

RANTOUL CITY SCHOOL DISTRICT #137

Technology Upgrade Project- Network Connectivity

1. INTRODUCTION

Rantoul City School District (hereinafter referred to as "The Customer") intends to upgrade the Information Transport Horizontal Data Cabling Infrastructure of five buildings located in Rantoul, IL. The Customer requests a proposal for the installation, termination, testing, and acceptance of the Information Transport Cabling Infrastructure as described in the Technical Specifications section of this document from invited vendors (hereinafter known as "The Bidder"). Prices quoted shall be all-inclusive and represent complete installation. The Bidder shall be responsible for all parts, labor and all other associated apparatus necessary to completely install, test, and turn-over for acceptance to The Customer the Information Transport Cabling Infrastructure detailed herein. Include and supply all necessary labor, material, tools and equipment for the proper construction and installation of information transport cabling in accordance with this document and accompanying drawings. The Customer has a requirement to improve the horizontal data cabling infrastructure to enable 1Gbps throughput performance to its work areas.

2. BID PROPOSAL

The bidding window for this RFP will begin on January 6th and all bids must be returned by February 3rd, 2010 by 4:00pm at the Rantoul District Office. Additional information can be picked up at the district office on or after January 13th, 2010. A mandatory pre-bid meeting and District walk through will take place on January 18th, 2010. This meeting will begin promptly at 12:30pm at the Rantoul District Office.

3. TERMS AND CONDITIONS

3.1. Payment Conditions

The complete cabling infrastructure will be deemed acceptable when The Bidder delivers to The Customer:

- Data cables which are free of defective pairs of copper.
- Test results for the installed UTP cables that are deemed acceptable by Customer.

Acceptance shall be further defined as beneficial use by The Customer. Acceptance will be deemed ~~to~~ full+upon receipt by The Bidder a Notice of Acceptance issued by The Customer upon beneficial use and full implementation of the Terms and Conditions and Technical Specifications of the Contract. Upon receipt of the Notice of Acceptance, The Bidder shall notify The Customer in writing of a release of all liens for all materials and services associated with this project.

3.2. Warranty

Materials and workmanship hereinafter specified and furnished shall be fully guaranteed by The Bidder for one year (365 calendar days) from transfer of title against any defects. In addition, defects which may occur as the result of faulty materials or workmanship within one year after installation and acceptance by The Customer shall be corrected by The Bidder at no additional cost to The Customer. The Bidder shall promptly, at no cost to The Customer, correct any nonconforming or defective work within one (1) year after completion of the project of which the work is a part. The period of The Bidder's warranty(ies) for any items herein are not exclusive remedies, and The Customer has recourse to any warranties of additional scope given by The Bidder to The Customer and all other remedies available at law or in equity. The Bidder's warranties shall commence with acceptance of/or payment for the work in full. Given that The Bidder will be procuring equipment or materials under the Contract, The Bidder must have the ability to obtain, for the benefit of The Customer, a 20-year Structured Connectivity Solutions (SCS) warranty including all application assurance, labor & extended product warranties. The Bidder shall pass along to The Customer any additional warranties offered by the manufacturers, at no additional costs to The Customer, should said warranties extend beyond the one-year period specified herein. This warranty shall in no manner cover equipment that has been damaged or rendered unserviceable due to negligence, misuse, acts of vandalism, or tampering by The Customer or anyone other than employees or agents of The Bidder. The Bidder's obligation under its warranty is limited to the cost of repair of the warranted item or replacement thereof, at The Bidder's option. Insurance covering said equipment from damage or loss is to be borne by The Bidder until full acceptance of equipment and services.

3.3. Testing and Acceptance

Acceptance will be upon completion of cabling plant installation and certification. Equipment installation and configuration acceptance will be based on the successful test result of functional specifications as per configuration design documentation. The Bidder must be able to show proper performance of equipment should a problem arise with non-contracted services such as cabling and carrier services. The Bidder shall provide the tests in electronic format, so that the results can be re-certified using a Fluke Tester with Cat6 parameters. Those cables that do not pass Cat6 will be rejected. Cabling Plant test results shall be provided in electronic format.

3.4. Price Quotations

Price quotations are to include the furnishing of all equipment, maintenance, and training material, and the provision of all labor and services necessary or proper for the completion of the work except as may be otherwise expressly provided in the Contract Documents. The Customer will not be liable for any cost beyond those proposed herein and awarded. Time and materials quotes will be unacceptable. The Bidder shall include all shipping costs in the price quotation. In case of discrepancy in computed proposal process, the lowest combined value of individual unit costs shall prevail.

This is an e-rate project and any company bidding must be eligible to participate in the e-rate program.

3.5. Price Stability

Contract prices and discounts shall be fixed at the time of contract approval by The Customer and The Bidder. In the event of price changes, replacement equipment shall be purchased at the lower of contract or then current market price. In no case shall a price higher than contract price be paid for equipment proposed.

3.6. Variations in Quantities and Configurations

Equipment and capacity requirements are the best estimates currently available. The Customer reserves the right to modify quantity and configuration requirements. The Bidder agrees to provide The Customer the revised quantity of items at the unit price as stated in the RFP regardless of quantity changes.

3.7. Installer Requirements

All work shall be performed by a Manufacture Certified Business Partner with technicians that have a minimum of 5 years experience, and shall follow the current design and installation guidelines in this RFP. Also be in accordance with the current edition of the National Electrical Code, current electrical contractors license, the current edition of the National Electrical Safety Code, the current edition of the BICSI Telecommunications Distribution Methods Manual, the current edition of the BICSI Cabling Installation Manual, the latest issue of the ANSI/TIA/EIA Standards as published by Global Engineering Documents as TIA/EIA Telecommunications Building Wiring Standards, and all local codes and ordinances.

3.8. Special Conditions

The Customer's activities shall not be interrupted by The Bidder's work activities. The Bidder will be required to work around all of the conditions listed above as well as working with The Customer staff to minimize disruptions to normal Customer activities.

3.9. Submission Instructions

Submissions shall be made in electronic format only. The Schedule of Values provided for this project shall be used to present the project costs. Non-conforming submissions will not be considered. The response shall include the following:

- 1) Overview of the contractor's organization including office location(s), number of years in business, company size, core capabilities, and any other information deemed applicable.
- 2) Overview of relationship with Systemax, certification status, year of certification award.
- 3) Description of the contractor's project management capabilities.
- 4) List of past projects with similar scope. Include client, size of engagement, value of engagement, description of work performed and client references.
- 5) Estimated duration of project and assumptions.
- 6) Schedule Of Values filled up and submitted in Excel format.

3.10. Project Manager

The Bidder shall include in its proposal a Project Manager that will report to Rantoul City School District Technology Department. This project manager shall be an RCDD responsible for coordination of all installation activities and supervise the cable testing.

4. SCOPE OF WORK

4.1. General Specifications

- 1) The National Electrical Code (NEC) will be adhered to for all installations in addition to the any site-specific requirements.
- 2) Cable requirements:
 - i) All data drops will use Category 6, four pair, 100 ohm UTP. All materials to be supplied by contractor.
- 3) Contractor must be able to provide a (20) year Systimax warranty on material and workmanship within 2 weeks of work completion.
- 4) Rantoul City School District is requiring:
 - a) (4) drops per classroom
 - b) All labs and offices upgraded ~~as is+~~
 - c) Fiber terminated in designated areas
 - d) Drops for wireless access points
- 5) Rack and cabinets will be required as necessary.
- 6) Rantoul City School District will need at least 1 week to review test results, verify locations, and problem areas for contractor to resolve at least 3 weeks before cable plant system can be used. Contractor must meet all of The Customers requirements prior to sign off on the project.
- 7) Data faceplate shall be a quad faceplate with 2- 4pair 8P8C Type Connector.
- 8) VOIP wall phone faceplate shall be a stainless steel simplex plate with wall telephone mounting lugs and 1 . 4pair 8P8C Type Connector.

4.2. General Project Conditions

The contractor is responsible for the following general project conditions:

- 1) The contractor is responsible for verifying all quantities, distances and measurements.

- 2) The contractor is responsible for correcting any damage or outage caused to existing facilities or utilities during construction.
- 3) The contractor is responsible for restoring initial conditions of the work areas.
- 4) The contractor is responsible for labeling cables as per the labeling guidelines.
- 5) The contractor is responsible for disposing of any refuse or garbage generated.
- 6) The contractor shall provide new Cat6 patch cords for interconnection of cables
- 7) The Customer will provide paper floor plans of the areas to be upgraded. The contractor is responsible for floor plans and providing an As Built set of plans (in electronic format) with each certification for payment.
- 8) Refer to the Typical Work Activities section for the outline of tasks to be performed by TR.
- 9) All work must be performed when school is not in session between the hours of 4:00 PM and 6:00 AM on school days when children are present.
- 10) All work areas must be cleaned up daily and all trash and debris must be removed from the site.

4.3. Typical Work Activities

Given the various activities to take place to ensure that service outage is minimized, several planning and pre-effort steps have been devised to help plan and coordinate the upgrades. Activities for more than one TR can be taking place simultaneously, in close coordination with the customer's IT Department. The typical work activities per TR to be performed prior to and during the upgrade are as follows:

- 1) The contractor will obtain a copy of the floor plan to be upgraded at least 2 weeks prior to the deadline for presentation of Preliminary As Built plans. Preliminary plans shall contain the floor plan and location of all connected cables and its faceplates. Every faceplate shall identify the number of data cables, whether they are in use or not and the port id of the patch panel. All cables and termination hardware (wiring blocks) shall be labeled and shown on Preliminary As Built plans.
- 2) Unused cables must be removed.

4.4. Labeling

The cabling contractor is responsible for labeling the following:

- 1) Terminated Cables . at both ends of each cable (the label shall be installed at 3 inches from the termination) .
- 2) Termination equipment.
- 3) Work Area faceplates.
- 4) Panels to be sequentially numbered with electronic labels with no omissions or duplications.

4.5. Grounding & Bonding

The cabling contractor is responsible for grounding and bonding on the infrastructure provided in this project. Specifically:

- 1) 1. Use #6 grounding conductors and two-hole irreversible compression connectors to bond racks to the room's telecommunications grounding bus-bar (TGB).
- 2) The contractor shall provide and install the proper grounding kits for the Patch Panels as required by manufacture.
- 3) The contractor shall ground and bond the telecommunications rack.
- 4) All grounding and bonding work must be performed by a licensed electrical contractor.

4.6. Cable Installation

The following cable installation guidelines shall be followed:

- 1) In areas where the cable does not traverse conduit, cable trays or ducts, the contractor shall bundle the cables in bundles of 48 (1 bundle per 48-port patch panel).
- 2) Cable bundles shall be supported by J-hooks attached to existing building structure at a maximum of five (5) foot intervals.
- 3) The contractor shall adhere to manufacturers requirements for bending radius and pulling tension of all cables.
- 4) Cables shall not be attached to removable ceiling grid supports or laid directly on the ceiling grid.
- 5) Cables shall not be attached to or supported by fire sprinkler heads, delivery systems, any environmental sensor in the ceiling air space, or any electrical conduits.
- 6) Wall penetrations shall be made sleeved and firestopped.

4.7. Cable Certifications

The cabling contractor shall certify the cables as a TIA Cat6 Permanent Link. In addition, the contractor shall certify cables to TIA Cat6 parameters with the use of a Fluke Cable Tester. Test results shall be provided for every case. If the connected cable in the faceplate does not pass certification, the cable from the faceplate shall be re-terminated and re-certified. If any run should not PASS the contractor shall install a new Cat6 cable up to the limit established for the project.

4.8. Firestopping

The cabling contractor will be responsible for ensuring that the fire-rated structure (core walls) retain their existing fire-rating by firestopping all the accesses from the core area once the cabling effort has been completed. Any openings created by or for the contractor and left unused shall also be sealed as part of this effort. The cabling contractor shall use only VA standard-approved firestop materials. The contractor must be certified by the specified manufacturer for firestopping.

4.11. Specific Requirements - Main Building

- 1) The contractor will provide suitable hangers and follow through the common halls until the applicable room is reached, then the cable will be accessed into the room. Contractor will be responsible for all necessary coring. Cable will be one piece direct runs. All cable protruding through walls and floors will be fire stopped.
- 2) Main Distribution Frame should have 7x 19+ free standing cabinets and Intermediates should have 36+x 19+wall mount racks. Racks and Cabinets will have Fiber panel on top

moving down with 3 & ½+Data panels to be separated by 3 & ½+cable management panels.

- 3) All previously abandoned telephone cable and Data cable in construction area will be removed completely from end to end. There can be no interruption of network services to the district.
- 4) All cables and terminations to be tested at cat-6 certification level with passing test results provided to The Customer and identified by matching numbering scheme with any updates or changes marked on print.
- 5) Data closets are to be cleaned of all dust and debris from racks, walls, and floor.
- 6) When fiber optics is required the minimum pull shall be 12 strands of 50 micron multimode terminated at both ends with fiber connectors to be determined by IRM representative. All materials to be provided by contractor, every installation shall be tested and identified with documentation provided to the VA representative