

### **REVISED REQUEST FOR PROPOSAL**

## 2020 Design & Construction of a Public Safety Radio and Backhaul SystemTower Durham, New Hampshire

REVISED BID DUE DATE: Friday, May 15, 2020 4:00 pm

Electronic Bid submittal is acceptable.

Email Subject Line: RFP Design & Construction of Public Safety Radio

Send to: lvincent@ci.durham.nh.us

This Revised Request for Proposal is put forth to accommodate new parameters for two tower design options. All other guidelines as defined within the Beech Hill Tower Request for Proposals posted to the Town of Durham's Website on January 21, 2020 are applicable.

#### **REVISED BID Submittal Requirements Only submitthe following:**

Tab 9 – Financial ● Proposed itemized cost breakdown for services as defined within this RFP for tower Option A and tower Option B.

The following Scope of Work is hereby Amended/Revised:

The PROJECT SCOPE is for a communication **tower site** on Beech Hill Road in Durham, NH. The project consists of the procurement and construction of a new self-support tower, 160LF 6' high chain link fenced compound with one drive through gate, electrical service and other general site improvements. The tower should be fully equipped, including cable management, stand-off mounts and ice bridge, to accommodate the equipment listed below at the elevation and offsets shown which are to be installed by 2 Way Communications Service, Inc.

The **tower equipment** shall include all structural hardware required to construct and install the facility per the manufacturer's specifications and Motorola spec. The selected firm will provide the Manufacturer's product specifications electronically and descriptive documentation with at minimum elevation drawings of the proposed communications tower as an attachment to the proposal. Work at the tower site shall include but not be limited surveying and engineering of site, PE stamped drawings for tower and foundation, certified <u>Site Plan</u>, tower foundation, tower, safety cable system, required pipe clamps, pipe ends, installation materials, welding supplies, required standoff assemblies, ground bars and required ground hardware, ground wire and ground rods, installation of RF and cabling components, concrete generator pad, concrete communications' shelter pad, utility coordination for extension/new service and utility trench construction per State/Eversource requirements.



**EXCAVATION:** Trenching, foundation excavation, backfill and site clearing to be provided by and/or with coordination of the Durham Department of Public Works. DO NOT INCLUDE EXCAVATION WITHIN BID.

#### **SHELTER:**

OPTION A GUIDELINES: A prefabricated wood framed shelter to be provided by and/or with coordination of the Durham Department of Public Works. DO NOT INCLUDE A SHELTER WITHIN BID. OPTION B GUIDELINES: A concrete masonry shelter to be provided by and/or with coordination of the Durham Department of Public Works. DO NOT INCLUDE A SHELTER WITHIN BID.

Two Bids are requested with consideration to the following Guidelines:

#### Option A 150' Self Support Tower

- 100 Amp Service (30A for heat, vent, lights; 30A for Durham LMR; 30A vacant for future tenant; 10A for water tank)
- Include buck/boost transformer for ~200VAC (V.I.F) -> 240VAC, extend existing 100A water tank electric service to shelter.
- Shelter specifications: grounding halo/electrical/exhaust fans/baseboard heat/lighting/cable management/cable ground bars/lockset and alarm contacts.
- Concrete pads for shelter and future generator.
- All other RFP specifications applicable.

#### Option B 180' Self Support Tower

- 200 Amp Service further defined below.
- Shelter specifications same as Option A.
- Concrete pads for shelter and future generator.
- All other RFP specifications applicable.

Tower shall be constructed to meet the minimum tower loading of:

| Option "A" 150' Height Tower |     |              |             |             |                 |           |             |  |  |  |  |
|------------------------------|-----|--------------|-------------|-------------|-----------------|-----------|-------------|--|--|--|--|
| Elev. (ft)                   | Qty | Fixture Type | UPSA (sqft) | Tx Line Qty | TS Line Type Mo | ounted on | Offset (ft) |  |  |  |  |
| 150                          | 1   | ANT 150-F6   | 4.05        | 1           | 7/8" Foam       | Leg       | 1           |  |  |  |  |
| 140                          | 3   | HP2          | 3.14        | 3           | CAT5e           | Leg       | 1           |  |  |  |  |
| 130                          | 2   | ANT 150-F2   | 1.3         | 2           | 7/8" Foam       | Leg       | 6           |  |  |  |  |
| 130                          | 1   | ANT 150-F6   | 4.05        | 1           | 7/8"Foam        | Leg       | 6           |  |  |  |  |
| 120                          | 3   | HP2          | 3.14        | 3           | CAT5e           | Leg       | 1           |  |  |  |  |



| Option "B" 150' Height up-to 180' Height Tower, minimum design reserve capacity 50% |     |              |             |             |                |            |             |  |  |  |  |
|---|-----|--------------|-------------|-------------|----------------|------------|-------------|--|--|--|--|
| Elev. (ft)  | Qty | Fixture Type | UPSA (sqft) | Tx Line Qty | TS Line Type M | lounted on | Offset (ft) |  |  |  |  |
| 180   | 1   | ANT 150-F6   | 4.05        | 1           | 7/8" Foam      | Leg        | 1           |  |  |  |  |
| 170   | 3   | HP2          | 3.14        | 3           | CAT5e          | Leg        | 1           |  |  |  |  |
| 160   | 2   | ANT 150-F2   | 1.3         | 2           | 7/8" Foam      | Leg        | 6           |  |  |  |  |
| 160   | 1   | ANT 150-F6   | 4.05        | 1           | 7/8"Foam       | Leg        | 6           |  |  |  |  |
| 150   | 3   | HP2          | 3.14        | 3           | CAT5e          | Leg        | 1           |  |  |  |  |

# Durham LMR Eversource Power RFP BID Instructions for Option B 200AMP Design

Per Eversource Pole Location Plan attached, please include in your bid the following:

- A) Provide and Install pull box (MH) for primary feeders at the intersection of utility and access trails.
- B) Provide and Install primary power conduits with mule-tape: 2x 3" PVC (1x is spare) to standard depth of 30" or with concrete cover to Eversource standards.
- C) Provide and Install 1x 3" PVC telco conduit with mule tape. Separate encasement from primary power conduits if standard depth not achieved.
- D) Note, conduit concrete encasements required only along travelled way over access easement, from intersection of trails to vault/site.
- E) <u>Concrete pad near water tank for transformer</u>, within 200' of proposed tower compound.