

PROPOSAL

REQUEST FOR PROPOSALS

Grayson County Virginia

Engineering & Construction Services

The Grayson County Network Authority is seeking proposals for engineering & construction to build a communication tower to locate and 911 Emergency Response Equipment on Point Lookout Mountain located at 4139 Point Lookout Lane, Independence, VA (coordinates 36.669487, 81.161835).

Six (6) originals of the Proposal for requested services shall be submitted to the Board of the Grayson County Network Authority at the address listed below on, or before, 5:00 pm local time Friday, May 31, 2024. Mailed submissions shall be postmarked sufficiently early to ensure delivery prior to the deadline.

Grayson County Board of the Network Authority

S County Administrator's Office

Engineering & Construction Services Pond Mountain Tower

P.O. Box 217

129 Davis Street

Independence, Virginia 24348

Interested firms may request a copy of the full RFP by contacting Thomas R. Revels at trevels@graysoncountyva.gov or by visiting the Grayson County website: www.graysoncountyva.gov.

Grayson County is an Equal Opportunity Employer and will not discriminate on the basis of race, creed, color, sex, national origin, age, handicap or familiar status. Local, minority, and female owned firms are encouraged to participate.

PROPOSAL
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Grayson County Network Authority

Engineering & Construction of a 911 Communication Tower

I. Introduction :

The Grayson County Network Authority Board is seeking proposals for Engineering and Construction of a communication tower to be located on Point Lookout Mountain from qualified professional firms that have the comprehensive scope of services to design, build, and install required equipment for the proper operation of 911 emergency response equipment in the western end of the county.

II. Scope of Work:

Quantity of one (1) 140' class III self-supporting tower.

The tower will be triangular in design with a base width of 15' - 0" tapering to 5' - 0" at the top. The tower will utilize tubular steel for tower legs and angular steel for bracing.

See the tower profile included in this proposal for the design parameters. The tower will be designed to support the following equipment:

	ANTENNA MODEL NUMBER (QTY)	RADOME		ELEVATION C.O.R.	TX. LINE SIZE & TYPE	FREQUENCY	AZIMUTH TO NORTH	ANTENNA MOUNT (DESIGN)	MOUNT PROVIDED	
		YES	NO						YES	NO
1	(1) 20' x 3in Omni	X		140' @ Base	(2) 7/8"	N/A	Unknown	One (1) Flush Mount 2-3/8" O.D. Pipe		X
2	(1) 4' x 1' x 8in	X		131'	(1) LMR-400 7/8"	N/A	Unknown	One (1) Flush Mount 2-3/8" O.D. Pipe		X
3	(1) 20' x 3in Omni	X		130' @ Base	(2) 7/8"	N/A	Unknown	One (1) 6' Sidarm		X
4	(2) 4' x 1' x 8in	X		130'	(3) 1/2"	N/A	Unknown	Two (2) Flush Mounts 2-3/8" O.D. Pipe		X
5	(1) 5' x 1' x 3in Panel	X		126'	(1) 7/8"	N/A	Unknown	One (1) Flush Mount 2-3/8" O.D. Pipe		X
6	(1) DB408	X		125' @ Base	(2) 7/8"	N/A	Unknown	One (1) 6' Sidarm		X
7	(1) 4' x 1' x 8in	X		123'	(1) LMR-400 7/8"	N/A	Unknown	One (1) Flush Mount 2-3/8" O.D. Pipe		X
8	(1) 12" x 12" x 6" Electrical Receptacle Box	X		123'	(2) 1/2"	N/A	Unknown	One (1) Flush Mount 2-3/8" O.D. Pipe		X
9	(1) 6' Solid Dish W/ Radome	X		120'	(1) 7/8"	6 GHz	0°	One (1) 4-1/2" O.D. Leg-type Dish Mount		X

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10	(2) 4' x 1' x 8in	X	119'	(3) 1/2"	N/A	Unknown	Two (2) Flush Mounts 2-3/8" O.D. Pipe	X
11	(1) 4' Solid Dish w/ Radome	X	118'	(2) 7/8"	6 GHz	180°	One (1) 4-1/2" O.D. Leg-type Dish Mount	X
12	(1) 4' Solid Dish w/ Radome	X	115'	(1) 1/2"	6 GHz	0°	One (1) 4-1/2" O.D. Leg-type Dish Mount	X
13	(1) 3' Solid Dish	X	110'	(2) LMR-400	6 GHz	180°	One (1) 4-1/2" O.D. Leg-type Dish Mount	X
14	(1) 4' Solid Dish w/ Radome	X	110'	(1) 1/2"	6 GHz	0°	One (1) 4-1/2" O.D. Leg-type Dish Mount	X
15	(1) 5' x 1' x 3in Panel	X	110'	(1) Cat 5	N/A	Unknown	One (1) Flush Mount 2-3/8" O.D. Pipe	X
16	(1) 5' Yagi	X	103'	(1) Cat 5	N/A	Unknown	One (1) Flush Mount 2-3/8" O.D. Pipe	X
17	(1) 5' Yagi	X	100'	(2) Cat 5	N/A	Unknown	One (1) Flush Mount 2-3/8" O.D. Pipe	X
18	(1) AN/T450D	X	90' @ Base	(1) 1/2"	N/A	Unknown	One (1) 6' Sidearm	X
19	(2) 20' x 3in Omni	X	85' @ Base	(3) 7/8"	N/A	Unknown	Two (2) 6' Sidearms	X
20	(1) 20' x 3in Omni	X	80' @ Base	(2) 7/8"	N/A	Unknown	One (1) 6' Sidearm	X
21	(1) 4' Solid Dish w/ Radome	X	78'	(1) LMR-400	6 GHz	0°	One (1) 4-1/2" O.D. Leg-type Dish Mount	X

22	(1) 3' Solid Dish w/ Radome	X	78'	(2) LMR-400	6 GHz	180°	One (1) 4-1/2" O.D. Leg-type Dish Mount	X
23	(1) 5' x 1' x 3in Panel	X	75'	(1) Cat 5	N/A	Unknown	One (1) Flush Mount 2-3/8" O.D. Pipe	X
24	(1) 10' Dipole	X	60' @ Base	(2) LMR-400	N/A	Unknown	One (1) 6' Sidearm	X
25	(1) 5' Yagi	X	59'	(1) LMR-400	N/A	Unknown	One (1) Flush Mount 2-3/8" O.D. Pipe	X
26	(1) 5' Yagi	X	55'	(2) LMR-400	N/A	Unknown	One (1) Flush Mount 2-3/8" O.D. Pipe	X
27	(1) 5' Yagi	X	48'	(1) Cat 5	N/A	Unknown	One (1) Flush Mount 2-3/8" O.D. Pipe	X

Note: This structure should be designed with a 50% increase in capacity after antennas and lines are installed. .

Note: This structure has been designed, for loading purposes only, with one (1) ice shield @ the 117.5', 112.5' and 82' elevations.

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I: TOWER MATERIALS

Materials to be provided include:

Complete tower steel and hardware

Anchor bolts and templates

Construction step bolts (see notes)

Outside climbing ladder

Waveguide support ladder (to support twelve (12) initial lines) **(stackable hangers by others)*

Safety cable kit without harness

(150') TIA standard grounding kit

8' x 3/4" lightning rod copper clad and stiffener 2-7/8" x 15' lightning rod extension

Leg-to-Leg templates

P.E. certified tower profile and foundation drawings

Final erection drawings

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II: FOUNDATION INSTALLATION

Install foundations based on presumptive clay soil, per TIA-222-H.

III: TOWER ERECTION

The following is included in the erection price:

Offload tower materials from truck and inventory

Erect tower steel complete

Install Outside climbing ladder

Install Waveguide support ladder (to support twelve (12) initial lines) **(stackable hangers by others)*

Install Safety cable kit without harness (150')

Install 8' x 3/4" lightning rod copper clad and stiffener

Install 2-7/8" x 15' lightning rod extension

IV. GROUNDING.

Install TIA standard grounding kit

V. TOWER FREIGHT TO GRAYSON COUNTY VA to be included.

VI. ANCHOR BOLT FREIGHT TO GRAYSON COUNTY, VA to be included.

**The pricing should be based on one(1) set of anchor bolts and templates, and one (1) leg-to-leg template to be shipped together in one (1) shipment to the same destination at the same time.*

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VII. OPTIONS

- Flush Mount with 2-3/8" O.D. Pipe for the 119' Elevation
 - Installation (each)
- Flush Mount with 2-3/8" O.D. Pipe for the 119' Elevation
 - Installation (each)
- 4-1/2" O.D. Leg Dish Mount for the 118' Elevation
 - Installation (each)
- 4-1/2" O.D. Leg Dish Mount for the 115' Elevation
 - Installation (each)
- 4-1/2" O.D. Leg Dish Mount for the 110' Elevation
 - Installation (each)
- 4-1/2" O.D. Leg Dish Mount for the 110' Elevation
 - Installation (each)
- Flush Mount with 2-3/8" O.D. Pipe for the 110' Elevation
 - Installation (each)
- Flush Mount with 2-3/8" O.D. Pipe for the 103' Elevation
 - Installation (each)
- Flush Mount with 2-3/8" O.D. Pipe for the 100' Elevation
 - Installation (each)
- 6' Sidarm with two (2) Tiebacks for the 90' Elevation
 - Installation (each)
- Two (2) 6' Sidarms each with two (2) Tiebacks for the 85' Elevation
 - Installation (each)
- 6' Sidarm with two (2) Tiebacks for the 80' Elevation
 - Installation (each)

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4-1/2" O.D. Leg Dish Mount for the 78' Elevation

Installation (each)

4-1/2" O.D. Leg Dish Mount for the 78' Elevation

Installation (each)

Flush Mount with 2-3/8" O>D> Pipe for the 75' Elevation

Installation (each)

6" Sidarm with two (2) Tiebacks for the 60' Elevation

Installation (each)

Flush Mount with 2-3/8" O.D. Pipe for the 59' Elevation

Installation (each)

Flush Mount with 2-3/8" O.D. Pipe for the 55' Elevation

Installation (each)

Flush Mount with 2-3/8" O.D. Pipe for the 48' Elevation

Installation (each)

Waveguide Bridge 2-Leg 2' x 10' (18' Direct Burial) with three (3) 4 level
trapeze kits (each)

Installation (each)

PROPOSAL

Submitted By: _____
Vendor Name

Signature: _____
Authorized Representative Signature

Acceptance of Customer:

Please enter our order for the above items in accordance with this proposal.

Signature of Authorized Representative

Name (Print)

Title

Date