

Chickamauga City Schools

# Low Voltage Project

Integrated Data, Audio/Visual, and  
Communications Systems

Wes Brown

09

## I. Summary

The Chickamauga City School System is accepting proposals to design, install and support the system's new integrated data, audio/video and communications systems. The purpose of this RFP is to provide a fair evaluation for all candidates and to provide the candidates with the evaluation criteria against which they will be judged.

The existing data network, audio/video (CCTV) and communications systems that connects all outlying buildings and schools is currently running overhead and attached to numerous utility poles which will be removed (see Underground Utilities Bid: <http://chickamaugacityschools.org/central/ugutilbid.pdf>) during the same time period as this Low Voltage project. All existing outdoor cable will be removed and new cable will be installed via underground conduit.

In addition to upgrading the cabling infrastructure this project will upgrade the intercom system in the high school and installing a new intercom system in the middle school.

After all work is complete, the Chickamauga City School System requires a detailed wiring diagram of the WAN/LAN using a program such as Microsoft Visio or a comparable program.

## II. Proposal Guidelines and Requirements

This is an open and competitive process.

Proposals received after 1:00pm EST, Tuesday, May 19, 2009, will not be considered and will be returned unopened.

The proposal must contain the signature of a duly authorized officer or agent of the company submitting the proposal.

If you wish to bid, you are required to a thorough walk-through with Wes Brown, Technology Coordinator for Chickamauga City Schools. No exceptions.

If you wish to submit alternative solutions, please do so.

The price you quote should be inclusive. If your price excludes certain fees or charges, you must provide a detailed list of excluded fees with a complete explanation of the nature of those fees.

If the execution of work to be performed by your company requires the hiring of sub-contractors you must clearly state this in your proposal. In addition to upgrading the cabling infrastructure this project will upgrade the intercom system in the high school and installing a new intercom system in the middle school. The Chickamauga City School System will not refuse the use of sub-contractors; however, we retain the right to refuse the sub-contractors you have selected.

Provisions of this RFP and the contents of the successful responses are considered available for inclusion in final contractual obligations.

### III. Timeline

- This RFP is dated April 21, 2009. Proposers may also request a copy be sent via e-mail by contacting Wes Brown at [wes.brown@glschools.org](mailto:wes.brown@glschools.org).
- Proposals are due no later than 1:00pm EST, Tuesday, May 19, 2009.
- Proposals will be evaluated immediately thereafter. During this time we may require interviews at our Central Office with our evaluation team. You will be notified if this is requested.
- The name of the candidate firm who has been selected will be decided on or about May 19, 2009.
- All other candidates will be notified on or about May 22, 2009.
- Work can begin on May 25, 2009
- Work shall be completed by July 31, 2009. At this time all cabling, network equipment, etc should be fully operational, tested, and certified.

### IV. Scope and Guidelines

The scope of this project is to remove all overhead (aerial) data, CATV, and other copper wiring on the campuses of Gordon Lee High School, Gordon Lee Middle School, and Chickamauga Elementary School. Any necessary blueprints are available upon request. Since this project is

running in conjunction with the Underground Utilities Bid, detailed specs of proposed directional boring and possible ditches are also available upon request.

**Data Wiring Specifications:**

- **Install new 48 strand fiber from the Technology Office to the GLHS Main Building**

A new 50 micron 48 strand multimode fiber will be installed from the Technology Office Building to the Media Center of the High School. In the Technology Office a new Rack Mount Fiber Patch Panel will be installed in an existing rack. In the Media Center a new Fiber Patch Panel will be wall mounted on the right side of the wall behind the in-swinging door. The fiber will be terminated with SC Style connectors and patched into the provided data electronics.

- **Internal Data Connections for the Technology Office**

We require a total of twelve (12) Category 6 drops for this location.

- **Internal Data Connections for GLHS Main Building**

A new wall mounted sixteen rack unit cabinet will be installed in the GLHS Media Center. The cabinet will hold all provided electronics and the patch panels for the local copper drops. 47 new Category 6 data drops will be installed to the following locations:

**2<sup>nd</sup> Floor: 21 total drops**

10 drops in room 221

2 drops per classroom (x5) classrooms = 10 total drops

1 drop in Hall outside room 205 for WAP

**1<sup>st</sup> Floor: 26 total drops**

2 drops per classroom (x4) classrooms = 8 total drops

2 drops in room 218 (receptionist)

2 drops in room 219 (principal)

2 drops in room 215.1 (Assistant Principal's Office)

2 drops in coach's office in Weight Room

1 drop in Hall outside Auditorium for WAP

1 drop in Hall outside Media Center for WAP

8 drops lower floor of Media Center

2 drops in balcony office of Media Center

- **Install a new 6 strand fiber from the Technology Office to the Tom Lee Building**

A new 50 micron 6 strand multimode fibers will be installed from the new fiber patch panel installed in the existing rack located in the Technology Office to the IDF located in room 117 in the Tom Lee Building. A new Wall Mounted twelve rack space cabinet will be installed to hold provided electronics as well as the new copper and fiber patch panels. 45 new Category 6 data drops will be installed to the following locations:

**2<sup>nd</sup> Floor: 25 total drops**

10 drops in room 121  
10 drops in room 122  
4 drops in room 123  
1 drop in hall outside room 121

**1<sup>st</sup> Floor: 20 total drops**

4 drops in room 112  
2 drops in room 112.1  
2 drops in office 113  
2 drops in office 114  
2 drops in office 115  
8 drops in the Career Center

- **Install a new 6 strand fiber from the GLHS Main Building to the Tech Lab**

A new 50 micron 6 strand multimode fiber will be installed from a new wall mounted fiber patch panel installed in Media Center to a new IDF located above the door in storage room #304 in the Tech Lab Building. A new Wall Mounted ten rack space cabinet will be installed to hold customer provided electronics as well as the new copper and fiber patch panels. 28 new Category 6 data drops will be installed to the following locations:

24 drops in lab 301  
2 drops in room 302  
2 drops in office 303

- **Install a new 6 strand fiber from GLHS Main Building to the GLHS Gym**

A new 50 micron 6 strand multimode fiber will be installed from a new wall mounted fiber patch panel in Media Center to the existing IDF located in storage room in the gym. A new Wall Mounted ten rack space cabinet will be installed to hold customer provided electronics as well as the new copper and fiber patch panels. 13 new Category 6 data drops will be installed in the gym at the following locations:

1 drop in hall for WAP  
2 drops in room 511  
2 drops in room 512  
2 drops in room 513  
2 drops in room 514  
2 drops in girls' locker room office  
2 drops in boys' locker room office

- **Install a new 6 strand fiber from the GLHS Main Building to the Olive Lee Building**

A new 50 micron 6 strand multimode fiber will be installed from a new wall mounted fiber patch panel in Media Center to the existing IDF located in the lower level of the Olive Lee Building near the Home Economics Kitchen. A new Wall Mounted twelve rack

space cabinet will be installed in the IDF to hold provided electronics as well as the new copper and fiber patch panels. This building will have two labs that will connect to the network with dedicated fiber to each. 16 new Category 6 data drops will be installed to the following locations:

- 12 drops in room 312
- 2 drops in room 321
- 2 drops in room 322
- 1 drop in hall outside room 323 for WAP

**Business Education Lab – Room 323**

- 1 – 10U wall mounted rack space cabinet
- 1 six strand fiber
- 34 drops for lab

**1<sup>st</sup> Floor Open Lab**

- 1 – 10U wall mounted rack space cabinet
- 1 six strand fiber
- 34 drops for lab

- **Install a new 6 strand fiber from the GLHS Main Building to the Math and Science Building**

A new 50 micron 6 strand multimode fiber will be installed from a new wall mounted fiber patch panel in Media Center to the existing IDF located in the upper level of the Math and Science Building. A new rack mounted copper and fiber patch panels will be installed in the existing rack. Since this building has the most up to date data wiring, we will reuse as many of the current drops as possible. All that is needed is 2 new Category 6 data drops will be installed to the following locations:

**2<sup>nd</sup> Floor: 10 total drops**

- 1 drop in hallway for WAP

**1<sup>st</sup> Floor: 7 total drops**

- 1 drop in hallway for WAP

- **Install a new 6 strand fiber from the GLHS Main Building to the GLMS MDF**

A new 50 micron 6 strand multimode fiber will be installed from a new wall mounted fiber patch panel in Media Center to the existing MDF located in the Middle School Building. A new Wall Mounted sixteen rack space cabinet will be installed in the MDF to hold provided electronics as well as the new copper and fiber patch panels. This building will have two labs that will connect to the network with dedicated fiber to each.

**New data drops pulled to GLMS MDF: 18**

- 4 drops to serving lines in cafeteria (2 each)
- 2 drops to cafeteria manager's office
- 2 drops to band room office
- 2 drops to main office receptionist area
- 2 drops to principal's office
- 2 drops to storage area behind receptionist's office
- 2 drops to assistant principal office

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- 2 drops to nurse's office
- 1 drop in hall outside room 710 for WAP
- 1 drop in hall outside Mini Lab for WAP
- 1 drop in hall outside room 804 for WAP

**Mini Lab: 20 total drops**

- 1 – 10U rack space wall mounted cabinet
- 1 six strand fiber
- 20 Cat 6 drops for lab

**Computer Lab Room 804: 34 total drops**

- 1 – 10U rack space wall mounted cabinet
- 1 six strand fiber
- 34 Cat 6 drops

- **GLMS Gym**  
The GLMS Gym's fiber connection is currently underground; however, 8 additional Category 6 drops need to be added to the gym classroom.
- **Chickamauga Elementary School**  
A new 50 micron 6 strand multimode fiber will be installed from GLHS MDF to CES MDF.

**Intercom Specifications:**

- **Gordon Lee High School**  
During the rewire of the Chickamauga City Schools fiber backbone and all internal wiring; all existing speakers and call switches will be reused in each classroom and hallways. If any speakers or call switches are found to be defective they will be replaced. New intercom admin cordless phones will be installed at the front desk and the principals' office so the staff can call individual rooms or make all-calls. A display will be included at the front desk for calls to be received by the receptionist and admin functions such as bell schedules and time changes can be carried out. At the intercom system itself, new four wire line cards will replace the existing three wire line cards. New lightning protection is needed to be installed at the intercom head-end. Intercom coverage for the cafeteria and the band room will come from the GLHS Main Building and the GLMS Main Office; a set of speakers connected from each intercom system will be installed in those areas.
- **Gordon Lee Middle School**  
Currently the middle school and the high school share an intercom system; this is no longer adequate or acceptable. The middle school needs to have its own intercom system. The intercom will be a Rauland-Borg Telecenter 2100 or something equal. New intercom admin cordless phones will be installed at the front desk, the principals' office and the nurse's office so the staff can call individual rooms or make all-calls. A display will be included at the front desk for calls to be received by the receptionist and admin functions such as bell schedules and time changes can be carried out. All existing speakers and call switches will be reused in each classroom and hallways. If any

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speakers or call switches are found to be defective they will be replaced. The new intercom system will be installed in a 7 ft cabinet located in the Middle School MDF. A UPS will also be provided with the system. Intercom Coverage for the cafeteria and the band room will come from the High School and the Middle School. A set of speakers connected from each intercom system will be installed in those areas.

**CATV Backbone Replacement:**

- Gordon Lee High School:  
The CATV cabling will originate from the GLHS Media Center and connect to each outlying building. All overhead (aerial) RG-11 cabling will be removed and run underground in conduit. New RG-11 cabling will be installed to the following high school buildings:
  - Technology Office
  - Gordon Lee Main Building
  - Tom Lee Building
  - Olive Lee Building
  - Tech Lab
  - Gordon Lee Middle School
  - Chickamauga Elementary School

Each RG-11 cable will be run to the current distribution point for each building. Indoor CATV cabling will not be affected in this project. Also the CATV cabling for the Math and Science Building and the GLMS Gym are already run underground and will not be replaced in this project.

**Underground Conduit Installation:**

- This project consists of cabling only. All buried conduit will be installed by the Electrical Contractor awarded the Underground Utilities bid. The Technology Contractor awarded the Low Voltage bid will assist in the routing and overall design of the conduit to maintain as easy of an installation of new cabling as possible.

**Cable Management and Cable Concealment/Raceway:**

- This project will have a lot of exposed cable. It is the Technical Contractor's responsibility to account for and provide adequate cable management and concealment for all visible wiring. Chickamauga City Schools reserve the right for final approval of style, color and type of concealment material used.

## V. Qualification Criteria

- Chickamauga City School System will choose a single vendor for this project with the capability and expertise to install, integrate, warranty, and maintain all of these systems. Potential vendors shall meet the following qualification criteria:
  - a. Documented previous experience in providing sole source turnkey installation of five projects similar in scope to the project specified herein.
  - b. The systems shall be provided by the contractor's own work forces. The Electrical Contractor may provide installation services; however, it is the intent for the Technology Contractor to provide sole responsibility for material, software and service for the systems.
  - c. The Technology Contractor shall be located within 100 miles of the project and provide a service response time of a maximum of two (2) hours from time of notification of major system failure.
  - d. The Technology Contractor shall assign technical specialists (full time employees, not subcontractors) to this project with the following certifications:
    - A Registered Communications Distribution Designer (RCDD)
    - Microsoft certified professional
    - Trained and certified on Data Electronics
    - ICIA Certified Technology Specialists
- Since the response to this RFP will be to purchase the most cost effective long-term system for the schools, the following criteria will be used in the evaluation of the bid/proposal. Bid price will represent 40% of the evaluation criteria, 20% for company fiscal strength/bonding capabilities, 20% for the experience in similar projects, and 20% for technical response.
- Submit the following Mandatory Statement of Qualifications with your proposal. Failure to provide a complete Statement of Qualifications shall be grounds for rejection of the entire proposal.
  - a. Bonding capability of the firm submitting the bid/proposal. This should be in form of a letter from the bonding company registered to do business in the state of Georgia.
  - b. Listing of five similar projects with contacts and phone numbers.
  - c. Georgia Low Voltage Contractor's License
  - d. Letter stating that the systems and products included in the proposal fully meet or exceed the mandatory specification criteria.
  - e. Authorized Dealer Certificates for all products listed in the proposal.
  - f. Service, Support, and Warranty Commitment
  - g. Bid/Proposal price(s) shall be separated out by line item.
  - h. Performance bond

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i. Non-influence affidavit

- The successful bidder shall provide a complete system in all respects and shall perform all design, engineering, installation, testing, Permits, OWNER TRAINING, and warranty as outlined herein. It is the responsibility of the Respondent to obtain drawings and perform site surveys as required to determine counts, configuration and site conditions. Respondents shall hold the Owner harmless from any discrepancies in counts, footages, or additional costs that arise from their failure to properly research the project prior to submitting their proposal.
- Right of School System - The Chickamauga City Schools reserves the right to accept or reject all proposals or sections thereof when the action is in the best interest of the Chickamauga City Schools. The School System reserves the right to request additional information and make the best interest award without further discussion. Therefore, responses should be submitted initially with the most favorable terms that The Vendor proposes. The School System reserves the right to reject the proposal of a Vendor who has previously failed to perform properly or completed on time contracts of a similar nature; and to reject the proposal of any Vendor who in the opinion of the Customer is not in a position to adequately perform the contract.



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**PROPOSAL FORM**

Date:

To: Chickamauga City Schools  
402 Cove Road  
Chickamauga, GA 30707

Re: Low Voltage -Integrated Data, Audio/ Video and Communications Systems

Ladies and Gentlemen:

BASE BID

- A. Having carefully examined the plans and specifications entitled, Low Voltage -Integrated Audio Video Communication Systems, New Chickamauga High School, and the drawings similarly entitled, enumerated on Index of Drawings, dated February 17, 2009 , and Addendum No.(s)\_\_\_\_\_ as well as the premises and conditions affecting the work, the undersigned proposes to furnish all services, labor, and materials called for by them for the entire work, in accordance with said document for the sum of:

\_\_\_\_\_ Dollars(\$ \_\_\_\_\_ )  
which sum is herein after called the "Base Bid."

- B. Failure to complete cost breakdown and provide a reasonable dollar value shall be, at the Owner's options, grounds for rejection of bid.
- C. Add Alternates:

CONTRACT AWARD

The undersigned understands and agrees to, if a contract is awarded, it will be awarded based on Base Bid, financial stability, and proof of ability to fully complete the project and complete the project on schedule. Upon Owner's request all information needed to prove contractor's ability to complete the project and complete it on schedule will be provided immediately.

### **SUBMITTAL PROCEDURES**

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- A. Administrative, procedural submittal requirements Work performance:
    - I. Shop drawings
    - II. Product data
  
  - B. Submittal Procedures
    - I. Coordinate preparation, processing submittals with construction activities
    - II. Transmit sufficiently in advance of related construction activities to avoid delay
    - III. Coordinate each with fabrication, purchasing, testing, delivery, other submittals, related activities requiring sequential activity
  
  - C. Submittal Preparation:
    - I. Name of entity preparing submittal
    - II. Project name.
    - III. Date.
    - IV. Contractor's name, address
    - V. Subcontractor's name, address
    - VI. Supplier's name, address
    - VII. Manufacturer's name
    - VIII. Applicable Specification Section number/title
    - IX. Appropriate drawing number, detail references
  
  - D. Shop Drawings
    - I. Submit newly prepared information, drawn to accurate scale
    - II. Highlight, encircle, otherwise indicate deviations from Contract Documents
    - III. Contract Documents reproduction not acceptable as basis of Shop Drawings
    - IV. Standard information without specific reference to Project not considered Shop Drawings
    - V. Sheet Size: sheet size: 24" x 36"
    - VI. Exception: Templates, patterns, similar full-size Drawings
  
  - E. Submittal Requirements:
    - I. For Owners review: four (4)
    - II. Contractor retain, maintain one (1)