

Athens Utilities Board Communication Tower RFP

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Description of Project

The Athens Utilities Board (AUB) is soliciting requests for proposals on the specification, design, procurement, delivery, and installation of a self supporting communications tower. The tower should be as tall as possible, while staying beneath the height regulated by the Federal Aviation Administration (FAA). The tower site is located outside the city limits of Englewood in McMinn County, Tennessee. The winning bidder of the project is expected to handle all engineering, purchasing, delivery, and remaining site preparations as spelled out below by licensed, bonded, and insured staff and subcontractors.

Required Insurance and Licensing

- Successful bidder shall have insurance as listed below

a. Commercial General Liability—Minimum Policy Limits

Commercial General Liability	Policy limits of not less than:
General Aggregate	\$ 2,000,000
Products—Completed Operations Aggregate	\$ 2,000,000
Personal and Advertising Injury	\$ 1,000,000
Bodily Injury and Property Damage—Each Occurrence	\$ 1,000,000

b. Automobile Liability:

Automobile Liability	Policy limits of not less than:
Combined Single Limit (Bodily Injury -Property Damage)	\$ 1,000,000

c. Contractor's Professional Liability:

Contractor's Professional Liability	Policy limits of not less than:
Each Claim	\$ 1,000,000
Annual Aggregate	\$ 1,000,000

d. Umbrella or Excess Liability

Excess or Umbrella Liability	Policy limits of not less than:
Each Occurrence	\$ 5,000,000
General Aggregate	\$ 5,000,000

e. Worker's Compensation

Workers' Compensation and Related Policies	Policy limits of not less than:
Workers' Compensation	
State	Statutory
Employer's Liability	
Each accident	\$ 1,000,000
Each employee	\$ 1,000,000
Policy limit	\$ 1,000,000

- Successful bidder shall hold a valid license in the State of Tennessee to construct the work. Likewise, the tower and foundation design shall be sealed by a professional engineer licensed in the State of Tennessee.
- Successful bidder shall execute a 100% Performance and Payment Bond on a form acceptable to AUB.

Pre-Work Already Completed/In Progress

- Tower site has been identified, cleared of trees, and leveled.
- A roadway/drive has been roughed in for access to the site and will be graveled in the coming months as deemed possible/necessary by the construction/delivery schedule and weather conditions.
- Underground utilities will be installed in the roadway to the site including underground power and fiber optic communications.
- There is no available water at the site.
- While there is a road, large trucks and deliveries including tower components and concrete may require the assistance of a dozer which can be provided by AUB's excavation contractor.
- Geotechnical survey and report completed.

Tower Requirements

- The tower should be as tall as allowable while not exceeding the height regulations requiring oversight or approval of the Federal Aviation Administration (FAA). Preferably 190' - 199'.
- The tower should be able to withstand a minimum of 90 miles per hour wind for 3 seconds. Additional miles per hour ratings welcome if advisable or not financially over restrictive.
- The tower should have adequate safety measures in place to allow for climbing to and working on any installed equipment.
- The tower shall be grounded at each leg with ground rods stacked as deep into the earth as is possible to provide for the maximum level of lightning and static protection.
- All permits and other documentation required for construction and maintenance of the tower and tower site shall be obtained by the contractor.
- AUB will supply a hut or NEMA rated cabinets as well as the utilities needed to support the equipment, as well as power for construction.
- AUB will provide a contractor for excavation work as well as other heavy equipment needs, except for cranes or concrete trucks which shall be scheduled and paid for by the project contractor.
- Although a light should not be required if the tower is below the height requiring FAA oversight, all of our existing towers have lights. Tower should be priced with a light and the decision to install or not install a light will be made at a later date.

Tower Loading Expectations

AUB

1. One Omni Antenna- 176" x 2.992 Diameter 38 lbs Wind Load is 444.8N @ 100 mph (100lbf @ 100mph) mounted at 185'. 860MHz.
2. One Ubiquiti Dish back haul to Star Mountain 413 x 360 mm, 420 N at 200 km/h (94.4 lbf at 125 mph mounted at 180'. 5GHz.
3. One omni antenna – 48"x1" diameter plus small connector box mounted at 175'. 900MHz ISM.

AUB-Tellico Junction

1. One Omni Antenna- 176" x 2.992 Diameter 38 lbs Windload is 444.8N @ 100 mph (100lbf @ 100mph) mounted at 120'. 860MHz.
2. Small WIFI related dish to distribute WIFI within the area. Mounted at 150'.

Englewood Fire

1. One Omni Antenna- 176" x 2.992 Diameter 38 lbs Windload is 444.8N @ 100 mph (100lbf @ 100mph) mounted at 165'. 450MHz.

Geotechnical Exploration Documents

A Geotechnical Exploration has been performed by GEOServices, LLC. A PDF of the results is available upon request. The request should be made by emailing Kevin Goins at kgoins@aub.org with the subject "AUB Tower Site Geotechnical Report Request."

Project Timeline

Work already completed

1. September 2023 - Site clearing and leveling
2. September 2023 - Access road/drive was partially completed

Future Work Proposed Timeline

1. February/March 2024 - bid tower project for labor and materials and award project to project manager/installation contractor
2. March/April 2024 - Southern Construction LLC to lay conduits for power and fiber service in the access road
3. March/April 2024 - winning bidder to get tower and foundation engineered information secured and available to AUB for review
4. April/May 2024 - Southern Construction LLC to gravel and ditch road and site for use by tower delivery and construction personnel
5. May/June/July 2024 - Tower foundation installed and concrete base poured for communications hut and conduits installed for tower and communication hut
6. July/August 2024 - Tower erected on site and all available equipment installed by contractor
7. July/August/September 2024 - Chain link fence installed around site
8. July/August/September 2024 - Final survey completed of site, utility easement, access roadway

Tower Location Information

The site of the tower is on private property outside of Englewood, Tennessee in McMinn County. The mapping coordinates for the site are 35°23'42.06"N 84°27'39.07"W. The closest road to the site is County Road 480, but access to the site is from County Road 477. The site location is approximately 1240' in elevation.

