

**Structured Cabling Project**

# Request for Proposal

Canandaigua Highway Garage

5440 NYS 5 & 20 West

Town of Canandaigua

December 7, 2017

##### Canandaigua Highway Garage Project.................................................................................................................

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**1.0 Introduction**

The Town of Canandaigua is requesting submittal of bids for installing a LAN infrastructure at the New Highway Garage.

This system, referred to as PDS, or Premise Distribution System, will be described in detail as to what and how it is to be implemented in the *specifications* section of this scope of work.

This scope of work seeks labor and material for the installation of the premise wiring system.

Once the contractor has been awarded the project, any changes made to the contract need to be approved by The Town of Canandaigua Highway and Water Superintendent.

### Purpose

Defined hereinafter are specifications regarding horizontal cabling installation for the new Highway Department facility.

### Scope

This specification provides the bidder with the necessary criteria for the installation of the PDS and all other requirements to complete this project. All installation practices and craftsmanship will be at a minimum adhered to ALL IEEE, FIRE, ANSI, EIA/TIA568-B.2 standards.

The Cabling should be BerkTek Plenum Cat 6 Lanmark-1000 white for both voice and data locations.

Design make for all connectivity hardware to include all jacks, patch panels, faceplates, etc. are Panduit. Acceptable alternates are, Leviton and Hubbell.

## The Vendor shall provide a Manufacturer's Warranty against defects for a period of at least fifteen

(**15**) **Years** from the date of installation. 45 days after the completion of the project the vendor will provide The Town of Canandaigua with the Warranty Certificate.

## 2.0 Specification for a Premise Distribution System (PDS)

### Main Distribution Frame (MDF)

There will be a new MDF constructed and will serve as the termination point for all horizontal UTP cabling within the site. The MDF is located on the drawing labeled I.T. 108.

The scope will require the tele/data contractor to build-out the room. This will include the installation of (1) 4’ wall mount swing gate rack – GL48SR (Great Lakes), (2) Modular 48 Port Patch Panels – NKFP48Y, (3) Panduit two sided 2U Horizontal Cable Managers – WMP1E, (1) Panduit single sided 2U Horizontal Cable Manager – WMPF1E. All racks shall be securely fastened to the wall and grounded to building steel. Provide and install (1) 4’ X 4’ fire rated plywood backboard on the back wall per customer specification.

### Feed Cables

All feed cables shall run from the DMARC area in the existing Town Hall building and terminate in the new Highway Garage I.T. room. All feeds shall run through the Town Hall basement, out newly installed conduits, (by others) enter the New building through the electrical room 113, and terminate in the I.T room 108.

Install a plenum indoor/outdoor 6 SM / 6 MM 50um OM3 fiber feed cable between the new Highway Garage and the existing Town Hall buildings. The fiber shall be terminated in Corning 1U rack mount housings on both ends. All strands shall be terminated on both ends with fusion splice-on SC connectors and inserted into the appropriate SC duplex coupler panels.

All fiber shall be tested with a power source and light meter. Readings shall be less than the maximum loss determined by the loss budget.

 If applicable any copper feeds shall require lightning protection at building entrances in both buildings.

### Workstation Communication Outlet

The workstation cabling configuration is dual Cat 6 at each station unless otherwise stated. The station locations are represented by a solid triangle on the print in all hard wall offices and conference rooms. All wall locations shall receive flush mount faceplates, the contractor should plan on fishing the walls and installing low voltage boxes for any wall locations that do not have conduit and backboxes.

All workstation outlets must be installed and terminated in compliance to the standards within the EIA/TIA 568B.2 guidelines, as stated above. All Voice and Data jacks shall be a Panduit NetKey Cat-6 RJ-45 Black or equal. This system will be terminated as a 568b configuration.

### Conference Room Audio / Video

None required at this time.

### Installation / Termination / Labeling

The contractor shall install, terminate and test **all** Cat 6 cables in accordance with the project schedule.

There will be no cable tray installed in the ceiling cavity as a part of this project, therefore, J-hook pathways are required and are the responsibility of the cabling contractor. It is expected that good industry practices and all standards set by EIA/TIA and cabling system manufacturers will apply to J-Hook installation.

Any penetrations through smoke and fire walls shall be properly sleeved and fire stopped per local code.

The Cabling contractor shall be responsible for providing any lifts required for installing cables in warehouse areas.

Labeling of stations should indicate patch panel and port number in the following format:

***A-XX***

For example, a typical station that has a label ID A-22, “A” would indicate the first patch panel, port 22.

All labels **must** be typed or made with a quality label maker. Hand written labels for station labels and all other associated equipment will not be acceptable. The labels shall be white with black letters/numbers.

### Wireless Access Points

There shall be cabling for wireless access point locations as part of this project. The locations and quantities are estimated for quoting purposes only and may change after a wireless survey. Please quote a total of (18) WAP locations for this bid. Plan on (2) in the main office area, (13) in the main highway garage, and (3) in the maintenance garage area. Each WAP location shall receive (1) Cat 6 Cable per location. Locations shall be placed above the ceiling in a surface mount housing with a 15’ coil. If there is no ceiling, the coils shall be securely fastened to the building structure. In the MDF the WAP cable shall be terminated to a Green Cat-6 RJ-45 jack and placed in its own 24 port patch panel.

### Cut-Over

All network equipment shall be installed by the customer.

## 3.0 Terms and Conditions

#### **Time and Duration**

A schedule will be provided once the General Contractor makes it available. For the purposes of this bid, assume all work can be done during normal business hours. Targeted start date will be the week of 3/12/18 to begin installation. This date may be slightly flexible due to the nature of new construction. The Town Highway Department has an expected move in date of 04/30/18.

#### **Materials**

The awarded vendor will provide all materials for the total cabling system. The overall logistics (to include shipping to and from the site, storage, and moving within the site) of the material will be the awarded contractor’s responsibility and should be included in their pricing for the project. There will be some space allocated at the facility for storage of material.

Contractors are expected to determine exact quantities for the material required to complete the project outlined in this scope of work. The vendors are required to provide the material to complete the work indicated in this scope document and change orders will not be accepted for oversights in the material quantities.

#### **Damage and Liability**

The Town of Canandaigua Highway Department shall **NOT** be held responsible for any damage to property belonging to the vendor, any employee of the vendor, or any subcontractor retained by the vendor, which may occur during the execution of any portion of any work awarded through this solicitation.

It is the contractor’s responsibility to obtain any local permits for the project. Any cost shall be the contractor’s responsibility and included in the project pricing.

The contractor shall take into consideration any additional costs associated with the proper execution of the project including parking fees.

##### \*\*\*\* Certificate of Insurance shall be submitted by successful bidder prior to work commencing.

## 4.0 Bidder Response

Bidder shall provide their proposals on or before 9 a.m. March 1, 2018. The Town of Canandaigua reserves the right to reject any and all proposals submitted after this deadline.

All responses must be e-mailed to jfletcher@townofcanandaigua.org

### 4.1 Award Date

Bidders will be informed no later than 3/20/18 as to the award of the contract.

###  Customer Acceptance

The contractor shall be responsible to correct any items found faulty or considered bad craftsmanship on their part. All cabling is the responsibility of the installation contractor.

### Testing and Documentation

Prior to system acceptance, the contractor shall submit the following to the Highway Supper Intendant:

* + 1. The contractor will be required to submit all station test results, utilizing a standard Level IV

 Cat-6 tester.

* + 1. After installation is complete, drawings must be updated to reflect the actual as built installation to

 include: station numbers and location on a clean legible print. Working copies are not acceptable.

* Any questions regarding this document or the project should be sent to James Fletcher at jfletcher@townofcanandaigua.org or call (585)-394-3300
* **If requested a site walkthrough can be scheduled and is advised.**