



ARLINGTON COUNTY, VIRGINIA  
OFFICE OF THE PURCHASING AGENT  
2100 CLARENDON BOULEVARD, SUITE 500  
ARLINGTON, VIRGINIA 22201

**CONTRACT AWARD COVERPAGE**

<b>TO:</b> WAVETRONIX LLC	<b>DATE ISSUED:</b>	JUNE 23, 2022
1827 WEST 650 NORTH	<b>CONTRACT NO:</b>	23-DES-ITB-3a
SPRINGVILLE, UTAH 84663	<b>CONTRACT TITLE:</b>	DETECTION AND SENSING EQUIPMENT AND TECHNICAL SUPPORT FOR SECTION 1

**THIS IS A NOTICE OF AWARD OF CONTRACT AND NOT AN ORDER. NO WORK IS AUTHORIZED UNTIL THE VENDOR RECEIVES A VALID COUNTY PURCHASE ORDER ENCUMBERING CONTRACT FUNDS.**

The contract documents consist of the terms and conditions of AGREEMENT No. 23-DES-ITB-3a, including any attachments or amendments thereto.

**EFFECTIVE DATE:** JULY 1, 2022

**EXPIRES:** JUNE 30, 2024

**RENEWALS:** THREE (3) ONE (1) YEAR OPTIONAL RENEWALS REMAINING FROM JULY 1, 2024 TO JUNE 30, 2027

**COMMODITY CODE(S):** 55090

**LIVING WAGE:** N

**ATTACHMENTS:**

AGREEMENT No. 23-DES-ITB-3a

**EMPLOYEES NOT TO BENEFIT:**

**NO COUNTY EMPLOYEE SHALL RECEIVE ANY SHARE OR BENEFIT OF THIS CONTRACT NOT AVAILABLE TO THE GENERAL PUBLIC.**

**VENDOR CONTACT:** ROBERT C. JOYNER

**VENDOR TEL. NO.:** (801) 724-7200

**EMAIL ADDRESS:** [MIDATLANTIC@WAVETRONIX.COM](mailto:MIDATLANTIC@WAVETRONIX.COM)

**COUNTY CONTACT:** SUNGJIN JE, DES

**COUNTY TEL. NO.:** (703) 228-3439

**COUNTY CONTACT EMAIL:** [SJE@ARLINGTONVA.US](mailto:SJE@ARLINGTONVA.US)

**PURCHASING DIVISION AUTHORIZATION**

**Kaylin Schreiber Title: Procurement Officer Date: 6/23/2022**



**ARLINGTON COUNTY, VIRGINIA  
OFFICE OF THE PURCHASING AGENT  
SUITE 500, 2100 CLARENDON BOULEVARD  
ARLINGTON, VA 22201**

**AGREEMENT NO. 23-DES-ITB-3a**

THIS AGREEMENT is made, on 6/23/2022, between Wavetronix LLC, 1827 West 650 North, Springville, Utah 84663 ("Contractor") an Idaho limited partnership authorized to do business in the Commonwealth of Virginia, and the County Board of Arlington County, Virginia ("County"). The County and the Contractor, for the consideration hereinafter specified, agree as follows:

**1. CONTRACT DOCUMENTS**

The "Contract Documents" consist of this Agreement, bid of the successful Bidder (hereinafter "Contractor") and Arlington County (hereinafter "County") Invitation to Bid No. 23-DES-ITB-3.

The Contract Documents set forth the entire agreement between the County and the Contractor. The County and the Contractor agree that no representative or agent of either party has made any representation or promise with respect to the parties' agreement that is not contained in the Contract Documents. The Contract Documents may be referred to below as the "Contract" or the "Agreement".

**2. SCOPE OF WORK**

The Contractor agrees to perform the services described in the Contract Documents (the "Work"), more particularly described in the Scope of Services included with the Invitation to Bid. The primary purpose of the Work is to all labor, tools, goods, materials, equipment, supplies, incidentals and technical support to furnish and deliver traffic related equipment and materials for Section 1 of the Pricing Sheet. The Contract Documents set forth the minimum work estimated by the County and the Contractor to be necessary to complete the Work. It will be the Contractor's responsibility, at its sole cost, to provide the services set forth in the Contract Documents and sufficient services to fulfill the purposes of the Work. Nothing in the Contract Documents limits the Contractor's responsibility to manage the details and execution of the Work.

**3. PROJECT OFFICER**

The performance of the Contractor is subject to the review and approval of the County Project Officer, who will be appointed by the Director of the Arlington County department or agency requesting the Work under this Contract.

**4. CONTRACT TERM**

Time is of the essence. The Work will commence on July 1, 2022 and must be completed no later than June 30, 2024 ("Initial Contract Term"), subject to any modifications provided in the Contract Documents. Upon satisfactory performance by the Contractor the County may, through issuance of a bilateral Notice

of Renewal, authorize continuation of the Agreement under the same contract prices for not more than three (3) additional 12-month periods, from July 1, 2024 to June 30, 2027 (each a "Subsequent Contract Term"). The Initial Contract Term and any Subsequent Contract Term(s) are together the "Contract Term".

**5. CONTRACT PRICING**

Unless otherwise provided in the Contract Documents, the Contractor shall provide the goods and services covered in the County's Invitation to Bid No. 23-DES-ITB-3 at the prices provided in the bid of the Contractor.

**6. CONTRACT PRICING WITH OPTIONAL PRICE ADJUSTMENTS**

The Contract Amount/unit price(s) will remain firm until June 30, 2024 (Price Adjustment Date"). To request a price adjustment, the Contractor or the County must submit a written request to the other party not less than 90 days before the Price Adjustment Date. Adjustments to the Contract Amount/unit price(s) will not exceed the percentage of change in the U.S. Department of Labor Producer Price Index, All Items, Unadjusted, Urban Areas ("PPI-U") for the 12 months of statistics available at the time of the Contract's renewal.

Any Contract Amount/unit price(s) that result from this provision will become effective the day after the Price Adjustment Date and will be binding for 12 months. The new Price Adjustment Date will be 12 months after the price adjustment.

If the Contractor and the County have not agreed on a requested adjustment by 30 days before the Price Adjustment Date, the County may not renew the Contract, whether or not the County has previously elected to renew the Contract's term.

**7. PAYMENT TERMS**

The Contractor must submit invoices to the County's Project Officer, who will either approve the invoice or require corrections. The County will pay the Contractor within 45 days after receipt of an invoice for completed work that is reasonable and allocable to the Contract and that has been performed to the satisfaction of the Project Officer. The number of the County Purchase Order pursuant to which goods or services have been delivered or performed must appear on all invoices.

If the County makes a partial payment, it may retain 5% of the estimate upon which the partial payment is based until completion and final acceptance of the Work.

**8. PAYMENT OF SUBCONTRACTORS**

The Contractor is obligated to take one of the two following actions within seven days after receipt of payment by the County for work performed by any subcontractor under this Contract:

- a. Pay the subcontractor for the proportionate share of the total payment received from the County attributable to the work performed by the subcontractor under this Contract; or
- b. Notify the County and the subcontractor, in writing, of the Contractor's intention to withhold all or a part of the subcontractor's payment, with the reason for nonpayment.

The Contractor is obligated to pay interest to the subcontractor on all amounts owed by the Contractor to the subcontractor that remain unpaid after seven days following receipt by the Contractor of payment from the County for work performed by the subcontractor under this Contract, except for amounts

withheld as allowed in subsection b., above. Unless otherwise provided under the terms of this Contract, interest will accrue at the rate of 1% per month.

The Contractor must include in each of its subcontracts, if any are permitted, a provision requiring each subcontractor to include or otherwise be subject to the same payment and interest requirements with respect to each lower-tier subcontractor.

The Contractor's obligation to pay an interest charge to a subcontractor pursuant to this section may not be construed to be an obligation of the County. A Contract modification may not be made for the purpose of providing reimbursement for such interest charge. A cost reimbursement claim may not include any amount for reimbursement for such interest charge.

**9. NO WAIVER OF RIGHTS**

The County's approval or acceptance of or payment for any goods or services under this Contract will not waive any rights or causes of action arising out of the Contract.

**10. NON-APPROPRIATION**

All payments by the County to the Contractor pursuant to this Contract are subject to the availability of an annual appropriation for this purpose by the County Board of Arlington County, Virginia ("Board"). In the event that the Board does not appropriate funds for the goods or services provided under this Contract, the County will terminate the Contract, without termination charge or other liability to the County, on the last day of the fiscal year or when the previous appropriation has been spent, whichever event occurs first.

**11. ESTIMATED QUANTITIES/NON-EXCLUSIVITY OF CONTRACTOR**

This Contract does not obligate the County to purchase a specific quantity of items or services during the Contract Term. Any quantities that are included in the Contract Documents are the present expectations of the County for the period of the Contract; and the County is under no obligation to buy that or any amount as a result of having provided this estimate or of having had any normal or otherwise measurable requirement in the past. The County may require more goods and/or services than the estimated annual quantities, and any such additional quantities will not give rise to any claim for compensation other than at the unit prices and/or rates in the Contract.

The County does not guarantee that the Contractor will be the exclusive provider of the goods or services covered by this Contract. The items or services covered by this Contract may be or become available under other County contract(s), and the County may determine that it is in its best interest to procure the items or services through those contract(s).

**12. COUNTY PURCHASE ORDER REQUIREMENT**

County purchases are authorized only if the County issues a Purchase Order in advance of the transaction, indicating that the ordering County agency has sufficient funds available to pay for the purchase. If the Contractor provides goods or services without a signed County Purchase Order, it does so at its own risk and expense. The County will not be liable for payment for any purchases made by its employees that are not authorized by the County Purchasing Agent.

### **13. DELIVERY**

All goods are purchased F.O.B. destination in Arlington County as described in the specifications. Transportation, handling and all related charges are included in the unit prices or discounts that the Contractor submitted with its bid.

### **14. WARRANTY**

- i. All goods and materials provided to the County shall be fully guaranteed by the Contractor against factory defects. Any defects which may occur as the result of either faulty material or workmanship by the manufacturer within the period of the manufacturer's standard warranty shall be corrected by the Contractor at no expense to Arlington County.
- ii. At the time of purchase the Contractor shall provide a detailed written warranty for all devices and components specified with their bid against defects in materials and workmanship. No date other than the date of final acceptance, by the County, at the designated location, shall govern the effective date of the warranty, unless the date is agreed upon by the County and Contractor in advance and in writing.
- iii. All goods and materials shall be guaranteed by the Contractor against defects resulting from the use of inferior or faulty materials or workmanship for a minimum of two (2) years from the date of final acceptance by the County if the manufacturer's or supplier's warranty is less than 2 years. In the case that the manufacturer's warranty exceeds one (2) years, no additional warranty is required. No date other than the date of final acceptance shall govern the effective date of the Guaranty, unless that date is agreed upon by the County and the Contractor in advance and in a signed writing.
- iv. Specific requirements for equipment and material warranties are included in the Arlington County Traffic and Streetlight Specifications. Where the ACTSS warranty requirements differ from the two-year minimum, the longer of the two shall apply.
- v. All costs of labor, parts and transportation from the Contractor shall be borne by the Contractor for the duration of the warranty period.

### **15. INSPECTION, ACCEPTANCE, TITLE, AND RISK OF LOSS**

The County will inspect all materials at the delivery location within ten days of delivery and may test the goods at is sees fit before accepting them.

The Contractor warrants that it has good title to and will require all subcontractors to warrant that they have good title to, all delivered goods.

The Contractor bears title and risk of loss or damage to all delivered goods until the County accepts them.

Neither the Contractor nor any subcontractor may retain any interest in the goods after the County accepts them.

### **16. DAMAGE TO PROPERTY**

Any damage, as determined by the Project Officer, to the real or personal property, whether owned by the County or others, resulting from the Work performed under this Contract shall be timely repaired or replaced to the County's satisfaction at the Contractor's expense. The County will perform the repairs

unless the County agrees that such repairs will be made by the Contractor. Any such Contractor repairs will be made within ten (10) days of the date of damage to the satisfaction of the County. All costs of the repair performed by the County shall be deducted from the Contractor's final payment.

**17. CLEANING UP**

The Contractor shall remove, as frequently as necessary, all refuse, rubbish, scrap materials and debris from any and all work sites to the extent that the trash is the result of the Contractor's operations, to the end that any and all work sites shall present a neat, orderly, and workmanlike appearance at all times. At completion of the Work, but before final acceptance, the Contractor shall remove all surplus material, falsework, temporary structures including foundations thereof, and debris of every nature resulting from the Contractor's operations or resulting from any activity on the site related to the Contractor's operations and put the site in a neat, orderly condition; if the Contractor fails to do so, the County shall have the right to remove the surplus material, falsework, temporary structures including foundations thereof, and debris, put the site in a neat, orderly condition, and charge the cost to the Contractor. The County shall be entitled to offset such cost against any sums owed by the County to the Contractor under this Contract.

**18. DISPOSAL OF PACKING MATERIALS, TRASH AND DEBRIS**

The Contractor must, at its expense and without using any County waste containers, immediately remove and legally dispose of off-site all packing materials, trash and debris ("Waste"). Otherwise, the County will contract a third party to dispose of the Waste and will deduct the expense from the final payment to the Contractor.

The County will deduct from the final payment the expense to repair any damage to County-owned or-controlled property that the Contractor or its agents cause, unless the County agrees that the Contractor can make the repairs, in which case the Contractor must make the repairs at its expense within ten days of the damage and to the satisfaction of the County.

**19. OSHA REQUIREMENTS**

The Contractor certifies that all material supplied or used under this Contract meets all federal and state Occupational Safety and Health Administration ("OSHA") requirements. If the material does not meet the OSHA requirements, the Contractor will bear all costs necessary to bring the material into compliance.

**20. PROHIBITION AGAINST ASBESTOS-CONTAINING MATERIALS**

No goods, equipment or material that the Contractor or its subcontractor provides, or installs may contain asbestos. The Contractor must remove any asbestos-containing goods, equipment and material at its sole cost, which includes worker protection and legal disposal, and must reimburse the County for the replaced goods, equipment and material. The County may offset these costs and reimbursement against any amounts that it owes the Contractor.

**21. SAFETY**

The Contractor shall comply with, and ensure that the Contractor's employees and subcontractors comply with, all current applicable local, state and federal policies, regulations and standards relating to safety and health, including, by way of illustration and not limitation, the standards of the Virginia Occupational Safety and Health program of the Department of Labor and Industry for General Industry and for the Construction Industry, the Federal Environmental Protection Agency standards and the applicable standards of the Virginia Department of Environmental Quality.

The Contractor shall provide, or cause to be provided, all technical expertise, qualified personnel, equipment, tools and material to safely accomplish the work specified to be performed by the Contractor and subcontractor(s).

The Contractor shall identify to the County Project Officer at least one on-site person who is the Contractor's competent, qualified, and authorized person on the worksite and who is, by training or experience, familiar with and trained in policies, regulations and standards applicable to the work being performed. The competent, qualified and authorized person must be capable of identifying existing and predictable hazards in the surroundings or working conditions which are unsanitary, hazardous or dangerous to employees, shall be capable of ensuring that applicable safety regulations are complied with, and shall have the authority and responsibility to take prompt corrective measures, which may include removal of the Contractor's personnel from the work site.

The Contractor shall provide to the County, at the County's request, a copy of the Contractor's written safety policies and safety procedures applicable to the scope of work. Failure to provide this information within seven (7) days of the County's request may result in cancellation of the contract.

## **22. COVID-19 VACCINATION POLICY FOR CONTRACTORS**

Due to the ongoing COVID-19 pandemic, the County has taken various steps to protect the welfare, health, safety, and comfort of the workforce and public at large. As part of these steps, the County has implemented various requirements with respect to health and safety including policies with respect to social distancing, the use of face-coverings and vaccine mandates. To protect the County's workforce and the public at large, all employees and subcontractors of the Contractor who are assigned to this Contract, should be fully vaccinated against COVID-19. Any contractor employee or subcontractor who is not fully vaccinated should be following a weekly testing protocol as established by the Contractor, unless exempt pursuant to a valid reasonable accommodation under state or federal law.

## **23. FAILURE TO DELIVER**

If the Contractor fails to deliver goods or services in accordance with the Contract terms and conditions, the County, after notice to the Contractor, may procure the goods or services from other sources and hold the Contractor responsible for any resulting additional purchase and administrative costs. The County shall be entitled to offset such costs against any sums owed by the County to the Contractor. However, if public necessity requires the use of nonconforming materials or supplies, they may be accepted at a reduction in price to be determined solely by the County.

## **24. UNSATISFACTORY WORK**

The Contractor must within 15 days of written notice from the County remove and replace, at its expense, any goods that the County rejects as unsatisfactory. Otherwise, the County may choose to remove or replace the rejected goods at the Contractor's expense. The County may offset the costs against any amounts that it owes the Contractor. The County may also decide not to remove or replace the unsatisfactory goods and instead to adjust the Contract Amount to account for the unsatisfactory performance. This paragraph applies throughout the Contract Term and any warranty or guarantee period.

## **25. PROJECT STAFF**

The County has the right to reasonably reject staff or subcontractors whom the Contractor assigns to the Project. The Contractor must then provide replacement staff or subcontractors satisfactory to the County

in a timely manner and at no additional cost to the County. The day-to-day supervision and control of the Contractor's employees and its subcontractors is the sole responsibility of the Contractor.

**26. SUPERVISION BY CONTRACTOR**

The Contractor shall at all times enforce strict discipline and good order among the employees and subcontractors performing under this Contract and shall not employ on the Work any person not reasonably proficient in the work assigned.

**27. EMPLOYMENT DISCRIMINATION BY CONTRACTOR PROHIBITED**

During the performance of its work pursuant to this Contract:

- A. The Contractor will not discriminate against any employee or applicant for employment because of race, religion, color, sex, sexual orientation, gender identity, national origin, age, disability or on any other basis prohibited by state law. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices setting forth the provisions of this nondiscrimination clause.
- B. Notices, advertisements and solicitations placed in accordance with federal law, rule or regulation will be deemed sufficient for meeting the requirements of this section.
- C. The Contractor will state in all solicitations or advertisements for employees that it places or causes to be placed that such Contractor is an Equal Opportunity Employer.
- D. The Contractor will comply with the provisions of the Americans with Disabilities Act of 1990 ("ADA"), which prohibits discrimination against individuals with disabilities in employment and mandates that disabled individuals be provided access to publicly and privately provided services and activities.
- E. The Contractor must include the provisions of the foregoing paragraphs in every subcontract or purchase order of more than \$10,000.00 relating to this Contract so that the provisions will be binding upon each subcontractor or vendor.

**28. EMPLOYMENT OF UNAUTHORIZED ALIENS PROHIBITED**

In accordance with §2.2-4311.1 of the Code of Virginia, as amended, the Contractor must not during the performance of this Contract knowingly employ an unauthorized alien, as that term is defined in the federal Immigration Reform and Control Act of 1986.

**29. DRUG-FREE WORKPLACE TO BE MAINTAINED BY CONTRACTOR**

During the performance of this Contract, the Contractor must: (i) provide a drug-free workplace for its employees; (ii) post in conspicuous places, available to employees and applicants for employment, a statement notifying employees that the unlawful manufacture, sale, distribution, dispensation, possession, or use of a controlled substance or marijuana is prohibited in the Contractor's workplace and specifying the actions that will be taken against employees for violating such prohibition; (iii) state in all solicitations or advertisements for employees placed by or on behalf of the Contractor that the Contractor maintains a drug-free workplace; and (iv) include the provisions of the foregoing clauses in every subcontract or purchase order of more than \$10,000.00 relating to this Contract so that the provisions will be binding upon each subcontractor or vendor.



For the purposes of this section, "workplace" means the site(s) for the performance of the work required by this Contract.

### **30. SEXUAL HARASSMENT POLICY**

If the Contractor employs more than five employees, the Contractor shall (i) provide annual training on the Contractor's sexual harassment policy to all supervisors and employees providing services in the Commonwealth, except such supervisors or employees that are required to complete sexual harassment training provided by the Department of Human Resource Management, and (ii) post the Contractor's sexual harassment policy in (a) a conspicuous public place in each building located in the Commonwealth that the Contractor owns or leases for business purposes and (b) the Contractor's employee handbook.

### **31. TERMINATION**

The County may terminate this Contract at any time as follows: (1) for cause, if, as determined by the County, the Contractor is in breach or default or has failed to perform the Work satisfactorily; or (2) for the convenience of the County.

Upon receipt of a notice of termination, the Contractor must not place any further orders or subcontracts for materials, services or facilities; must terminate all vendors and subcontracts, except as are necessary for the completion of any portion of the Work that the County did not terminate; and must immediately deliver all documents related to the terminated Work to the County.

Any purchases that the Contractor makes after the notice of termination will be the sole responsibility of the Contractor, unless the County has approved the purchases in writing as necessary for completion of any portion of the Work that the County did not terminate.

If any court of competent jurisdiction finds a termination for cause by the County to be improper, then the termination will be deemed a termination for convenience.

#### **A. TERMINATION FOR CAUSE, INCLUDING BREACH AND DEFAULT; CURE**

1. Termination for Unsatisfactory Performance. If the County determines that the Contractor has failed to perform satisfactorily, then the County will give the Contractor written notice of such failure(s) and the opportunity to cure them within 15 days or any other period specified by the County ("Cure Period"). If the Contractor fails to cure within the Cure Period, the County may terminate the Contract for failure to provide satisfactory performance by providing written notice with a termination date. The Contractor must submit any request for termination costs, with all supporting documentation, to the County Project Officer within 30 days after the expiration of the Cure Period. The County may accept or reject the request for termination costs, in whole or in part, and may notify the Contractor of its decision within a reasonable time.

In the event of termination by the County for failure to perform satisfactorily, the Contractor must continue to provide its services as previously scheduled through the termination date, and the County must continue to pay all fees and charges incurred through the termination date.

2. Termination for Breach or Default. If the County terminates the Contract for default or breach of any Contract provision or condition, then the termination will be immediate after notice of termination to the Contractor (unless the County provides for an opportunity to cure), and the Contractor will not be permitted to seek termination costs.

Upon any termination pursuant to this section, the Contractor will be liable to the County for costs that the County must expend to complete the Work, including costs resulting from any related delays and from unsatisfactory or non-compliant work performed by the Contractor or its subcontractors. The County will deduct such costs from any amount due to the Contractor; or if the County does not owe the Contractor, the Contractor must promptly pay the costs within 15 days of a demand by the County. This section does not limit the County's recovery of any other damages to which it is entitled by law.

Except as otherwise directed by the County, the Contractor must stop work on the date of receipt the notice of the termination.

**B. TERMINATION FOR THE CONVENIENCE OF THE COUNTY**

The County may terminate this Contract in whole or in part whenever the Purchasing Agent determines that termination is in the County's best interest. The County will give the Contractor at least 15 days' notice in writing. The notice must specify the extent to which the Contract is terminated and the effective termination date. The Contractor will be entitled to termination costs plus any other reasonable amounts that the parties might negotiate; but no amount will be allowed for anticipatory profits.

Except as otherwise directed by the County, the Contractor must stop work on the date of receipt of the notice of the termination.

**32. INDEMNIFICATION**

The Contractor covenants for itself, its employees and its subcontractors to save, defend, hold harmless and indemnify the County and all of its elected and appointed officials, officers, current and former employees, agents, departments, agencies, boards and commissions (collectively the "County Indemnitees") from and against any and all claims made by third parties for any and all losses, damages, injuries, fines, penalties, costs (including court costs and attorneys' fees), charges, liability, demands or exposure resulting from, arising out of or in any way connected with the Contractor's acts or omissions, including the acts or omissions of its employees and/or subcontractors, in performance or nonperformance of the Contract. This duty to save, defend, hold harmless and indemnify will survive the termination of this Contract. If the Contractor fails or refuses to fulfill its obligations contained in this section, the Contractor must reimburse the County for any and all resulting payments and expenses, including reasonable attorneys' fees. The Contractor must pay such expenses upon demand by the County, and failure to do so may result in the County withholding such amounts from any payments to the Contractor under this Contract.

**33. INTELLECTUAL PROPERTY INDEMNIFICATION**

The Contractor warrants and guarantees that in providing services under this Contract neither the Contractor nor any subcontractor is infringing on the intellectual property rights (including, but not limited to, copyright, patent, mask and trademark) of third parties.

If the Contractor or any of its employees or subcontractors uses any design, device, work or material that is covered by patent or copyright, it is understood that the Contract Amount includes all royalties, licensing fees, and any other costs arising from such use in connection with the Work under this Contract.

The Contractor covenants for itself, its employees and its subcontractors to save, defend, hold harmless, and indemnify the County Indemnitees, as defined above, from and against any and all claims, losses, damages, injuries, fines, penalties, costs (including court costs and attorneys' fees), charges, liability or exposure for infringement of or on account of any trademark, copyright, patented or unpatented invention, process or article manufactured or used in the performance of this Contract. This duty to save, defend, hold harmless and indemnify will survive the termination of this Contract. If the Contractor fails or refuses to fulfill its obligations contained in this section, the Contractor must reimburse the County for any and all resulting payments and expenses, including reasonable attorneys' fees. The Contractor must pay such expenses upon demand by the County, and failure to do so may result in the County withholding such amounts from any payments to the Contractor under this Contract.

#### **34. COPYRIGHT**

By this Contract, the Contractor irrevocably transfers, assigns, sets over and conveys to the County all rights, title and interest, including the sole exclusive and complete copyright interest, in any and all copyrightable works created pursuant to this Contract. The Contractor will execute any documents that the County requests to formalize such transfer or assignment.

The rights granted to the County by this section are irrevocable and may not be rescinded or modified, including in connection with or as a result of the termination of or a dispute concerning this Contract.

The Contractor may not use subcontractors or third parties to develop or provide input into any copyrightable materials produced pursuant to this Contract without the County's advance written approval and unless the Contractor includes this Copyright provision in any contract or agreement with such subcontractors or third parties related to this Contract.

#### **35. OWNERSHIP AND RETURN OF RECORDS**

This Contract does not confer on the Contractor any ownership rights or rights to use or disclose the County's data or inputs.

All drawings, specifications, blueprints, data, information, findings, memoranda, correspondence, documents or records of any type, whether written, oral or electronic, and all documents generated by the Contractor or its subcontractors as a result of this Contract (collectively "Records") are the exclusive property of the County and must be provided or returned to the County upon completion, termination, or cancellation of this Contract. The Contractor will not use or willingly cause or allow such materials to be used for any purpose other than performance of this Contract without the written consent of the County.

The Records are confidential, and the Contractor will neither release the Records nor share their contents. The Contractor will refer all inquiries regarding the status of any Record to the Project Officer or to his or her designee. At the County's request, the Contractor will deliver all Records, including hard copies of electronic records, to the Project Officer and will destroy all electronic Records.

The Contractor agrees to include the provisions of this section as part of any contract or agreement related to this Contract into which it enters with subcontractors or other third parties.

The provisions of this section will survive any termination or cancellation of this Contract.

**36. CONFIDENTIAL INFORMATION**

The Contractor and its employees, agents and subcontractors will hold as confidential all County information obtained under this Contract. Confidential information includes, but is not limited to, nonpublic personal information; personal health information (PHI); social security numbers; addresses; dates of birth; other contact information or medical information about a person; and information pertaining to products, operations, systems, customers, prospective customers, techniques, intentions, processes, plans and expertise. The Contractor must take reasonable measures to ensure that all of its employees, agents and subcontractors are informed of and abide by this requirement.

**37. ETHICS IN PUBLIC CONTRACTING**

This Contract incorporates by reference Article 9 of the Arlington County Purchasing Resolution, as well as all state and federal laws related to ethics, conflicts of interest or bribery, including the State and Local Government Conflict of Interests Act (Code of Virginia § 2.2-3100 et seq.), the Virginia Governmental Frauds Act (Code of Virginia § 18.2-498.1 et seq.) and Articles 2 and 3 of Chapter 10 of Title 18.2 of the Code of Virginia, as amended (§ 18.2-438 et seq.). The Contractor certifies that its bid was made without collusion or fraud; that it has not offered or received any kickbacks or inducements from any other offeror, supplier, manufacturer or subcontractor; and that it has not conferred on any public employee having official responsibility for this procurement any payment, loan, subscription, advance, deposit of money, services or anything of more than nominal value, present or promised, unless consideration of substantially equal or greater value was exchanged.

**38. COUNTY EMPLOYEES**

No Arlington County employee may share in any part of this Contract or receive any benefit from the Contract that is not available to the general public.

**39. FORCE MAJEURE**

Neither party will be held responsible for failure to perform the duties and responsibilities imposed by this Contract if such failure is due to a fire, riot, rebellion, natural disaster, war, act of terrorism or act of God that is beyond the control of the party and that makes performance impossible or illegal, unless otherwise specified in the Contract, provided that the affected party gives notice to the other party as soon as practicable after the force majeure event, including reasonable detail and the expected duration of the event's effect on the party.

**40. AUTHORITY TO TRANSACT BUSINESS**

The Contractor must, pursuant to Code of Virginia § 2.2-4311.2, be and remain authorized to transact business in the Commonwealth of Virginia during the entire term of this Contract. Otherwise, the Contract is voidable at the sole option of and with no expense to the County.

**41. RELATION TO COUNTY**

The Contractor is an independent contractor, and neither the Contractor nor its employees or subcontractors will be considered employees, servants or agents of the County. The County will not be responsible for any negligence or other wrongdoing by the Contractor or its employees, servants or agents. The County will not withhold payments to the Contractor for any federal or state unemployment taxes, federal or state income taxes or Social Security tax or for any other benefits. The County will not provide to the Contractor any insurance coverage or other benefits, including workers' compensation.

**42. ANTITRUST**

The Contractor conveys, sells, assigns and transfers to the County all rights, title and interest in and to all causes of action under state or federal antitrust laws that the Contractor may have relating to this Contract.

**43. REPORT STANDARDS**

The Contractor must submit all written reports required by this Contract for advance review in a format approved by the Project Officer. Reports must be accurate and grammatically correct and should not contain spelling errors. The Contractor will bear the cost of correcting grammatical or spelling errors and inaccurate report data and of other revisions that are required to bring the report(s) into compliance with this section.

Whenever possible, proposals must avoid unnecessary attachments or documents or superfluous use of paper (e.g. separate title sheets or chapter dividers)

**44. AUDIT**

The Contractor must retain all books, records and other documents related to this Contract for at least five years, or such period of time required by the County's funding partner(s), if any, whichever is greater, after the final payment and must allow the County or its authorized agents to examine the documents during this period and during the Contract Term. The Contractor must provide any requested documents to the County for examination within 15 days of the request, at the Contractor's expense. Should the County's examination reveal any overcharging by the Contractor, the Contractor must, within 30 days of County's request, reimburse the County for the overcharges and for the reasonable costs of the County's examination, including, but not limited to, the services of external audit firm and attorney's fees; or the County may deduct the overcharges and examination costs from any amount that the County owes to the Contractor. If the Contractor wishes to destroy or dispose of any records related to this Contract (including confidential records to which the County does not have ready access) within five years after the final payment, or such period of time required by the County's funding partner(s), if any, whichever is greater, the Contractor must give the County at least 30 days' notice and must not dispose of the documents if the County objects.

The Purchasing Agent may require the Contractor to demonstrate that it has the necessary facilities, ability, and financial resources to comply with the Contract and furnish the service, material or goods specified herein in a satisfactory manner at any time during the term of this Contract.

**45. ASSIGNMENT**

The Contractor may not assign, transfer, convey or otherwise dispose of any award or any of its rights, obligations or interests under this Contract without the prior written consent of the County.

**46. AMENDMENTS**

This Contract may not be modified except by written amendment executed by persons duly authorized to bind the Contractor and the County.

**47. ARLINGTON COUNTY PURCHASING RESOLUTION AND COUNTY POLICIES**

Nothing in this Contract waives any provision of the Arlington County Purchasing Resolution, which is incorporated herein by reference, or any applicable County policy.

**48. DISPUTE RESOLUTION**

All disputes arising under this Agreement or concerning its interpretation, whether involving law or fact and including but not limited to claims for additional work, compensation or time, and all claims for alleged breach of contract must be submitted in writing to the Project Officer as soon as the basis for the claim arises. In accordance with the Arlington County Purchasing Resolution, claims denied by the Project Officer may be submitted to the County Manager in writing no later than 60 days after the final payment. The time limit for a final written decision by the County Manager is 30 days. Procedures concerning contractual claims, disputes, administrative appeals and protests are contained in the Arlington County Purchasing Resolution. The Contractor must continue to work as scheduled pending a decision of the Project Officer, County Manager, County Board or a court of law

**49. APPLICABLE LAW, FORUM, VENUE AND JURISDICTION**

This Contract is governed in all respects by the laws of the Commonwealth of Virginia; and the jurisdiction, forum and venue for any litigation concerning the Contract or the Work is in the Circuit Court for Arlington County, Virginia, and in no other court.

**50. ARBITRATION**

No claim arising under or related to this Contract may be subject to arbitration.

**51. NONEXCLUSIVITY OF REMEDIES**

All remedies available to the County under this Contract are cumulative, and no remedy will be exclusive of any other at law or in equity.

**52. NO WAIVER**

The failure to exercise a right provided for in this Contract will not be a subsequent waiver of the same right or of any other right.

**53. SEVERABILITY**

The sections, paragraphs, clauses, sentences, and phrases of this Contract are severable; and if any section, paragraph, clause, sentence or phrase of this Contract is declared invalid by a court of competent jurisdiction, the rest of the Contract will remain in effect.

**54. NO WAIVER OF SOVEREIGN IMMUNITY**

Notwithstanding any other provision of this Contract, nothing in this Contract or any action taken by the County pursuant to this Contract shall constitute or be construed as a waiver of either the sovereign or governmental immunity of the County. The parties intend for this provision to be read as broadly as possible.

**55. ATTORNEY'S FEES**

In the event that the County prevails in any legal action or proceeding brought by the County to enforce any provision of this Contract, the Contractor will pay the County's reasonable attorney's fees and expenses.

**56. SURVIVAL OF TERMS**

In addition to any statement that a specific term or paragraph survives the expiration or termination of this Contract, the following sections also survive: INDEMNIFICATION; INTELLECTUAL PROPERTY INDEMNIFICATION; RELATION TO COUNTY; OWNERSHIP AND RETURN OF RECORDS; AUDIT; COPYRIGHT;

WARRANTY; DISPUTE RESOLUTION; APPLICABLE LAW AND JURISDICTION; ATTORNEY'S FEES, AND CONFIDENTIAL INFORMATION.

**57. HEADINGS**

The section headings in this Contract are inserted only for convenience and do not affect the substance of the Contract or limit the sections' scope.

**58. AMBIGUITIES**

The parties and their counsel have participated fully in the drafting of this Agreement; and any rule that ambiguities are to be resolved against the drafting party does not apply. The language in this Agreement is to be interpreted as to its plain meaning and not strictly for or against any party.

**59. NOTICES**

Unless otherwise provided in writing, all legal notices and other communications required by this Contract are deemed to have been given when either (a) delivered in person; (b) delivered by an agent, such as a delivery service; or (c) deposited in the United States mail, postage prepaid, certified or registered and addressed as follows:

**TO THE CONTRACTOR:**

Robert C. Joyner, Business Unit Executive  
Wavetronix LLC  
1827 West 650 North  
Springville, Utah 84663  
Phone: (801) 734-7200  
Email: [MidAtlantic@Wavetronix.com](mailto:MidAtlantic@Wavetronix.com)

**TO THE COUNTY:**

Sungjin Je, Project Officer  
Arlington County, Virginia  
2100 Clarendon Boulevard, Suite 900  
Arlington, Virginia 22201  
Phone: (703) 228-3439  
Email: [sje@arlingtonva.us](mailto:sje@arlingtonva.us)

**AND**

Dr. Sharon T. Lewis, LL.M, MPS, VCO, CPPB  
Purchasing Agent  
Arlington County, Virginia  
2100 Clarendon Boulevard, Suite 500  
Arlington, Virginia 22201  
Phone: (703) 228-3294  
Email: [slewis1@arlingtonva.us](mailto:slewis1@arlingtonva.us)

**TO COUNTY MANAGER'S OFFICE (FOR PROJECT CLAIMS):**

Mark Schwartz, County Manager  
Arlington County, Virginia  
2100 Clarendon Boulevard, Suite 318

Arlington, Virginia 22201

**60. ARLINGTON COUNTY BUSINESS LICENSES**

The Contractor must comply with the provisions of Chapter 11 ("Licenses") of the Arlington County Code, if applicable. For information on the provisions of that Chapter and its applicability to this Contract, the Contractor must contact the Arlington County Business License Division, Office of the Commissioner of the Revenue, 2100 Clarendon Blvd., Suite 200, Arlington, Virginia, 22201, telephone number (703) 228-3060, or e-mail [business@arlingtonva.us](mailto:business@arlingtonva.us).

**61. NON-DISCRIMINATION NOTICE**

Arlington County does not discriminate against faith-based organizations.

**62. INSURANCE REQUIREMENTS**

Before beginning work under the Contract or any extension, the Contractor must provide to the County Purchasing Agent a Certificate of Insurance indicating that the Contractor has in force at a minimum the coverage below. The Contractor must maintain this coverage until the completion of the Contract or as otherwise stated in the Contract Documents. All required insurance coverage must be acquired from insurers that are authorized to do business in the Commonwealth of Virginia, with a rating of "A-" or better and a financial size of "Class VII" or better in the latest edition of the A.M. Best Co. Guides.

- a. Workers Compensation - Virginia statutory workers compensation (W/C) coverage, including Virginia benefits and employer's liability with limits of \$500,000/500,000/500,000. The County will not accept W/C coverage issued by the Injured Worker's Insurance Fund, Towson, MD.
- b. Commercial General Liability - \$1,000,000 per occurrence, with \$1,000,000 annual aggregate covering all premises and operations and including personal injury, completed operations, contractual liability, independent contractors, and products liability. The general aggregate limit must apply to this Contract. Evidence of contractual liability coverage must be typed on the certificate.
- c. Business Automobile Liability - \$1,000,000 combined single-limit (owned, non-owned and hired).
- d. Professional Errors & Omissions Liability - \$1,000,000 per occurrence/claim.
- e. Inland Marine-Bailee Liability - \$100,000 or the amount shipped by the Contractor and in Contractor's possession, whichever is greater.
- f. Additional Insured – The County and its officers, elected and appointed officials, employees and agents must be listed as additional insureds on all policies except workers compensation and automotive and professional liability; and the additional insured endorsement must be typed on the certificate.
- g. Cancellation - If there is a material change or reduction in or cancellation of any of the above coverages during the Contract Term, the Contractor must notify the Purchasing Agent immediately and must, with no lapse in coverage, obtain replacement coverage that is consistent with the terms of this Contract. Not having the required insurance throughout the Contract Term is grounds for termination of the Contract.



- h. Claims-Made Coverage - Any "claims made" policy must remain in force, or the Contractor must obtain an extended reporting endorsement, until the applicable statute of limitations for any claims has expired.
- i. Contract Identification - All insurance certificates must state this Contract's number and title.

The Contractor must disclose to the County the amount of any deductible or self-insurance component of any of the required policies. With the County's approval, the Contractor may satisfy its obligations under this section by self-insurance for all or any part of the insurance required, provided that the Contractor can demonstrate sufficient financial capacity. In order to do so, the Contractor must provide the County with its most recent actuarial report and a copy of its self-insurance resolution.

The County may request additional information to determine if the Contractor has the financial capacity to meet its obligations under a deductible and may require a lower deductible; that funds equal to the deductible be placed in escrow; a certificate of self-insurance; collateral; or another mechanism to guarantee the amount of the deductible and ensure protection for the County.

The County's acceptance or approval of any insurance will not relieve the Contractor from any liability or obligation imposed by the Contract Documents.

The Contractor is responsible for the Work and for all materials, tools, equipment, appliances and property used in connection with the Work. The Contractor assumes all risks for direct and indirect damage or injury to the property used or persons employed in connection with the Work and for of all damage or injury to any person or property, wherever located, resulting from any action, omission, commission or operation under the Contract or in connection in any way whatsoever with the Work. The Contractor's insurance shall be the primary non-contributory insurance for any work performed under this Contract.

The Contractor is as fully responsible to the County for the acts and omissions of its subcontractors and of persons employed by them as it is for acts and omissions of persons whom the Contractor employs directly.

**63. MATERIAL CHANGES**

The Contractor shall notify Purchasing Agent within seven days of any material changes in its operation that relate to any matter attested regarding certifications on its bid form.

**64. COUNTERPARTS**

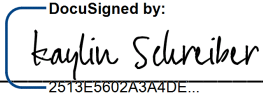
This Agreement may be executed in one or more counterparts and all of such counterparts shall together constitute one and the same instrument. Original signatures transmitted and received via facsimile or other electronic transmission (e.g., PDF or similar format) are true and valid signatures for all purposes hereunder and shall be effective as delivery of a manually executed original counterpart.

WITNESS these signatures:

THE COUNTY BOARD OF ARLINGTON

WAVETRONIX LLC

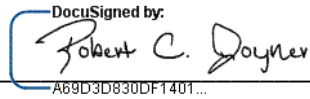
COUNTY, VIRGINIA

AUTHORIZED  
SIGNATURE:   
2513E5602A3A4DE...

NAME: Kaylin Schreiber

TITLE: Procurement Officer

DATE: 6/23/2022

AUTHORIZED  
SIGNATURE:   
A69D3D830DF1401...

NAME: Robert C. Joyner

TITLE: Unit Executive

DATE: 6/23/2022

## **EXHIBIT A**

### **SCOPE OF SERVICES**

#### **1) General**

- a. Contractor shall provide the equipment needed for various sensing and detection needs for the County's traffic signal and Intelligent Transportation Systems operations. The Contractor shall provide all labor, tools, goods, materials, equipment, supplies, incidentals and technical support to furnish and deliver traffic related equipment and materials as listed in the Attachment B - Price Schedule. All products shall comply with the following requirements:
  - a. Arlington County Traffic Signal Specifications (ACTSS)  
<https://transportation.arlingtonva.us/traffic-signal-specification-updates/>
  - b. VDOT Road and Bridge Specifications (latest editions)  
<http://www.virginiadot.org/business/const/spec-default.asp>
  - c. Manual on Uniform Traffic Control Devices (MUTCD) <https://mutcd.fhwa.dot.gov/>
  - d. National Electrical Manufacturers Association (NEMA)  
<http://www.nema.org/Standards/pages/default.aspx>
  - e. Institute of Transportation Engineers (ITE), Traffic Control Devices Handbook, Latest Edition <http://www.ite.org/>

#### **2) SHIPMENT AND DELIVERY**

- i. The Contractor's price shall include all FOB charges for delivery and unloading of the equipment and materials. Shipments shall be delivered to the County's Transportation Engineering and Operations Bureau Trades Center located at:

Transportation Engineering and Operations  
Traffic Signal Section  
4300 29th Street South  
Arlington, VA 22206
- ii. Upon receiving the signed Call Order Form (Attachment C), the Contractor shall assign a unique shipment number (range to be decided by the County) and shall place labels on every package or parcel in the shipment for easy identification.
  - a. These labels containing shipment numbers shall be standalone labels not to be combined with or obscured by any other labels that may be placed on the package.
- iii. Detailed instructions regarding shipment numbers and label sizes will be provided at the time of Contract Award.
- iv. Upon shipment of orders and/or at least three (3) business days in advance of the expected delivery, Contractor shall provide the County with an email notification that includes:
  - a. Copy of the packing slip (to include order number and Purchase Order (PO) number)
  - b. Shipment number

- c. Tracking number (assigned by the Carrier)
  - d. Expected date of Delivery
- v. Arlington County reserves the right to refuse an entire shipment if the advance notice is not received.

### **3) LEAD TIMES**

- i. The County will provide a Call Order Form (Attachment C) with each order. The Call Order Form will serve as Notice to Proceed (NTP) for each order and will accompany the official PO. The Contractor must receive a Call Order Form and an official PO in order to release the order for production. The Contractor shall acknowledge receipt of the order by signing the Call Order Form and returning to the County via email.
- ii. Equipment lead time shall be no more than thirty (30) calendar days from the placement of the order. If there are circumstances which preclude the delivery within thirty (30) calendar days, the Contractor shall notify the Project Officer in advance and request approval for the waiver of the lead time on a particular order in writing.
- iii. Upon shipment of the materials, written shipping notification shall be provided to the Project Officer. Said shipment notification shall serve as the completion date for the lead time.

### **4) INVOICING**

- i. All invoices shall be provided on the Contractor's letterhead and shall contain the following information:
  - a. PO Number
  - b. Invoice Number
  - c. Order Number
  - d. Date
  - e. Item Descriptions matching the Contract line items
  - f. Item Quantity and Prices
- ii. Invoices must be signed by an authorized signee.
- iii. Partial shipments may be invoiced, providing that the Contractor has prior written approval from the County's Project Officer. Otherwise, the Contractor shall not invoice the County until the order is received in full.
- iv. If an invoice is submitted prior to the County receiving the goods, the County may reject the invoice and require resubmittal upon receipt of the goods.

### **5) REPAIRS**

- i. For equipment under warranty, the Contractor shall be responsible for administering a Return Merchandise Authorization (RMA) process for any warranted equipment included in this Contract. The RMA process shall be timely and streamlined.

- a. Upon notification from the County, the Contractor shall provide RMA within 5 business days.
  - b. For items under warranty, the Contractor shall be responsible for the cost and mechanism of shipping items.
  - c. RMA actions shall be documented including equipment serial numbers, dates, and repairs completed.
- ii. For equipment not under warranty, the County may ship damaged equipment to the Contractor for the Contractor to provide an estimate of repair costs.
  - a. The estimate shall include the components to be replaced, the estimated cost of the repair, and the estimated repair time. The estimated cost shall include any shipping costs.
  - b. The County shall then evaluate the estimate for reasonableness. If the County elects to proceed with the repairs, the County will provide a PO for the work to the Contractor.
  - c. If the County does not elect to proceed with repairs, the Contractor shall dispose of the equipment at no cost to the County.
  - d. Repair actions shall be documented including equipment serial numbers, dates, and repairs completed.

## **6) TECHNICAL SUPPORT**

- i. Technical Support for each of the sections included in Attachment B shall include activities such as field troubleshooting, technical remote support, training, or configuration of difficult installations and shall be paid on an hourly basis.
- ii. No additional allowances for travel or accommodations will be provided by the County.

## **Attachment A**

### **SPECIFICATIONS**

#### **1) GENERAL**

- a) All materials and equipment shall conform to the requirements listed in the Arlington County Traffic Signal Specifications (ACTSS) where applicable.
- b) The supplemental information included in Attachment A is meant as specific information required in the case that the information is not contained in the ACTSS. The Supplemental Specifications in Attachment A shall be considered the highest precedence and shall govern where conflicts exist with any other specifications.
- c) Where there are conflicts between ACTSS and VDOT specifications, County specifications shall prevail. Items not described herein or in the ACTSS will default back to Virginia Department of Transportation (VDOT) Road and Bridge Standards and Specifications, latest edition (website provided in Section II.1.b).

#### **2) MANAGEMENT AND COMMUNICATION OF DEVICES**

- a) All detectors shall be network enabled via an ethernet communication port. The configuration and status of the device shall be accessible both remotely via the network connection and locally at the device.
- b) All detectors shall have configuration tools available to make setting up and calibration less cumbersome.
- c) Detectors shall not lose their configuration and setup upon power loss.
- d) Any software licenses that may be needed for communication with the County's Traffic Operation Center (TOC) central system software and for field communications shall be provided. The detection system software shall offer an open API and software development kit available to the Department at no cost for integration with third party software and systems.
- e) During the warranty period of the device, all firmware upgrades shall be provided at no additional cost to the County. Additionally, any software updates for management of the devices shall be provided at no additional cost to the County.
- f) All detection systems shall be compatible with the County's central TOC and management software.
- g) Detectors which provide video outputs such as infrared or color cameras, shall provide streaming video in a format that is compatible with the County's video management system. The vendor shall work to develop drivers if needed with the County's video management software provider at no additional cost to the County.

- h) Detection systems shall utilize separate ports for dedicated TOC and field operations to allow for field modifications without losing connection to the TOC.

### 3) BASIC FUNCTIONALITY OF DETECTORS

- a) All detectors shall be weatherproof UV with a temperature range of -20 to 180 degrees Fahrenheit and shall comply with NEMA TS2 specifications (<https://www.nema.org/standards/view/traffic-controller-assemblies-with-ntcip-requirements-version-03-07>) for shock and vibration. The manufacturer shall provide documentation to certify that the product has completed this NEMA testing.
- b) All equipment intended to be mounted in a control box or traffic signal cabinet shall be capable of being rack, panel, or din rail mounted.
- c) Shall detect vehicles in real time as they cross each detection zone and provide detection input for traffic signal controllers.
- d) Shall provide up to 24 detection zones per device.
- e) Detection zones shall be programmable remotely through management software or by a laptop in the field running the County's current version of Windows.
- f) Device settings shall not be lost during power outages.
- g) Detection zones shall be displayed for each device for user programming and provide flexible detection zone placement within the device's area of capture. For devices without a visual display, programming tools shall represent the field of view along with live detection zones and status on screen. When a vehicle is detected, the display of the status shall visually indicate the detection call in real time as well as the removal or drop of a call.
- h) Detection equipment shall detect vehicle presence in day, night, and adverse weather conditions and not be affected by shadows from fixed or moving objects within the detection zone.
- i) Devices shall have the option to set detection zones as directional to reduce false calls from objects traveling in directions other than the desired direction of travel for that detection area. All detectors shall have an omni-directional (no specific direction) option as well.
- j) The device processor shall provide traffic data collection to include count, speed, occupancy, and classification. Traffic data shall be exportable, as well as accessible via management software in the TOC.
- k) The device processor shall output a constant call for each detector output channel if a loss of detection capabilities occurs.
- l) All detectors provided in the sections below shall have integrated Synchronous Data Link Control (SDLC) capability and shall not require additional equipment in the cabinet unless specified in the following sections.

#### 4) SECTION 1 - RADAR DETECTION

##### a) GENERAL

- i) This section includes items pertaining to detection using radar technology. This section contains a variety of situational detectors used for different purposes. All detectors listed in this section shall utilize radar detection technology only.
- ii) The Side-Fire system is intended for continuous traffic data collection for mid-block or link applications. The Side-Fire detector shall utilize dual sensors within a single detector to collect speed, volume, and classification data.
- iii) The Corner-Fire Radar Detection System is intended for stop bar vehicle detection and continuous data collection. This detector will typically be mounted on a signal pole at an intersection and used for typical signal detection purposes along with data collection.

##### b) FUNCTIONAL REQUIREMENTS

- i) Side-Fire Dual Radar
  - (1) The detector shall be able to collect direct measurement of speed, classification, and volume, including in slow or congested traffic conditions.
    - (a) Classification data shall follow AASHTO vehicle classification bins ([https://www.fhwa.dot.gov/policyinformation/tmguidetmg\\_2013/vehicle-types.cfm](https://www.fhwa.dot.gov/policyinformation/tmguidetmg_2013/vehicle-types.cfm)) for up to 8 classes.
  - (2) The detector shall be capable of collecting data from a roadway cross section of up to 250 feet wide simultaneously.
  - (3) Each detector shall have multiple radar systems to filter out erroneous detection and accurately measure speed.
  - (4) The data collected by the detector shall be capable of being pushed to third party management software and managed via web solution.
  - (5) The detector system must be modular.
    - (a) Power and communication devices shall be DIN rail mounted in a cabinet accessible without the use of a ladder, stool, or bucket truck.
    - (b) Power and communication devices shall not be in the radar device itself
- ii) Corner-Fire Radar
  - (1) The detector shall be able to detect vehicles at the real-time presence data in 10 lanes as well as count volume.
  - (2) The detector shall support a minimum of 16 zones.
  - (3) The detector shall support a minimum of 16 channels.
  - (4) The communication device shall have integrated SDLC capability and be able to connect through a backend connection using an RJ45 port (standard ethernet connection).
  - (5) Provide compatibility with the Arlington County traffic Intelight controllers
  - (6) The detection system shall have fail-safe mode for contact closure output if communication fails.

##### c) MEASUREMENT

##### i) SIDE-FIRE DETECTOR ASSEMBLY



- (1) Side-fire detector assemblies shall include the 360 rotating backplate, mounting brackets/hardware required for installation, as well as 20 feet of cable and all required connectors for each detector (the number of detectors shall be specified in the assembly line item). The assembly shall also include the communication module, a surge protector, cable junction box, and power adapter.
- ii) CORNER-FIRE DETECTOR ASSEMBLY
  - (1) Corner-fire assemblies shall include the 60 rotating backplates, mounting brackets/hardware required for installation, as well as 20 feet of cable and all required connectors for each detector (the number of detectors shall be specified in the line item). The assembly shall also include the communication module, a surge protector, cable junction box, and power adapter.
- iii) DETECTOR
  - (1) Both Side-Fire and Corner-Fire Detector shall include the 360-degree rotating mounting, brackets/hardware required for installation, as well as 200 feet of detector cable and all required connectors.
- iv) 360-ROTATING DETECTOR BACKPLATE
  - (1) 360 Rotating back plate hardware shall be measured and shall include all screws, bolts, nuts, washers, brackets and any other hardware required to mount a detector.
- v) MOUNTING KIT
  - (1) Mounting hardware shall be measured and shall include a mounting arm, and any other hardware required to mount a detector in a typical position on a mast arm or mast arm pole.
  - (2) The extended mounting kit shall be equal or longer than 36 inches to create a buffer from surroundings.
- vi) PIGTAILS
  - (1) Pigtails shall include 20 feet of cable pre-terminated with connectors for use in device replacement. All connections shall be tested for good working conditions prior to supply to the County.
- vii) DETECTOR CABLE
  - (1) Both Side-Fire detector and Corner-Fire detector cables shall be measured on a linear foot basis and shall be delivered on spools with a maximum length of 1000 feet unless requested by the Project Officer.
- viii) SURGE PROTECTOR
  - (1) Each surge protector shall be measured.
- ix) CABLE JUNCTION BOX
  - (1) The cable junction box shall be measured and shall include all hardware required for mounting.
- x) COMMUNICATION MODULE

- (1) Side-Fire Radar communication module shall be measured and shall include all hardware required for mounting. Communication protocol should be RJ45 with two data ports in simultaneous connection. If the protocol of the detector is RS232 or RS485, the communication module should be able to convert the protocol from RS232 or RS485 to RJ45 communication. Modules shall be DIN-rail mounted or rail mounted.
  - (2) Corner-Fire Radar communication module shall be measured for 4 or maximum 6 Corner-Fire Radars. Modules shall be DIN-rail mounted or rail mounted.
- xi) POWER ADAPTER
- (1) Each power adapter shall be measured.

Arlington County Government  
ATTACHMENT B - BID PRICING

NAME OF OFFEROR OR CONTRACTOR		SOLICITATION OR CONTRACT NUMBER		PAGE	
Wavetronix LLC		23-DES-ITB-3		1	
SCOPE OF WORK					
The Contractor shall supply traffic equipment, materials, and technical support listed in the sections below to the County.					
ITEM NO.	SUPPLIES/SERVICES	EST QTY	UNIT	UNIT PRICE	AMOUNT
SECTION 1 - Radar Detection					
Side-Fire Radar Detection Systems					
1.1	1 AC Radar Assembly	6	EA	\$ 12,390.00	\$74,340.00
1.2	2 AC Radar Assembly	10	EA	\$ 24,140.00	\$241,400.00
1.3	1 Solar Assembly	6	EA	\$ 11,825.00	\$70,950.00
Corner-Fire Radar Detection System					
1.4	1 Radar Assembly	1	EA	\$ 13,210.00	\$13,210.00
1.5	2 Radar Assembly	1	EA	\$ 20,310.00	\$20,310.00
1.6	3 Radar Assembly	1	EA	\$ 27,410.00	\$27,410.00
1.7	4 Radar Assembly	5	EA	\$ 34,510.00	\$172,550.00
Components and Replacement Parts					
1.8	Side-fire detector	5	EA	\$ 7,445.00	\$37,225.00
1.9	Corner-fire detector	5	EA	\$ 5,770.00	\$28,850.00
1.1	360 rotating detector backplate	5	EA	\$ 100.00	\$500.00
1.11	Mounting kit	5	EA	\$ 270.00	\$1,350.00
1.12	Extended Mounting kit	20	EA	\$ 430.00	\$8,600.00
1.13	Side-fire pigtail (20 ft with connector)	5	EA	\$ 215.00	\$1,075.00
1.14	Corner-fire pigtail (20 ft with connector)	5	EA	\$ 210.00	\$1,050.00
1.15	Side-fire cable	10000	LF	\$ 3.25	\$32,500.00
1.16	Corner-fire radar cable	25000	LF	\$ 3.05	\$76,250.00
1.17	Surge protector	5	EA	\$ 385.00	\$1,925.00
1.18	Cable junction box	5	EA	\$ 240.00	\$1,200.00
1.19	Side-fire radar communication module	5	EA	\$ 740.00	\$3,700.00
1.20	Corner-fire radar communication module	5	EA	\$ 5,770.00	\$28,850.00
1.21	Power adapter	5	EA	\$ 270.00	\$1,350.00
1.22	Tehnnical Support	200	HR	\$ 250.00	\$50,000.00
GRAND TOTAL FOR SECTION 1					\$894,595.00

ARLINGTON COUNTY GOVERNMENT			
TRAFFIC ENGINEERING & OPERATIONS			
EQUIPMENT & TECHNICAL SUPPORT SERVICES CALL ORDER			
Contract #:		Notice to Proceed	
Contractor:		Date:	
Project:		County POC:	
Contractor Address:		Office Phone #	
		Cell Phone #	
		E-mail:	
LINE ITEM	DESCRIPTION	QUANTITY	AMOUNT
			\$0.00
			\$0.00
			\$0.00
			\$0.00
			\$0.00
			\$0.00
			\$0.00
			\$0.00
			\$0.00
			\$0.00
			\$0.00
			\$0.00
			\$0.00
			\$0.00
TOTAL ESTIMATED COST			\$0.00
APPROVAL			
Call Order #		1	
AUTHORIZATION BY:			
PURCHASE ORDER #:			
CONTRACTOR ACKNOWLEDGEMENT		DATE	
REMARKS:			
1 THIS CALL ORDER SERVES AS NOTICE TO PROCEED FOR THE WORK CONTAINED IN THE REFERENCED COUNTY PURCHASE ORDER.			
2 THE CONTRACTOR SHALL REVIEW AND CONFIRM THAT THE ORDER HAS BEEN PLACED BY SIGNING THE CALL ORDER.			
3 THE CONTRACTOR SHALL ADHERE TO DELIVERY GUIDELINES SPECIFIED IN THE CONTRACT REGARDING LEAD TIMES.			
4 THE APPROVAL OF INVOICES FOR THE WORK CONTAINED HEREIN WILL SERVE AS ACCEPTANCE.			