

## **Background**

The Borough of Naugatuck Police Department (Naugatuck) has contracted Motorola Solutions, Inc. (Motorola) to provide an upgrade of their radio system. This project includes new equipment being installed in several rooms at the police department and various other locations around town. As part of this project Naugatuck is responsible to provide or improve grounding and AC power systems to comply with Motorola's R56 standards. The purpose of this RFP is to select a contractor to perform required upgrades.

## **Vendor Qualifications**

This project includes installation of specialized equipment which requires R56 compliant grounding and AC power distribution. All vendors responding must have documented experience performing work as part of a communications project which required R56 grounding and AC power distribution.

Please provide references for at least two R56 communications projects for which your firm has completed power and grounding upgrades to meet R56 standards.

In addition to R56 upgrade experience all firms must be licensed in the state of Connecticut to perform the work required by this request.

All prospective vendors will be required to submit their R56 communications project customer references and license information prior to the pre-bid walk through. Those vendors that meet the above criteria will be contacted to attend the pre-bid walk through and will be given a soft copy of Motorola's R56 Standards to reference when preparing their responses and while performing work.

## **General Specifications**

1. All materials provided and installed must meet Motorola's R56 standards where applicable
2. All workmanship provided must meet Motorola's R56 standards
3. All work and materials must comply with all applicable codes
4. Any workmanship or materials provided by the successful vendor, that are found to be deficient during the project R56 audit, shall be reworked or replaced to correct the identified deficiencies without additional cost
5. Permits Fees Waived

## **Site By Site Overview**

Vendors that meet the basic qualification shown above will be invited to a pre-bid meeting and site inspection at a date to be determined. During this meeting and site inspection specific information about the work required will be reviewed. It is the vendor's responsibility to thoroughly review each site to ensure that they are familiar with the sites and the work to be performed. It is expected that the prices

submitted for this project will be “turn-key” and “complete” and that additional expenses will not be required to be paid by Naugatuck to complete the project or to pass the R56 compliance audit performed at the completion of this project.

This overview references UPS power for power installed at the police department. The UPS unit is installed and operational and is to be assumed to have enough capacity to power the required circuits. Outlets noted as “standard” require generator power without UPS protection.

All required outlets for all sites are 120v.

### **Police Department Dispatch**

- Provide two 20 amp UPS circuits in each operator position. Each circuit shall be terminated in a quad surface mount box.
- Provide two 20 amp standard circuits in each operator position. Each circuit shall be terminated in a quad surface mount box.
- Provide an R56 compliant ground terminating in a buss bar in each operator position. Recommended buss bar is Harger P/N GBI1426B or equivalent.
- Provide one 20 amp UPS circuit in a third work area in dispatch. The circuit shall terminate in quad box.

### **Police Department Dispatch E911**

- AT&T E911 has specific power requirements which will be reviewed during pre-bid meeting

### **Police Department Basement Equipment Room**

- Install three customer provided PDUs. Each PDU contains 8 outlets and requires two 20 amp UPS circuits. Total six UPS circuits.
- Install customer provided TVSS on feed to existing UPS
- Upgrade existing UPS breaker panel. Size of new panel to be determined during site inspection.
- Provide an R56 compliant ground terminating in a buss bar in the area of the equipment racks. Recommended buss bar is Harger P/N GBI14416M or equivalent.

### **Police Department Penthouse Equipment Room**

- Install two customer provided 8 outlet PDUs.
  - One PDU requires two 20 amp UPS circuits
  - One PDU requires two standard 20 amp circuits
- Install an R56 complaint ground terminating in a buss bar in the area of the equipment rack. Recommended buss bar is Harger P/N GBI14416M or equivalent.
- Provide a 2” conduit with weather head from roof to equipment room
- Provide a 4” conduit with weather head from roof to equipment room

- Provide an R56 complaint ground terminating in a buss bar in the area of the antennas mounted on the roof. Recommended buss bar is Harger P/N GBI14416M or equivalent. Ground cable shall be routed through the above provided 2" conduit.

### **WTXX**

- Review building ground system and ensure compliance with Motorola's R56 standards. Correct any deficiencies.
- Provide an R56 complaint ground terminating in a buss bars in the building interior (recommended bar Harger P/N GBI14420M)
- Install an R56 complaint Interior Perimeter Ground System (IPGS) also known as a "Halo". Ground all metallic objects in the equipment room per Motorola's R56 Standards. Note: It will be the responsibility of others to ground communications equipment enclosures and equipment.
- Provide 20 amp outlet in the area of the new equipment rack

### **Mill View**

- Provide an R56 complaint ground terminating in a buss bars as noted below
  - At the equipment (recommended bar Harger P/N GBI14416M)
  - At the RF cable entry exterior (recommended bar Harger P/N GBI14416M)
- Verify there is a 20 amp outlet existing and if not install one

### **Pump Station**

- Provide an R56 complaint ground terminating in a buss bars as noted below
  - At the equipment (recommended bar Harger P/N GBI14416M)
  - At the RF cable entry exterior (recommended bar Harger P/N GBI14416M)
- Provide 20 amp outlet in the area of the new equipment cabinet

### **City Hall**

- Provide an R56 complaint ground terminating in a buss bars as noted below
  - At the equipment (recommended bar Harger GBI14416M)
  - At the RF cable entry exterior (recommended bar Harger P/N GBI14416M)
- Provide 20 amp outlet in the area of the new equipment cabinet
- New outlet should be powered from existing generator

**Communication Power and Grounding Upgrades**

**Pre-Bid Registration**

Vendor Name \_\_\_\_\_

Street \_\_\_\_\_

City, State and Zip \_\_\_\_\_

Phone \_\_\_\_\_ Email \_\_\_\_\_

License Number \_\_\_\_\_

Years in Business \_\_\_\_\_

**R56 Project Reference #1**

Agency/Project Name \_\_\_\_\_

Contact Name and Number \_\_\_\_\_

Agency/Project Name \_\_\_\_\_

Contact Name and Number \_\_\_\_\_

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Agency/Project Name \_\_\_\_\_

Contact Name and Number \_\_\_\_\_

Agency/Project Name \_\_\_\_\_

Contact Name and Number \_\_\_\_\_

***Please return this form to Wendy Hozer; Purchasing Agent; 229 Church ST;  
Naugatuck, CT 06770 on or before Wednesday, May 2, 2012 @ 4 pm.***



**Communication Power and Grounding Upgrades**

**Bid Submittal**

Vendor Name \_\_\_\_\_

Street \_\_\_\_\_

City, State and Zip \_\_\_\_\_

Phone \_\_\_\_\_ Email \_\_\_\_\_

**Pricing**

**Police Department** \_\_\_\_\_

**Police Department E911** \_\_\_\_\_

**WTXX** \_\_\_\_\_

**Mill View** \_\_\_\_\_

**Pump Station** \_\_\_\_\_

**City Hall** \_\_\_\_\_