

REQUEST FOR QUOTATION
Wood County Commission
1 Court Sq RM 203, Parkersburg, WV 26101

The Wood County Commission will accept sealed quotations for the site preparation and installation of a 340 ft. self-supporting steel communications tower until 3:30pm August 14th 2019, in the County Commission meeting room, at Wood County Courthouse, Parkersburg West Virginia. Proposals are to be valid for a period of 180 days from date of opening. The exact number and schedule of installations are variable. The Wood County Commission reserves the right to reject any or all proposals. Bid opening will occur on Aug 15, 2019 at 10:30 AM at the Wood County Commission office, Wood County Courthouse, 1 Court Square # 203, Parkersburg WV 26101.

ADMINISTRATIVE INFORMATION

1. Inquiries of Interpretation

All clarifications for these specifications involving these bidding procedures and processes must be made in writing through the project manager.

Questions must be received no later than five (5) calendar days prior to the scheduled RFQ response due date to insure adequate time for proper response.

All inquiries concerning this Request for Quotation (RFQ) shall be addressed to the Project Manager detailed below:

Name: Rick Woodyard
Address: 911 Core Road, Parkersburg, WV
26101

Phone: 304-834-0238 (Cell) or
304-420-0911 (Office)

If the bidder is in doubt as to the meaning of any part of this RFQ written request for an interpretation may be submitted by mail or fax to the Project Manager. The contractors agency will not be responsible to supply any explanations or interpretations to other than those submitted in writing as described in this section.

1.1 Pertinent Dates:

The pertinent dates for this **RFQ** are as follows:

Four (4) signed copies of the written response to this RFQ shall be submitted and received by the Wood County Commission not later than **3:30 p.m. August 14th 2019**

1.2 Bidder Incurred Costs:

The bidder will be responsible for all costs incurred in preparing or responding to this **RFQ**. All materials and documents submitted in response to this **RFQ** become the property of the Wood County Commission and will not be returned. Any information submitted with the proposal, which the bidder considers proprietary must be appropriately identified. The bidder must be licensed to do business in the State of West Virginia. Each bidder must supply a copy of their WV Contractors License and proof of insurance with their RFQ proposal.

INSTRUCTIONS TO BIDDER

2.0 General

- A. Only proposal responses from qualified vendors will be received. The response shall be specific and complete in every detail, prepared in a simple and straight forward manner.
- B. The Bidder is advised to read the **RFQ** in its entirety. Failure to read and/or understand any portion of the **RFQ** shall not be cause for waiver of any portion of this **RFQ**
- C. The Bidder recognizes that the purchase order and the contract comprise a system and assumes full responsibility for providing a functional system, including interfaces.
- D. The Wood County Commission reserves the right to reject any or all bids.
- E. The term of the contract shall be for one year, with the option of two (2) one (1) year renewals.
- F. Visitation to or contact with personnel at the installation must be through and with the approval of the Project Management. Failure to do this requirement is grounds for disqualification of the bidder.

2.1 Preparation and Format of Bid

- A. The Bidder is required to submit both costs and technical information.
- B. Proposals are required to be typewritten for ease of evaluation.
- C. Four copies of the entire proposal shall be provided.

2.2 Submittal Date of Response

- A. Four (4) signed copies of the proposal shall be submitted and received **by the Wood County Commission not later than 3:00pm on November the 13th, 2018**

Quotations shall be submitted to:

Name: Wood County
Commission #1 Gov
Square RM203
Parkersburg WV 26101

Phone: 304-424-1976

- B. RFQ quotations are to be sealed and marked, **"Communication Tower"**.

2.3 Withdrawal of Quotation

Quotations may be withdrawn, altered and/or resubmitted at any time prior to the submittal date, by appearing in person at the above location.

2.4 Alternate Equipment

Recognizing the differences in technology, the Wood County Commission will allow Bidders to submit alternative pieces of equipment and software that meet our minimum requirements. Alternative RFQ will be submitted in the same form and manner as the main RFQ under the heading entitled **"Alternates"**, and will be considered separately. Alternatives shall be accompanied by a detailed description of the advantages to the Wood County Commission. Response outlining alternative approaches for meeting the requirements of this RFQ must satisfy the full set of requirements therein.

GENERAL TERMS AND CONDITIONS

3.0 General

It is the intent of this specification to establish minimum requirements for the site preparation and installation of a 340 ft. Self-Supporting Steel Communications Tower to serve Wood County, West Virginia. These specifications do not include proprietary items, components, circuitries, or devices, which would preclude any vendor from meeting these specifications. All technical tolerances and criteria contained within these specifications are considered to be within the current state of the art and currently are being met by commercial available equipment. The fact that a bidder chooses not to represent a manufacturer or

equipment that meet these specifications, providing the above criteria are met will not be sufficient cause to adjudge these specifications as restrictive.

3.1 Information to be submitted with Bid Quotation

The bidder shall submit the following information to be included in his Quotation with the RFQ as evidence of compliance with the specifications (See Section 2 for proposal format). The RFQ may be rejected if the information listed herein is incomplete or if the proposed system deviates from the specifications.

- A.** A complete list of all equipment proposed, which shall specify manufacturer and individual model number shall be submitted.
- B.** Technical specifications and descriptions of all equipment proposed, including a functional description of the proposed system, will be supplied.
- C.** Detailed description of any special equipment shall be submitted.
- D.** Samples of pertinent contracts, warranties, and maintenance agreements shall be submitted.
- E.** Copies of WV Business License and WV Contractors Licenses (for installed systems).
- F.** Copies of Workers Compensation Certificate and Commercial Liability Insurance.
- G.** Certificate of Good Standing from Secretary of State.
- H.** Proof of registration with State Tax Department and copy of business license.
- I.** Proof of registration with any municipalities in which the bidder has an office, and copy of municipal business license(s).
- J.** Certificate or letter from Workers Compensations stating that the bidder is current on all workers compensation payments and is in good standing.
- K.** Copies of paid tax receipts, for current taxing period, from all counties in which the bidder owns personal or real property. Alternatively, a letter from the Sheriff of the county in which the bidder owns personal or real property stating that the bidder does not owe any delinquent personal or real property taxes.
- L.** Letter from the West Virginia State Tax Department stating that there are no liens against the bidder for unpaid State Taxes.
- M.** Affidavit from bidder that there are no unpaid judgments, liens or assessments against the bidder in any jurisdiction within West Virginia.
- N.** Detailed timeline for delivery.
- O.** **A Performance Bond may be required in whole or in part equal to the cost of the entire project to include the cost of any pre-purchased equipment, materials, services or other goods.** The Performance Bond may be waived in lieu of the Contractor totally completing a phase of the overall project. It must be inspected, all labor, materials, and equipment must be received and in place and approved by the Project manager. Then a recommendation to the Wood County Commission for payment on that particular phase of the project. Each

phase must be completed before the next phase can start by the recommendation of the Project Manager.

P. A mandatory Pre-RFQ/Bid Meeting will be held **Nov 5th, 2018 at 10:00am** in the 911 Center, 911 Core Road, Parkersburg WV, we are also requesting a "**Menu Item**" style quote in which a potential client or purchaser of tower installation services can view a matrix of prices that are culminated by selecting the price of installation or a specific tower type and height and the need of any or all of the other services contained herein.

3.2

Permits

The County shall be responsible for obtaining any and all permits required to perform tasks contracted through this request.

3.3 Insurance

A. Workers Compensation

Bidder, performing as an independence contractor hereunder, shall be fully responsible for providing Workers Compensation or other applicable insurance coverage for itself and its employees and the Wood County Commission shall have no responsibility or liability for such insurance coverage.

B. General Liability Insurance

The successful Bidder for any systems that included construction or installation shall provide to the Wood County Commission a copy of a policy, or a certification by an insurance carrier, showing the Bidder to have in effect during the term of this contract a General Liability Insurance policy which shall be the primary coverage for all Bidder's activities under this contract, name the Wood County Commission as a covered party, and all equipment, software and systems including training or any type which are part of this bid.

The Insurance coverage required by the above paragraph and listed with minimum coverage of at least Ten Million Dollars (\$10,000,000) with a (\$10,000,000.00 umbrella) shall be provided by an insurance company authorized to transact business in the State of West Virginia.

Bidder must provide certification of insurance compliance within 10 calendar days after notification of award. Certification must include: Name and address of insurance company; policy number; liability coverage amounts and contain the bidding document title from which award is made (i.e. **RFQ** title). The Wood County Commission shall be named as the insured.

3.4 One Year New System Warranty (MINIMUM)

For a period of one year from the date of final acceptance, the Bidder warrants that work performed under the contract conforms to the contract requirements and is free of any defects of hardware, software, materials or workmanship performed by the Bidder or any of his subcontractors or suppliers. Under this warranty the bidder shall remedy, at his own expense, any such defect. All equipment supplied by these contracts, including labor, will have a one-year warranty.

3.5 Replacement Parts

Upon expiration of the One Year New System Warranty, replacement parts for the equipment proposed shall be available for a period of at least five years.

3.6 Equipment of Current Production

Only new equipment of the latest design in current production will be considered and in no case will used, reconditioned or obsolete parts be accepted. Under no condition will equipment under development and without proven Beta testing on all proposed features be considered. Only equipment that meets current industry standards will be considered.

3.7 Possession of System

The successful Bidder for any systems that include construction or installation shall assume full responsibility for risk of loss or damage of all hardware and software until final installation. The one-year warranty will begin at the time the Wood County Commission accepts the system at final acceptance for installed systems, and upon delivery for hardware-only systems. The Wood County Commission will provide a secure area for the system during installation.

3.8 Delivery Time

The delivery/completion date for each project shall be established by the Wood County Commission's Project Manager and the successful Bidder of RFQ. Deliveries and installation dates and times shall be coordinated with the Wood County Commission's Project Manager.

3.9 Indemnify and Hold Harmless

Bidder shall indemnify and hold harmless the Wood County Commission, its agents, servants, and employees against all claims, demands and judgments made or recovered against them for damages to real or tangible personal property or for bodily injury or death to any person or any claim arising out of, or in connection with this RFQ where such damage, injury or claim was caused by

the negligence of bidder, or subcontractor of Bidder or their employees, servants or agents. The Wood County Commission agrees to notify Bidders promptly of any claim or demand, and to cooperate with Bidder in a reasonable way to facilitate the settlement or defense of such claim or demand.

3.10 Default

The Wood County Commission may declare a default should the Bidder fail to commence the work or a portion thereof within the specified time, or to perform said work continuously with sufficient workers and equipment to insure its completion within the time specified or as required by the agreed upon progress schedule, or to perform in a safe manner, or to comply with any provision of the contract. The Wood County Commission may elect to give notice in writing of such default, specifying the same. If the Bidder, within a period of 10 days after receipt of such notice, shall not proceed in accordance therewith to remedy such default, then the Wood County Commission shall have full power and authority, without process of law and without violating this contract to consider the Bidder in default and pursue remedies available.

3.11 Safety

The Bidder shall be familiar with and operate within the guidelines set forth by the Occupational Safety and Health Act, NFPA Standards, FAA, FCC regulations.

3.12 Clean Up

The Bidder will be responsible for the cleanup of any waste, extraneous or used material, packing material, shipping support structures, spillages, by-product resulting from the delivery, unloading and/or installation of equipment. Bidder shall be liable and in all respects responsible for all costs of cleanup and immediate action required on account of the release of any hazardous substance or regulated substance which is brought on premises by Bidder, to the extent that Bidder is the cause of any such release. Bidder shall be responsible for penalties, fines, costs and expenses or claims which may be assessed against the Wood County Commission or for which the Wood County Commission may become liable as a direct result of personal injury or property damage resulting from any such release caused by Bidder.

Bidder shall, from day to day, clean up and remove waste materials and rubbish, leaving the areas used by Bidder clear of all obstruction. Upon cut over, Bidder shall remove from the site all tools and machinery owned or rented by Bidder and all rubbish and material.

3.13 Anticipated Payment Schedules

The Wood County Commission's payment schedule will be net 60 days. The final 10% will be withheld until final testing and completion of the project. Under no circumstances will Wood County Commission pay for equipment or labor until a specific phase of work has been totally completed, i.e., civil work, foundations, tower erection, etc., or until receipt of that equipment.

The Wood County Commission requires the Bidders to provide information for the total dollar amount of the bids/quotes, which must include all equipment, accessories, software, labor, documentation, delivery, taxes, materials, and other anticipated cost for the delivery of the respective tower.

3.14 Davis-Bacon Act

The successful Bidder must meet the requirements of the Davis-Bacon Act and all related acts (DBRA), if applicable

DELIVERY, INSTALLATION AND ACCEPTANCE OF SPECIFICATIONS

4.0 Project Director/Management

The Wood County Commission has assigned a representative to function as their responsible person to oversee the purchase, installation and acceptance of this Communication Tower, the successful vendor must designate a specific person(s) that is (are) responsible for the delivery, inventory, staging, installation, and acceptance of the hardware and software that is being provided by the Bidder. The Bidder's Project Manager will have the responsibility and authority to negotiate any necessary change orders, be technically knowledgeable about the equipment, and have been experienced in the installation of the equipment being provided by the Bidder.

4.1 Installation/Maintenance

Maintenance of all hardware and software provided by Bidder will be the responsibility of the Bidder until final acceptance in the case of the installed systems, or until delivery in the case of hardware-only systems.

Bidder shall supply all test equipment, tools and spare parts required to perform preventative maintenance during the final period.

4.2 Delivery/Installation Schedules

The Bidder shall submit with their quotation a proposed schedule for delivery, installation, and checkout of all hardware, software, and systems (s) identified in the quotation.

The Bidder will be responsible for all labor in loading or unloading of hardware at the installation or delivery site.

4.3 Adherence to Date and Schedules

The successful Bidder agrees to adhere to proposed and contracted schedules. The Bidder shall not be liable or deemed to be in default for any delays or failure in performances resulting directly or indirectly from any cause or circumstances beyond the Bidder's reasonable control. The Bidder will advise the Wood County Commission's Project Manager in writing as soon as it becomes aware of such delays. However, the Wood County Commission's Project Manager, must approve any extension of scheduled completion dates and additional cost.

4.4 Correction of Defects

If any reason, before final acceptance, the equipment or software is found to be defective or not as warranted and/or contracted for, the Wood County Commission may refuse to accept it and the Bidder shall be so advised and shall be required to correct the defective equipment or software within a reasonable time as defined by the Wood County Commission. All costs relating thereto, including freight, would be at Bidder's own expense. In the event of such an occurrence, the initial or final performance test, which is in progress, shall be suspended for that device or the entire system, at the option of the Purchaser. When the faulty equipment or software has been corrected, the test shall be restarted at the beginning or resumed at the point of suspensions, depending upon the nature and seriousness of the defect, and at the discretion of the Purchaser.

STATEMENT OF SYSTEM REQUIREMENT

5.0 General Description

The Wood County Commission requires the Bidder to provide all hardware, engineering, software, materials, maintenance manuals, etc. as specified.

5.1 Hardware Specifications

All equipment must meet industry standards. (I.e. UL Listings, FCC, IEEE).

It is preferred that all equipment is manufactured according to the guidelines of the "Buy America Act".

CONTRACT AWARD

6.0 Terms and Conditions of Award

The terms and conditions imposed herein shall govern in all cases. Conflicting terms and conditions submitted by Bidder may constitute sufficient grounds for rejection of the bid.

It is anticipated that this **RFQ** shall form the basis of the negotiated contract entered into by successful bidder.

6.1 Contract Award

Only one contractor shall be responsible for the total work covered by this project. The utilization of sub-contractors must be pre- approved by the Project Manager. A full description of the work to be performed by the sub-contractor must be submitted in writing. Any sub-contractor used on this project, must provide documentation that is required by the general contractor. A sub-contractor must provide a certificate of insurance naming the Wood County Commission as the insured, before any work can be performed, and verified by the Project Manager.

6.2 Reserved Rights to Purchase

The Wood County Commission may award a contract, based on quotations received, without further discussion of such a quotation. Accordingly, each quotation shall state the most favorable terms, from a price and technical standpoint, the Bidder can submit.

6.3 Reserved Rights to Accept or Reject

The Wood County Commission reserves the right to waive informalities and minor irregularities in quotations received and to accept the most responsible, qualified offer.

6.4 Contractual Obligation

The contents of the submission of the successful Bidder shall be considered as contractual obligations. Failure to meet these obligations may result in voidance of the contract.

QUALIFICATIONS OF BIDDER

7.0 General

The Wood County Commission will examine the qualifications and ability of Bidders to meet the following criteria.

- A. The ability to meet or exceed the functional requirements of this **RFQ**.
- B. Bidder's support capabilities for on-going maintenance and enhancement of the systems purchased.
- C. Total fixed price costs to be incurred in processing the systems and subsequent hardware and software maintenance.

7.1 Reserved Rights to Reject

The Wood County Commission reserves the right to reject any or all bids/quotes.

EVALUATION CRITERIA

8.0 General

The evaluation of all responses received will consist of any initial and final (detailed) review as follows:

- A. The initial review will evaluate all submissions for conformance to stated guidelines, to eliminate all responses, which would deviate substantially from the basic intent of the request.
- B. A second review process will be done to evaluate all **RFQ** responses with reference to:
 - 1. Vendors Reliability
 - 2. Vendors Compliance - To perform work.
- C. The final review will consist of the following:
 - 1. Evaluate the technical content of the offering to determine which total configuration will best satisfy the requirements. The Bidder may be requested to give an oral presentation of their submission, at their expense, at the option of the County Commission.
 - 2. The Bidder's level of experience in Communication Tower installation must be a minimum of five (5) years, and provide proof of similar work.
 - 3. The Bidder's financial resources and business ability to provide the system being proposed.
 - 4. Prices quoted for the system.
 - 5. The Bidder's performance and service record with similar projects.
- D. The bid evaluation committee may make such investigations as deemed necessary to determine the ability of the Bidder to perform the work. The bid evaluation committee reserves the right to

recommend or reject any bid if, in the judgment of the committee, the Bidder is found to be deficient in any of the evaluation criteria.

The importance of cost factors in the selection will depend on the magnitude of the cost differentials identified, the credibility of such differentials, and astuteness of completion in the Technical Quotation, and the impact of other factors. Any significant inconsistency, if unexplained, raises a fundamental issue of the vendor's understanding of the nature and scope of the work required. The burden of proof as to cost credibility rests with the vendor. Proposed cost will be evaluated not only to determine if the cost is reasonable and realistic, but also to determine the Contractor understands of the program and his ability to organize and perform the contract.

The Selection committee may make such investigations as deemed necessary to determine the ability of the Bidder to perform the work. The committee reserves the right to reject any offer if, in the judgment of the committee, the offer is found to be deficient in any of the evaluation criteria.

8.1 Price Analysis

The low dollar quotation shall not necessarily be selected for award of the contract. The Wood County Commission will evaluate each quotation based upon the overall effectiveness and utility of serving the Wood County Commission.

The aggregate of the initial configuration, maintenance, and service costs will be of prime importance in the quotation cost analysis.

8.2 Equipment Evaluation

Each quotation must contain, at a minimum, technical documentation including literature sufficient for an effective evaluation of the equipment being proposed.

SPECIFICATIONS AND SCOPE OF THE PROJECT

9.0 General

The Wood County Commission requires the Bidder to provide all hardware, engineering, software, materials, maintenance manuals, etc. as specified in this Request for Quotation (RFQ).

The Wood County Commission requests that each vendor provide to the Wood County Commission a suggested system design and equipment to meet the desired features described below. Each vendor shall, at a minimum, provide

equipment that meets the needs, features, and benefits described herein. Additionally, each vendor will be responsible to provide suggested solutions and additional equipment as recommended options to best meet the future growth of the Communications System requested.

9.1 Scope of Work

Turn-key installation of self-supporting communications tower in Wood County. Work is to include, but not limited to civil work, foundations, grounding, tower installation and or tower removal, building delivery, building installation, providing pre-cast communications buildings, electrical installation, providing electrical and radio equipment, providing antennas, transmission lines and all related hardware, installation or removal of antennas and lines, and all related components of Communications Facilities in the State of West Virginia.

9.2 Specifications - Civil Work - Site Preparation

Vendor is to provide all equipment, materials and labor, and is responsible for maintaining a clean work site, free from trash and debris. Site clearing and grading shall be completed in all construction areas, which includes tower location and guy wire right of ways. All trees, brush, and stumps shall be laid in a windrow like fashion. No materials shall be buried on site.

Erosion and sediment control devices shall be installed as the first step of construction. All areas disturbed by construction activity shall be seeded, fertilized and mulched as quickly as possible.

Tower locations shall be cleared and leveled, with all topsoil being removed. Tower compound shall be approximately **100 feet by 100 feet**. Total area to be **100 feet by 100 feet** for self-supporting towers.

Upon a completion of foundations and grounding systems, a layer of environmental cloth shall be placed on the 100 foot by 100-foot compound with 6" of 3" crushed limestone with 3" of 1 1/2 minus crushed limestone to cover .

Pricing for this section shall be furnished as cost per square foot, and identified as "SITE PREPARATION".

9.3 Specifications - Civil Work - Roadway

Vendor is to provide all equipment, materials and labor, and is responsible for maintaining a clean work site, free from trash and debris. Roads shall be graded, drained, and ditched as necessary. Roads shall have a minimum of six inches of crushed stone, with stabilization fabric and larger stone as deemed necessary.

Pricing for this section shall be furnished as a cost per linear foot of 10-foot roadway, and shall include 2 prices - one for improvement of existing grade, and one for new grade. Pricing for this section shall be identified as "ROADWAY". Road will require 40' of 18" HOPE culvert

9.4 Specifications - Foundation

Vendor is to provide all equipment, materials and labor, and is responsible for maintaining a clean work site, free from trash and debris. Foundation sizes shall be determined per site. Building foundations as designed by the building manufacturer, generator pads and tank pads shall be 1 foot thick, with #4 rebar spaced 12 inches on center each way. Rebar will have a minimum of 3 inches of concrete cover.

Concrete for all foundations shall be 4000 psi in 28 days. Test reports shall be furnished for slump test, air entrainment, and 7-day/28-day break. All testing shall be performed by an independent engineering firm as approved by Wood County Commission or the Project Manager.

All concrete shall be placed in a continuous pour unless otherwise indicated.

Top of building foundation, tower foundation and generator pad shall be four inches above finished grade.

Tower foundations shall be installed according to tower manufacturer's specifications and tolerances.

Pricing for this section shall be furnished in three parts: 1.) Price per square foot for building and generator pads, 2.) Price for standard self-supporting tower foundations. Pricing for this section shall be identified as "Foundations".

9.5 Specifications - Electrical Service

Vendor is to provide all equipment, materials and labor, and is responsible for maintaining a clean work site, free from trash and debris. Electrical service shall be installed underground from the closest utility pole to an agreed upon location, just inside the compound. Vendor shall install one (1), three (3) inch conduit and two (2), four (4) inch conduits per site.

A four-gang meter box shall be installed on an "H" structure just inside the compound. Meter box shall be capable of 200-amp service at each meter location, with a separate 200-amp breaker for each service. All breakers are to be provided.

Electrical service shall be installed from the meter structure to the equipment building in underground 3 or 4-inch conduit. Contractor shall be responsible for obtaining for electrical inspections. An additional 4-inch conduit shall be installed from "H" structure to the equipment building for telephone lines.

Electrical serviced conduit shall be installed from the equipment building to the generator pad, as well as necessary conduits for telemetry and control of the proper operations of a standby generator.

The Electrical Contractor shall provide according to specific site (new or existing) pricing to replace, upgrade, or install new electrical service, including overhead, or underground High Voltage 7200-volt service, high voltage metering, transformer, pull boxes, breakers, conduit, UPS units, transfer switch, surge protection, grounding, or special grounding, wiring of specific circuits or equipment, emergency generator, and LP tanks. Reference shall be made to specific line items in the menu bid portion of this RFQ

Pricing for this section shall be identified as "ELECTRICAL".

9.6 Specifications - Tower Installation

Vendor is to provide all equipment, materials (other than that supplied by fabricator) and labor, and is responsible for maintaining a clean work site, free from trash and debris. Tower shall be kept plumb and straight during installation.

Lights shall be installed in their permanent locations as the tower is being installed.

Towers will be installed in a workmanlike manner according to tower manufacturer's specifications and tolerances.

County Commission

An approximate **10-foot** ice bridge shall be installed between the tower and the equipment building.

Self-supporting tower shall be plumbed and leveled to manufacturer's standards. All tower base flanges shall be grouted to the foundation with weep holes, using non-shrink grout.

Pricing for this section needs to be by tower type and size (separate price for each). Following is a list of expected tower types and sizes that are to be used:

Self-Supporting Towers	
40 ft.	
60 ft.	
80 ft.	
100 ft.	
120 ft.	
140 ft.	
160 ft.	
180 ft.	
200 ft.	
220 ft.	
240 ft.	
260 ft.	
280 ft.	
300 ft.	
320 ft.	
340 ft.	

A per unit installation price for each of the following optional installation:

6 foot and 8-foot ice shields for microwave dishes

Pricing for this section shall be identified as TOWER INSTALLATIONS.

9.6.1 Specifications - Tower Removal and Demolition

This section shall refer to the MENU BID portion of this RFQ. Vendor shall provide all equipment, materials (other than that supplied by the fabricator) and labor, to remove or demolish any guyed, self-supporting, monopole, including fire towers or any other antenna structure. While maintaining a clean work site, free from trash and debris.

Vendor shall be qualified in this aspect of the work to be performed and shall follow all manufacture specifications and safety procedures.

Vendor shall be responsible for removing and transporting of structure to a designated location as specified by customer.

Pricing for this section needs to be by tower type and size (separate price for each). Following is a list of expected tower type and sizes that are to be used:

Self-Supporting Towers	
40 ft.	
60 ft.	
80 ft.	
100 ft.	
120 ft.	
140 ft.	
160 ft.	
180 ft.	
200 ft.	
220 ft.	
240 ft.	
260 ft.	
280 ft.	
300 ft.	

320 ft.	
340 ft.	

Pricing for this shall be referenced in the MENU BID portion of this RFO and shall be identified as "TOWER DEMOLITION"

9.7 Specifications - Fencing

Vendor is to provide all equipment, materials, and labor, and is responsible for maintaining a clean work site, free from trash and debris. All wire, fabric, fittings, hardware and steel members used for site area or guy anchor fencing shall be hot dipped galvanized or other approved non-corrosive materials.

Location of corner posts for tower compound shall be determined after completion of tower work.

Gate and corner posts shall be 4-inch ID galvanized pipe. Line posts shall be 2-inch ID galvanized pipe.

Corner post foundations shall be 3 feet deep or 6 inches below the frost line, whichever is greater.

Foundations for line posts shall be 12 inches in diameter. Foundations for gate and corner posts shall be 18 inches in diameter.

All posts except gateposts shall be capped with combination cap and barbed wire support arm.

A top rail 1 3/8-inch ID galvanized pipe shall be installed between posts.

Fence fabric shall be eight-foot high, #9 gauge, galvanized chain link fabric with twisted top selvage and knuckles bottom selvage.

Fabric shall be tensioned per manufacturer's recommendations to present a neat appearance.

Fabric shall be secured at corner and gateposts using stretcher bars and tension bank clips.

Fabric shall be secured to the top rail and brace rods using tie clips.

Three runs of 4 point galvanized barbed wire shall be installed along top of fence. Barbed wire shall be tensioned per manufacturer's recommendations to present a neat appearance.

Install tension wire along bottom of fabric.

Location of gates shall be determined at the time fence corners are located. One (1) 16- foot drive through gate and one (1) man gate shall be installed per site.

All joints between tubular gate members shall be welded or heavy fittings providing rigid and watertight connections.

Gate hinges shall provide for 180-degree radius gate swing. Barbed wire guard shall be installed on top of the gates. Adequate clearance shall be maintained to allow gate operation.

Gates shall be installed plum and shall open and close freely.

All corner posts and gateposts shall be connected to the site grounding system.

Pricing for this section is to be based on above specifications for a 100-foot by 100-foot compound. Pricing shall be identified as "FENCING".

9.8 Specifications - Grounding

Grounding option: 8 ft. copper clad grounds thermal bonded to the #2 tinned copper wire, throughout the site with a sufficient number place in ground to provide a 5 ohms or less minimum resistance, as outlined in the site specification.

grounding to include, but not limited to: loop around tower with leads to each tower leg. Lead to each fence corner, each gate post, each H-frame, shelter for shelter grounding.

Loop around shelter with leads to inside shelter.

Leads to tower bottom ground bar, shelter ground bar, generator and propane tank.

all grounds to be terminated to meet or exceed (nec 2018).

All connectors other than cad welds will be crimped double hole lugs. All underground connections shall be cad weld. No right angle cad welds are to be used. All wire-to-wire connections should utilize "y" or parallel connections.

All wire used will be #2 tinned copper wire unless otherwise indicated.

No sharp bends will be permitted in any portion of the grounding system.

A "Tower Ground Ring" of #2 tinned copper wires will circle tower foundation 2 feet out from the foundation and 3 feet underground.

Three (3) jumpers will run from the tower ground ring and be attached to the tower legs. Jumpers will be attached to tower according to manufacturer's directions.

Pricing for this section shall be identified as "Grounding".

9.9 Specifications - Installation and Removal of RF antennas, microwave

Dishes and transmission lines.

This section shall be referenced in the MENU BID portion of this RFQ. The purpose of this section is to provide a broad menu of work for the installation of various sizes of antennas, antenna mounts, attachment hardware, microwave dishes, transmission lines, hanger brackets, grounding kits, connectors, dehydrators, tower lights, Beacon assembly, side lights, Light controllers, Lightning protection, buss bars, entrance ports, horizontal ice bridges, and antenna ice shields, including special fabrication of antenna support mounts.

Pricing for this section shall be referenced in the MENU BID and identified as "ANTENNAS AND LINES".

9.9.1 Installation of Transmission Lines

Installation of Transmission line shall be priced on a per foot basis. Pricing shall be included for 1/2", 7/8", 1 1/4", and 1 5/8" helix and 6 GHz elliptical waveguide. Installation shall include attachment of hanger brackets at 3 foot intervals, attachments of grounding kits at 4 locations as appropriate and proper termination. Waveguide shall be pressurized. Appropriate sealant and weather-proofing shall be used.

Installation of three (3) provided VHF stationmaster or similar antenna as well as three provided UHF SIRM antenna. bidder must provide transmission lines.

County Commission _____

9.9.2 Shelter _____

Shelter shall be 8x20 pre-cast concrete construction with 4" walls, dual redundant 3 ton HVAC. Interior 200 amp service panel
4x4 peep with integrated cable tray running length of shelter to peep.
Walls to be FRP or equal, tile floor (non-asbestos) Metal 2 hour fire door
minimum of 8-4' 2 bulb ceiling lights

Pricing for this section shall be referenced in the MENU BID and Identified as "TRANSMISSION LINES".

10.0 MENU BID/QUOTE OPTIONS

Each Line Item number shall be quoted and considered as an individual item as specified. All labor, materials, and equipment shall be included in each line item price when applicable. The Vendor supplied material or equipment must be approved and 2 copies of technical information, specifications or related information supplied to the customer and will be quoted at a cost plus freight and mark-up.

The purpose of the "MENU BID/QUOTE" document is to cover all additional line items that may or may not occur on each individual tower, tower site, and its components, to make each site a complete operational facility for Wood County.