional torch cassette and injector designs for:
 - i) Organic solvents
 - ii) HF resistance
 - iii) Ultra-trace BECs
 - iv) High TDS
- e) The choice of either a fixed torch design or a design with a demountable injector
- f) Design where components are mounted outside the torch enclosure for easy access of alternate components and accessible from the front of the instrument.
- g) Sample introduction components must be accessible from the front of the instrument
- h) Spray chamber must not include or require cooling to run EPA methods 200.8
- i) Fully automated one touch X, Y, Z torch alignment
- j) System must have available an All Matrix System using argon for dilution of the aerosol up to and greater than 100x when dealing with high matrix solutions, minimizing matrix suppression, and

reducing deposition on the cones

D) ION SOURCE and RF GENERATION REQUIREMENTS

- a) The RF generator must be computer controlled, operating from 500 to 1600 watts for automatic control of torch ignition, shutdown, and system warm up
- b) The RF generator must operate at 34 MHz providing a good medium between the higher temperatures of lower frequencies and the greater robustness of higher frequencies
- c) The RF generator must be free running and made up of solid-state components
- d) The RF generator must be able to respond in 50 nanoseconds to adapt quickly to changing loading and does not require an impedance matching network within
- e) The RF generator must have no moving parts other than cooling fans
- f) The RF generator must electrically decouple the plasma from the ion optics allowing independent adjustment of the ion optic parameters and the plasma conditions
- g) The RF generator must be able to run in cold plasma mode (400-800W) and hot plasma mode (1400-1600W) in a single sample acquisition
- h) The load coil must not require water, air, or oil cooling
- i) The load coil must not require any maintenance
- j) The design must not require consumable shields or screens

E) ION EXTRACTION INTERFACE REQUIREMENTS

- a) A Triple cone design consisting of Sampler, Skimmer and Hyper-skimmer cones with all cones at ground potential (do not require voltages to meet specifications). Not to be confused with a 2 cones and 1 extraction lens (using voltage) design.
- b) System must not utilize a high voltage extraction lens or lens stack which creates higher backgrounds for elements such as Li, B, K, Na, Ni, and Pt
- c) Standard large orifice sampling and skimmer cones with 1.1 and 0.9 mm diameters, respectively
- d) The sampler and skimmer cones must be available in Pt versions
- e) Design with rapid mounting and removal of cones which are easily accessible from the front of the instrument
- f) Cones can be changed while maintaining vacuum in the vacuum chamber

F) VACUUM SYSTEM REQUIREMENTS

- a) The vacuum system must consist of a four-stage vacuum system utilizing a triple-inlet turbo molecular pump to maintain vacuum at 1e-6 Torr (or lower) during operation
- b) The vacuum system must include a vacuum chamber isolation valve which automatically closes as plasma is extinguished or with system faults
- c) The pumping system shall have enough capacity to reach operating vacuum from atmosphere in less than 20 minutes
- d) In the event of vacuum failure, the entire vacuum system must be automatically back-filled with inert gas to preserve the cleanliness of the system
- e) Turbo molecular vacuum pump must be purged by an inert gas during operation to prevent damage by reactive gases and/or corrosive vapors such as those generated by the analysis of phosphoric acid
- f) The vacuum system must be backed by a single external high performance roughing pump
- g) The external roughing pump must be computer controlled and automatically shift into energy saving mode when the plasma is off
- h) Automated torch alignment

G) ION FOCUSING SYSTEM REQUIREMENTS

- a) The ion focusing system must be an end-on quadrupole deflector to allow for complete separation of ions from photons and neutrals with 90 degree bend of ions into an interference removal cell
- b) The ion focusing system must be maintenance free
- c) The ion focusing system must not use a multi-component high voltage lens system that requires cleaning

H) COLLISION/REACTION CELL REQUIREMENTS

- a) The system must be able to use a single mixed gas of Helium and Hydrogen running in Collision cell mode and Dynamic reaction cell mode in order for the best operation when running natural and wastewater samples.
 - i) This must be a dual mode method only, using Collision and DRC mode only and utilizing one gas.
- b) The system must incorporate a Universal Cell offering three modes of operation: Standard mode, Collision mode and Dynamic Reaction Cell mode.
- c) The universal cell must have a quadrupole within the cell for high and low bandpass tuning and for reducing sensitivities on selected elements (EDR-Extended Dynamic Range)
- d) The cell must be able to switch between modes (no gas, helium, pure ammonia) within a minimum of 15 seconds so that all three modes can be incorporated into a practical single method
- e) In Standard Mode:
 - i) Universal Cell must be able to operate with no gas and no energy barrier for optimal signal-to-noise performance on elements with no interferences.
 - ii) The system must have Extended Dynamic Range – The system must have a quadrupole in the Universal Cell to detune the signal response of selective elements to enable incorporation of high concentration elements (outside of the system's 10 orders of dynamic range from 0.1 cps to > 1e9 cps) into a single analysis. This will allow the user to see very low PPB levels of elements and in the same analytical run see 100's of PPM of other elements. This should not require any changes in gas flows, which would prolong the run.
- f) In Collision Cell Mode:
 - i) Universal Cell must be able to operate as a passive ion guide with an energy barrier at the cell exit for KED.
 - ii) The system must have Extended Dynamic Range – The system must have a quadrupole in the Universal Cell to detune the signal response of selective elements to enable incorporation of high concentration elements (outside of the system's 10 orders of dynamic range from 0.1 cps to > 1e9 cps) into a single analysis. This will allow the user to see very low PPB levels of elements and in the same analytical run see 100's of PPM
- g) In Dynamic Reaction Cell Mode:
 - i) The band pass on the Universal Cell must have the ability to provide both high mass and low mass cutoffs.
 - ii) The Universal Cell shall provide a user selectable mass band pass window that is variable in resolution and mass position. The mass band pass window shall be dynamically scanned in concert with the quadrupole mass spectrometer during analysis of samples.
 - iii) There should be an accelerating voltage across the Universal Cell, to control the speed of the ions through the cell.
 - iv) The transmission band pass of the Universal Cell shall be variable from analyte to analyte.
 - v) The velocity of the ion beam through the reaction cell shall be controlled by the selection of voltages on the entrance and exit plate of the cell.
 - vi) The Universal Cell must be able to use pure reaction gases such as pure oxygen or pure

- methane. The flow and optimization of the gases shall be under full operator control.
- vii) The Universal Cell shall be capable of reducing the intensity of isobaric and polyatomic interfering species by up to 10 orders of magnitude.
 - viii) The system must have Extended Dynamic Range – The system must have a quadrupole in the Universal Cell to detune the signal response of selective elements to enable incorporation of high concentration elements (outside of the system's 10 orders of dynamic range from 0.1 cps to > 1e9 cps) into a single analysis. This will allow the user to see very low PPB levels of elements and in the same analytical run see 100's of PPM of other elements. This should not require any changes in gas flows, which would prolong the run. System must be able to reduce and eliminate spectroscopic interferences using either collision gases with KED and/or DRC modes (with Dynamic Bandpass Tuning)

I) QUADRUPOLE MASS ANALYZER REQUIREMENTS

- a) The quadrupole mass filter rods shall be made from a metal alloy with a Thermal Coefficient of Expansion 3 times less than molybdenum for best stability and operate at 2.5 MHz for exceptional resolution and abundance sensitivity.
- b) The quadrupole must:
 - i) Be able to scan up to 5000 amu per second
 - ii) Scan speed is defined as the maximum rate at which the quadrupole can be scanned while acquiring continuous spectral data at every mass at 20 pts/amu (measures peaks and valleys, not peak hopping) from the minimum to the maximum mass of the instrument (1-285 amu)
 - iii) Operate with dwell times as short as 10 μ s
 - iv) Operate with a peak hop settling time < 0.2 ms regardless of mass change
 - v) Operate with peak hop slew speeds up to 1.6M amu/sec
 - The slew speed is defined as the maximum rate at which the quadrupole can change from the minimum mass to the maximum mass without affecting the precision of the analytical measurement
 - vi) Scan speed must not be calculated by hopping from Li-U-Li, as this is a distortion of scan and slew speed as defined above
 - vii) Offer mass range to $m/z = 285$ for separation of actinides
 - viii) Stability of the quadrupole mass calibration and resolution must be maintained by having critical parts of the quadrupole power supply temperature controlled
 - ix) The analyzer quadrupole must have the ability to discretely control the resolution of selected mass regions dynamically, without affecting the overall nominal resolution of the system for non-"custom-controlled" mass regions.

J) ION DETECTOR REQUIREMENTS

- a) The ion detector must be a simultaneous dual-stage discrete dynode electron multiplier, providing element concentration calibration over 10 orders of magnitude (from 0.1 cps to > 1e9 cps) dynamic range in a single scan using both analog and pulse ion counting mode, and offer protection against overload in both pulse counting and analog modes.
- b) The detector must:
 - i) Provide a dead time < 35 ns
 - ii) Provide switching between pulse or analog in < 0.2 ms
 - iii) Provide data acquisition rate up to 100,000 data points per second
 - iv) Provide dynamic range to 1.5 GHz (1.5 e9 cps)

- c) The dual-stage detector assembly must come standard with the system

K) COMPUTER and SOFTWARE REQUIREMENTS

- a) The software must be capable of running in Windows 10 on a 64-bit operating system
- b) All analytical system operations from component optimization to methods development to calibration to analysis to reports must be able to be performed using a single software program
- c) The software must have functions for automated system startup, shutdown, optimization and instrument tuning for optimum performance
 - i) To provide ease-of-use the system software must include the following features:
 - ii) Scheduled user-defined alerts for routine maintenance
 - iii) Method development wizards
 - iv) Pre-set methods
 - v) Automated quality control checking features
- d) The system software shall support the following calibration curve fit modes for quantitative analysis:
 - i) Linear least squares
 - ii) Weighted linear least squares
 - iii) Linear forced-through-zero least squares
 - iv) Method of standard additions (Matrix Matched calibration)
 - v) Additions calibration
- e) Real-time graphics with the ability to display transient and continuous signal profiles
- f) Real-time plotting of internal standard responses
- g) UNIT must be able to operate without internet access. Software updates must be available for download online
- h) Single-click button to export analytical data as an Excel file
- i) Quantitative analysis including external calibration, additions (matrix matched) calibrations, method of standard additions, isotope ratios and isotope dilution's and semi quantitative analysis
- j) All analytical raw data must be retained and stored on the hard disk as well as being encrypted to prevent tampering per EPA requirements to support a complete data audit trail
- k) Per EPA methods requirements the time and date must be printed on each sheet of data generated by the system printer
- l) Per EPA methods requirements, the quadrupole must be able to be tuned or mass calibrated on a minimum of 5 elements (Be, Co, In, Mg, Pb), providing a printed mass calibration report with all elements
- m) QC protocol limits on measured values, allowing the analyst to define when and how an action is taken, and to specify a second QC action for automatic operation in the event that the first action fails
- n) On-line help with quick steps to reference entire instrument user manual
- o) Videos to assist with system use and maintenance
- p) Data reprocessing on stored data without re-running samples for changes of calibration points, internal standard points or curve fit mode
- q) Computer-controlled automatic selection of cell gas when multiple gases or mixed mode are specified within a single method
- r) Cold plasma settings must be able to be performed in a single method along with hot plasma settings
- s) The software must allow the system to be able to operate in any number of modes and plasma conditions in a single method
- t) Computer-controlled cell gas flows and optimization
- u) The software must be capable of supporting a syringe-pump based auto dilution system

- v) The software must support auto dilutions by both a global dilution factor and serial dilutions for samples out of range
- w) User friendly software and consumable components

L) SOFTWARE APPLICATION ADD-ON MODULE OPTIONS/UPGRADES

- a) The software must have the following optional add-ons or upgrades:
 - i) Enhanced Security Add-on for 21 CFR Part 11 compliance
 - ii) Single Particle Application (Nano App) for Single Particle ICP-MS
 - iii) Single Cell Application (Single Cell App) for Single Cell ICP-MS
 - iv) Chromatography Application for LC, IC, or GC ICP-MS
 - v) Data Visualization Software (Spotfire) - Allows you to interact with your data across multiple visualizations and pages, simultaneously providing information from all aspects of your results. Markings made in one visualization will carry over to all other visualizations created from the same data table. Through this software you can compare data sets, explore multi-dimensional data, and drill-down to specific data points.

3. 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. The UNIT 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.
- iii. The UNIT 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

- iv. 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. Bidder shall supply a licensed and/or certified installation professional who is authorized by the manufacturer of the UNIT to oversee its installation in strict accordance with all local, national, and seismic governing codes. Work not in conformance with applicable codes shall be brought into compliance at no additional cost to the Town.
 - 1. The Town may require proof from the manufacturer of the unit authorizing the representative to perform the installation and startup.
- ii. Installation must adhere to the existing footprint and infrastructure available within the space including:
 - 1. Breaker input must not exceed two 30 amp breakers currently dedicated to this function.
 - 2. Physical space should not exceed 36" x 40" of countertop space.

- a. If the unit is supported by a stand on the ground that stand shall be included in the price quoted within the bid.
3. Any modifications required shall be accounted for within the submitted bid total price.
 - a. Any price differences or additional expenses shall be at the winning bidder's expense.

C) START-UP AND TRAINING

The Town estimates needing 2 days of installation and startup supervision (including method development). Interested bidders will submit costs based on the two day estimate.

- The bidder shall deliver a completed working system to the Town within that timeframe or shall stay until that system is delivered complete at no additional cost to the Town.
- There shall be a formal sign off period in which a checklist will be completed, and the Town of Cary will officially take control of the UNIT.
- System startup will not be considered complete until two successful analytical runs have been achieved with all passing QC for NCWRF Influent, Effluent, Mixed Liquor and a representative Pretreatment sample.
- Failure to complete the checklist will result in the winning bidder having to remain onsite for additional time to make the system right.
- Outputs falling below the levels outlined in the checklist within 48 hours of the Town taking control of the UNIT shall require the winning bidder to make right within 10 business days at no additional cost to the Town.

Training staff will require both in person and remote training/instruction. The Town expects:

- Onsite one (1) day trainings after startup must be provided in the form of two (2) separate occurrences at least 14 days apart so that personnel adequately distanced.
- Access to virtual training
- Phone and online support/assistance must be available

4. DELIVERY REQUIREMENTS

UNIT 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 mechanical bar/filter screen and wash press delivery. The Town reserves the right to analyze delivered UNIT upon arrival at the destination and reject such UNIT for failing to meet one or more of the above-mentioned specifications or quality standards. All freight charges on rejected UNIT 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

- a) The CONTRACTOR shall provide the manufacturer's standard warranty on the UNIT 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 the UNIT 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.
- b) Bidder shall provide a memo with the manufacturer's warranty information as part of their bid submission.

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").

ATTACHMENT 1 MUNICIPAL REFERENCES

Please provide a minimum list of three (3) references who are a government entity to whom you have installed a same or similar UNIT as outlined in this bid.

Name of Client _____
Address _____
Contact Person _____
Telephone _____ E-mail: _____
Delivery Dates _____
Approximate Quantity Installed _____

Name of Client _____
Address _____
Contact Person _____
Telephone _____ E-mail: _____
Delivery Dates _____
Approximate Quantity Installed _____

Name of Client _____
Address _____
Contact Person _____
Telephone _____ E-mail: _____
Delivery Dates _____
Approximate Quantity Installed _____

Name of Client _____
Address _____
Contact Person _____
Telephone _____ E-mail: _____
Delivery Dates _____
Approximate Quantity Installed _____

Name of Client _____
Address _____
Contact Person _____
Telephone _____ E-mail: _____
Delivery Dates _____
Approximate Quantity Installed _____