



RANDOLPH COUNTY PURCHASING OFFICE

725 McDowell Road
Asheboro, North Carolina 27205
Tel: (336) 318-6304
Fax: (336) 636-7568

REQUEST FOR PROPOSAL

Bid# 16-0613

FOR

POINT TO POINT WIRELESS BACKHAUL FOR NETWORK REDUNDANCY

At

Emergency Services Headquarters Building
New Century Dr.
Asheboro, NC 27203

Issued on: Monday, June 13, 2016

Deadline: June 30, 2016, 11:00 AM EST

NOTICE TO VENDORS

Pursuant to General Statutes of North Carolina Section 143-129.8 as amended, proposals will be received by the Randolph County Purchasing Officer for the following:

POINT TO POINT WIRELESS BACKHAUL FOR NETWORK REDUNDANCY

Randolph County is requesting from qualified System Design and Installation Contractors to provide a proposal for installing and configuring an Ethernet handoff from New Century Dr. Asheboro to 1512 N Fayetteville St, Asheboro, NC 27203. The proposal submitted in response to this RFP will include various combinations of equipment, associated design, installation, materials, labor and training required for a complete turn-key system.

All proposers must return a completed proposal by **Thursday, June 30, 2016, 11:00 AM EST**

All inquiries for information concerning Proposals, Bid Submission Requirements or Procurement Procedures shall be directed to (in writing):

Randolph County Purchasing Office
ATTN: Lisa Garner, Purchasing Officer
725 McDowell Rd
Asheboro, NC 27205
lisa.garner@randolphcountync.gov

Phone: (336) 318-6304
Fax: (336) 636-7568

Proposals may be emailed, faxed, mailed or hand delivered to the department shown above, marked as "POINT TO POINT WIRELESS BACKHAUL FOR NETWORK REDUNDANCY Bid # 16-0613". It is the sole responsibility of the Bidder to ensure that their bid reaches the Purchasing Office by the designated date and hour indicated above.

Once a vendor has been selected, award of the bid is contingent upon the parties being able to negotiate a contract for the service.

Randolph County reserves the right to award in whole, or in part, and to accept or reject any or all proposals, to waive any technicalities or irregularities and to award to the vendor that has the best overall proposal as determined by Randolph County.

Issuing Office and Inquiries

This Request for Proposal (RFP) is issued by the Randolph County Purchasing Office on behalf of Randolph County. Any inquiries, clarifications, or interpretations regarding this RFP should be directed in writing to:

Lisa Garner
Purchasing Officer
Randolph County Government
725 McDowell Road
Asheboro, NC 27205
(336) 318-6304
lisa.garner@randolphcountync.gov

Responses to inquiries that affect the content of this RFP will be provided in writing to all recipients of the RFP through an addendum that will be posted on the County website, <http://www.co.randolph.nc.us/purchasing/bid.htm>. It is the responsibility of each vendor to inquire about any aspect of the RFP that is not fully understood or is believed to be susceptible to more than one interpretation. All times listed are understood to be Eastern Standard Time. The County's interpretation of the RFP shall be controlling in all cases.

Important Dates

Issue Date:	Monday, June 13, 2016
Final Date for Written Questions:	Wednesday, June 22, 2016 by 4:00 PM
Final Date for Addenda Posting:	Friday, June 24, 2016 by 5:00 PM
Deadline for Submitting Proposals:	Thursday, June 30, 2016 at 11:00 AM

Scope of Project

Randolph County is seeking proposals to create a wireless backhaul link between New Century Dr. and 1512 N Fayetteville St, Asheboro, NC 27203 for the purposes of network redundancy. The backhaul will involve:

Hardware

- Affixing a Radio to a new 150 ft. privately owned tower on New Century Dr. in Asheboro, NC 27205
- Affixing two Radios to Dave's Mountain Fire Tower at 35.726283° / -79.829205° for the purpose of a relay point
- Affixing a Radio to the roof (non-penetrating) at 1512 N Fayetteville St, Asheboro, NC 27203
- Configuring and performance testing all equipment
- Properly ground all equipment as specified by the manufacture
- Be able to provide ongoing maintenance on the system
- Provide a mechanism for monitoring the hardware status and wireless links through normal off the shelf network monitoring tools that utilize Simple Network Management Protocol (SNMP) or other similar interface, proprietary monitoring applications may not be considered

Wireless

- All RF signals should not conflict with any other RF signals and be spaced appropriately as both towers are occupied with several other radio systems including some microwave, 800 MHz, and VHF.
- Be in licensed space to avoid conflict and ensure stability
- The system should be stable, secure, and expected to be operational 24/7 with 99.999 uptime, excluding uncontrollable power outages.

Ethernet/Network

- Provide Ethernet hand off of at least 1 GBit/s and Full Duplex for use with any network switch, this may be copper or fiber but please specify cabling and optics required
- Entire system should meet or exceed **1 GBit/s throughput and provide Full Duplex** communications
- Pass 802.11Q for trunking multiple VLANs across the link
- Honor DiffServ CodePoint (DSCP) Quality of Service (QoS) or specify how QoS is performed on the equipment specified.

The successful proposer solution will provide system concept, core hardware components, necessary software, installation, implementation, path study, service contract, training and warranty on items provided.

The vendor is responsible for any specific wiring needed.

At a minimum, equipment and wiring to be provided by the vendor:

Install Radio equipment at New Century Dr.

- Antenna on tower must not exceed:

Diameter	0.6 m 2 ft
Axial Force (FA)	1290 N 290 lbf
Side Force (FS)	639 N 144 lbf

Twisting Moment (MT)	395 N•m
Weight with 1/2 in (12 mm) Radial Ice	21 kg 46 lb
Zcg with 1/2 in (12 mm) Radial Ice	106 mm 4 in
Zcg without Ice	74 mm 3 in
Cable Diameter	½ in. diameter

- Bandwidth must meet or exceed a total of 1 GBit/s Full Duplex to the destination location of 1512 N Fayetteville St, Asheboro, NC 27203
- Due to topology, will need to relay off Dave’s Mountain Fire Tower at 35.726283° / -79.829205°
- Ethernet hand off to customer (Randolph County)
- All installation will be responsibility of the vendor

Install Radio equipment at Dave’s Mountain Fire Tower

- Each antenna on tower must not exceed:

Diameter	0.6 m 2 ft
Axial Force (FA)	1290 N 290 lbf
Side Force (FS)	639 N 144 lbf
Twisting Moment (MT)	395 N•m
Weight with 1/2 in (12 mm) Radial Ice	21 kg 46 lb
Zcg with 1/2 in (12 mm) Radial Ice	106 mm 4 in
Zcg without Ice	74 mm 3 in
Cable Diameter	½ in. diameter

- Bandwidth must meet or exceed a total of 1 GBit/s Full Duplex through the site
- Due to topology, this will be a relay site only.
- All installation will be responsibility of the vendor

Install Radio equipment at 1512 N Fayetteville St

- Antenna on tower must not exceed:

Diameter	0.6 m 2 ft
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Axial Force (FA)	1290 N 290 lbf
Side Force (FS)	639 N 144 lbf
Twisting Moment (MT)	395 N•m
Weight with 1/2 in (12 mm) Radial Ice	21 kg 46 lb
Zcg with 1/2 in (12 mm) Radial Ice	106 mm 4 in
Zcg without Ice	74 mm 3 in
Cable Diameter	½ in. diameter

- Bandwidth must meet or exceed a total of 1 GBit/s Full Duplex to the destination location of 1512 N Fayetteville St, Asheboro, NC 27203
- Must provide non-penetrating roof mount OR comparable mast that does not compromise or impact the integrity of the roof system capable of meeting the antenna specs
- Due to topology, will need to be relayed from Dave's Mountain Fire Tower at 35.726283° / -79.829205°
- Ethernet hand off to customer (Randolph County)
- All installation will be responsibility of the vendor

1st Year Contract

- Itemized one year maintenance contract for parts installed and labor
- Specify if parts & labor are covered
- Specify standard service level agreement

2nd Year Contract

- Itemized maintenance contract
- Specify if parts & labor are covered
- Specify standard service level agreement

Site Information:

- **New Century Dr. Asheboro, NC (Emergency Services Headquarters Building)**
 - New tower currently under construction. Details attached as Appendix A.
 - Building is currently under construction.
 - Approximate location will be 35.668762° / -79.832060°
 - Tower height projected to be 152 ft.
 - Anticipated antenna placement at 102 ft.
 - Conduit will be provided into MDF
- **Dave's Mountain Fire Tower**
 - Existing structure. Details attached as Appendix B.
 - Approximate location is 35.726283° / -79.829205°
 - Tower height approximately 99 ft.

- Antenna height should be as low as possible
- Conduit into equipment building available
- **1512 N Fayetteville St. Asheboro, NC (Department of Social Services)**
 - Existing structure. 1 ½ story building. Details attached as Appendix C.
 - Approximate height is 26 ft.
 - Approximate location is 35.736375° / -79.806728°
 - Flat roof
 - Cable path already designated

General Information:

1. Invoice(s) shall be billed to the following:

Lisa Garner
725 McDowell Road
Asheboro, NC 27205

2. If the project is approved and funded it is the intent of Randolph County to award the contract to the vendor that submits the best overall proposal as determined by the County. The County reserves the right to determine the best overall proposal based on the following factors listed below, said factors listed in no particular order. (a) adherence to all conditions and requirements of the bid specifications; (b) price; (c) qualifications of the proposer, including past performance, financial responsibility, general reputation, experience, service capabilities, and facilities; (d) delivery or completion date; (e) product appearance, workmanship, finish, overall quality, and results of product testing; (f) maintenance costs and warranty provisions; and (g) repurchase or residual value (h) Service response time (i) attendance in pre-bid walk through.
3. The contract shall be deemed binding only to the extent of appropriated funds for the purpose set forth in this contract.
4. Addenda to these conditions and/or specifications shall be made in writing. Information provided verbally outside the bid specifications shall not be binding. It is the responsibility of the Vendor to periodically check the County's website at <http://www.co.randolph.nc.us/purchasing/bid.htm> before submitting a bid to obtain any addenda that have been issued. Each proposer is responsible for determining that all addenda issued by the Randolph County Purchasing Office have been received before submitting a proposal.
5. Proposers shall attach to the BID FORM certificates issued by its insurance carrier evidencing insurance coverage. The proposer shall maintain such insurance coverage throughout the contract.
6. At least three recent references, preferably in North Carolina are required and shall be indicated on the BID FORM. Randolph County may request additional evidence of the proposer's experience, qualifications, ability, products, and financial standing and the proposer shall be prepared to provide such evidence.
7. Randolph County intends to contract with the successful proposer. The successful proposer shall be the prime contractor and shall be solely responsible for all contractual performance.
8. Each proposer shall perform his/her own evaluation and due diligence verification of all information and data provided by the County. The County makes no representation or warranties regarding any information or data provided by the County.

9. The contractor shall comply with all state, federal, or local laws, ordinances, codes rules, or regulations bearing on the conduct of work including equal opportunity employment laws, OSHA regulations, minimum wage and hour regulations as set forth in the Fair Labor Standards Act, and National Fire Protection Association regulations. The proposer shall be responsible for verification for any of it employee's eligibility to legally work in the United States. Randolph County is a drug-free workplace.
10. Contractor hereby attests that it currently complies with and shall continue to comply with, for the duration of this Agreement, Article 2 of Chapter 64 of the North Carolina General Statute § 143-133.3 (commonly referred to as "E-Verify") and further attests that it ensures and continues to ensure that any subcontractors utilized by Contractor also comply with said Article.
11. The contractor shall be responsible for any damage to and/or loss of the County's equipment and/or facilities arising out of an act or omission of the proposer's employees.
12. The deliverables shall be accepted by the County when (1) the deliverables have been delivered, installed and made ready for use at the County's site in accordance with the installation and operating specifications; (2) The County has tested the deliverables and the deliverables have passed testing; (3)The County's staff have received system documentation and training;(4) The County agrees that deliverables meet or exceed the specifications and those contained in the scope of work and order concerning performance and capabilities of the deliverables.
13. Once the deliverables are installed in the County's premises as specified herein with regard to the Final Installation Date, the Contractor shall notify the Project Manager in writing that the deliverables as specified have been installed in good working order and ready for use, that the modifications or enhancements are completed as defined and specified herein, are in good working order, ready for use, and to the best of the Contractors knowledge is one hundred percent operational and that the deliverables as installed is ready for testing. At that point, the County shall have fifteen (15) working days to perform and complete acceptance testing on-site. If the deliverables as installed and represented passes such testing, the County shall so notify the Contractor in writing termed the Certificate of Acceptance.
 - 13.1.1 If the deliverables as installed fails to pass such testing, the County shall notify the Contractor in writing and the Contractor shall then have ten (10) working days to correct any failure. The Contractor shall then certify to the County that the failure has been corrected and the County shall have five (5) working days for additional testing at which time the County shall supply the Certificate of Acceptance if the deliverables passes testing.
 - 13.1.2 If the deliverables fails testing twice, at the County's option: (1) the correction period may be extended as agreed by the parties; or (2) The County may terminate the Agreement, return the specifications, product and documentation to the Contractor and the Contractor will refund to the County any payments previously given to the Contractor for the deliverables and modifications or enhancement pursuant to the Agreement.
14. Upon completion of this contract by the Contractor and acceptance by the County as being in accordance with this proposal, the County shall pay the contract amount within 20 days of the date of invoice.
15. Contractor certifies that it is not identified on any list created by the North Carolina State Treasurer pursuant to North Carolina General Statute 147-86.58 et al (the Iran Divestment Act). This includes but is not limited to the Final Divestment List and the Iran Parent and Subsidiary Guidance List located at <https://www.nctreasurer.com/inside-the-department/OpenGovernment/Pages/Iran-Divestment-Act-Resources.aspx>. Contractor further certifies that it will not, during the term of this Agreement, subcontract with any entity identified on any such list.

PART I: Proposal

Please submit the total proposal amount for a turn-key system. **A detailed list should be attached for each Option.**

Hardware	\$ _____
Professional Services/Labor	\$ _____
1 st Year Maintenance – Annual Amount	\$ _____
2 nd Year Maintenance – Annual Amount	\$ _____

PART II: Addenda Acknowledgements (if applicable)

Each proposer is responsible for determining that all addenda(s) issued by the Randolph County Purchasing Officer have been received before submitting a proposal.

Addenda	Date Issued	Date Proposer Received
"A"		
"B"		
"C"		

PART III: Certificate of Insurance attached Yes No

PART IV: Service response time within _____ hours of notification.

PART V: Path Study Attached Yes No

Please provide path study attached to your bid.

PART VI: Appendices Reviewed

Appendix A Appendix B Appendix C

PART VII: References

Provide at least three (3) references

Company Name	Contact Name	Phone Number

PART VIII: Submitted by

Company Name		
Company Address		
Telephone		Fax
Representative (print name)		
Signature of Representative		
Email Address		
Date Submitted		