

Sussex County Virginia Invitation for Bid Self-Supporting Tower

January 25, 2017

Prepared by:



Federal Engineering, Inc.
10600 Arrowhead Dr, Suite160
Fairfax, VA 22030
703-359-8200

Table of Contents

1.	General Tower Requirements.....	4
2.	Instructions to Bidders	6
2.1	Bid Submittals.....	6
2.2	Public Opening	6
2.3	Criteria for Evaluation	6
2.4	Communication and Restriction on Communications.....	7
2.5	Withdrawal and Modification of Bids	7
2.6	Technical Specifications	7
2.7	Award of Contract	9
2.8	Bids Binding.....	10
3.	Submittal of Regulatory Licenses, Notices and Permits.....	11
3.1	Standards and Codes	11
3.2	Qualifications	11
4.	Design Criteria	12
5.	Tower Material	13
5.1	Communications Tower	13
5.2	Waveguide Support	13
5.3	Waveguide Bridge.....	13
5.4	Climbing Equipment.....	14
5.5	Lighting System & Control (Option).....	14
6.	Execution	16
6.1	Tower Installation.....	16
6.2	Tower Erection.....	16
6.3	Lighting System Installation	17
6.4	Tower Grounding and Lightning Protection.....	18
6.4.1	Ground and Bonding System Testing	18
6.5	Post Construction Site Cleaning	18
7.	Acceptance	19



Sussex County, Virginia
Invitation for Bid
Self-Supporting Tower

7.1	Final Inspection.....	19
7.2	Final Acceptance	19
7.3	As-Built Documentation	19
8.	Warranty	20
9.	Sussex County Terms and Conditions.....	21
9.1	Bid Bond	21
9.2	Contract Invalidation	21
9.3	Insurance Requirements.....	21
9.4	OSHA Compliance and Safety.....	24
9.5	Payment Terms	25
9.6	Contract Personnel	25
9.7	Ownership of Materials	26
9.8	Protection of Property	26
9.9	Confidentiality and Ownership of Documents	26
9.10	Termination for Default	26
9.11	Additional Terms and Conditions	26
	Appendix A – Price Sheet	27
	Appendix B –Tower Loading Requirements	28
	Appendix C – Site Plan View.....	29



1. General Tower Requirements

Sussex County, Virginia invites bids for the provision of a fully installed new 300-foot self-supporting tower. This specification includes the design, fabrication, and installation of a new tower at the Sussex County communications facilities.

The site for the new tower is located at the Sussex County Courthouse Compound next to an existing 300-foot tower. The coordinates are:

- 36 54' 55.1" N
- 77 16' 52.8" W

The 300-foot tower structure shall be of self-supporting, lattice design. All structural steel and hardware shall be galvanized after fabrication in accordance with the industry standards referenced in this specification. The design shall be based on the minimum wind and ice requirements as specified for the Sussex County, Virginia zone in EIA/TIA RS-222 Standards Revision G.

This Invitation for Bid (IFB) is for a complete turn-key installation including the following:

- Tower engineering and design
- Foundation design and installation
- Tower erection
- Tower and foundation project management
- Tower materials
- Waveguide bridge
- Waveguide ladder and accessories
- Lightning protection and grounding system for both the tower and a halo around the shelter foundation
- Trenching between the new shelter slab and the existing County Shelter
- Two runs of 4" conduit for power and communications within the trench
- Fencing (3 sided to join existing fence and includes removal of the old fence where the new fence joins the existing compound
- Weed barrier and 3" of rock in the new area of the compound
- Safety climb
- Travel
- Lodging



Sussex County, Virginia
Invitation for Bid
Self-Supporting Tower

- Delivery charges
- Removal of dirt
- Disposal of trash
- Other expenses or materials necessary to meet the requirements of this proposal.

All RESPONDENTS are invited to visit the proposed location to determine the exact location of the tower and become familiar with the existing tower, building, water tanks and site conditions prior to proposal submission.



2. Instructions to Bidders

2.1 Bid Submittals

All Bids must be received by February 10, 2017. All bids shall be presented in five properly bound hard copies and one electronic copy, i.e., CD Rom. Sussex County reserves the right to reject any and all Bids under the following conditions:

1. Bids are received after the deadline stipulated in the IFB
2. Bids are not properly marked or addressed as required in the IFB
3. Bids are delivered to an office location other than the one required in the IFB
4. Bids are not otherwise in compliance with this IFB

Envelopes shall be clearly marked "IFB Self-Supporting Tower" and shall be addressed to:

Sussex County Administration
Attn: Eddie T. Vick
Post Office Box 1397
20135 Princeton Road
Sussex, Virginia 23884

Bidders shall furnish the information required on the Bid price sheet, Appendix A, as well as any supplemental information they feel is pertinent to this IFB. Any questions regarding this Sussex County IFB must be submitted in writing and e-mailed to:

Ric Martin, Chief Consultant, Federal Engineering – rmartin@fedeng.com

Bid package shall include specification sheets/slick sheets on all equipment.

2.2 Public Opening

VENDORS may observe the opening of Bids as specified by this IFB. The reading at the public opening will be of RESPONDENT names and lump sum bid price only. No ranking of VENDORS will be possible until evaluations are completed.

2.3 Criteria for Evaluation

All Bids will be evaluated in accordance with the provisions of Sussex County, VA Procurement Process as applicable, and the requirements of this IFB.



2.4 Communication and Restriction on Communications

- A. VENDORS are prohibited from communicating with Sussex County employees regarding this IFB, except as provided specifically in this IFB, from the time the ITB is released until the contract is awarded (post IFB phase). This includes, “Thank You” letters, phone calls, e-mails, and any contact that results in direct or indirect discussion of the IFB submitted by VENDORS.
- B. All responses to questions pertaining to this IFB submitted to the designated party are binding only in written form. Any interpretations derived from verbal communications are non-binding. Violation of this provision by the VENDOR may lead to disqualification of the VENDOR’s Bid from consideration.

2.5 Withdrawal and Modification of Bids

Bids may be modified or withdrawn in writing, prior to the IFB closing time specified herein. Bids may not be modified or withdrawn after that time.

2.6 Technical Specifications

- Design Details:
 - Design Code: ANSI/TIA-222-REV G 2005
 - Wind Speed: ASCE 7-10 Ultimate Wind Speed (No Ice) = 123 MPH
 - Wind Speed with Ice: 30 MPH with 0.5 inches Ice
 - Structure Class: III
 - Exposure Category: C
 - Topographic Category: 1
- Geotechnical report will be required and the soil information must be provided before a final foundation design can be completed. Soil is expected to be “Normal Soil”; however geotechnical report must be performed
- In accordance with TIA-222-G, a geotechnical site investigation is required for all site-specific designs including approval by Sussex County civil authorities and signed by a VA PE)
- Transportation of the tower assembly will be by Vendor
- **Tower Specifics**
 - 50% growth in loading
 - Vertical cable ladder support (from top of tower to ice bridge level)



- Motorola R-56 grounding, (CADWELD only), ground resistance to be tested and measured
- Climbing ladder and climbing line (w/two safety harness belts)
- FAA LED top of tower lighting with monitoring/control system – to be installed by others, provide electrical cabling, (to be installed, verified and tested by others), no side lights
- Lightning rod (top of tower + 2')
- Tower signage (make, model, SN, tower height and FAA/FCC ID numbers)
- Only factory welding (prior to hot dip zinc galvanizing), steel and welds shall be deburred/smooth (prior to galvanizing)
- Prior to start/design – field study and geo conditions
- Document as-built of finished tower
 - Photos (4 cardinal directions, footers and grounding)
 - As-built drawings (certified by VA PE)
- Site prep/improvements (as necessary – not limited to):
 - Meet or exceed State/local codes
 - Protecting plants/grass to remain
 - Removal of plants/grass
 - Clearing/grubbing
 - Stripping (and covering of stockpiled of top soil)
 - Removing of above/below-grade improvements
 - Disconnecting/capping/sealing/removing site utilities
 - Temporary erosion/sedimentation control (per Dept. of Environmental Resources and Bureau of Water and Soil Conservation Guidelines for Erosion and Sedimentation (E&S) Control)
 - Site review of difficulties/utilities (later claims will not be considered)
 - Water/dust control
 - Removal of debris to suitable/approved location
 - Removal of existing pavement/utilities/curbing/shrubbery shall be replaced in kind
 - No access road or gate is required. Access to site will be via the existing compound road and gate.
 - Complete area within fence shall be prepared and covered with a plastic weed barrier and 3" of aggregate base course, graded for proper drainage



- Fencing around site parameter:
 - Chain-link – 9 gauge 2” diamond mesh, top twisted/barbed, bottom knuckled and buried in minimum of 6” concrete
 - Type II ASTM A569 steel piping
 - Fence posts (2-4” as appropriate and approved)
 - Fence height 7’ with 1’ barbed wire
 - Post spacing no more than 10’
 - Terminal posts – braced to adjacent line posts with horizontal brace rails and diagonal truss rods
 - Ground all posts per Motorola R-56
 - 3-sided (see diagram) to mate with existing fence. The side of the existing fence (West side) where the new fence meets will be removed by the contractor.
- Other non-tower items:
 - New shelter slab (12’ x 21’) or piers Vendor choice (shelter supplied/installed by others) – coordinate with shelter provider, CADWELD groundings as per R-56
 - Two 4” PVC conduits (one electrical, one communications) from existing shelter to new shelter slab, turned-up on both ends and with temporary caps

2.7 Award of Contract

Sussex County specifically reserves the following rights:

- A. Sussex County reserves the right to reject any and/or all Bids or to accept the Bid evaluated to be in the best interest of the Sussex County. All Bids shall be evaluated with consideration of the following criteria: Cost, Compliance with Technical Specifications, Qualifications/Experience and References. Consideration will also be given to: Past Record with Sussex County, Timelines, Quality of Materials, Financial Stability, and Compliance with Law.
- B. This IFB does not commit Sussex County to award a contract or to pay any costs incurred in the preparation or submission of Bids, or costs incurred in making necessary studies for the preparation thereof, or to procure or contract for services or goods. Any Bid submitted will be regarded as an offer made by the VENDOR and not as an acceptance by the VENDOR of an offer made by Sussex County. No contractual relationship will exist except pursuant to a written contract document signed by the duly authorized official of Sussex County and by the



selected VENDOR. This IFB does not commit Sussex County to consider any Bid or to award a contract.

- C. Sussex County reserves the right to seek clarifications of any Bid submitted or specific aspects of any Bid prior to the award of the contract.
- D. The VENDOR may be precluded from participating in future projects that are generated by or in conflict with the performance of this contract and may result in financial benefit to the VENDOR.
- E. If any provision of the contract awarded as a result of this IFB is found to be invalid, such invalidation will not be construed to invalidate the entire contract.

2.8 Bids Binding

Unless otherwise specified, all Bids submitted should be binding for 180 calendar days following Bid opening date, unless the Vendor, at the request of Sussex County, agrees to an extension.



3. Submittal of Regulatory Licenses, Notices and Permits

- A. The SELECTED VENDOR shall furnish and display the Sussex County ASR Number in a conspicuous place so that it is readily visible near the base of the antenna structure. Materials used to display the ASR Number must be weather resistant and of sufficient size to be easily seen at the base of the tower.
- B. As required by the FAA, the SELECTED VENDOR shall file with the FAA and FCC notifying them at the start of tower construction that construction has commenced and within five (5) days after completion of the tower, that construction of the tower is complete. This shall be accomplished on behalf of Sussex County.
- C. Foundation design shall be provided by the tower manufacturer based on information provided by Sussex County's Geo Technical Engineer supplied borings, site condition report and any other information required by the manufacturer. All drawings and designs must be approved and stamped by a State of Virginia certified Professional Engineer (PE).
- D. The SELECTED VENDOR must secure any building permits as required in conjunction with this project, comply with the Virginia Dig Law prior to any excavation or installation work on site.

3.1 Standards and Codes

The tower shall adhere to the latest revision of all applicable federal, state and local standards, specifications, codes and labor laws.

3.2 Qualifications

- A. RESPONDENTS shall include a section that accurately represents the qualifications of the organization and the manufacturer of any proposed equipment.
- B. RESPONDENTS shall be actively involved in the design, manufacture or supply, and installation of communications towers and sites used by public safety, commercial carriers or utilities. RESPONDENTS shall provide a list of five tower installations similar in scope and application installed within the last five years and shall submit evidence of training of its current employees.
- C. RESPONDENTS must submit with the proposal a copy of their Drug and Alcohol Policy.



4. Design Criteria

- A. The SELECTED VENDOR shall design the tower and foundation to meet EIA/TIA Standard RS-222 Standards Revision G. Each tower and foundation proposal shall be designed for all equipment, appurtenances, ancillary equipment, antenna loading as follows:



5. Tower Material

5.1 Communications Tower

- A. The tower shall be manufactured as a self supporting lattice design.

All structural steel and hardware shall be galvanized after fabrication in accordance with the appropriate standards. All tower materials shall be hot dip galvanized after fabrication, with a minimum zinc coating of 2 oz. per sq. ft. Bolts shall be hot dip galvanized according to ASTM A-325 or the latest version of this standard.

The make, model, serial number and height of the tower shall be clearly labeled at the base of the tower. Labeling shall be weatherproof and durable such as a stamped metal plate or equivalent.

5.2 Waveguide Support

There shall be a ladder type support system associated with the tower to mount the transmission cables. This support shall comply with tower and cable manufacturer's installation specifications. The support system shall accommodate cable or waveguide mounting hardware at the proper intervals. The support shall be equipped with precision punched or drilled holes to allow installation of snap-in type or bolt-in hangers. The support system will be sized for 50% growth beyond initial system implementation. The support materials will be of similar construction as other tower materials so as to appear integral to the structure. The support shall be designed to meet rigidity specs similar to the tower.

5.3 Waveguide Bridge

The tower shall be equipped with a waveguide bridge with support posts spaced at intervals compliant to the wind loading specifications, but not more than 10 feet distant. There will be posts placed on both lateral sides of the bridge to fully support the load. The bridge will be designed to support all initial antenna transmission lines plus 50% growth capacity. The structure shall have sufficient stiffness to comply with the tower wind and ice loading specifications.

The SELECTED VENDOR shall furnish and install the waveguide bridge between the tower and equipment shelter. The following criteria shall govern the design of the waveguide bridge:

1. Structurally sturdy to support live and dead loads



2. Free standing (i.e., not attached to the shelter or tower)
3. Minimum width of 2 feet
4. Length/height as required by the site specifics
5. Bridge/ice shield material shall be fabricated from galvanized bar grating or approved equivalent
6. All components of the waveguide bridge shall be hot-dipped galvanized after fabrication
7. Posts shall have galvanized caps and be set in concrete foundations. Each post shall be separately grounded to the site ground system with 1/0 AWG stranded bare copper conductor
8. Waveguide bridge shall be adjustable in height so as to allow interface with shelter waveguide entry ports
9. Bridge shall be effectively grounded to the external ground bar

5.4 Climbing Equipment

- A. The tower shall be equipped with an approved climbing ladder and safety device. The ladder may be integrated into the structural components of the tower.
- B. There shall be a climbing safety system compliant to original manufacturer's specifications. The equipment must comply with EIA/TIA-222-G.

5.5 Lighting System & Control (Option)

Sussex County's application with the FAA for approval of the new tower is pending. The SELECTED VENDOR shall furnish and install an obstruction lighting system approved by the FAA and compliant with applicable standards.

- A. The lighting system shall include controller, LED lamps, lightning protection, mounting hardware, service cabling and conduit, conduit drain-breather system, wiring, and other material required for a complete installation.
- B. The lighting system shall be controlled by a 120 volt AC single phase solid state control unit and power supply. The unit shall be installed within a NEMA 3R metal cabinet or a NEMA 4X cabinet. The controller shall be mounted inside the equipment shelter.



- C. The lights shall be automatically controlled by means of a photoelectric unit. The control unit shall be designed with relay control. The design shall include relays for:
 - 1. ON-OFF status of lights
 - 2. Control unit failure
 - 3. Light failure
- D. The lighting system design shall have automatic revert to back-up power sources and automatic reset upon power source restoral.
- E. There shall be a test switch in the controller to simulate daytime, nighttime, and auto modes.



6. Execution

6.1 Tower Installation

- A. The SELECTED VENDOR shall furnish all materials, labor, equipment, and mounting hardware to provide a complete functional tower installation.
- B. The SELECTED VENDOR shall perform all operations required for the installation, including concrete work and excavation, which will comply with manufacturer's recommendations for temperature, slump and air content.
- C. Two sets of fresh field concrete specimens shall be taken. One set of field cured concrete specimens shall be tested for weight and one set for compressive strength with the tests to be taken at 7 days and at 28 days. The results of these tests will be presented to Sussex County.
- D. The compressive strength test shall be the average of the two specimens from the same composite sample.
- E. Tower documentation shall include construction, installation, and maintenance drawings, approved by a Virginia certified Professional Engineer (PE).

6.2 Tower Erection

- A. The foundation shall be allowed to cure for at least seven (7) days before erecting the tower.
- B. Manufacturer recommended bolts shall be used for all connections in accordance with the installation documentation. Bolts should be of such lengths as to protrude beyond the nuts a minimum of 1/4 inch and a maximum of 1/2 inch. All bolts shall be equipped with self-locking nuts. Field reaming of coated metal components will be acceptable only upon determining there is no structural damage to the tower. Field remanufactured holes must receive two coats of spray galvanizing as specified and be completely filled by the use of a larger diameter bolt. All bolts placed through slotted holes shall be equipped with flat washers.
- C. Mud, dirt, and other foreign matter shall be removed from the tower sections before erection, with special attention given to cleaning the contact surfaces at joints before they are bolted together.
- D. When portions of the tower are ground assembled, such assembly shall be on rigid surfaces or blocking which will provide support to prevent distortion of tower steel



and damage to surface finish. All bolts shall be installed in all connections of ground assembled portions of the tower. Temporary bracing of tower members shall be used to avoid overstressing or distortion.

- E. The structure shall be erected plumb. The method of assembling and erecting shall be such that no member will be subjected to a load in excess of that for which it was designed. Extreme care shall be taken to establish and maintain the true geometric shape of the portion of the tower assembled. All connections must lie flat where bolted together. No gaps between butt flanges or connections are acceptable after the bolts are tensioned.
- F. Slings or other equipment used for picking up members or portions of the tower shall be of such material or protected in such a way as to not damage the tower section, the finish, or distort or overstress the tower when lifts are made. Portions of the tower shall be raised in such a manner that no dragging on the ground or against other hard surfaces will occur.
- G. Damaged tower sections can be used if properly repaired. If a damaged portion cannot be repaired to the satisfaction of Sussex County, it shall be replaced. For any galvanized surfaces, which are damaged for any reason, zinc-based solder repair shall be used. Solders in a rod form or a powder may be used. Surfaces must be cleaned using a wire brush or a light grinding action. Surface preparation shall extend into the surrounding undamaged galvanized coating. The thickness of zinc solder repair shall be equivalent to the originally specified hot dip galvanizing process. Repairs shall be performed in accordance with the solder manufacturer's instructions.
- H. Only wrenches of proper size, which will not deform the nuts, nor injure the surface finish, are to be used. Standard ironworkers' 12-inch spud or 12-inch socket wrenches shall be used. Pipe extenders will not be permitted.
- I. During construction of the tower where required, the obstruction lighting fixtures shall be installed and operated at each required level as each such level is exceeded in height during construction.

6.3 Lighting System Installation

- A. The SELECTED VENDOR shall install all necessary equipment required for the tower lighting system. The installation shall follow the manufacturer's recommendations.



- B. All levels of lighting shall be clearly visible from any direction of approach to the tower.
- C. The photoelectric unit shall be installed in a moisture-proof protective metal or high impact plastic housing on the building in an inconspicuous location and adjusted to attain an unobstructed view of the NNE sky. The photocell shall be mounted such that it is not affected by artificial light. Photocell wiring shall be completely installed within rigid galvanized conduit.
- D. Ice shields shall be installed for all lighting system fixtures not mounted on top of the tower.
- E. The controller case shall be grounded to the equipment shelter building ground with #4 AWG or larger copper wire.
- F. If necessary, Sussex County shall provide temporary electrical service for the tower lighting systems until the site has permanent power.

6.4 Tower Grounding and Lightning Protection

- A. The tower and all appurtenances will be installed in accordance with the Motorola R56, Harris M/A-COM 4Z/LZT 123 4618/1 R3A or MIL-STD-188-124B.
- B. All equipment mounted on the tower shall attach to the tower such that it will be electrically at ground potential.

6.4.1 Ground and Bonding System Testing

- A. The site installation should have less than 5 ohms resistance between any connected point on the ground bus and earth ground.
- B. Ground resistivity shall be tested using the four-point method. The SELECTED VENDOR shall supply a ground test report and shall fully describe the method used in testing.

6.5 Post Construction Site Cleaning

- A. The worksite shall be left neat and clean upon completion of work. All excavated spoils, trash, boxes, pallets, reels and miscellaneous debris shall be removed and disposed of properly during the construction phase of the project.



7. Acceptance

7.1 Final Inspection

- A. Upon notice of installation completion Sussex County will conduct a final inspection. Any deficiencies will be noted on a punch list and provided to SELECTED VENDOR for resolution.
- B. All punch list items shall have been resolved prior to final acceptance.

7.2 Final Acceptance

- A. The intent of final acceptance is to demonstrate to Sussex County that the tower system as described herein is complete and ready for commissioning and operation.
- B. Sussex County shall be given two weeks written notice that all hardware, structures, antennas and lines, equipment, assemblies, accessories and associated items are ready for final acceptance.
- C. Sussex County shall witness final acceptance with SELECTED VENDOR.

7.3 As-Built Documentation

- A. SELECTED VENDOR shall provide complete as-built documentation including:
 - 1. Tower drawing and specification
 - 2. Plan drawings
 - 3. Elevation drawings of all site equipment including antennas, lines, mounts, amplifiers and/or diplexers
 - 4. Cable drawings and color code index
 - 5. Exact antenna installed height AGL, mounting position and orientation



8. Warranty

The installation and equipment as described herein shall be warranted for one year following final acceptance of the new Sussex County radio system.



Sussex County, Virginia
Invitation for Bid
Self-Supporting Tower

- 2) Applicable Federal Statutory
 - 3) Employer's Liability Each Accident - \$500,000
 - 4) Disease Policy Limit - \$1,000,000
2. Comprehensive or Commercial General Liability (including Premises-Operations; Independent Contractor's Production; Product Liability and Completed Operations; Broad Form Property Damage):
- a. General Aggregate \$2,000,000
 - b. Products-Completed Operations Aggregate \$2,000,000
 - c. Personal/Advertising Injury
 - 1) Per Person/Organization \$1,000,000
 - 2) Each Occurrence:
 - i. Bodily Injury and Property Damage \$1,000,000
 - ii. Limit per Person Medical Expense \$5,000
3. Automobile Liability:
- a. Bodily Injury Each Person \$500,000
 - 1) Each Accident \$1,000,000
 - b. Property Damage Each Accident \$500,000
 - c. Or, a combined Bodily Injury & Property Damage Limit of \$1,000,000
4. Excess Liability:
- a. General Aggregate \$1,000,000
 - b. Each Occurrence \$1,000,000

D. The following policies are to contain, or be endorsed to contain the following provisions:

- 1. Commercial Liability Coverage:



- a. Sussex County, its officers, employees and volunteers are to be covered as additional insureds as respects: liability arising out of activities performed by or on behalf of the entity entering into this contract for service including the insured's general supervision of the premises owned, occupied or used by the entity entering into this contract. The coverage shall contain no special limitations on the scope of protection afforded to Sussex County, its officers, employees and volunteers.
 - b. The insurance coverage for the Vendor entering into a contract shall be primary insurance as respects Sussex County, its officers, employees and volunteers. Any insurance or self-insurance maintained by Sussex County, its officers, employees and volunteers shall be in excess of the Vendor's insurance coverage and shall not contribute to it.
 - c. Any failure to comply with reporting provisions of the policies shall not affect coverage provided to Sussex County, its officers, employees and volunteers.
 - d. The Vendor entering into a contract agrees to hold harmless and indemnify Sussex County, its officers, employees and volunteers for all liability arising out of this contract, except that arising out of the sole negligence of Sussex County.
2. All coverages:
- a. Each insurance policy required shall be endorsed to state that coverage shall not be suspended, voided, canceled, reduced in coverage or in limits except after 30 days' prior written notice by certified mail, return receipt requested, has been given to Sussex County.
 - b. Any deductibles or self-insured retentions must be declared to and approved by Sussex County.
 - c. The Vendor entering into this contract for service shall furnish Sussex County with certificates of insurance and with original endorsements effecting coverage required by these insurance requirements. The certificates and endorsements are to be signed by a person authorized by that insurer to bind coverage on its behalf. All



endorsements are to be received and approved by Sussex County before work commences. Sussex County reserves the right to require complete, certified copies of all required insurance policies at any time.

- d. The Vendor entering into this contract for service shall include all subcontractors as additional insured's under its policies or shall furnish separate certificates of insurance and endorsements for each subcontractor. All coverage's for subcontractors shall be subject to all of the requirements stated in these insurance requirements.
- e. Division Manager may waive in writing any or all of the provisions of these insurance requirements as deemed to be in the best interests of Sussex County. A waiver of any provisions shall be communicated with the Human Resources & Risk Management department.

9.4 OSHA Compliance and Safety

- A. The Vendor entering into a contract for services agrees to comply with all appropriate federal and state OSHA laws, rules and regulations.
- B. The SELECTED VENDOR must secure satisfactory insurance coverage as required by Sussex County. Failure to provide evidence of adequate coverage is a material breach and grounds for termination of the contract.
- C. All fall protection and safety equipment must meet ANSI and OSHA standards and may be inspected by Sussex County at any time during this project.
- D. Climbers shall wear full body safety harness with appropriate approved shock absorbing safety lanyard attached to a single D ring attached to the back of the climber at all times. Each climber must be issued, equipped and use fall protection equipment and must insure 100% tie off when climbing. The SELECTED VENDOR shall provide proof of ownership and possess industry standard, properly rated rescue equipment.
- E. The SELECTED VENDOR shall provide certification cards that all tower climbers and their supervisors have completed OSHA approved Tower Climbing Safety and Rescue course such as those by Comtrain and Tractel. Training shall have been completed within the last 5 years with at least one person having completed the course within the last year, so as to bring others in the company up to date with any changes in safety regulations, requirements or procedures.



- F. When performing any work on the antenna support structure, or near any RF radio transmission emitters at the Sussex County site, the SELECTED VENDOR must comply with FCC OET Bulletin 65, latest edition and supplement titled "Evaluating Compliance with FCC Guidelines for Human Exposure to Radio Frequency Electromagnetic Fields".

9.5 Payment Terms

- A. Sussex County Financial Regulations and Rules preclude advance payments or payments by letter of credit. Such provisions in a Bid will be prejudicial to its evaluation by Sussex County.
- B. The normal terms of payment by Sussex County are 30 days (or similarly discounted payment terms if offered by Vendor) upon satisfactory delivery of goods or performance of services, acceptance thereof by Sussex County and certification by Sussex County of the Vendor's invoice. Vendors must therefore clearly specify in their Bids the payment terms being offered.

9.6 Contract Personnel

- A. The SELECTED VENDOR shall furnish qualified and experienced workers and supervisors to carry out the work to be performed under this contract. The Vendor shall at all times enforce strict discipline and maintain good order among the workers engaged in such work, and shall cause workers to observe all reasonable fire prevention and safety rules and regulations enforced at Sussex County. The persons hired by the Vendor shall be and remain the Contractor's employees. Sussex County reserves the right to require the Vendor to replace at the Vendor's expense any worker found by Sussex County to be unfit.
- B. Sussex County reserves the right to inform the SELECTED VENDOR of any actions, procedures, conditions or equipment it deems unsafe or potentially hazardous, to halt work on the site until such time Sussex County agrees that the action, procedure, condition or equipment has been returned to a safe condition. No additional charges will be incurred by Sussex County for the above work stoppage.
- C. A pre-climb safety meeting is required before each climbing of the tower. A log of each meeting is required and may be inspected at any time by Sussex County.



9.7 Ownership of Materials

Sussex County intends to maintain ownership and/or use of all materials produced as a result of this contract.

9.8 Protection of Property

The SELECTED VENDOR shall protect all existing buildings, structures, and equipment at the site during assembly and erection of the tower. The vendor shall be liable for any damage caused to such buildings and equipment.

9.9 Confidentiality and Ownership of Documents

All data, maps, drawings, photographs, plans, reports, recommendations, estimates, documents, computer files and all other data compiled by or received by the SELECTED VENDOR under this contract shall be treated by the SELECTED VENDOR as confidential and shall be delivered only to Sussex County's designated Project Manager or other authorized officials as required in the contract. Their contents shall not be made known by the SELECTED VENDOR to any person other than personnel of the awarded Vendor performing services under this contract without written consent of Sussex County.

9.10 Termination for Default

If the Contractor refuses or fails to perform the work, or any separable part thereof, with such diligence as will ensure its completion within the written contracted time frame, Sussex County may, by written notice to the SELECTED VENDOR, terminate the right to proceed with the work or such part of the work to which there have been delays.

9.11 Additional Terms and Conditions

Sussex County reserves the right to include additional terms and conditions during the contract negotiations. These terms and conditions must be within the scope of the original IFB and contract documents, and will be limited to cost, clarification, definition, and administrative and legal requirements.



Appendix A – Price Sheet

**Sussex County, Virginia
INVITATION FOR BID
COMMUNICATIONS TOWER**

BID PRICE SHEET

The Bidder will furnish all necessary materials, equipment, machinery, tools, apparatus, means of transportation, and labor necessary to construct and deliver a turn-key radio communications tower according to the specifications provided herein for a lump sum fee.

LUMP SUM BID: \$ _____

Company	
Printed Name:	
Signature of Authorized Representative:	
Title:	Date:



Appendix B –Tower Loading Requirements

Tower Loading Requirements

Mounting Level in feet	Center Line	Qty	Vendor	Model	Frequency	Number of Feedlines, Size	Notes
287	287	1	Decibel	DB224-A	VHF	1 – 7/8"	SitePro PSA6 Mount
255	267	2	dbSpectra	DS7B12F36U-D	700 MHz	2 – 1 5/8"	SitePro PSA6 Mounts
197	197-250	2	SitePro	ISMD6	n/a	n/a	Ice shields
191	191 - 250	1	Andrew	VHLP6-6WA-6WH	6 GHz	Waveguide	Radome
190	190 - 250	1	Andrew	VHLP6-6WA-6WH	6 GHz	Waveguide	Radome



Appendix C – Site Plan View

