

ADVERTISEMENT FOR REQUEST FOR PROPOSAL  
COBB COUNTY PURCHASING DEPARTMENT

**BID OPENING DATE: MARCH 11, 2010**

Sealed proposals from qualified contractors will be receive before 12:00 NOON, March 11, 2010, in the Cobb County Purchasing Department, 1772 County Services Parkway, Marietta, GA 30008 for furnishing all labor. Materials, equipment, appliances, etc. pursuant to the plans, specifications, condition and addenda for:

**SEALED BID # 10 -5473**  
REQUEST FOR PROPOSAL  
DESIGN, DELIVER, INSTALL AND PROVIDE SERVICE RESPONSE FOR A VIDEO WALL –  
AUDIO VISUAL DISPLAY AND COLLABORATION SYSTEM  
COBB COUNTY DEPARTMENT OF PUBLIC SAFETY

**PRE-PROPOSAL MEETING: FEBRUARY 23, 2010 @ 2:00 P.M. (EST)**  
**COBB COUNTY PURCHASING DEPARTMENT**  
**1772 COUNTY SERVICES PARKWAY**  
**MARIETTA, GEORGIA 30008**

**No bids will be accepted after the 12:00 noon deadline.**

Proposals are opened at 2:00 p.m. at Cobb County Purchasing Department, 1772 County Services Parkway, 2nd Floor, Bid/Meeting Room, Marietta, GA 30008.

Performance Bond and Labor and Material Payment Bond, or other security instruments as allowed by law each in the amount equal to 100% of the contract sum will be required of the successful bidder. Bonds must be written by a surety company licensed to do business in the State of Georgia, have a "Best's" rating of "A" or better, appear on the current U.S. Treasury Department list of sureties that are acceptable on bonds for the federal government (circular 570), and have recommended bonds limits equal to or in excess of those required for this project; otherwise acceptable to the owner.

No proposal may be withdrawn for a period of one hundred eighty (180) days after date of bid opening, unless otherwise specified in the bid documents. Cobb County will consider the competency and responsibility of bidders in making the award. Cobb County reserves the right to reject any and all proposals, to waive informalities and technicalities, to reject portions of the proposals, and to award contracts in a manner consistent with the County and the laws governing the State of Georgia.

This solicitation and any addenda are available for download in PDF format on the Cobb County purchasing website. [www.purchasing.cobbcountyga.gov](http://www.purchasing.cobbcountyga.gov)

To request a copy of the proposal documents, **FAX** the following information to the Purchasing Department @ 770-528-1154 or **e-mail** requests to [purchasing@cobbcounty.org](mailto:purchasing@cobbcounty.org):

Company name, contact name, company address, phone number and fax number.

Please reference the proposal number and the title of the proposal in the request

Advertise: FEBRUARY 12, 19, 26, 2010  
MARCH 5, 2010



## BIDDING INSTRUCTIONS – TERMS AND CONDITIONS

### 1. PREPARATION OF BID:

- (A) Bidders are expected to examine the drawings, specifications, schedules, and all instructions. Failure to do so will be at the bidder's risk.
- (B) Each bidder shall furnish the information required by the bid form. The bidder shall sign and print or type his/her name where designated. The person signing the bid must initial erasures or other changes.
- (C) Unit price for each quotation shall be shown and such price shall include packing unless otherwise specified, along with a total and grand total where applicable. In case of discrepancy between a unit price and extended price, the unit price will be presumed correct.
- (D) Where not otherwise specified, bidders must definitely state DATE OF DELIVERY.

### 2. EXPLANATION TO BIDDERS:

Any explanation desired by a bidder regarding the meaning or interpretation of Invitation to Bids, Request for Proposals or Qualifications, drawings, specifications, etc., must be in writing. All questions must be received within seven (7) business days prior to the bid opening date for a response to be generated by the County to all bidders in the form of an addendum. If any statement in the bidding documents, specifications, etc., appears ambiguous to the bidder, the bidder is specifically instructed to make a written request to the Purchasing Department, unless otherwise outlined in the specifications. Any information given to a prospective bidder concerning an Invitation for Bid will be furnished to all prospective bidders, as an addendum to the invitation, if such information is necessary to bidders in submitting bids on the invitation or if the lack of such information would be prejudicial to uninformed bidders. Receipt of the addendum by a bidder must be acknowledged on the bid or by letter received before the date and time specified for the bid opening. **ORAL EXPLANATION OR INSTRUCTIONS GIVEN BEFORE THE AWARD OF THE CONTRACT WILL NOT BE BINDING.**

### 3. SUBMISSION OF BIDS: FACSIMILE BIDS WILL NOT BE CONSIDERED.

- (A) Any Bid Package and modifications thereof shall be enclosed in a sealed envelope, addressed to the office specified in the Invitation to Bid, with the name and address of the bidder, the date and hour of bid opening, and name of bid. A bid reply label will be included in most bid packages stating the above referenced information. Any bid package NOT having bid information on outside of package could be opened as regular mail, and bid could be disqualified.
- (B) Samples of items, when required, must be submitted within the time specified, unless otherwise specified by the County, and at no expense to the County
- (C) An item offered must at least meet specifications called for and must be of quality which will adequately service the purpose and use for which it was intended.
- (D) Full identification of each item bid upon, including brand name, make, model, and catalog number, must be furnished according to the bid specifications if requested to identify exactly what the bidder is proposing. Supporting literature may be furnished to further substantiate the proposal.
- (E) The bidder represents that the article(s) to be furnished under this Invitation to Bid is (are) new and that the quality has not deteriorated so as to impair its usefulness.
- (F) Bids cannot be withdrawn or corrected after the bid opening (except reductions or changes by the successful bidder which would be beneficial or advantageous to the County). The County as deemed necessary may reject changes.
- (G) Cobb County is exempt from Federal Excise Tax and Georgia Sales Tax.
- (H) Cobb County does not accept conditional bids.

### 4. DEFAULT:

The Award as a result of bids received under this invitation may be in part based on the delivery factor. Accordingly, should delivery fail to be performed within the time specified by the bidder, the bid may then be declared in default of the contract. In such event, the County may then proceed to purchase in the open market the items from another source.

### 5. F.O.B. POINT:

Unless otherwise stated in the Invitation to Bid and any resulting contract, all articles will be F.O.B. Destination. This means delivered, unloaded, and placed in the designated place.

### 6. AWARD OF CONTRACT:

The Contract will be awarded to the responsible bidder whose bid will be the most advantageous to the County, price, and other factors considered. The County will make the determination. The County reserves the right at any time to reject any and all bids, to waive informalities and technicalities, to award portions of the bid, and to award contracts consistent with the County and the laws governing the State of Georgia. Normal payment terms are net thirty (30) days after receipt of invoice by the Finance Department.



**COBB COUNTY**  
PURCHASING DEPARTMENT  
1772 County Services Parkway  
Marietta, Georgia 30008-4012  
(770) 528-8400/FAX (770) 528-1154  
www.cobbcounty.org

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## **IMPORTANT NOTICE – PLEASE READ CAREFULLY!!**

All vendors are required to submit the ORIGINAL AND AT LEAST one (1) duplicated copy of any bid submitted to Cobb County. Please refer to your bid specifications to determine if more than one (1) copy is required. Non-submission of a duplicate copy may disqualify your bid/proposal.

A “**SEALED BID LABEL**” has been enclosed to affix to your bid. This label ***MUST*** be affixed to the outside of the envelope or package, **even if it is a “NO BID” response**. Failure to attach the label may result in your bid being opened in error or not being routed to the proper location for consideration. No bid will be accepted after the date and time specified. **IT IS THE VENDOR’S RESPONSIBILITY TO ENSURE THAT EACH BID HAS BEEN RECEIVED IN A TIMELY MANNER.**

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### **BIDS MUST BE RECEIVED BEFORE 12:00 (NOON) ON BID OPENING DAY**

Bids must be received at the Cobb County Purchasing Department. **Any bids received later than 12:00 (noon) will not be accepted.** The County accepts no responsibility for delays in the mail. Bids are to be mailed or hand delivered to:

COBB COUNTY PURCHASING DEPARTMENT  
1772 COUNTY SERVICES PARKWAY  
MARIETTA, GA 30008-4012

*Bids will be opened at 2:00 P.M. in the Cobb County Purchasing Department, 1772 County Services Parkway, 2<sup>nd</sup> Floor, Conference/Bid Room, Marietta, GA 30008.*

Thank you in advance for your cooperation.

## SEALED BID LABEL

### **SEALED BID ENCLOSED**

DELIVER TO:  
COBB COUNTY PURCHASING  
1772 County Services Parkway  
Marietta, GA 30008-4012

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**SEALED BID # 10-5473 DATE: March 11, 2010**

**BIDS MUST BE RECEIVED BEFORE 12:00 NOON**

**DESCRIPTION: Request for Proposal  
Design, Deliver, Install and Provide Service Response for a  
Video Wall – Audio Visual Display and Collaboration System**

**PLEASE ATTACH LABEL TO OUTSIDE OF BID PACKAGE**



*Cobb County...Expect the Best!*

**REQUEST FOR PROPOSAL**

**SEALED BID # 10 – 5473  
DESIGN, DELIVER, INSTALL AND PROVIDE SERVICE RESPONSE FOR A VIDEO WALL –  
AUDIO VISUAL DISPLAY AND COLLABORATION SYSTEM  
COBB COUNTY DEPARTMENT OF PUBLIC SAFETY**

**BID OPENING DATE: MARCH 11, 2010**

**PRE-PROPOSAL CONFERENCE: FEBRUARY 23, 2010 @2:00 P.M. (E.S.T.)  
COBB COUNTY PURCHASING DEPARTMENT  
1772 COUNTY SERVICES PARKWAY  
MARIETTA, GEORGIA 30008**

BIDS ARE RECEIVED IN THE  
COBB COUNTY PURCHASING DEPARTMENT  
1772 COUNTY SERVICES PARKWAY  
MARIETTA, GEORGIA 30008  
**BEFORE 12:00 (NOON) BY THE BID OPENING DATE**

BIDS WILL BE OPENED IN THE COBB COUNTY PURCHASING DEPARTMENT  
**BID/MEETING ROOM AT 2:00 P.M.**

**VENDORS ARE REQUIRED TO SUBMIT THE ORIGINAL AND 7 COPIES AND 1 COPY ON CR-ROM DISK OF BID  
(UNLESS OTHERWISE SPECIFIED IN BID SPECIFICATIONS)**

N.I.G.P. COMMODITY CODE: 84084

NAME: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

\_\_\_\_\_

REPRESENTATIVE: \_\_\_\_\_

PHONE: \_\_\_\_\_ FAX: \_\_\_\_\_

E-MAIL \_\_\_\_\_

**NOTE: The Cobb County Purchasing Department will not be responsible for the accuracy or completeness of the content of any Cobb County Invitation to Bid or Request for Proposal or subsequent addenda thereto received from a source other than the Cobb County Purchasing Department.**



*Cobb County...Expect the Best!*

**"STATEMENT OF NO BID"**

COBB COUNTY PURCHASING DEPARTMENT  
1772 COUNTY SERVICES PARKWAY  
MARIETTA, GA 30008

TO ALL PROSPECTIVE BIDDERS:

Because of the many requests to be placed on our vendors' list, we are continuously updating the list. While we want to include all bona fide vendors, we do not want to mail bids to those vendors who may no longer be interested in participating in our bidding process.

If you do not choose to respond to the attached Invitation to Bid/Request for Proposal, please fill out the form below indicating whether or not you want to be retained on our current vendor list.

Vendors who do not respond in any way (by either submitting a bid or by returning this form) over a period of one year may be removed from the current vendor list.

**Vendors who do not wish to bid often return the entire bid package, sometimes at considerable postage expense. Returning the entire bid package is not necessary. Simply return this form.**

Thank you for your cooperation.  
Cobb County Purchasing Department

**"STATEMENT OF NO BID"**  
**SEALED BID NUMBER 10-5473**  
REQUEST FOR PROPOSAL

DESIGN, DELIVER, INSTALL AND PROVIDE SERVICE RESPONSE FOR A VIDEO WALL –  
AUDIO VISUAL DISPLAY AND COLLABORATION SYSTEM  
COBB COUNTY DEPARTMENT OF PUBLIC SAFETY

If you do not wish to respond to the attached Invitation to Bid/Request for Proposal, please complete this form and mail/fax to: **Cobb County Purchasing Department, Attention: Sealed Bid Department, 1772 County Services Parkway, Marietta, GA. Fax # 770-528-1154**

I do not wish to submit a bid/proposal on this solicitation.

**I wish to be retained on the vendor list for this commodity or service: Yes \_\_\_\_\_ No \_\_\_\_\_**

Please PRINT the following:

\_\_\_\_\_  
Company

\_\_\_\_\_  
Representative

You are invited to list reasons for your decision not to bid: \_\_\_\_\_

\_\_\_\_\_

# REQUEST FOR PROPOSAL

**SEALED BID NUMBER: 10-5473**



*Cobb County...Expect the Best!*

## COBB COUNTY GOVERNMENT

***To Design, Deliver, Install and Provide Service Response  
for a  
Video Wall – Audio Visual Display and Collaboration System***

**Cobb County Purchasing Department  
1772 County Services Parkway  
Marietta, GA 30008**

**770-528-8400  
Richard Brun, Director**

**Cobb County 911 Communications  
140 North Marietta Parkway  
Marietta, GA 30060**

**770-590-5711  
Tony Wheeler, Director**

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## **1.0 Overview and General Instructions to Proposers**

The purpose of this Request for Proposal (RFP) is to provide sufficient information to interested and competent organizations which will provide them the opportunity to respond by submitting proposals for a video wall and audio visual display collaboration system for the Cobb County 911 main dispatch center located on North Marietta Parkway in Marietta, Georgia. Public Safety/911 Emergency Communication Centers pose unique challenges and demands. Unlike an office environment, Emergency Communications personnel are required to manage multiple LCD/CRT monitors, plus additional ancillary rack mount electronics required for emergency radio dispatch. Additionally, these video monitoring and display systems are utilized 24 hours per day/ 7 days per week by many different employees, with many different monitoring display preferences and personal default settings. It must be recognized that this user environment will require robust and reliable electronics, displays and monitoring equipment and systems. Floor plans and elevation drawings included in this bid shall prevail as the specifications for all measurements, angles and dimensions.

Any and all components, whether mechanical, electrical, for physical appearance or ergonomics, required making this video wall and audio visual display collaboration system usable and fully operational must be included in the vendors' final proposal cost. The price listed in the vendors' proposal shall be the EFI (Engineer-Furnish-Install) or full-turnkey price, including freight to and installation at the existing site location of work for Cobb County Public Safety. The Vendor will also be asked to segment pricing, whereby Cobb County, Georgia can see the effects of adding or deleting components and services to the final price total.

**SEE SECTION 2.00 FOR MORE INFORMATION**

### **1.01 Pre-Proposal Conference**

There will be a Pre-Proposal Conference for all interested parties:

**Date: Tuesday – February 23, 2010**  
**Time: 2:00 PM**  
**Location: Cobb County Purchasing Department**  
**Bid Conference Room, 2<sup>nd</sup> Floor**  
**1772 County Services Parkway**  
**Marietta, Georgia 30008-4012**

Although attendance at this meeting is not mandatory, proposers are strongly urged to attend, as it is expected that many relevant questions will be asked and answered during this conference. Proposers may submit written inquiries or request clarifications verbally at the Pre-Proposal Conference.

### **1.02 Request for Additional Information**

It is anticipated that most questions will be answered at the Pre-Proposal Conference. However, if there are additional questions or inquiries after the Pre-Proposal Conference, they shall be submitted and received in writing before **5:00 pm Tuesday, March 2, 2010 to:**

Cobb County Purchasing Department  
Attn.: Purchasing Director  
1772 County Services Parkway  
Marietta, Georgia 30008-4012

FAX: (770) 528-1154  
E-mail: [purchasing@cobbcounty.org](mailto:purchasing@cobbcounty.org)

Proposers are expressly instructed that the above contact is the only authorized source of information. Unauthorized contact with any other personnel may result in immediate disqualification of the proposer. Any response to a properly submitted inquiry will be addressed in writing as an addendum. Cobb County is not bound by any oral representations, clarification, or changes made to the written specification by County's employees unless such clarification or change is provided to the vendors in written addendum from Cobb County. Cobb County does not discriminate on the basis of disability in the admission or access to its programs or activities. Any requests for reasonable accommodations required by individuals to fully participate in any open meeting, program or activity should be directed to the Cobb County Purchasing Department.

### **1.03 Addenda to this RFP**

Addenda will be posted on the Cobb County Website at [purchasing.cobbcountyga.gov](http://purchasing.cobbcountyga.gov). Addenda No Addenda will be issued later than three days prior to the date for receipt of proposals except an Addendum withdrawing the request for proposals or one, which includes postponement of the date for receipt of proposals. Each proposer shall ascertain prior to submitting a proposal that the proposer has received all Addenda issued, and the proposer shall acknowledge the receipt in the proposal.

### **1.04 Proprietary Information**

Any information contained in a proposal that is considered proprietary by the proposer shall be clearly marked as such. Information not marked as proprietary will be considered public information generally available. The entire document may not be designated as proprietary.

### **1.05 Costs of Proposal Preparation**

All costs incurred in the preparation of a proposal including but not limited to labor, travel and incidental expenses are the complete responsibility of the proposer and are not recoverable from Cobb County.

### **1.06 Delivery of Proposals**

Proposers are instructed to deliver one (1) original hardcopy, (1) CD and seven (7) hard copies of their response to this RFP **before 12:00PM (Noon), on Thursday – March 11, 2010** to:

Cobb County Purchasing Department  
Attn.: Purchasing Director  
1772 County Services Parkway  
Marietta, Georgia 30008-4012

All responses shall be sealed and clearly marked "PROPOSAL – Cobb County Government - Video Wall and Audio Visual Display System ". – **Sealed Bid No. 10-5473**

No proposal will be accepted after the above date and time. The proposer shall assume full responsibility for timely delivery at the location designated for receipt of proposals.

## **1.07 Bonding**

### **1.07.01 Performance/Payment Bond**

Within ten (10) days after notice of an award, Proposers are required to have a valid Performance/Payment Bond in force covering the work to be performed up to the time of total acceptance by Cobb County. The bond shall be in the amount of one hundred (100) percent of the contract amount, guaranteeing to Cobb County the completion and performance of the work covered in such a contract, as well as full payment of all suppliers, agents, laborers or subcontractors employed in the performance of the project. Such bond will be in a form and with a surety acceptable to Cobb County and will provide for the protection of all persons supplying labor and materials used for the performance of the work. Purchase Order(s) will not be issued until an acceptable Performance/Payment Bond has been received. The proposer agrees to keep such bond or a replacement thereof, in force at all times during the course of the performance for this project, including any change orders.

### **1.07.02 Qualification of Surety**

A surety company of recognized and acceptable standing, authorized to do business in the State of Georgia and having a resident agent in Cobb County or adjacent area shall execute the Performance Bond. The Surety Company will hold a current certificate of authority as acceptable surety on Federal Bonds, in accordance with U.S. Department of Treasury Circular 570, Current Revision.

### **1.07.03 Contract Assignment**

A successful proposer(s) may not assign any part of a resultant contractual agreement (except contract payments) without the prior written authorization of Cobb County.

## **1.08 Non Collusion Statement**

By submission of a proposal, the vendor certifies, under penalty of perjury, that to the best of its knowledge and belief:

- A. The prices in the proposal have been arrived at independently without collusion, consultation, communications, or agreement, for the purpose of restricting competition, as to any matter relating to such prices with any other vendor or with any competitor.
- B. Unless otherwise required by law, the prices, which have been quoted in the proposal, have not been knowingly disclosed by the vendor prior to opening, directly, or indirectly, to any other vendor or to any competitor.
- C. No attempt has been made, or will be made, by the vendor to induce any other person, partnership, or corporation to submit or not to submit a proposal for the purpose of restricting competition.

## **1.09 Conflict of Interest/Contingency Fees/Certification by Subcontractors**

By submission of a proposal, the vendor certifies, under penalty of perjury, that to the best of its knowledge and belief:

- A. No circumstances exist which will cause a conflict of interest in performing the services

required by this RFP

- B. That no employee of the County, nor any member thereof, nor any public agency or official affected by this RFP, has any pecuniary interest in the business of the Vendor or his subcontractor(s) has any interest that would conflict in any manner or degree with the performance related to this RFP

The vendor also warrants that he and his subcontractor(s) have not employed or retained any company or person other than a bona fide employee working solely for the vendor or subcontractor(s) to solicit or secure a contract agreement with Cobb County, as related to this RFP, and that he and his subcontractor(s) have not paid or agreed to pay person, company, corporation, individual, or firm other than a bona fide employee working solely for the vendor or his subcontractor(s) any fee, commission, percentage, gift, or other consideration contingent upon or resulting from the award of this agreement.

For any breach or violation of this provision, the County shall have the right to terminate any related contract or agreement without liability and at its discretion to deduct from the price, or otherwise recover, the full amount of such fee, commission, percentage, gift, payment or consideration.

The successful vendor shall require each of its subcontractor(s) to sign a statement certifying to and agreeing to comply with the terms of (A) and (B) above.

#### **1.10 Indemnification/Hold Harmless Agreement**

By submission of a proposal, the selected vendor agrees to indemnify Cobb County and, to the fullest extent permitted by law, protect, defend, indemnify and hold harmless Cobb County, its officers, officials, employees, and volunteers from and against all claims, actions, liabilities, losses, (including economic losses) or costs arising out of any actual or alleged (a) bodily injury, sickness, disease, or death; or injury to or destruction of tangible property including the loss of use resulting there from; or any other damage or loss arising out of or resulting claims resulting in whole or in part from any actual or alleged act or omission of the vendor, subcontractor, anyone directly or indirectly employed by any of them; or anyone for whole acts any of them may be liable in the performance of work; (b) violation of any law, statute, ordinance, governmental administrative order, rule, regulation, or infringement of patent rights or other intellectual property rights by the vendor in the performance of work; or (c) liens, claims or actions made by the vendor or other party performing the work, as approved by the County.

The indemnification obligations herein shall not be limited by any limitation on the amount, type of damages, compensation, or benefits payable by or for the vendor or his subcontractor(s), as approved by the County, under worker's compensation acts, disability benefit acts, other employee benefits acts or any statutory bar or insurance.

#### **1.11 Proof of Insurance**

The successful vendor and its subcontractors will be required to provide proof of insurance as follows:

##### **A. GENERAL REQUIREMENTS**

1. General Liability: \$1,000,000 combined single limit per occurrence for comprehensive coverage including bodily injury, personal injury and property damage for

premises/operations, products/completed operations, contractual liability, independent contractors, broad-form property damage, and underground, explosion and collapse hazard.

2. Automobile Liability: \$1,000,000 combined single limit per accident for bodily injury and property damage including all owned, hired, and non-owned.

3. Workers' Compensation and Employers Liability: Workers' Compensation limits as required by the Labor code of the State of Georgia and Employers Liability of \$100,000 per accident.

4. Umbrella Liability: \$5,000,000 combined single limits per occurrence.

5. Builders Risk Insurance, if applicable: All Risk coverage on any buildings, structure of work and material in an amount equal to 100 percent of the value of the contract. Coverage is to cover Cobb County interest and Cobb County shall be named as Loss Payee.

#### B. DEDUCTIBLES AND SELF-INSURED RETENTION

Any deductibles or self-insurance retentions must be declared to and approved by the Owner. At the option of the Owner, either: The insurer shall reduce or eliminate such deductibles or self-insured retentions as respects the Owner, its officers officials, and employees; or the Contractor shall procure a bond guaranteeing payment of losses related to investigations, claim administration and defense expenses.

#### C. OTHER INSURANCE PROVISIONS

##### 1. General Liability, Automobile Liability, and Umbrella Liability Coverage Requirements

The Owner and its officers, officials, employees and volunteers are to be covered as additional insureds as respects: liability arising out of activities performed by or on behalf of the Contractor.

Any failure to comply with reporting provisions of the policies shall not affect coverage provided to the Owner and its officers, officials, employees or volunteers.

The Contractor is responsible for insuring its own property and equipment.

2. Workers' Compensation and Employers Liability Coverage. The insurer shall agree to waive all rights of subrogation against the Owner and its officers, officials, employees and volunteers for losses arising from the work performed by the Contractor for the Owner.

3. All Coverages: Each insurance policy required by this clause shall be endorsed to state that coverage shall not be changed, cancelled, suspended, terminated or non-renewed except after sixty (60) days prior written notice by certified mail, return receipt requested, has been given to Cobb County of said change of coverage, cancellation, suspension, termination / or non-renewal.

#### D. ACCEPTABILITY.

Insurance is to be placed with insurers with an A.M.Best's rating of no less than A: VII, or otherwise acceptable to the Owner.

#### E. VERIFICATION OF COVERAGE.

Contractor shall furnish the Owner with certificates of insurance and with original endorsements effecting coverage required by this clause. These certificates and endorsements for each insurance policy are to be signed by a person authorized by that insurer to bind coverage on its behalf. The certificates and endorsements are to be received and approved by the Owner before any work commences. The Owner reserves the right to require complete, certified copies of all required insurance policies at any time.

#### F. SUBCONTRACTORS

Subcontractor means one not in the employment of the Contractor who is performing all or part of the services under this Agreement under a separate contract with the Contractor.

Contractor shall include all subcontractors as insured under its insurance or shall ensure that subcontractors have met the insurance requirements of this agreement. Owner may request evidence of subcontractor's insurance.

Contractor is responsible for having all subcontractors comply with all terms and conditions of the Invitation to Bid.

#### G. WAIVER OF SUBROGATION

Vendor shall require all insurance policies in any way related to the work and secured and maintained by Vendor to include clauses stating each underwriter shall waive all rights of recovery, under subrogation or otherwise, against Customer. Vendor shall require of subcontractors, by appropriate written agreements, similar waivers each in favor of all parties enumerated in this section.

All coverage will be on an "occurrence" basis. All policies required will name Cobb County as an additional insured. All insurance policies required above will be issued by companies authorized to do business under the laws of the State of Georgia with a rating of A or higher and no less than Class V as to financial strength as rated by the latest edition of Best's Insurance Guide or otherwise acceptable to Cobb County.

#### **1.12 Clarification of Proposals**

During the evaluation of proposals, Cobb County may, at its discretion and at no cost to Cobb County, invite any respondent to appear for questioning or provide written responses during proposal evaluation for the purpose of clarifying statements in the proposal.

#### **1.13 Video Wall – Audio Visual Display System Demonstration**

If requested by Cobb County, the proposer agrees to provide a demonstration of the proposed

video wall and audio visual display monitoring system solution at a nearby (Metro-Atlanta) area site to be conducted within three weeks of this request. The proposed video wall and audio visual display monitoring system that will be demonstrated should closely match the configuration and requirements as those proposed for the Cobb County 911 Dispatch Center.

#### **1.14 Prime Proposer Responsibility**

It is recognized that several firms may wish to combine their resources in responding to this RFP. However, one firm shall be identified as the prime proposer and shall be responsible for the entire contract. Proposals by such combinations are acceptable, provided that each proposal is a complete proposal (as defined within this RFP) and contains all required information. The proposer shall be a certified Audio-Video Display vendor and integrator for the product(s) being proposed.

This specification shall require the successful proposer to supply a fully operational video wall and audio visual display monitoring system, installed and operating in the facilities of the Cobb County Government. Prime proposer responsibility requires that the successful proposer be responsible for the complete definition, delivery, integration, training and implementation of the video wall and audio visual display system solution. If multiple proposers wish to jointly propose a solution, the proposer that will be completely responsible for system integration shall be clearly specified in the proposal. The proposal shall contain a section which describes the Company Information Overview for each company proposed to participate in the video wall and audio visual display monitoring system.

#### **1.15 Modification or Withdrawal of Proposals**

Modifications to or withdrawals of proposals that have been submitted may take place without hindrance at any time up to the deadline for proposal submission. After this time, no modifications to or withdrawals of proposals may be made for any reason.

#### **1.16 Proposal Duration**

Proposals submitted in response to this RFP shall be valid for a period of 180 days from proposal submission deadline, and shall be so marked.

#### **1.17 Proposer's Experience with Video Wall-Audio Visual Display System Solutions**

Proposers submitting a response to this RFP must have experience with providing complete video wall and audio visual display system solutions and integration services for Public Safety use. The proposer must meet the following criteria:

- A. The proposer shall have at least five (5) years or more experience producing and implementing video wall and audio visual display monitoring system solutions and providing integration services and
- B. The proposer shall have at least five (5) operational video wall and audio visual display monitoring systems, similar in system size, complexity and organization to Cobb County Government, in full operation using the proposed video wall and audio visual display monitoring system, or one similar and
- C. The proposer shall have at least three (3) operational video wall and visual display

monitoring system sites, similar in system size, complexity and organization to Cobb County Government, in full operation using the proposed video wall and audio visual display monitoring system, or one similar, that were **recently completed within the last year**, and

- D. The proposer shall provide their credentials in the field of Public Safety video wall and audio visual display monitoring system solutions and providing integration services and
- E. The proposer shall identify five specific agencies (agency name, contact person, email and telephone number) that have purchased any of the proposer's video wall and audio visual display monitoring system solutions and integration services, or one similar to that being proposed to Cobb County currently in operation and
- F. The applicable customer references shall include contact names, email addresses and telephone numbers along with a brief description of the system, including:
  - 1. Type of video wall and audio visual display system solution (Large rear-projection display wall, near-seamless or thin-bevel audio video display wall, multi-screen LCD/Plasma/LED Source Selection Systems, etc.)
  - 2. Number of operator/users/departments supported
  - 3. Specific date the video wall and audio visual display system was installed
  - 4. Post implementation support comments and concerns
  - 5. Implementation duration for each customer
- G. The proposer must identify the proposed implementation/integration staff and their related experience. Résumés must be included for key implementation staff members and
- H. The proposer must identify the post implementation support staff and maintenance services. Résumés must be included for key support staff members and

### **1.18 Uniform Proposals**

To facilitate comparative analysis and evaluation of proposals it is desired that a uniform format be employed in structuring each proposal. The required format is one that will coincide with specifications given later in this RFP in the Proposal Format section. The vendor's degree of compliance with the requirements of the RFP will be a factor in the subsequent evaluation of their specific proposal. Proposals with major deviations or omissions may be considered non-responsive and not evaluated. Company proposals will become part of the contract with Cobb County should they be selected under the RFP.

### **1.19 Added Value**

Vendors may include anything unique in their proposed video wall and audio visual display system solution which adds value to the products/services provided to Cobb County Government. The cost of this added value must be clearly explained and justified in the proposal.

### **1.20 Award of Contract**

It is anticipated that a contract will be awarded to the successful proposer. However, no work is to begin, nor is the County liable for any costs whatsoever, until the contract has been duly signed and certified by the appropriate parties.

The successful proposer will enter into a contract with the County on a form agreeable to Cobb County.

### **1.21 Multiple Awards**

Cobb County reserves the right to make multiple awards or to award a contract by individual line or alternatives, or to make an aggregate award, whichever is deemed most advantageous to Cobb County. If Cobb County determines that an aggregate award to one proposer is not in Cobb County's best interest, "all or none" offers shall be rejected. Cobb County reserves the right to purchase any desired audio-visual equipment, related system components, and/or services from any source in part or in whole.

### **1.22 Right to Reject Any or All Proposals**

Each proposal must comply with all requirements for a video wall and audio visual display system solution as directed or required by this RFP. Notice is hereby given to all companies bidding that if their proposal is defective or irregular, the proposal may be rejected immediately. Cobb County reserves the right to reject any or all proposals or to waive any specific technicalities or informalities in order to accept any proposal deemed to be in the best interest of Cobb County. Cobb County also reserves the right to accept any portion of any bid and to enter into a contract with one or more proposers. The successful vendor will be required to enter into a contract agreeable to the County, and in the event a negotiated contract cannot be completed, then the County may withdraw from the negotiations and enter into negotiations with another qualified vendor. Cobb County also reserves the right to accept any portion of any bid and enter into a contract with one or more respondents.

### **1.23 Multi-Year Contract Provisions**

The successful respondent will be required to enter into a contract containing the provisions as required by Georgia law pertaining to multi-year contracts. The following is a sample of the provision and will be adjusted as to the term or as to the length of the contract.

This contract shall terminate absolutely and without further obligation on the part of Cobb County at the close of the calendar year in which it was executed, and at the close of each succeeding calendar year for which it may be renewed as provided in O.C.G.A. Section 36-60-13. The contract shall automatically renew for each of the remaining calendar years provided for in the contract, unless positive action is taken by Cobb County to terminate such contract, and the nature of such action shall be written notice provided to the consulting firm within sixty (60) days before the end of the initial year of the contract or each succeeding remaining calendar year.

This contract shall terminate immediately and absolutely at such time as appropriated and otherwise unobligated funds are no longer available to satisfy the obligations of Cobb County under this contract.

### **1.24 Disadvantaged Business Enterprises (DBE):**

*The following provisions should be carefully read to determine applicability to your business.*

Cobb County Government encourages the participation of all businesses in offering their services and/or products. The Cobb County Government has the goal to fairly and competitively procure the best product at the most reasonable cost.

A Disadvantaged Business Enterprise (DBE) is generally defined as a Female, Black American, Hispanic American and any other minority owned business. The Federal Government has long had a program in place to ensure participation of DBE vendors and suppliers. The State of Georgia has established a similar program whereby DBE firms are defined, certified and made known. This effort is managed by the Georgia Department of Transportation (GDOT). More information can be obtained from the GDOT Web site at:

<http://www.dot.state.ga.us/doingbusiness/dbePrograms/Pages/default.aspx>

The Cobb County Government addresses DBE business participation (frequency and dollar value) in the following ways:

- A. Cobb County wishes to identify all DBE participation; both at the contractor and sub-contractor levels in the following ways.
  1. DBE businesses are requested to identify such status at the time they register as a vendor.
  2. DBE businesses are requested to identify themselves at the time they propose to do business. Please complete EXHIBIT B if applicable and return with bid submittal.
  3. All businesses will receive with each Purchase Order an instruction sheet for use of the furnished Cobb County Government DBE Participation Report, EXHIBIT C. Businesses are requested to complete this report and submit it with each invoice for the time period billed.
- B. Cobb County has established a Disadvantaged Business Enterprise Plan in accordance with the regulations of the U.S. Department of Transportation (U. S. Department of Transportation (USDOT), 49 CFR Part 26.) The Cobb County Department of Transportation is the lead agency for implementing the USDOT DBE Program for the County.
- C. The Plan applies only to projects which are clearly indicated by the County.

### **1.25 Americans With Disabilities Act**

Cobb County requires all contractors to comply with applicable sections of the Americans With Disabilities Act (ADA) as an equal opportunity employer. In compliance with the Americans With Disabilities Act (ADA), Cobb County provides reasonable accommodations to permit a qualified applicant with a disability to enjoy the privileges of employment equal to those employees without disabilities. Disabled individuals must satisfy job requirements for education background, employment experience, and must be able to perform those tasks that are essential to the job with or without reasonable accommodations.

**1.26 Evidence of Compliance with Georgia Security & Immigration Compliance Act**

The County and Contractor agree that compliance with the requirements of O.C.G.A. Sec. 13-10-91 and Rule 300-10-1-.02 of the Rules of the Georgia Department of Labor are conditions of this Agreement for the physical performance of services.

The Contractor represents that it employs:

\_\_\_\_\_ 500 or more employees;

\_\_\_\_\_ 100 or more employees; or

\_\_\_\_\_ fewer than 100 employees

(Contractor must initial appropriate category)

\_\_\_\_\_  
Contractor Name

The Contractor further agrees that its compliance with the requirements of O.C.G.A. Sec. 13-10-91 and DOL Rule 300-10-1-.02 is attested to on the executed Contractor Affidavit and Agreement attached hereto as EXHIBIT A.

If employing or contracting with any subcontractor(s) in connection with this Agreement, Contractor further agrees:

- A. To secure from the subcontractor(s) such subcontractor(s)' indication of the employee-number category applicable to the subcontractor(s); and
- B. To secure from the subcontractor(s) an affidavit attesting to the subcontractor's compliance with O.C.G.A. Sec. 13-10-91 and DOL Rule 300-10-1-.02; such affidavit being in the form attached hereto and referenced as EXHIBIT A-1; and
- C. To submit such subcontractor affidavit(s) to the County when the subcontractor(s) is retained, but in any event, prior to the commencement of work by the subcontractor(s).

The failure of Contractor to supply the affidavit of compliance at the time of execution of this Agreement and/or the failure of Contractor to continue to satisfy the obligations of O.C.G.A. Sec. 13-10-91 and DOL Rule 300-10-1-.02 as set forth in this Agreement during the term of the Agreement shall constitute a material breach of the contract. Upon notice of such breach, Contractor shall be entitled to cure the breach within ten (10) days, upon providing satisfactory evidence of compliance with the terms of this Agreement and State law. Should the breach not be cured, the County shall be entitled to all available remedies, including termination of the contract and damages.

**THIS PAGE MUST BE SUBMITTED WITH BID PACKAGE**

**CONTRACTOR AFFIDAVIT & AGREEMENT  
EXHIBIT A**

By executing this affidavit, the undersigned contractor verifies its compliance with O.C.G.A. § 13-10-91, stating affirmatively that the individual, firm or corporation which is contracting with Cobb County, Georgia, has registered and is participating in a federal work authorization program\* [an electronic verification of work authorization program operated by the U.S. Department of Homeland Security or any equivalent federal work authorization program operated by the U.S. Department of Homeland Security to verify information of newly hired employees, pursuant to the Immigration Reform and Control Act of 1986 (IRCA), P.L. 99-603], in accordance with the applicability provisions and deadlines established in O.C.G.A. § 13-10-91.

The undersigned further agrees that should it employ or contract with any subcontractor(s) for the physical performance of services pursuant to the contract with Cobb County, Georgia, the contractor will secure from the subcontractor(s) verification of compliance with O.C.G.A. § 13-10-91 on the attached Subcontractor Affidavit. (EXHIBIT A-1). The contractor further agrees to maintain records of such compliance and shall provide a copy of each such verification to Cobb County, Georgia, at the time the subcontractor(s) is retained to perform such services.

BY: \_\_\_\_\_  
Authorized Officer or Agent  
[Contractor Name]

Date: \_\_\_\_\_

\_\_\_\_\_  
Title

\_\_\_\_\_  
Printed Name

\_\_\_\_\_  
Company Name

SUBSCRIBED AND SWORN  
BEFORE ME ON THIS THE  
\_\_\_ DAY OF \_\_\_\_\_, 200\_\_

\_\_\_\_\_  
Notary Public  
My Commission Expires:

\*The applicable federal work authorization program as of the effective date of the statute is the Basic Pilot program of the Systematic Alien Verification for Entitlements (SAVE) Program Office of U.S. Citizenship and Immigration Service (USCIS).

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**SUB CONTRACTOR AFFIDAVIT -  
EXHIBIT A-1**

By executing this affidavit, the undersigned subcontractor verifies its compliance with O.C.G.A. § 13-10-91, stating affirmatively that the individual, firm or corporation which is engaged in the physical performance of services on behalf of Cobb County, Georgia, has registered and is participating in a federal work authorization program\* [an electronic verification of work authorization program operated by the U.S. Department of Homeland Security or any equivalent federal work authorization program operated by the U.S. Department of Homeland Security to verify information of newly hired employees, pursuant to the Immigration Reform and Control Act of 1986 (IRCA)], in accordance with the applicability provisions and deadlines established in O.C.G.A. § 13-10-91.

BY: \_\_\_\_\_  
Authorized Officer or Agent  
[Contractor Name]

Date: \_\_\_\_\_

\_\_\_\_\_  
Title

\_\_\_\_\_  
Printed Name

\_\_\_\_\_  
Company Name

SUBSCRIBED AND SWORN  
BEFORE ME ON THIS THE  
\_\_\_ DAY OF \_\_\_\_\_, 200\_

\_\_\_\_\_  
Notary Public  
My Commission Expires:

\*The applicable federal work authorization program as of the effective date of the statute is the Basic Pilot program of the Systematic Alien Verification for Entitlements (SAVE) Program Office of U.S. Citizenship and Immigration Service (USCIS).

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**DISADVANTAGED BUSINESS ENTERPRISE IDENTIFICATION FORM  
EXHIBIT B**

A Disadvantaged Business Enterprise (DBE) is generally defined as a Female, Black American, Hispanic American and any other minority owned business. If your firm is classified as a Disadvantaged Business Enterprise (DBE), please complete this form and submit with bid response or send to:

Cobb County Purchasing Department  
Attn: Mr. Rick Brun, Purchasing Director  
1772 County Services Parkway  
Marietta, GA 30008  
Fax: 770-528-1154  
Email: purchasing@cobbcounty.org

Name of Firm: \_\_\_\_\_

Address: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Telephone: \_\_\_\_\_

Fax: \_\_\_\_\_

Email: \_\_\_\_\_

MBE Certification Number: \_\_\_\_\_

Name of Organization Certification \_\_\_\_\_

**This information is acquired for informational purposes only and will have no bearing on the award unless otherwise stated**

**Instructions for Completing – Exhibit C  
Disadvantaged Business Enterprise (DBE)  
Participation Report**

**All Cobb County Government contractors or vendors are requested to complete a report descriptive of any DBE subcontractor involvement in work for which the government is making payment. If otherwise specified in an RFP or contract, additional reporting forms may be required as well.**

The objective of this request is to assist in the identification of Disadvantaged Business Enterprise (DBE) business participation with the Cobb County Government and to quantify that participation.

The Cobb County Government does not administer a DBE Certification Program. The principle certification agency for the State of Georgia is the Georgia Department of Transportation. As a Contractor/Vendor you are not responsible for verification of any DBE Certification information of your subcontractor.

\*\*\* Instructions \*\*\*

1. Contractor/Vendor is furnished the one-page DBE Participation Report form with each Cobb County Government-issued Purchase Order.
2. Contractor/Vendor completes this form for each billing period and attaches it to the invoice to then be sent to the Cobb County Government.
3. Upon receipt of a Contractor/Vendor invoice, County staff should simply separate the completed DBE form and transmit to:

Cobb County Purchasing Department,  
Attn.: DBE Report

A Disadvantaged Business Enterprise (DBE) is a firm that is under the control of someone in an ownership position (at least 51%) that:

1. Has membership in one or more of the following groups: Female, Black American, Hispanic American, Native American, Subcontinent Asian American and Asian-Pacific America. There may be other groups that may be eligible to be certified as DBE;
2. Is a U.S. citizen or lawfully admitted permanent resident of the U.S.;
3. Has a personal net worth which does not exceed \$750,000; and,
4. The business meets the Small Business Administration's size standard for a small business and does not exceed \$17.42 million in gross annual receipts;
5. The business is organized as a for-profit business.
6. The business may also be DBE eligible as a certified U.S. Small Business Administration 8(a) program.

**EXHIBIT C**  
**DBE PARTICIPATION REPORT**  
**Cobb County Government Disadvantaged Business Enterprise Participation Report**

→ PLEASE keep this blank form to make copies for actual use as needed. Also, please print or type in the form. ←

Submitted by: \_\_\_\_\_ Period Invoiced: \_\_\_\_\_  
 Name of Prime Contractor/Vendor From/To:

Cobb County Project Name: \_\_\_\_\_ Bid or P.O. Number: \_\_\_\_\_

Cobb County Department or Agency receiving service or product: \_\_\_\_\_

Description of Purchased Service/Product: \_\_\_\_\_

Full Contracted Amount: \$ \_\_\_\_\_ Payment amount requested at this time: \$ \_\_\_\_\_

1. Are YOU, the Prime Contractor or Vendor a DBE business? YES \_\_\_\_\_ NO \_\_\_\_\_
2. Please provide the following information for each subcontractor participating during this reporting period:

Subcontractor Business Name	Type Service or Product Supplied	Subcontractor Business/Contact Tel. Number	Actual Dollar Value of Subcontractor Participation this Reporting Period
			\$
			\$
			\$
			\$
			\$
			\$
			\$

Submitted by: \_\_\_\_\_  
 Printed Name

Title or position: \_\_\_\_\_

Signature of Authorized Representative

Date Completed: \_\_\_\_\_

**County Departments: Please send this completed form to the Cobb County Purchasing Department, ATTN: DBE Report**

## **2.00 Introduction**

### **2.01 Opening Statement**

Cobb County is a metro Atlanta county located just twenty minutes northeast of downtown Atlanta and that recently celebrated its 175th Anniversary. With a rich history of the old south, Cobb County is a proven government leader whose focus is on improving the quality of life for its residents and businesses. We have continued our tradition of having the lowest property taxes in the metro area while continuing to maintain our “Triple A” bond ratings from the nation’s top three bond agencies for more than a decade. Likewise, our Water System has earned the same honor for seven years running. With 679,325 residents, the County contributes to the well-being of its residents through investment in parks land, Public Safety and transportation. During 2007 residents witnessed the opening of metro Atlanta’s newest entertainment venue, the impressive \$145 million Cobb Energy Performing Arts Centre. It is the first major performing arts facility in the metro area in four decades and the new home for the Atlanta Opera. This distinguished venue has brought exceptional entertainment to Cobb County, allowing visitors to learn what our residents already knew: This is a great place to live. Not only is Cobb a good place for its residents, it is also a good place for business. There are several Fortune 500 Companies with headquarters in Cobb County which include Home Depot, Coca-Cola Enterprises, BlueLinx Holdings and Genuine Parts (NAPA). It is with this desire to improve the quality of life and public safety of the Cobb County citizens that this request for an enhanced audio visual (AV) display and monitoring system for the 911 Public Safety Dispatching Center is being developed and distributed to all qualified vendors.

### **2.02 Project Purpose**

The purpose of this Request for Proposal (RFP) is to provide sufficient information to interested and competent organizations which will provide them with the opportunity to respond by submitting proposals for an enhanced audio visual display and monitoring system for use by Cobb County Government emergency dispatch operators, 911 management staff and support personnel. These interested and qualified AV equipment and software providers will need to submit a proposal to develop, deliver, install, integrate and provide service response for an enhanced audio visual display and monitoring system for the Cobb County 911 Dispatch Center. The Cobb County Purchasing Department will facilitate the vendor proposal process, but the 911 Communications Center Director and his direct Staff will ultimately issue the Notice of Intent to Award, negotiate the contract with the vendor deemed the best value, and be responsible for the payment of all equipment, software, integration costs and services provided by the vendor and requested within this RFP.

Public Safety/911 Emergency Communication Centers pose unique challenges and demands. Unlike an office environment, Emergency Communications personnel are required to manage multiple LCD/CRT monitors, plus additional ancillary rack mount electronics required for emergency radio dispatch. Additionally, such equipment and computer systems are utilized 24 hours per day/ 7 days per week by many different employees, with many different display preferences, character sizes and needs. It must be recognized that in this user environment the AV components will receive at least five times the use of typical office equipment, software and systems each year. Consumer grade AV components and systems will not be considered as part of this procurement. Floor plans, elevation drawings and pictures included in this bid shall prevail as the specifications for all measurements, angles and dimensions.

Any and all components, whether equipment, software, AV systems or integration services required to make this enhanced audio visual display and monitoring system solution usable and fully operational will need to be included in the vendors' final proposal cost. The price listed in the vendors' proposal shall be the EFI (Engineer-Furnish- Install) or full-turnkey price, including freight to and installation at the existing site location of work for Cobb County Public Safety. Vendors will also be asked to segment their pricing, whereby Cobb County, Georgia can see the effects of adding or deleting AV components and services.

### **2.03 Project Requirements**

The Cobb County 911 dispatch center is looking to enhance its current AV display, monitoring and application software capability. Currently, all existing console dispatch positions have between three (3) to as many as eight (8) computer displays configured that need to be monitored on a real-time basis by the 911 operator/officer. These approximately thirty-four (34) operator positions are spread-across a fifty-foot by one-hundred and ten foot room, with several large cable television (CATV) sets providing local weather, news and traffic information. Please see Appendix A for the existing 911 console dispatch position locations and associated dimensions.

Additionally, two (2) specific applications and AV display systems have been directly budgeted for this project and will need to be included in the vendor proposal. The Cobb County Department of Transportation (DOT) currently monitors numerous traffic cameras throughout Cobb County to monitor traffic congestion, view accidents and to remotely control and monitor in order to maintain traffic signals. Currently, the real-time video monitoring of approximately sixteen (16) of these traffic cameras are available on the Cobb County internal Local Area Network (LAN) for viewing by the 911 Center dispatch operator personnel. However, this traffic camera video has not been routed to any of the 911 Center dispatch monitors for viewing and analysis. The plan is to make the video from any or all of these sixteen (16) Cobb County DOT traffic cameras available for viewing by all dispatch operators and positions within the 911 Center. Also, future plans would include the routing of the State of Georgia DOT traffic cameras (Internet based) and the 911 Center indoor/outdoor video surveillance cameras for viewing by all dispatch operators and positions within the 911 Center.

The other major AV display system and application directly budgeted for this procurement is the 911 Fire resource control, coordination and monitoring system. Currently, for large fires, hazardous waste spills, gas leaks and other threats to public safety; the Cobb County Fire Department assigns an incident commander located at the 911 Dispatch Center for active resource control, agency coordination and event site monitoring. The plan is to install a large multi-cube screen display or video wall that will properly size and configure a large map (streets, roads, houses/businesses, etc.) of Cobb County for use by a Fire Command application showing the existing location of the fire vehicles and equipment apparatus on scene at an incident. This large screen interactive display and real-time video wall would have the resolution and clarity to zoom-in or out on this Cobb County mapping and Fire Command application. Please see Appendix A for the location of the four (4) Fire Dispatch operators and console positions in relation to the proposed location of the large screen display and video wall, approximately 15-20 feet viewing area.

### **2.04 Project Goals**

#### **2.04.01 Creating a Valuable Emergency Response and Management A-V Tool**

The 911 dispatch center and project team are looking to enhance its current A-V display, emergency event coordination capability, event site monitoring and application software

capability to better serve the citizens of Cobb County. There are several key objectives and 911 Center project team goals that will need to be accomplished for this A-V system procurement including (in no particular order):

1. The ability to easily, reliably and securely visually monitor any 911 event from any A-V system viewing location inside the dispatch center at any time.
2. Providing a valuable A-V communications system tool that will allow other support teams, agencies, groups, and departments to effectively collaborate to develop an initial emergency services response strategy based on available resources and event conditions.
3. Allow for effective visual surveillance and remote dispatch coordination of an emergency event through the use of available GDOT/Cobb DOT cameras, map-based tools, emergency vehicle location applications and information based 911 dispatch programs.
4. An A-V system that allows for the real-time sharing of information, on-site event images and communication updates that can be effectively delivered and connected to remote command and control respondents, senior managers, officials, and executives within Cobb County, Georgia.
5. The procurement of an advanced, highly reliable, network secure and low maintenance A-V system tool that is robust enough to withstand the rigors of operating 24 hours a day and 7 days per week.

#### **2.04.02 A-V System Major Components and Requirements**

The Cobb County 911 dispatch center is looking to enhance its current A-V display, monitoring and application software capability. The audio visual requirement shall consist of four (4) main components:

1. A 2X3 (HXW) Video Wall consisting of quantity six (6) 50" diagonal SXGA+ Display Cubes utilizing a rear-projection system or a quantity six (6) narrow bezel (near seamless) professional grade 50" LCD or equivalent multi-display system. It is desired that the narrow bezel LCD or equivalent video wall shall be mounted flush to the computer room front-wall and capable of being moved to another location within the room, verses being built into the computer room wall to meet the space and cooling requirements of the rear-projection video wall display system.
2. Video Wall and multi-screen controller for multi-source video/data display.
3. Quantity ten (10) diagonal 52 inch or 65 inch LCD/LED or equivalent monitors with the top-edge mounted flush with the 10 foot drop ceiling or mounted to the side of a structural column. These display monitors will be located along the window wall of the 911 dispatch room and on the side of several different structural columns.
4. Collaboration software using a networking concept that allows connection of a multitude of video/computer display sources which can be easily configured to display operational data on any of the proposed overhead monitors or video display wall.

Please see Appendix B for the proposed video wall and ceiling mount monitor locations and associated room dimensions.

### **3.0 Proposal Format and Content**

#### **3.01 Proposal Response Format**

To assist in the evaluation of vendor proposals resulting from this RFP, it is requested that each proposal be written in a concise and forthright manner and that unnecessary marketing statements and materials be avoided. The proposal response should consist of nine sections; vendor solutions for each of the proposal requirements criteria listed below (and described further in the sections to follow) must be clearly stated. Additional relevant information may be placed in appendices.

<b>Section</b>	<b>Section Name</b>	<b>Section Description</b>
1.	Executive Summary	This section should contain a summary of the proposal for review by senior management. The required statement found in section 3.02 should be included in the Executive Summary.
2.	Brief Company Overview	This section should contain a brief overview of the responding company and include the following information. Please include same information for companies you may be partnering with: <ul style="list-style-type: none"><li>• Company name</li><li>• Address</li><li>• Telephone number</li><li>• Fax number</li><li>• Website</li><li>• Year company was established</li><li>• Number of employees</li></ul>
3.	Financial Statements	This section should contain a copy of the two most recent financial statements for the responding company and their proposed partners.
4.	Qualifications and References	This section should contain responses to section 1.17 of the RFP and describe the proposer's experience with providing A-V systems and solutions.
5.	Implementation Plan and Project Schedule	This section should contain a draft of the implementation plan for this project including a preliminary project schedule as described in section 5.02 and 5.03.
6.	Service Level Requirements	This section should contain responses to section 5.0 of the RFP and describe the proposer's service level and support guarantees and capabilities.
7.	Proposal Responses	This section should contain the proposer's responses to all items in sections 4.0 of the RFP.
8.	Supporting Documentation for Responses	This section should contain any supporting documentation for the responses provided for in sections 4.0 through 6.0 of the RFP.

## 9. Cost Section

This section should contain a completed Cost Section for the proposed system using the form found in Section 6.0 of the RFP. Costs for additional services and features not covered in the Cost Section forms can be provided in an appendix to the Proposal response.

**Do not change the Cost Section Form.**

### 3.02 Proposal Contents

Each proposal shall include a description of the video wall and audio visual display and event monitoring system for use by Cobb County Government emergency dispatch operators, 911 management staff and support personnel. Interested and qualified AV equipment, software providers and system integrators will need to submit a proposal to develop, deliver, install, integrate and provide service response for a video wall - audio visual display and software collaboration system for the Cobb County 911 Dispatch Center. The proposal is not complete unless it contains both a Proposal Response Section and a Cost Section as described. A proposal that lacks either a Proposal Response Section or a Cost Section will not be evaluated and therefore will not be eligible for contract award.

The proposal shall include a proper response to each requirement contained in Section 4 Video Wall – Audio Visual Display and Collaboration System of this RFP. Proposer shall return the general specifications chart provided in Section 3 with responses marked as detailed in Section 4. Cobb County will also provide a spreadsheet (general specifications chart) for the proposer to complete and return with the proposal. In the event of a conflict between the spreadsheet (general specifications chart) and the paper copy, the paper copy will determine the proposer’s official responses. The proposal should also include any additional comments necessary to fully describe the functional capabilities of the Video Wall – Audio Visual Display and Collaboration System, and give enough technical detail to allow the evaluation team to assess the feasibility of the proposed approach.

The Proposal shall include the following statement:

**“This proposal represents all costs to cover and include all labor and supervision, materials, equipment, machinery, apparatus, tools, services, transportation, and all other facilities, licenses, permits, taxes, fees, charges, excises, services, expenses and incidentals of any description whatsoever necessary to perform and complete this Video Wall – Audio Visual Display and Collaboration system solution in a professional manner and to the complete satisfaction and approval of the Cobb County Government, free from all liens or claims of laborers, material, suppliers, or subcontractors and in conformity in all respects with all applicable federal, state, county or municipal laws, ordinances, rules or regulations, all working things contemplated by the RFP in contract.”**

It shall be clearly understood that, although cost is important, the overriding cost consideration will be the total anticipated cost of installing, maintaining and supporting this Video Wall – Audio Visual Display and Collaboration system solution throughout the contracted time period.

Any and all components, whether software or service related to make this Video Wall – Audio Visual Display and Collaboration system solution usable and fully operational will need to be included in the vendors’ final proposal cost. The price listed in the vendors’ proposal shall be the EFI (Engineer-Furnish-Install) or full-turnkey price, including installation, programming and

integration of this Video Wall – Audio Visual Display and Collaboration system. If included, the cost for the **optional** features and functions should be labeled as “Optional Components”.

In addition, prices quoted in the proposal shall be firm and best prices. Prices for expansions/upgrades of any/all components of the proposal shall be included and guaranteed as “not to exceed” pricing for two years from contract signing.

### **3.03 Response Format**

**The following section contains the response documents, which shall be completed and submitted as part of the Proposal Response Section. Failure to complete and return this section of the RFP will be a basis for disqualification. This section is to be returned in hard copy forms for the original bid response as well as the seven (7) copies; in no case shall the requirements be retyped or altered in any way from those provided within. Responses shall also be recorded on the enclosed spreadsheet (general specifications chart) and returned with the proposal. In the event that the paper response and electronic response differ, the paper response will be used.**

Each item in this response document shall be marked with one of the following "status codes":

- [ 5] Requirement is fully and completely met by the proposed Video Wall – Audio Visual Display and Collaboration system and can be demonstrated.
- [ 3] Requirement will be provided by proposed modifications or alternatives to the Video Wall – Audio Visual Display and Collaboration system in the total price proposed. These modifications or alternatives will be maintained for at least ten years by proposer.
- [ 3] Requirement will be provided by a standard option. The cost of these options shall be provided in the cost section of the proposal.
- [ 0 ] Requirement can not be provided.

In the event that additional information is to be provided on a separate sheet to further describe the method in which the proposed Video Wall – Audio Visual Display and Collaboration system meets the specific requirement, an asterisk shall be entered on the response form following the "status code", such as [5\*].

This part of the proposal shall include a response to each element of **Section 4.0** of this RFP. To avoid ambiguity any additional comments or explanation required by the proposer should be identified by element number.

For the purposes of this RFP, please use the following chart to respond to the General Specifications. Use “5” (Fully Compliant) if the product/service meets the requirement 100% in the way described. Use “3” (Comply with Clarification) if the proposed product/service does not meet the requirement, but you have addressed this same concern with a different process or if your product/service meets most of the requirement but addresses some portion in different manner. Use “0” (Not Comply) if your proposed product/service does not meet the requirement. Unless your response is Fully Compliant, please include a detailed description to explain how your product/service is different. In the event that additional information is to be provided on a separate sheet to further describe the method in which the proposed product/service meets the specific requirement, an asterisk shall be entered on the response chart following the "status code", such as [5\*].

RFP No.	Requirement	Response Code 5 = Fully Compliant 3 = Comply - Clarification 0 = Non-Compliant	Comments / Explanation
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**4.0 Video Wall – Audio Visual Display and Collaboration System**

4.01	<p>Cobb County – Information Systems Standards Below are the County standards for servers, communications, databases, desktops, laptops and tablet Personal Computers (PC’s).</p> <p>A. No device shall require administrator rights to operate in production.</p> <p>B. The County prohibits providing administrator or root privileges to servers for executing any software in the production environment.</p> <p>C. The County Standards for server operating systems are:</p> <ol style="list-style-type: none"> <li>1. HP UX 11.11 and higher</li> <li>2. Solaris 10 and higher,</li> <li>3. AIX 5L version 5.2 and higher,</li> <li>4. Windows Server 2003 and higher.</li> </ol> <p>D. The County standards for the desktop environment are:</p> <ol style="list-style-type: none"> <li>1. Microsoft Windows XP SP2 and higher</li> <li>2. Microsoft Office 2003</li> <li>3. Microsoft Outlook</li> <li>4. Microsoft Visio</li> <li>5. Internet Explorer 6.0 and higher (SP XPSP 2 and higher)</li> <li>6. ESRI GIS products</li> </ol> <p>E. The County standards for ad-hoc reporting are:</p> <ol style="list-style-type: none"> <li>1. Oracle© Discoverer</li> <li>2. Crystal Reports</li> <li>3. MS SQL Server 2000 Reporting Services</li> </ol>		
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	<p>F. The County standards for database management system are:</p> <ol style="list-style-type: none"> <li>1. Oracle 10g and higher ©</li> <li>2. SQL Server 2005 and higher</li> </ol> <p>G. The County standards for network protocols communicating externally are:</p> <ol style="list-style-type: none"> <li>1. Port 80</li> <li>2. Port 443</li> <li>3. Any other ports must be approved by Cobb County Network Security</li> </ol> <p>H. The County standards for network communication are:</p> <ol style="list-style-type: none"> <li>1. Ethernet</li> <li>2. Wireless 802.11g/n</li> <li>3. Wireless Cellular Broadband</li> </ol> <p>I. The County standard for all communications devices is Cisco.</p> <p>J. The County standard Telephony System is Cisco Call Manager v4.2.</p>		
4.02	<p>Cobb County – Low Voltage Wiring Standards</p> <p>A. Low Voltage Data Wiring Standard</p> <ol style="list-style-type: none"> <li>1. Vendor shall provide a Certified Category 6e Structured Wiring System for Data.</li> <li>2. The vendor shall provide Modular Relay Racks or Wall Mount Racks per design. All racks must include cable management. More than one Relay rack requires double sided wire troughs between each rack. Vendor is required to terminate the work-station end of the station cable into a RJ45 connector module. The vendor is required to use a faceplate on all wall locations, and a surface mount jack in the modular furniture. The Vendor is required to use Ivory faceplates with Blue RJ45 connector module inserts. Any faceplate that has an open insert position without a jack installed must be covered with the dust cover/blank cover.</li> <li>3. The vendor shall provide homerun cabling from modular jacks in the offices and work areas to modular patch panels in the wire closet. Vendor is required to provide patch panels. Vendor is required to mount the patch panels in the data rack and terminate the closet end of the work-station cables for data into the panels. The Vendor shall allow for network equipment at the top of each rack to be specified per job. Each rack should start with one wire manager then patch panel.</li> <li>4. Vendor shall be required to install and homerun any tie cables that are required per job.</li> <li>5. All cabling shall be installed in compliance with all applicable national, state and local codes. Specifically, all cable-to-power source separation distances must be maintained. Cables will be securely attached to building structures and not to conduits containing power</li> </ol>		

	<p>conductors or Fire sprinkler system.</p> <p>B. Low Voltage Overhead Paging Wiring</p> <ol style="list-style-type: none"> <li>1. Vendor shall install Category 5 wiring for all Overhead Paging wiring systems.</li> <li>2. The vendor shall homerun all speaker wiring from speaker location to wire closet.</li> <li>3. The Vendor shall terminate all speaker connections in wire closet to a 66 block. The vendor shall provide and mount the 66 block to the plywood backboard in the wire closet.</li> <li>4. The vendor shall provide Cobb County Information Services Department (IS) with documentation of the wiring schema.</li> <li>5. Vendor shall use Valcom paging equipment for any zone paging requirements.</li> <li>6. Vendor shall use Valcom speakers for any installations and use 2' x 2' Lay – In Ceiling Speaker for any drop ceiling installations.</li> </ol> <p>C. Warranty Requirements</p> <ol style="list-style-type: none"> <li>1. Submit warranty information with bid proposal. Any cable or component used in the installation must be covered in the warranty.</li> <li>2. A minimum requirement for the warranty includes 24 hour, 7 days week coverage for repair or replacement of any component or cable used in the wiring system. Systimax certification is preferred.</li> </ol>		
4.03	<p>Cobb County – Data Cabling Standards</p> <p>A. Cabling Specifications</p> <ol style="list-style-type: none"> <li>1. All station cables shall be Plenum rated Category 6e verified Unshielded Twisted Pair cable in Blue.</li> <li>2. All overhead speaker cables shall be Plenum rated Category 5 verified Unshielded Twisted Pair cable in White.</li> </ol> <p>B. Hardware Standards</p> <ol style="list-style-type: none"> <li>1. Racks - Modular Relay Racks or Wall Mount Racks per design: <ol style="list-style-type: none"> <li>a. All racks must include cable management.</li> <li>b. More than one Relay rack requires double sided wire troughs between each rack.</li> <li>c. Must provide at least 4 Wire managers per data rack</li> <li>d. Chatsworth Black Standard 7'x19" free standing rack, similar to #55053-703</li> <li>e. Chatsworth Black Double Vertical Cable trough, similar to #11729-703</li> <li>f. Chatsworth Concrete floor mounting kit, similar to #40604-001</li> <li>g. Chatsworth Black line-up spacer kit, similar to #40702-700</li> </ol> </li> <li>2. Data Patch Panel All data patch panels shall be Category 6e certified 48 port patch panels.</li> <li>3. Data Jacks All data jacks shall be Blue RJ45 CAT6e</li> </ol>		

	<p style="text-align: center;">modular jacks.</p> <table border="0"> <tr> <td>Specified Part #'s:</td> <td>Systemax</td> <td>Comscope Part#</td> </tr> <tr> <td>Jack Inserts:</td> <td>MGS400-318-Blue</td> <td>700206758</td> </tr> </table> <p>Faceplates:</p> <table border="0"> <tr> <td>Simplex</td> <td>M10L-246 (Ivory)</td> <td>108258419</td> </tr> <tr> <td>Duplex</td> <td>M12L-246 (Ivory)</td> <td>108168477</td> </tr> <tr> <td>Quad</td> <td>M14L-246(Ivory)</td> <td>108168550</td> </tr> </table> <p>Surface Mount:</p> <table border="0"> <tr> <td>Duplex</td> <td>M102SMB-246(Ivory)</td> <td>107984049</td> </tr> <tr> <td>Quad</td> <td>M104SMB-246(Ivory)</td> <td>107952442</td> </tr> <tr> <td>Dust Cover</td> <td>M20AP-246(Ivory)</td> <td>107067860</td> </tr> </table> <p>4. Overhead Paging</p> <table border="0"> <tr> <td>Product #:</td> <td>Description:</td> </tr> <tr> <td>V-2003A</td> <td>Valcom 3 Zone One-Way paging control unit</td> </tr> <tr> <td>V-9022</td> <td>Valcom Lay-In Ceiling Speaker</td> </tr> <tr> <td>V-1030C</td> <td>Valcom 5-Watt, One-Way Horn Speaker</td> </tr> <tr> <td>VP-1124</td> <td>Valcom 1 Amp -24Vdc Power Supply</td> </tr> </table> <p>C. Numbering Standard</p> <ol style="list-style-type: none"> <li>1. D-X-X-XX = Data-Building Letter-Floor-Jack number.</li> <li>2. For more information contact the Information Services Department of Cobb County.</li> </ol> <p>D. Floor Plan Symbols Standard</p> <ol style="list-style-type: none"> <li>1. Solid Triangle = Data Outlet with 1 data cable as standard per triangle unless otherwise noted</li> <li>2. Split Triangle = Data Outlet with 2 data cables as standard per triangle unless otherwise noted</li> <li>3. Solid Triangle marked with a "W" = Wall mount data jack with AT&amp;T Face plate</li> <li>4. Solid Triangle marked with a Circle around triangle = Ceiling height data jack with service loop</li> <li>5. Solid Triangle marked with a Box around triangle = Floor box with data jack</li> </ol> <p>E. Communications Closets Standard</p> <ol style="list-style-type: none"> <li>1. Closet Locations       <ol style="list-style-type: none"> <li>a. Closets will be located during the design phase of any given project.</li> <li>b. See Cobb County I.S. staff for internal room layout. These rooms are generally shared with the internal telephone service group, AT&amp;T, and any other low voltage services like fire and security alarm systems.</li> </ol> </li> <li>2. Conduits       <p>Contractor will provide the following:</p> <ol style="list-style-type: none"> <li>a. Provide two 4-inch conduits between Main Distribution frame and the Intermediate Distribution Frame.</li> <li>b. Entry Conduits: Minimum of three 4-inch conduits entering the building from outside utilities. Two of which must contain four</li> </ol> </li> </ol>	Specified Part #'s:	Systemax	Comscope Part#	Jack Inserts:	MGS400-318-Blue	700206758	Simplex	M10L-246 (Ivory)	108258419	Duplex	M12L-246 (Ivory)	108168477	Quad	M14L-246(Ivory)	108168550	Duplex	M102SMB-246(Ivory)	107984049	Quad	M104SMB-246(Ivory)	107952442	Dust Cover	M20AP-246(Ivory)	107067860	Product #:	Description:	V-2003A	Valcom 3 Zone One-Way paging control unit	V-9022	Valcom Lay-In Ceiling Speaker	V-1030C	Valcom 5-Watt, One-Way Horn Speaker	VP-1124	Valcom 1 Amp -24Vdc Power Supply		
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	<p>1-inch inter-ducts. These provide entry service for Telco and CATV services as well as any future services that may be needed.</p> <p>3. Grounding Contractor will provide the following:</p> <p>a. Provide Building Ground to each communications rack and the telephone switch location with #6 awg solid copper</p> <p>F. Miscellaneous Standard</p> <p>1. Fire Stop Any penetration through firewalls or floor sleeves will have to be sealed with Fire Stop material.</p> <p>2. Testing</p> <p>a. All Data jacks and cable pairs of the station cables must be tested with the use of a TDR (Time Domain Reflectometer) or like tester, to at least 200 MHz rate.</p> <p>b. Required 100% usable results</p> <p>G. Warranty Requirements</p> <p>1. Submit warranty information with bid proposal. Any cable or component used in the installation must be covered in the warranty.</p> <p>2. A minimum requirement for the warranty includes 24 hour, 7 days week coverage for repair or replacement of any component or cable used in the wiring system. Systimax certification is preferred.</p>		
4.04	<p>Flat-Panel High-Definition LCD/LED Display Monitors</p> <p>A. Native full 1920 x 1080P HD resolution or better.</p> <p>B. These display monitors need to be commercial or industrial grade with full-duty cycle durability and reliability, this is not a typical consumer electronics environment.</p> <p>C. High contrast ratio and brightness for clear and rich colors.</p> <p>D. Fast response times for reproducing clear moving images.</p> <p>E. Screen saver functions to help expand the life of the LCD/LED panel display.</p> <p>F. Built-in scheduling functions to automate on/off times per input signals.</p> <p>G. Bid requires at least two overhead flat-panel display monitors be quoted with diagonals in the range of 50 inches to 65 inches or equivalent, suitable for overhead mounting. The ceiling height of the 911 dispatch center is approximately 10-feet, so a maximum display monitor height of approximately 40 inches or less will be acceptable.</p> <p>H. Include a single LCD/LED display monitor cost along with the cost or price-break of the collective purchase of a quantity of ten (10) of these display monitors.</p> <p>I. Include a single LCD/LED display monitor cost of installation, cabling, programming and integration</p>		

	<p>along with the cost for the purchase of a quantity of ten (10) of these display monitors.</p> <ul style="list-style-type: none"> <li>J. PC Analog Input Connectors: BNC, RGB (Mini D-sub 15 pin)</li> <li>K. PC Digital Input Connectors: DVI-D, HDMI</li> <li>L. AV Input Connectors: Composite BNC, Separate (Y/C), &lt;S-TERMINAL&gt;, Component (Y/Pb/Pr)</li> <li>M. Audio Input Connectors: HDMI (digital Audio)</li> <li>N. Remote Control capable display monitors and speakers</li> <li>O. Video Electronics Standards Association (VESA) Compatible</li> <li>P. Required Power Supply: AC 100-240, 50/60 Hz</li> <li>Q. External speakers for all display monitors are required and will need to be mounted with unit</li> <li>R. VESA Compliant wall or ceiling mounts will be required for all display monitor installations.</li> <li>S. Minimum Warranty of 1-Year Parts and Labor</li> </ul>		
4.05	<p>Fire Control-Incident Mapping Video Wall LCD/LED Narrow Bezel Display System</p> <p><b>Array of LCD/LED Narrow Bezel display modules.</b></p> <ul style="list-style-type: none"> <li>A. The display wall shall be composed of an array of 2-high and 3-wide 46" diagonal or equivalent WXGA Narrow Bezel or near seamless LCD/LED Front and Rear Accessible Display Modules. This video display wall is for use in the 911 dispatch room and shall be mounted flush with the IT room outside wall, nearest the four (4) fire radio console positions. See Appendix B for specific location.</li> <li>B. Each Display module shall be specifically designed for extremely high daily use. Each module shall utilize LCD technology to avoid irreversible "burn-in".</li> <li>C. Each module shall utilize additional hot-air isolation or equivalent technology within the carrying structure for the LCD panels to insure panels remain at lower temperatures, thus minimizing image retention in high use. The cooling system shall isolate hot air and cool air within distinct, separate chambers at the rear of the display. The supplier of the panel shall also be the supplier of the cooling system and carrying structure.</li> <li>D. In order to utilize the entire native resolution of the display module, the supplier of the panel shall also be able to supply a compatible controller to drive the displays at full native 1366 x 768 resolution or better without scaling the image. The display modules shall utilize a Digital Video Interface (DVI) interface to connect to the display wall controller.</li> <li>E. The Display Modules shall be front serviceable. The 2-high and 3-wide LCD/LED array shall also be capable of being moved or relocated with only the cabling and power requiring consideration and minimal to no structural room changes required.</li> </ul>		

	<p>F. Each assembled array of panels shall utilize an acoustical shell on the rear of the displays to minimize noise in the 911 dispatch room.</p> <p>G. The overall structure plus air gap behind shall make the overall dimension from a wall to the front of the screen no greater than 18”.</p> <p>H. No cabling shall be visible on the front of the display module – all cabling is professionally hidden internally within the carrying structure.</p> <p>I. Near Seamless image. All modules shall be optimized to work in a multi-screen arrangement with a minimal gap between adjacent screens. No data shall be lost within the screen gaps.</p> <p>J. Large half-gain viewing angles for operators. Each display module shall utilize a high contrast black screen (anti-glare) with sizes of 46” diagonal or equivalent. The screen shall maintain viewing cones of approximately 178° Horizontal and 178° vertical. The luminance shall be minimum 500 Cd/m2 up to a 700Cd/m2 maximum or equivalent.</p> <p>K. Long life Backlight illumination. Each display module shall be equipped with 50,000 hour rated backlights or equivalent.</p> <p>L. Remote control and management of display wall for easy-of-maintenance. The available features shall be:</p> <ol style="list-style-type: none"> <li>1. Provide a user interface with access control (login) to perform following actions <ol style="list-style-type: none"> <li>a. Switch On/Off:</li> <li>b. Adjustment of brightness, contrast, backlight brightness and color</li> <li>c. Input Switching</li> <li>d. Alternate Control via RS232</li> <li>e. Get health status of each display and of the full system</li> <li>f. Get version number and equivalent information.</li> </ol> </li> <li>2. Perform the above actions over an Ethernet network</li> <li>3. Be able to monitor the display wall from multiple clients showing the user interface</li> </ol> <p>M. Resolution</p> <ol style="list-style-type: none"> <li>1. The native resolutions shall be 1366 x 768 or better</li> <li>2. When connected to a graphical card, native resolution shall be shown <ol style="list-style-type: none"> <li>a. All pixels shall be shown</li> <li>b. All monitor pixels shall be used, so no unused pixel columns increasing the gap shall be present</li> <li>c. No scaling of the content or softening of image shall be allowed.</li> <li>d. The monitor Display Data Channel (DDC) shall be 1366 x 768 or equivalent</li> </ol> </li> </ol> <p>N. It shall be possible to calibrate each monitor to the same defined whitepoint and brightness level via calibration</p>		
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	<p>O. User shall be able to remove any LCD monitor from the display wall without having to remove other LCD monitors</p> <p>P. Also include the costs for extending the warranty by an additional 2-year's and a 5-year extended warranty cost proposal.</p> <p>Q. Cobb County will be responsible for all of the required electrical-structural modifications and space required for the effective installation of this proposed video wall system.</p> <p>R. Include all of the costs associated with the complete equipment installation, cabling, programming, integration, testing and commissioning of this video wall system in section 6.0.</p>		
4.06	<p>Fire Control-Incident Mapping Video Wall Rear-Projection Display System</p> <p><b>Array of Rear-Projection Modules.</b></p> <p>A. The display wall shall be composed of an array of 2-high and 3-wide 50" diagonal or equivalent Digital Light Processing (DLP) projection modules for use in the main-911 dispatch room to be mounted into the computer room outside wall, nearest the four (4) fire radio console positions. See Appendix B for specific location.</p> <p>B. Each projection module will have a native resolution of 1400 x 1050 (SXGA+) or equivalent. The MTBF (Mean Time Between Failure) of the digital micro-mirror device (DMD) shall be more than 120,000 hours.</p> <p>C. The Projection Modules shall be rear serviceable, without a need to remove the display modules.</p> <p>D. No cabling shall be visible on the rear of every projection module, all cabling is professionally hidden internally.</p> <p>E. Seamless image. All modules shall be optimized to work in a multi-screen arrangement with less than 0.8 mm or equivalent separation between adjacent display modules.</p> <p>F. Each "cube" or "projection module" shall consist of a steel-constructed fully enclosed light tight cabinet, first surface mirror, black bead screen and modular DLP (LED based) projection engine or equivalent. The cabinet shall be of all-steel construction with dedicated removable panels for access to the twin lamps, power supply, and projection engine. Each display module shall include a single chip DLP light engine with native 1400 x 1050 resolution or equivalent. The projection engines shall utilize a Digital Video Interface (DVI) digital interface to connect to the display wall controller. Each display wall module shall have a contrast ratio of minimum 1700:1. Each display module shall maintain at least 95% brightness uniformity.</p> <p>G. Must be of acceptable image quality for both video and graphics. To avoid pixel loss, the DMD chip</p>		

	<p>within the DLP projection engine must be of native resolution of 1400 x 1050 or equivalent. No simulated resolutions based on wobulation technology are allowed.</p> <p>H. Large half-gain viewing angles for operators. Each display module shall utilize a high contrast black bead screen (anti-glare) with sizes of 50" diagonal or equivalent. The screen shall maintain a 35° horizontal and 35° vertical half gain angle with viewing cones of approximately 180° horizontal and 180° vertical. The luminance is 325 Cd/m2. No high-gain screens that reduce the half-gain viewing angle are allowed.</p> <p>I. Each display module's projection engine shall be modular in design, allowing sub components of the projection engine to be replaced without upsetting the mounting or adjustments of the other components. This includes a separate fan assembly, separate low voltage DLP (LED based) projection engine, and a separate high voltage illumination unit with dual lamps and power supplies, as well as an easily slid-out and slid-in color-wheel if required.</p> <p>J. Each display module shall be equipped with two isolated lamp chambers to permit the replacement of one lamp while the other continues to illuminate the screen (Hot Swap). However, each display module shall be designed to utilize a single 120 Watt Ultra High Performance (UHP) lamp with a typical lifetime of 6,000 hours or a single 100W lamp with a typical lifetime of 15,000 hours (lamp manufacturer spec @ IEC 61947-1 test conditions) for low-energy and cost-effective operation. The supplier should guarantee a fixed lamp cost per year. In Cold Standby Mode, each display module requires not more than 250 W of power and in Hot Standby Mode, not more than 350 W with heat dissipation of typically 700 Btu/h and 1200 Btu/h respectively or equivalent.</p> <p>K. Lamp redundancy for zero lamp downtime. Each display module shall be equipped with two lamps (redundant) and a motorized lamp changer system to provide redundancy due to a premature failure of the primary lamp. In "Cold Standby Mode", upon failure of the primary lamp, a sensor will instruct the secondary lamp to travel into place and strike within one second, providing image within 10 seconds and full color spectrum within one minute. The lamp switch time itself after lamp failure should be 3 seconds. In "Hot Standby Mode" the secondary lamp will remain on in its chamber, providing an instantaneous full spectrum image within one second of the primary lamp's premature failure. The lamp switch system has an MTBF of 100,000 hours.</p> <p>L. Each display module shall be equipped with an over-pressured air system or equivalent to prevent dust from entering the DLP (LED based) engine and to ensure a high MTBF.</p>		
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	<p>M. Input signal redundancy: dual link Digital Video Interface (DVI) input to double the content or cabling towards the display module. It shall be possible to automatically switch to the second source.</p> <p>N. Standard product for high MTBF. The display modules shall be fully enclosed and light tight.</p> <p>O. Built-in sensors with automated feedback loops to keep display performance, such as luminance and color, constant across the whole area display wall. Sensors must measure both brightness and color. The brightness information is used to adjust the optical dimmer, while the color information is used to adjust color by a color adjustment algorithm – according to ANSI13 specifications.</p> <ol style="list-style-type: none"> <li>1. Optical dimming and dynamic feedback for equal brightness. Each display wall module shall be equipped with one (1) optical light sensor, permitting the brightness level of each light engine to be controlled automatically without raising or lowering the voltage. Light intensity from each engine will be monitored and adjusted automatically or manually by operators. The brightness target can be changed for the entire display wall via control management software without having to interact with each projection module separately. The brightness locking must have a 50-100% optical dimming range, without color shift, loss of contrast and loss of color.</li> <li>2. Active color sensor and adjustment. Each display module shall be equipped with one (1) active color sensor, permitting the color level of each light engine to be constantly measured and adjusted automatically.</li> <li>3. Central PC and hub for feedback loops. A dedicated network PC with NIC card shall constantly monitor and adjust each cube's individual colors and brightness to a common value via a network hub and Cat 5/6 cables pulled to the RJ45 connector on each cube. Both brightness and color adjustment are over the entire lifetime of the lamp, not just after a lamp change.</li> </ol> <p>P. Remote control and management of display wall for easy-of-maintenance over a standard IP-network. The control of the wall shall be possible via a network connection. All projectors shall have their own IP address, and software can access all of them at the same time. The available features shall be:</p> <ol style="list-style-type: none"> <li>1. On/Off: <ol style="list-style-type: none"> <li>a. Switching the entire display wall on or off.</li> <li>b. Switching any group of projectors on or off.</li> </ol> </li> <li>2. Brightness and Color: <ol style="list-style-type: none"> <li>a. Setting all projection modules to a common brightness target, which can be either static (fixed) or dynamic to always achieve maximum common brightness between projection modules.</li> </ol> </li> </ol>		
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	<ul style="list-style-type: none"> <li>b. Setting a common white target or primary color targets for the whole wall.</li> <li>3. Lamp control: <ul style="list-style-type: none"> <li>a. Switching between the active and backup lamps either in the entire wall, or in a selection of projectors.</li> <li>b. Switching to either hot or cold standby operation mode in case hot standby operation mode is enabled.</li> </ul> </li> <li>4. Input control: <ul style="list-style-type: none"> <li>a. Changing the active input (of the two present DVI inputs).</li> <li>b. Selecting a redundancy scenario in case the active input fails.</li> </ul> </li> <li>5. On top of these actions the health or status of every lamp, projector as well as the whole display wall is monitored and indicated.</li> <li>6. The remote management software shall store and collect data in a relational database. The display wall history will log data in two different ways: <ul style="list-style-type: none"> <li>a. Event Logging will log real-time events; lamp failed, lamp restarted, projector switched on/off, hot-standby enabled/disabled, Temp Error has occurred, etc.</li> <li>b. Property Logging will log properties of projectors and lamps.</li> <li>c. Configured to periodically log properties of projectors and lamps for a given number (select duration) of full projector hours or lamp hours.</li> </ul> </li> <li>7. The remote control management software is a client/server application. The server components can be installed on any PC or wall controller that has Ethernet connection with the projectors. The client components can be installed on any workstation in the network. It shall be possible to start multiple clients that connect to the same service on one or multiple workstations. Upgrading of the server SW or clients shall be easy by upgrading through the client which pushes the upgrade to the server (web-start).</li> <li>Q. Complete technology ownership for single point of responsibility. Supplier-integrator must be owner of design of entire projection engine and module as described above, as well as the Display Wall Controller and Wall Management Software as described below.</li> <li>R. Maintainability <ul style="list-style-type: none"> <li>1. Manufacturer design for long-term support of spare parts (manufacturer must guarantee availability of parts for 7 years).</li> <li>2. Design with possible upgrade paths for new version display cubes and projector engines.</li> <li>3. Color-wheel in cartridge for low Mean-Time-to-Recovery (MTTR). Each display module's projection engine shall be equipped with field-serviceable (easily slid in and out) 5-segment color wheel cartridge optimized for color</li> </ul> </li> </ul>		
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	<p>uniformity that can be replaced within 30 minutes. The MTBF of the color-wheel is 50,000 hours.</p> <p>4. Also include the costs for extending the warranty by an additional 2-year's and a 5-year extended warranty cost proposal.</p> <p>S. Cobb County will be responsible for all of the required electrical-structural modifications and space required for the effective installation of this proposed video wall system.</p> <p>T. Include all of the costs associated with the complete equipment installation, cabling, programming, integration, testing and commissioning of this video wall system in section 6.0.</p>		
4.07	<p>Video Wall Matrix-Switching for Multiple Computer/ Video Sources</p> <p>A. The video wall controller shall consist of components designed to provide wall display control for layouts, visuals, internal source switching, and have the capacity of integrated decoding of signals to be displayed. The controller shall consist of a base unit, graphical back plane, input cards, and output cards. The controller shall be configurable to achieve the particular display solution required. The controller shall be capable of supporting both video and data displays simultaneously and be configurable by card.</p> <p>B. The overall video wall controller system shall be constructed of one base unit which is capable of expanding up to 5 graphical backplanes with each graphical backplane providing a minimum of either 18 slots with 533 MB/s bandwidth or 12 slots with 1.6 GB/s bandwidth for input and output cards or equivalent. The controller architecture shall allow up to 320 video/160 RGB sources in a system and up to 64 video/32 RGB sources to be freely movable on a the video display wall. The same supplier as a consistent platform shall provide all components for this video wall switching and controller system.</p> <p>C. The base unit shall consist of a standard, rack-mountable PC utilizing the latest Intel or equivalent microprocessor technology and Commercial-off-the-shelf (COTS) components to allow for future upgrades. At minimum, the base unit shall be equipped with Dual Xeon Dual Core 3.0 GHz processors or equivalent, 3GB of random access memory (RAM), redundant hot-swap dual power supply, redundant hot-swap RAID1/5 hard disks and redundant network interface cards. The redundancy components are continuously monitored. For expandability, the base unit shall be capable of utilizing multiple graphical back planes. The base unit shall allow the user to visualize Windows-based client-server applications by installing a client-copy on the base unit. Other network-based ways of visualization shall be possible through the use of</p>		

	<p>software.</p> <p>D. The digital graphical back plane shall transfer the digitized information from the input cards to the output cards without analog paths and matrix-switching inside the system for maximum flexibility. A minimum of two (2) graphical backplanes shall be included in this controller system to support the Cobb 911 video wall requirements and for redundancy purposes.</p> <p>E. Each back plane shall be equipped with no fewer than 18/12 PCI slots for the various input, output, and backend scalar cards that may be utilized. These cards shall be arranged during installation to provide optimal bandwidth clustering performance for the specific Cobb 911 configuration. The graphical back plane shall have a redundant hot-swap power supply.</p> <p>F. All input and output cards listed below shall be supported by the graphical back plane simultaneously in any combination within the slots (i.e. the user can mix and match the cards below in the back plane without introducing other hardware adaptors or external devices).</p> <p>G. Output Cards—The video wall controller shall be capable of supporting 4-channel Graphical Output Cards. The output card shall be equipped with dual Digital Video Interface (DVI) connectors that allow a digital connection of up to UXGA (1,600 x 1,200) resolution or better.</p> <p>H. The video wall controller shall be capable of supporting backend scalar cards to minimize the need to put excessive bandwidth on the graphical back plane. These backend scalar cards shall be hard wired to the output cards of the graphical back plane and shall scale the various input sources off the graphical back plane and output them directly to the output cards with no loss of image quality when the display is projected on the video wall and without direct analog paths. Even with many input sources, the scaling technology features individual scaling factors resulting in superior image quality.</p> <p>I. The RGB input card is an analog input device that shall be provided so that operators may project an exact copy of their workstation or of a laptop on the video display wall. Each RGB input card shall be a dual input unit that allows two analog RGB inputs up to SXGA at 60 Hz to be displayed on the video wall. A total of 8 RGB inputs shall be displayed within their own application window and be capable of being sized to a resolution of 1920 x 1080 on the entire display wall.</p> <p>J. Baseband Video Inputs —Quad video input cards shall be furnished that will accept up to four YUV/S-Video/Composite Video sources and that will digitize the information for display on the video wall. These video sources shall be displayed within their own application window and be capable of being sized beyond their native resolution. The minimum</p>		
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	<p>amount of video windows that can be displayed simultaneously on the video wall is 4, expandable to 16. It shall be possible to size large video windows up to a resolution of 1920 x 1080 or better at any position on the video wall simultaneously.</p> <p>K. The video wall controller shall be capable of genlocking all input video signals in order to provide a non-jittered view of video sources when the controller is accepting video signals from video switching systems. The video wall controller shall be capable of accepting a standard black-burst video synch signal as the genlock reference signal (via a BNC connector on the base unit) or selecting one of the video input signals as the reference. The video wall controller shall be capable of aligning all vertical synch pulses of all input video signals it receives to the reference genlock signal for display. In addition, the Video Wall Controller shall be able to adjust the timing for all display units (cubes or panels) such that there will be no visual artifacts to the viewers caused by video switching or refresh frequency adjustments.</p> <p>L. The video wall controller shall be capable of supporting integrated streaming video input cards to achieve a seamless integration between various IP networks and the display wall. Streaming video input cards that allow for the enhanced performance and high-quality MPEG2/MPEG4/MJPEG decoding. The streaming video card shall provide IP interfacing and hardware decoding of the streaming video input locally on the card, and shall not require any additional processing power from the CPU of the main base unit for this task. The integrated hardware decoding shall be independent from a large set of current encoder suppliers. System must be capable of decoding various manufacturer supported streaming video formats. The manufacturer shall publish and provide a current encoder interoperability list.</p> <p>M. The digital video input card shall provide two standard IP network connections utilizing the RJ-45 connectors. These two connections shall operate as redundant backups to one another. The fail-over operations shall be automatic upon detection of the network link failure by the card.</p> <p>N. In addition, for all connections, Ethernet packet sizes should not exceed 1472 active bytes per packet or equivalent.</p> <p>O. On the active RJ-45 connector, the streaming video input card shall be capable of accepting up to four compressed video streams simultaneously. The UDP Port shall differentiate each stream into the card. The card shall be capable of supporting at least 40Mbps of simultaneous streaming traffic in total. This 40Mbps shall be spread across the four streams in any combination (e.g. 4 streams at 7Mbps each or one stream at 2 Mbps and 3 streams of 7 Mbps or any similar combination). The total bandwidth per</p>		
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	<p>card should not exceed 40Mbps and no one stream should exceed 10Mbps.</p> <p>P. The maximum delay for decoding and displaying an input stream from the input interface of the card to the display shall not exceed 300 msec.</p> <p>Q. Each Graphical Backplane shall be capable of supporting up to a maximum of 12 Digital Video Input cards simultaneously on a Graphical Backplane (other slots may still be used by other cards).</p> <p>R. The Vendor-Integrator shall include a summary and total of the various types of input and output cards included in their proposal response for cost purposes. This estimate will be based on the configuration of similar video wall systems used by other 911 dispatch centers and the A-V sources included in the below list. The actual quantity and types of required input and output cards will be determined during the design and integration phase of this project by the selected vendor-integrator. Cobb 911 requests that the following A-V sources be available for the video wall:</p> <ol style="list-style-type: none"> <li>1. GIS Map of the County - Computer Aided Dispatch (CAD) Mapping Application - Layers that include the different Cobb Fire Battalions, including Marietta Fire and station locations.</li> <li>2. Incident Status Window from Motorola Printrak CAD</li> <li>3. AVL – Fire Vehicles and other Public Safety Vehicles</li> <li>4. Pictometry (of county)</li> <li>5. Weather radar</li> <li>6. Info from the JHAT project (info from a disc)*</li> <li>7. Cobb D.O.T camera video from a LAN/WAN connection</li> <li>8. GDOT camera video from Web-site</li> <li>9. Map/floor plans of schools, hospitals etc.*</li> <li>10. CATV. Include a Comcast CATV access encoder to capture a minimum of four (4) distinct video channels for routing and simultaneous display.</li> <li>11. Railroad, Power areas- map layer</li> <li>12. Road closures*</li> <li>13. 311 info</li> </ol> <p>S. Cobb County will be responsible for all of the required electrical-structural modifications and space required for the effective installation of this proposed video wall system.</p> <p>T. Also include the costs for extending the warranty by an additional 2-year's and a 5-year extended warranty cost proposal.</p> <p>U. Include all of the costs associated with the complete equipment installation, cabling, programming, integration, testing and commissioning of this video wall system in section 6.0.</p>		
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4.08	<p>Collaborative or A-V Networking Software Application</p> <ul style="list-style-type: none"> <li>A. Collaboration Software shall be a networked concept which easily allows connections of a multitude of sources which can be configured to easily display operational data.</li> <li>B. Collaboration Software shall support a central server with client architecture, include server hardware and software costs and associated features and specifications.</li> <li>C. Collaboration Software shall provide an application that will allow the user to manage and maintain the system via a Graphical User Interface (GUI). This application shall be able to allow the user to query the available layouts or “Perspectives”, define new perspectives, save the perspectives, switch current video wall and overhead display monitor perspectives, preview sources, drag and drop sources, launch applications, and perform other configuration functions via a sidebar tool or equivalent.</li> <li>D. The collaboration software must allow the operator to create shortcuts to computer applications installed onto the graphical controller.</li> <li>E. The wall management software shall allow the operator to move and position the computer applications, video windows, and RGB windows onto the unmanned display through a graphical user interface on the local operator’s workstation.</li> <li>F. Administrator shall be able to adjust the default settings via an admin control panel. Administrator will be able to control tool access, define security constraints and ensure proper anti-virus protection and scans are properly maintained.</li> <li>G. Collaboration Software shall support source types such as: <ul style="list-style-type: none"> <li>1. Analog &amp; Streaming Video</li> <li>2. Analog (RGB) &amp; Digital (DVI)</li> <li>3. Networked desktops</li> <li>4. Intranet &amp; Internet</li> <li>5. Networked Application Servers</li> </ul> </li> <li>H. Hybrid decoding of video streams via hardware or software</li> <li>I. Once sources are appropriately positioned then they must be able to be saved as a perspective and capable of recall at a later time and date.</li> <li>J. The collaboration software shall allow the operator to use his local mouse and keyboard to control applications on unmanned displays as if the mouse and keyboard was physically connected</li> <li>K. The collaboration software shall be able to share/push complete and/or partial desktop content between workstations and between unmanned displays and workstations.</li> <li>L. Collaboration software shall provide an application programmer’s interface (API) that is based on the Simple Object Access Protocol (SOAP) standard or equivalent. This interface shall allow third-party</li> </ul>		
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	<p>software to control and access the controller's features to query the available layouts, query current wall states, switch layouts, switch current window contents to available inputs (on the input cards), query overall system status, and launch applications.</p> <p>M. Collaboration software shall provide a simple telnet interface for third party control.</p> <p>N. Include the costs for Collaborative Software administrative and application-user training for 8-10 Supervisors, 911 Support Specialists and Cobb Information Systems team members.</p> <p>O. Include all costs of Collaborative software installation, programming and integration.</p>		
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#### **4.00 Video Wall – Audio Visual Display and Collaboration System**

This section outlines the specifications and requirements for the video wall, overhead display monitors and audio visual matrix-switching controller and collaboration software system.

#### **4.01 Cobb County – Information Systems Standards**

Below are the County standards for servers, communications, databases, desktops, laptops and tablet Personal Computers (PC's).

- A. No device shall require administrator rights to operate in production.
- B. The County prohibits providing administrator or root privileges to servers for executing any software in the production environment.
- C. The County Standards for server operating systems are:
  - 1. HP UX 11.11 and higher
  - 2. Solaris 10 and higher,
  - 3. AIX 5L version 5.2 and higher,
  - 4. Windows Server 2003 and higher.
- D. The County standards for the desktop environment are:
  - 1. Microsoft Windows XP SP2 and higher
  - 2. Microsoft Office 2003
  - 3. Microsoft Outlook
  - 4. Microsoft Visio
  - 5. Internet Explorer 6.0 and higher (SP XPSP 2 and higher)
  - 6. ESRI GIS products
- E. The County standards for ad-hoc reporting are:
  - 1. Oracle© Discoverer
  - 2. Crystal Reports
  - 3. MS SQL Server 2000 Reporting Services
- F. The County standards for database management system are:
  - 1. Oracle 10g and higher ©
  - 2. SQL Server 2005 and higher
- G. The County standards for network protocols communicating externally are:
  - 1. Port 80
  - 2. Port 443
  - 3. Any other ports must be approved by Cobb County Network Security
- H. The County standards for network communication are:
  - 1. Ethernet
  - 2. Wireless 802.11g/n
  - 3. Wireless Cellular Broadband
- I. The County standard for all communications devices is Cisco.
- J. The County standard Telephony System is Cisco Call Manager v4.2.

#### **4.02 Cobb County – Low Voltage Wiring Standards**

- A. Low Voltage Data Wiring Standard
  - 1. Vendor shall provide a Certified Category 6e Structured Wiring System for Data.
  - 2. The vendor shall provide Modular Relay Racks or Wall Mount Racks per design. All racks must include cable management. More than one Relay rack requires double sided wire troughs between each rack. Vendor is required to terminate the workstation end of the station cable into a RJ45 connector module. The vendor is required

to use a faceplate on all wall locations, and a surface mount jack in the modular furniture. The Vendor is required to use Ivory faceplates with Blue RJ45 connector module inserts. Any faceplate that has an open insert position without a jack installed must be covered with the dust cover/blank cover.

3. The vendor shall provide homerun cabling from modular jacks in the offices and work areas to modular patch panels in the wire closet. Vendor is required to provide patch panels. Vendor is required to mount the patch panels in the data rack and terminate the closet end of the work-station cables for data into the panels. The Vendor shall allow for network equipment at the top of each rack to be specified per job. Each rack should start with one wire manager then patch panel.
  4. Vendor shall be required to install and homerun any tie cables that are required per job.
  5. All cabling shall be installed in compliance with all applicable national, state and local codes. Specifically, all cable-to-power source separation distances must be maintained. Cables will be securely attached to building structures and not to conduits containing power conductors or Fire sprinkler system.
- B. Low Voltage Overhead Paging Wiring
1. Vendor shall install Category 5 wiring for all Overhead Paging wiring systems.
  2. The vendor shall homerun all speaker wiring from speaker location to wire closet.
  3. The Vendor shall terminate all speaker connections in wire closet to a 66 block. The vendor shall provide and mount the 66 block to the plywood backboard in the wire closet.
  4. The vendor is shall provide Cobb County Information Services Department (IS) with documentation of the wiring schema.
  5. Vendor shall use Valcom paging equipment for any zone paging requirements.
  6. Vendor shall use Valcom speakers for any installations and use 2' x 2' Lay – In Ceiling Speaker for any drop ceiling installations.
- C. Warranty Requirements
1. Submit warranty information with bid proposal. Any cable or component used in the installation must be covered in the warranty.
  2. A minimum requirement for the warranty includes 24 hour, 7 days week coverage for repair or replacement of any component or cable used in the wiring system. Systimax certification is preferred.

#### **4.03 Cobb County – Data Cabling Standards**

- A. Cabling Specifications
1. All station cables shall be Plenum rated Category 6e verified Unshielded Twisted Pair cable in Blue.
  2. All overhead speaker cables shall be Plenum rated Category 5 verified Unshielded Twisted Pair cable in White.
- B. Hardware Standards
1. Racks - Modular Relay Racks or Wall Mount Racks per design:
    - a. All racks must include cable management.
    - b. More than one Relay rack requires double sided wire troughs between each rack.
    - c. Must provide at least 4 Wire managers per data rack
    - d. Chatsworth Black Standard 7'x19" free standing rack, similar to #55053-703
    - e. Chatsworth Black Double Vertical Cable through, similar to #11729-703
    - f. Chatsworth Concrete floor mounting kit, similar to #40604-001
    - g. Chatsworth Black line-up spacer kit, similar to #40702-700
  2. Data Patch Panel  
All data patch panels shall be Category 6e certified 48 port patch panels.

3. Data Jacks

All data jacks shall be Blue RJ45 CAT6e modular jacks.

Specified Part #'s:	Systimax	Comscope Part#
Jack Inserts:	MGS400-318-Blue	700206758

Faceplates:

Simplex	M10L-246 (Ivory)	108258419
Duplex	M12L-246 (Ivory)	108168477
Quad	M14L-246(Ivory)	108168550

Surface Mount:

Duplex	M102SMB-246(Ivory)	107984049
Quad	M104SMB-246(Ivory)	107952442
Dust Cover	M20AP-246(Ivory)	107067860

4. Overhead Paging

Product #:	Description:
V-2003A	Valcom 3 Zone One-Way paging control unit
V-9022	Valcom Lay-In Ceiling Speaker
V-1030C	Valcom 5-Watt, One-Way Horn Speaker
VP-1124	Valcom 1 Amp -24Vdc Power Supply

C. Numbering Standard

1. D-X-X-XX = Data-Building Letter-Floor-Jack number.
2. For more information contact the Information Services Department of Cobb County.

D. Floor Plan Symbols Standard

1. Solid Triangle = Data Outlet with 1 data cable as standard per triangle unless otherwise noted
2. Split Triangle = Data Outlet with 2 data cables as standard per triangle unless otherwise noted
3. Solid Triangle marked with a "W" = Wall mount data jack with AT&T Face plate
4. Solid Triangle marked with a Circle around triangle = Ceiling height data jack with service loop
5. Solid Triangle marked with a Box around triangle = Floor box with data jack

E. Communications Closets Standard

1. Closet Locations
  - a. Closets will be located during the design phase of any given project.
  - b. See Cobb County I.S. staff for internal room layout. These rooms are generally shared with the internal telephone service group, AT&T, and any other low voltage services like fire and security alarm systems.
2. Conduits

Contractor will provide the following:

  - a. Provide two 4-inch conduits between Main Distribution frame and the Intermediate Distribution Frame.
  - b. Entry Conduits: Minimum of three 4-inch conduits entering the building from outside utilities. Two of which must contain four 1-inch inter-ducts. These provide entry service for Telco and CATV services as well as any future services that may be needed.
3. Grounding

Contractor will provide the following:

  - a. Provide Building Ground to each communications rack and the telephone

switch location with #6 awg solid copper

- F. Miscellaneous Standard
  - 1. Fire Stop
    - Any penetration through firewalls or floor sleeves will have to be sealed with Fire Stop material.
  - 2. Testing
    - a. All Data jacks and cable pairs of the station cables must be tested with the use of a TDR (Time Domain Reflectometer) or like tester, to at least 200 MHz rate.
    - b. Required 100% usable results
- G. Warranty Requirements
  - 1. Submit warranty information with bid proposal. Any cable or component used in the installation must be covered in the warranty.
  - 2. A minimum requirement for the warranty includes 24 hour, 7 days week coverage for repair or replacement of any component or cable used in the wiring system. Systimax certification is preferred.

#### **4.04 Overhead Flat-Panel High-Definition LCD/LED Display Monitors**

- A. Native full 1920 x 1080P HD resolution or better.
- B. These display monitors need to be commercial or industrial grade with full-duty cycle durability and reliability, this is not a typical consumer electronics environment.
- C. High contrast ratio and brightness for clear and rich colors.
- D. Fast response times for reproducing clear moving images.
- E. Screen saver functions to help expand the life of the LCD/LED panel display.
- F. Built-in scheduling functions to automate on/off times per input signals.
- G. Bid requires at least two overhead flat-panel display monitors be quoted with diagonals in the range of 50 inches to 65 inches or equivalent, suitable for overhead mounting. The ceiling height of the 911 dispatch center is approximately 10-feet, so a maximum display monitor height of approximately 40 inches or less will be acceptable.
- H. Include a single LCD/LED display monitor cost along with the cost or price-break of the collective purchase of a quantity of ten (10) of these display monitors.
- I. Include a single LCD/LED display monitor cost of installation, cabling, programming and integration along with the cost for the purchase of a quantity of ten (10) of these display monitors.
- J. PC Analog Input Connectors: BNC, RGB (Mini D-sub 15 pin)
- K. PC Digital Input Connectors: DVI-D, HDMI
- L. AV Input Connectors: Composite BNC, Separate (Y/C), <S-TERMINAL>, Component (Y/Pb/Pr)
- M. Audio Input Connectors: HDMI (digital Audio)
- N. Remote Control capable display monitors and speakers
- O. Video Electronics Standards Association (VESA) Compatible
- P. Required Power Supply: AC 100-240, 50/60 Hz
- Q. External speakers for all display monitors are required and will need to be mounted with unit
- R. VESA Compliant wall or ceiling mounts will be required for all display monitor installations.
- S. Minimum Warranty of 1-Year Parts and Labor

#### **4.05 Fire Control-Incident Mapping Video Wall LCD/LED Narrow Bezel Display System**

##### **Array of LCD/LED Narrow Bezel or Near-Seamless Display Modules.**

- A. The display wall shall be composed of an array of 2-high and 3-wide 46" diagonal or equivalent WXGA Narrow Bezel or near seamless LCD/LED Front and Rear Accessible Display Modules. This video display wall is for use in the 911 dispatch room and shall be mounted flush with the IT room outside wall, nearest the four (4) fire radio console positions. See Appendix B for specific location.
- B. Each Display module shall be specifically designed for extremely high daily use. Each module shall utilize LCD technology to avoid irreversible "burn-in".
- C. Each module shall utilize additional hot-air isolation or equivalent technology within the carrying structure for the LCD panels to insure panels remain at lower temperatures, thus minimizing image retention in high use. The cooling system shall isolate hot air and cool air within distinct, separate chambers at the rear of the display. The supplier of the panel shall also be the supplier of the cooling system and carrying structure.
- D. In order to utilize the entire native resolution of the display module, the supplier of the panel shall also be able to supply a compatible controller to drive the displays at full native 1366 x 768 resolution or better without scaling the image. The display modules shall utilize a Digital Video Interface (DVI) interface to connect to the display wall controller.
- E. The Display Modules shall be front serviceable. The 2-high and 3-wide LCD/LED array shall also be capable of being moved or relocated with only the cabling and power requiring consideration and minimal to no structural room changes required.
- F. Each assembled array of panels shall utilize an acoustical shell on the rear of the displays to minimize noise in the 911 dispatch room.
- G. The overall structure plus air gap behind shall make the overall dimension from a wall to the front of the screen no greater than 18".
- H. No cabling shall be visible on the front of the display module – all cabling is professionally hidden internally within the carrying structure.
- I. Near Seamless image. All modules shall be optimized to work in a multi-screen arrangement with a minimal gap between adjacent screens. No data shall be lost within the screen gaps.
- J. Large half-gain viewing angles for operators. Each display module shall utilize a high contrast black screen (anti-glare) with sizes of 46" diagonal or equivalent. The screen shall maintain viewing cones of approximately 178° Horizontal and 178° vertical. The luminance shall be minimum 500 Cd/m<sup>2</sup> up to a 700Cd/m<sup>2</sup> maximum or equivalent.
- K. Long life Backlight illumination. Each display module shall be equipped with 50,000 hour rated backlights or equivalent.
- L. Remote control and management of display wall for easy-of-maintenance. The available features shall be:
  - 1. Provide a user interface with access control (login) to perform following actions
    - a. Switch On/Off:
    - b. Adjustment of brightness, contrast, backlight brightness and color
    - c. Input Switching
    - d. Alternate Control via RS232
    - e. Get health status of each display and of the full system
    - f. Get version number and equivalent information.
  - 2. Perform the above actions over an Ethernet network
  - 3. Be able to monitor the display wall from multiple clients showing the user interface
- M. Resolution
  - 1. The native resolutions shall be 1366 x 768 or better
  - 2. When connected to a graphical card, native resolution shall be shown

- a. All pixels shall be shown
- b. All monitor pixels shall be used, so no unused pixel columns increasing the gap shall be present
- c. No scaling of the content or softening of image shall be allowed.
- d. The monitor Display Data Channel (DDC) shall be 1366 x 768 or equivalent
- N. It shall be possible to calibrate each monitor to the same defined whitepoint and brightness level via calibration
- O. User shall be able to remove any LCD monitor from the display wall without having to remove other LCD monitors
- P. Also include the costs for extending the warranty by an additional 2-year's and a 5-year extended warranty cost proposal.
- Q. Cobb County will be responsible for all of the required electrical-structural modifications and space required for the effective installation of this proposed video wall system.
- R. Include all of the costs associated with the complete equipment installation, cabling, programming, integration, testing and commissioning of this video wall system in section 6.0.

#### **4.06 Fire Control-Incident Mapping Video Wall Rear-Projection Display System**

##### **Array of Rear-Projection Modules.**

- A. The display wall shall be composed of an array of 2-high and 3-wide 50" diagonal or equivalent Digital Light Processing (DLP) projection modules for use in the main-911 dispatch room to be mounted into the computer room outside wall, nearest the four (4) fire radio console positions. See Appendix B for specific location.
- B. Each projection module will have a native resolution of 1400 x 1050 (SXGA+) or equivalent. The MTBF (Mean Time Between Failure) of the digital micro-mirror device (DMD) shall be more than 120,000 hours.
- C. The Projection Modules shall be rear serviceable, without a need to remove the display modules.
- D. No cabling shall be visible on the rear of every projection module, all cabling is professionally hidden internally.
- E. Seamless image. All modules shall be optimized to work in a multi-screen arrangement with less than 0.8 mm or equivalent separation between adjacent display modules.
- F. Each "cube" or "projection module" shall consist of a steel-constructed fully enclosed light tight cabinet, first surface mirror, black bead screen and modular DLP (LED based) projection engine or equivalent. The cabinet shall be of all-steel construction with dedicated removable panels for access to the twin lamps, power supply, and projection engine. Each display module shall include a single chip DLP light engine with native 1400 x 1050 resolution or equivalent. The projection engines shall utilize a Digital Video Interface (DVI) digital interface to connect to the display wall controller. Each display wall module shall have a contrast ratio of minimum 1700:1. Each display module shall maintain at least 95% brightness uniformity.
- G. Must be of acceptable image quality for both video and graphics. To avoid pixel loss, the DMD chip within the DLP projection engine must be of native resolution of 1400 x 1050 or equivalent. No simulated resolutions based on wobulation technology are allowed.
- H. Large half-gain viewing angles for operators. Each display module shall utilize a high contrast black bead screen (anti-glare) with sizes of 50" diagonal or equivalent. The screen shall maintain a 35° horizontal and 35° vertical half gain angle with viewing cones of approximately 180° horizontal and 180° vertical. The luminance is 325 Cd/m<sup>2</sup>. No high-gain screens that reduce the half-gain viewing angle are allowed.
- I. Each display module's projection engine shall be modular in design, allowing sub components of the projection engine to be replaced without upsetting the mounting or

adjustments of the other components. This includes a separate fan assembly, separate low voltage DLP (LED based) projection engine, and a separate high voltage illumination unit with dual lamps and power supplies, as well as an easily slid-out and slid-in color-wheel if required.

- J. Each display module shall be equipped with two isolated lamp chambers to permit the replacement of one lamp while the other continues to illuminate the screen (Hot Swap). However, each display module shall be designed to utilize a single 120 Watt Ultra High Performance (UHP) lamp with a typical lifetime of 6,000 hours or a single 100W lamp with a typical lifetime of 15,000 hours (lamp manufacturer spec @ IEC 61947-1 test conditions) for low-energy and cost-effective operation. The supplier should guarantee a fixed lamp cost per year. In Cold Standby Mode, each display module requires not more than 250 W of power and in Hot Standby Mode, not more than 350 W with heat dissipation of typically 700 Btu/h and 1200 Btu/h respectively or equivalent.
- K. Lamp redundancy for zero lamp downtime. Each display module shall be equipped with two lamps (redundant) and a motorized lamp changer system to provide redundancy due to a premature failure of the primary lamp. In “Cold Standby Mode”, upon failure of the primary lamp, a sensor will instruct the secondary lamp to travel into place and strike within one second, providing image within 10 seconds and full color spectrum within one minute. The lamp switch time itself after lamp failure should be 3 seconds. In “Hot Standby Mode” the secondary lamp will remain on in its chamber, providing an instantaneous full spectrum image within one second of the primary lamp’s premature failure. The lamp switch system has an MTBF of 100,000 hours.
- L. Each display module shall be equipped with an over-pressured air system or equivalent to prevent dust from entering the DLP (LED based) engine and to ensure a high MTBF.
- M. Input signal redundancy: dual link Digital Video Interface (DVI) input to double the content or cabling towards the display module. It shall be possible to automatically switch to the second source.
- N. Standard product for high MTBF. The display modules shall be fully enclosed and light tight.
- O. Built-in sensors with automated feedback loops to keep display performance, such as luminance and color, constant across the whole area display wall. Sensors must measure both brightness and color. The brightness information is used to adjust the optical dimmer, while the color information is used to adjust color by a color adjustment algorithm – according to ANSI13 specifications.
  - 1. Optical dimming and dynamic feedback for equal brightness. Each display wall module shall be equipped with one (1) optical light sensor, permitting the brightness level of each light engine to be controlled automatically without raising or lowering the voltage. Light intensity from each engine will be monitored and adjusted automatically or manually by operators. The brightness target can be changed for the entire display wall via control management software without having to interact with each projection module separately. The brightness locking must have a 50-100% optical dimming range, without color shift, loss of contrast and loss of color.
  - 2. Active color sensor and adjustment. Each display module shall be equipped with one (1) active color sensor, permitting the color level of each light engine to be constantly measured and adjusted automatically.
  - 3. Central PC and hub for feedback loops. A dedicated network PC with NIC card shall constantly monitor and adjust each cube’s individual colors and brightness to a common value via a network hub and Cat 5/6 cables pulled to the RJ45 connector on each cube. Both brightness and color adjustment are over the entire lifetime of the lamp, not just after a lamp change.
- P. Remote control and management of display wall for easy-of-maintenance over a standard IP-network. The control of the wall shall be possible via a network connection. All

projectors shall have their own IP address, and software can access all of them at the same time. The available features shall be:

1. On/Off:
  - a. Switching the entire display wall on or off.
  - b. Switching any group of projectors on or off.
2. Brightness and Color:
  - a. Setting all projection modules to a common brightness target, which can be either static (fixed) or dynamic to always achieve maximum common brightness between projection modules.
  - b. Setting a common white target or primary color targets for the whole wall.
3. Lamp control:
  - a. Switching between the active and backup lamps either in the entire wall, or in a selection of projectors.
  - b. Switching to either hot or cold standby operation mode in case hot standby operation mode is enabled.
4. Input control:
  - a. Changing the active input (of the two present DVI inputs).
  - b. Selecting a redundancy scenario in case the active input fails.
5. On top of these actions the health or status of every lamp, projector as well as the whole display wall is monitored and indicated.
6. The remote management software shall store and collect data in a relational database. The display wall history will log data in two different ways:
  - a. Event Logging will log real-time events; lamp failed, lamp restarted, projector switched on/off, hot-standby enabled/disabled, Temp Error has occurred, etc.
  - b. Property Logging will log properties of projectors and lamps.
  - c. Configured to periodically log properties of projectors and lamps for a given number (select duration) of full projector hours or lamp hours.
7. The remote control management software is a client/server application. The server components can be installed on any PC or wall controller that has Ethernet connection with the projectors. The client components can be installed on any workstation in the network. It shall be possible to start multiple clients that connect to the same service on one or multiple workstations. Upgrading of the server SW or clients shall be easy by upgrading through the client which pushes the upgrade to the server (web-start).
- Q. Complete technology ownership for single point of responsibility. Supplier-integrator must be owner of design of entire projection engine and module as described above, as well as the Display Wall Controller and Wall Management Software as described below.
- R. Maintainability
  1. Manufacturer design for long-term support of spare parts (manufacturer must guarantee availability of parts for 7 years).
  2. Design with possible upgrade paths for new version display cubes and projector engines.
  3. Color-wheel in cartridge for low Mean-Time-to-Recovery (MTTR). Each display module's projection engine shall be equipped with field-serviceable (easily slid in and out) 5-segment color wheel cartridge optimized for color uniformity that can be replaced within 30 minutes. The MTBF of the color-wheel is 50,000 hours.
  4. Also include the costs for extending the warranty by an additional 2-year's and a 5-year extended warranty cost proposal.
- S. Cobb County will be responsible for all of the required electrical-structural modifications and space required for the effective installation of this proposed video wall system.
- T. Include all of the costs associated with the complete equipment installation, cabling, programming, integration, testing and commissioning of this video wall system in section 6.0.

#### 4.07 Video Wall Matrix-Switching for Multiple Computer/Video Sources

- A. The video wall controller shall consist of components designed to provide wall display control for layouts, visuals, internal source switching, and have the capacity of integrated decoding of signals to be displayed. The controller shall consist of a base unit, graphical back plane, input cards, and output cards. The controller shall be configurable to achieve the particular display solution required. The controller shall be capable of supporting both video and data displays simultaneously and be configurable by card.
- B. The overall video wall controller system shall be constructed of one base unit which is capable of expanding up to 5 graphical backplanes with each graphical backplane providing a minimum of either 18 slots with 533 MB/s bandwidth or 12 slots with 1.6 GB/s bandwidth for input and output cards or equivalent. The controller architecture shall allow up to 320 video/160 RGB sources in a system and up to 64 video/32 RGB sources to be freely movable on a the video display wall. The same supplier as a consistent platform shall provide all components for this video wall switching and controller system.
- C. The base unit shall consist of a standard, rack-mountable PC utilizing the latest Intel or equivalent microprocessor technology and Commercial-off-the-shelf (COTS) components to allow for future upgrades. At minimum, the base unit shall be equipped with Dual Xeon Dual Core 3.0 GHz processors or equivalent, 3GB of random access memory (RAM), redundant hot-swap dual power supply, redundant hot-swap RAID1/5 hard disks and redundant network interface cards. The redundancy components are continuously monitored. For expandability, the base unit shall be capable of utilizing multiple graphical back planes. The base unit shall allow the user to visualize Windows-based client-server applications by installing a client-copy on the base unit. Other network-based ways of visualization shall be possible through the use of software.
- D. The digital graphical back plane shall transfer the digitized information from the input cards to the output cards without analog paths and matrix-switching inside the system for maximum flexibility. A minimum of two (2) graphical backplanes shall be included in this controller system to support the Cobb 911 video wall requirements and for redundancy purposes.
- E. Each back plane shall be equipped with no fewer than 18/12 PCI slots for the various input, output, and backend scalar cards that may be utilized. These cards shall be arranged during installation to provide optimal bandwidth clustering performance for the specific Cobb 911 configuration. The graphical back plane shall have a redundant hot-swap power supply.
- F. All input and output cards listed below shall be supported by the graphical back plane simultaneously in any combination within the slots (i.e. the user can mix and match the cards below in the back plane without introducing other hardware adaptors or external devices).
- G. Output Cards—The video wall controller shall be capable of supporting 4-channel Graphical Output Cards. The output card shall be equipped with dual Digital Video Interface (DVI) connectors that allow a digital connection of up to UXGA (1,600 x 1,200) resolution or better.
- H. The video wall controller shall be capable of supporting backend scalar cards to minimize the need to put excessive bandwidth on the graphical back plane. These backend scalar cards shall be hard wired to the output cards of the graphical back plane and shall scale the various input sources off the graphical back plane and output them directly to the output cards with no loss of image quality when the display is projected on the video wall and without direct analog paths. Even with many input sources, the scaling technology features individual scaling factors resulting in superior image quality.

- I. The RGB input card is an analog input device that shall be provided so that operators may project an exact copy of their workstation or of a laptop on the video display wall. Each RGB input card shall be a dual input unit that allows two analog RGB inputs up to SXGA at 60 Hz to be displayed on the video wall. A total of 8 RGB inputs shall be displayed within their own application window and be capable of being sized to a resolution of 1920 x 1080 on the entire display wall.
- J. Baseband Video Inputs —Quad video input cards shall be furnished that will accept up to four YUV/S-Video/Composite Video sources and that will digitize the information for display on the video wall. These video sources shall be displayed within their own application window and be capable of being sized beyond their native resolution. The minimum amount of video windows that can be displayed simultaneously on the video wall is 4, expandable to 16. It shall be possible to size large video windows up to a resolution of 1920 x 1080 or better at any position on the video wall simultaneously.
- K. The video wall controller shall be capable of genlocking all input video signals in order to provide a non-jittered view of video sources when the controller is accepting video signals from video switching systems. The video wall controller shall be capable of accepting a standard black-burst video synch signal as the genlock reference signal (via a BNC connector on the base unit) or selecting one of the video input signals as the reference. The video wall controller shall be capable of aligning all vertical synch pulses of all input video signals it receives to the reference genlock signal for display. In addition, the Video Wall Controller shall be able to adjust the timing for all display units (cubes or panels) such that there will be no visual artifacts to the viewers caused by video switching or refresh frequency adjustments.
- L. The video wall controller shall be capable of supporting integrated streaming video input cards to achieve a seamless integration between various IP networks and the display wall. Streaming video input cards that allow for the enhanced performance and high-quality MPEG2/MPEG4/MJPEG decoding. The streaming video card shall provide IP interfacing and hardware decoding of the streaming video input locally on the card, and shall not require any additional processing power from the CPU of the main base unit for this task. The integrated hardware decoding shall be independent from a large set of current encoder suppliers. System must be capable of decoding various manufacturer supported streaming video formats. The manufacturer shall publish and provide a current encoder interoperability list.
- M. The digital video input card shall provide two standard IP network connections utilizing the RJ-45 connectors. These two connections shall operate as redundant backups to one another. The fail-over operations shall be automatic upon detection of the network link failure by the card.
- N. In addition, for all connections, Ethernet packet sizes should not exceed 1472 active bytes per packet or equivalent.
- O. On the active RJ-45 connector, the streaming video input card shall be capable of accepting up to four compressed video streams simultaneously. The UDP Port shall differentiate each stream into the card. The card shall be capable of supporting at least 40Mbps of simultaneous streaming traffic in total. This 40Mbps shall be spread across the four streams in any combination (e.g. 4 streams at 7Mbps each or one stream at 2 Mbps and 3 streams of 7 Mbps or any similar combination). The total bandwidth per card should not exceed 40Mbps and no one stream should exceed 10Mbps.
- P. The maximum delay for decoding and displaying an input stream from the input interface of the card to the display shall not exceed 300 msec.
- Q. Each Graphical Backplane shall be capable of supporting up to a maximum of 12 Digital Video Input cards simultaneously on a Graphical Backplane (other slots may still be used by other cards).

- R. The Vendor-Integrator shall include a summary and total of the various types of input and output cards included in their proposal response for cost purposes. This estimate will be based on the configuration of similar video wall systems used by other 911 dispatch centers and the A-V sources included in the below list. The actual quantity and types of required input and output cards will be determined during the design and integration phase of this project by the selected vendor-integrator. Cobb 911 requests that the following A-V sources be available for the video wall:
  - 1. GIS Map of the County - Computer Aided Dispatch (CAD) Mapping Application - Layers that include the different Cobb Fire Battalions, including Marietta Fire and station locations.
  - 2. Incident Status Window from Motorola Printrak CAD
  - 3. AVL – Fire Vehicles and other Public Safety Vehicles
  - 4. Pictometry (of county)
  - 5. Weather radar
  - 6. Info from the JHAT project (info from a disc)\*
  - 7. Cobb D.O.T camera video from a LAN/WAN connection
  - 8. GDOT camera video from Web-site
  - 9. Map/floor plans of schools, hospitals etc.\*
  - 10. CATV. Include a Comcast CATV access encoder to capture a minimum of four (4) distinct video channels for routing and simultaneous display.
  - 11. Railroad, Power areas- map layer
  - 12. Road closures\*
  - 13. 311 info
- S. Cobb County will be responsible for all of the required electrical-structural modifications and space required for the effective installation of this proposed video wall system.
- T. Also include the costs for extending the warranty by an additional 2-year's and a 5-year extended warranty cost proposal.
- U. Include all of the costs associated with the complete equipment installation, cabling, programming, integration, testing and commissioning of this video wall system in section 6.0.

#### **4.08 Collaborative or A-V Networking Software Application**

- A. Collaboration Software shall be a networked concept which easily allows connections of a multitude of sources which can be configured to easily display operational data.
- B. Collaboration Software shall support a central server with client architecture, include server hardware and software costs and associated features and specifications.
- C. Collaboration Software shall provide an application that will allow the user to manage and maintain the system via a Graphical User Interface (GUI). This application shall be able to allow the user to query the available layouts or “Perspectives”, define new perspectives, save the perspectives, switch current video wall and overhead display monitor perspectives, preview sources, drag and drop sources, launch applications, and perform other configuration functions via a sidebar tool or equivalent.
- D. The collaboration software must allow the operator to create shortcuts to computer applications installed onto the graphical controller.
- E. The wall management software shall allow the operator to move and position the computer applications, video windows, and RGB windows onto the unmanned display through a graphical user interface on the local operator's workstation.
- F. Administrator shall be able to adjust the default settings via an admin control panel. Administrator will be able to control tool access, define security constraints and ensure proper anti-virus protection and scans are properly maintained.

- G. Collaboration Software shall support source types such as:
  - 1. Analog & Streaming Video
  - 2. Analog (RGB) & Digital (DVI)
  - 3. Networked desktops
  - 4. Intranet & Internet
  - 5. Networked Application Servers
- H. Hybrid decoding of video streams via hardware or software
- I. Once sources are appropriately positioned then they must be able to be saved as a perspective and capable of recall at a later time and date.
- J. The collaboration software shall allow the operator to use his local mouse and keyboard to control applications on unmanned displays as if the mouse and keyboard was physically connected
- K. The collaboration software shall be able to share/push complete and/or partial desktop content between workstations and between unmanned displays and workstations.
- L. Collaboration software shall provide an application programmer's interface (API) that is based on the Simple Object Access Protocol (SOAP) standard or equivalent. This interface shall allow third-party software to control and access the controller's features to query the available layouts, query current wall states, switch layouts, switch current window contents to available inputs (on the input cards), query overall system status, and launch applications.
- M. Collaboration software shall provide a simple telnet interface for third party control.
- N. Include the costs for Collaborative Software administrative and application-user training for 8-10 Supervisors, 911 Support Specialists and Cobb Information Systems team members.
- O. Include all costs of Collaborative software installation, programming and integration.

## **5.00 Professional Services**

This section describes the services to be provided by the successful proposer in the course of implementing the Video Wall – Audio Visual Display and Collaboration system.

### **5.01 Video Wall A-V Display System Solution Definition**

The proposal should include an executive summary describing the overall Video Wall – Audio Visual Display and Collaboration system implementation plan. The successful vendor shall develop detailed plans to be included as deliverables in the contract.

The proposer must include the required hours to evaluate the current 911 dispatch computer applications, Cobb LAN/WAN network, security and firewall system and the proposed Video Wall – Audio Visual Display and Collaboration system processes and recommend necessary changes to effectively implement the proposed solution. Implementation services will need to be extensive with the proposer providing most of the effort in both documenting/integrating this Video Wall – Audio Visual Display and Collaboration system into the existing 911 dispatching processes and configuration of the current system. However, there should be enough training during project implementation to allow the County to support this Video Wall – Audio Visual Display and Collaboration system as needed after implementation is complete.

## **5.02 Project Management**

Cobb County uses the Project Management Institute's (PMI) Project Management Body of Knowledge Guide (PEMBOK) methodology as a project management best practice.

The county is particularly interested in how the proposer's project management approach utilizes the following or similar key process groups when implementing a project. Also, the proposer should provide documentation which shows their understanding of the application of such documents within each key process group.

1. Initiating - Setting up the project for success by identifying the right team (especially the project manager) and scope, as well as determining the relationship between the project and its alignment with the client's overall objectives.
2. Planning – Developing the relevant resources, timelines and milestones, and aligning project deliverables to business priorities (i.e. risk management, communications, quality, cost/budgeting, duration and sequencing, external dependencies).
3. Executing – Assigning a project team and distributing information to ensure the proper project activities are undertaken. This process also includes ensuring quality assurance methods are in place to address change management.
4. Controlling and Monitoring – Ensuring the resulting project activities is in check with the original project charter and plan, and risk from uncontrolled external actions is mitigated.
  - a. Monitor quality, costs and schedule;
  - b. Manage stakeholder relationships, risk and contract monitoring;
  - c. Identify discrepancies (or variations) within the project schedule to ensure project schedule is met.
  - d. Ensure proper project communications
5. Closing – Making sure you have delivered everything expected of the project.

## **5.03 Implementation Planning**

- A. The provider must present a preliminary implementation plan with a timeline from contract signature through user training with clearly identified roles and responsibilities for both provider and Cobb County Government.
- B. The provider must present during the implementation and training phase an articulated plan for best practices for use and how the Video Wall – Audio Visual Display and Collaboration system adheres to existing protocols for emergency communications.

## **5.04 Training**

- A. The provider must detail all expenses associated with initial training for all users, re-training, and new user training as part of the cost. The provider must also disclose all costs associated with on-site training including travel and per-day fees.
- B. The provider must describe the training courses, length and training materials provided to Cobb County Government personnel.
- C. Training must be provided at a site of client's choosing, or via a live meeting environment if requested.

### **5.05 User Training Manual**

Provider shall recommend best practices and system configuration for effective system set up. Using this information, the vendor will prepare a document that defines all work flow processes and procedures for users. The provider shall provide a sample of the typical document or implementation approach as part of the response.

### **5.06 Video Wall A-V Display System Testing**

The types and amounts of Video Wall – Audio Visual Display and Collaboration sub-system and system testing that will be supplied shall be described. The provider shall include a plan that results in acceptable testing for Video Wall – Audio Visual Display and Collaboration system acceptance.

### **5.07 Video Wall A-V Display System Repair and Support**

The Proposer shall provide a written guarantee and the cost to maintain, repair and service the Video Wall and A-V Display System being proposed for a minimum of five years from date of installation. This five year system maintenance agreement should also include the first year system warranty period and include any extra costs for system and application software upgrades, enhancements and problem fixes if required.

The Proposer should also provide:

- A. Preliminary Video Wall A-V System maintenance procedures
- B. Telephone number for any normal business hour and after-hour maintenance issues
- C. Service or repair center locations and service level commitments
- D. Recommended Video Wall and A-V system equipment spares list
- E. A description of the repair, replacement and return process

**6.00 Video Wall A-V Display System Cost Section**

The following section contains the response documents, which shall be completed and submitted as part of the Proposal Response Section. Failure to complete and return this section of the RFP will be a basis for disqualification. This section is to be returned on the original hard copy forms provided; in no case shall the requirements be retyped or altered in any way from those provided within. Responses shall also be recorded on the enclosed spreadsheet and returned with the proposal. In the event that the paper response and electronic response differ, the paper response will be used.

**6.01 High-Definition (HD) LCD-Plasma-LED Displays**

<i>Overhead Flat-Panel HD Display Monitors</i>	<i>(Quantity)</i>	<u>1</u>	<u>10</u>
52" LCD Landscape HD Monitor 1920 X 1080 or equivalent		\$_____	\$_____
52" Plasma Landscape HD Monitor 1920 X 1080 or equivalent		\$_____	\$_____
52" LED Landscape HD Monitor 1920 X 1080 or equivalent		\$_____	\$_____
65" LCD Landscape HD Monitor 1920 X 1080 or equivalent		\$_____	\$_____
65" Plasma Landscape HD Monitor 1920 X 1080 or equivalent		\$_____	\$_____
65" LED Landscape HD Monitor 1920 X 1080 or equivalent		\$_____	\$_____
Mounting-Wall or Ceiling Suspension Pole with Tilt		\$_____	\$_____
External Speakers with Remote Volume Controls		\$_____	\$_____
Installation, Programming and Integration		\$_____	\$_____
Additional 2-Year Replacement Warranty		\$_____	\$_____
Additional 5-Year Replacement Warranty		\$_____	\$_____

**6.02 Fire Control-Incident Mapping Video Wall**

***Fire Control-Incident Mapping Video Wall***

2x3 Built-in Video Wall with 50" Diag. SXGA+ Cubes	\$_____
2x3 Built-in Wall - 50" Diag. (LED Based) SXGA+ Cubes	\$_____
2x3 Movable Wall - 52" Thin-Bevel LCD 1920X1080 Cubes	\$_____
2x2 Movable Wall - 65" Thin-Bevel LCD 1920X1080 Cubes	\$_____
Video Wall Processor & Control Equipment & Software	\$_____
Movable Equipment Rack (s) - Touch Panel & Speaker (s)	\$_____
Installation, Programming and Integration	\$_____
Additional 2-Year Component Replacement Warranty	\$_____
Additional 5-Year Component Replacement Warranty	\$_____

\*\* Cobb is responsible for electrical & structural modifications

**6.03 Video Display Wall Controller**

***Matrix-Switching for Multiple Computer/Video Sources***

16x16 RGBHVA Multi-source switching for Computer/Video	\$ _____
32x32 RGBHVA Multi-source switching for Computer/Video	\$ _____
Total = _____ Computer/Video interface input or output cards	\$ _____
A-V Control System Processor/CPU and software	\$ _____
Equipment Rack with Touch Panel Interface	\$ _____
Installation, Programming and Integration	\$ _____
Additional 2-Year System Warranty	\$ _____
Additional 5-Year System Warranty	\$ _____

\*\* Cobb is responsible for CATV service

**6.04 Collaboration Software**

***Collaborative or Networking Software Application***

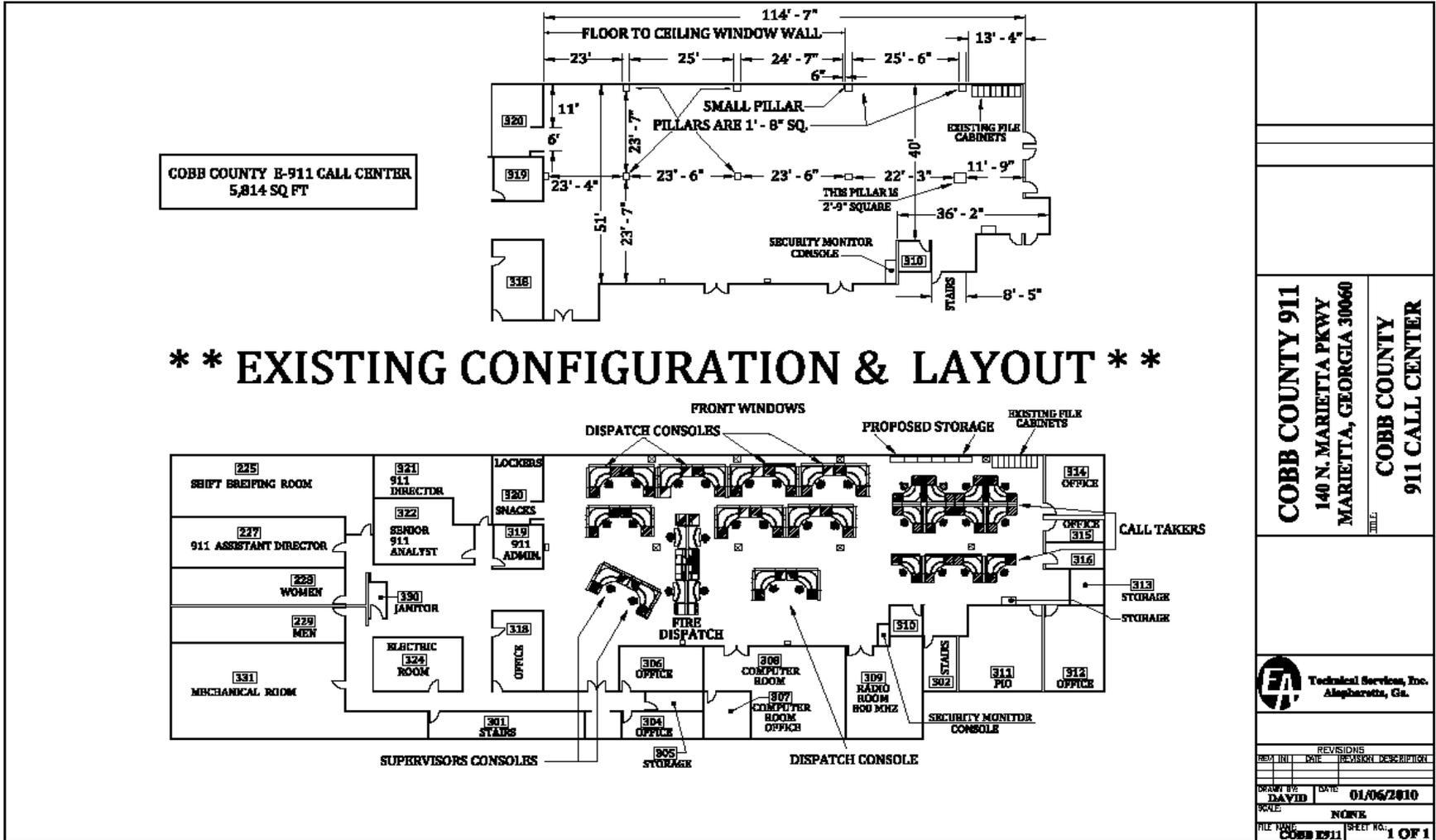
Central Server (CPU) with Client Architecture	\$ _____
GUI Based Multi-source Selection – Software Application	\$ _____
Admin Control & Application Programming Training	\$ _____
Installation, Programming and Integration	\$ _____

## **7.00 Evaluation Methodology**

All complete proposals will be evaluated according to the guidelines set forth in this RFP. The lowest priced proposal will not necessarily be the one selected, as cost is only one of the factors that will be considered. The evaluation team will complete their assessments of the merit of each proposal by the criteria given below. Please note that these criteria are not in weighted order.

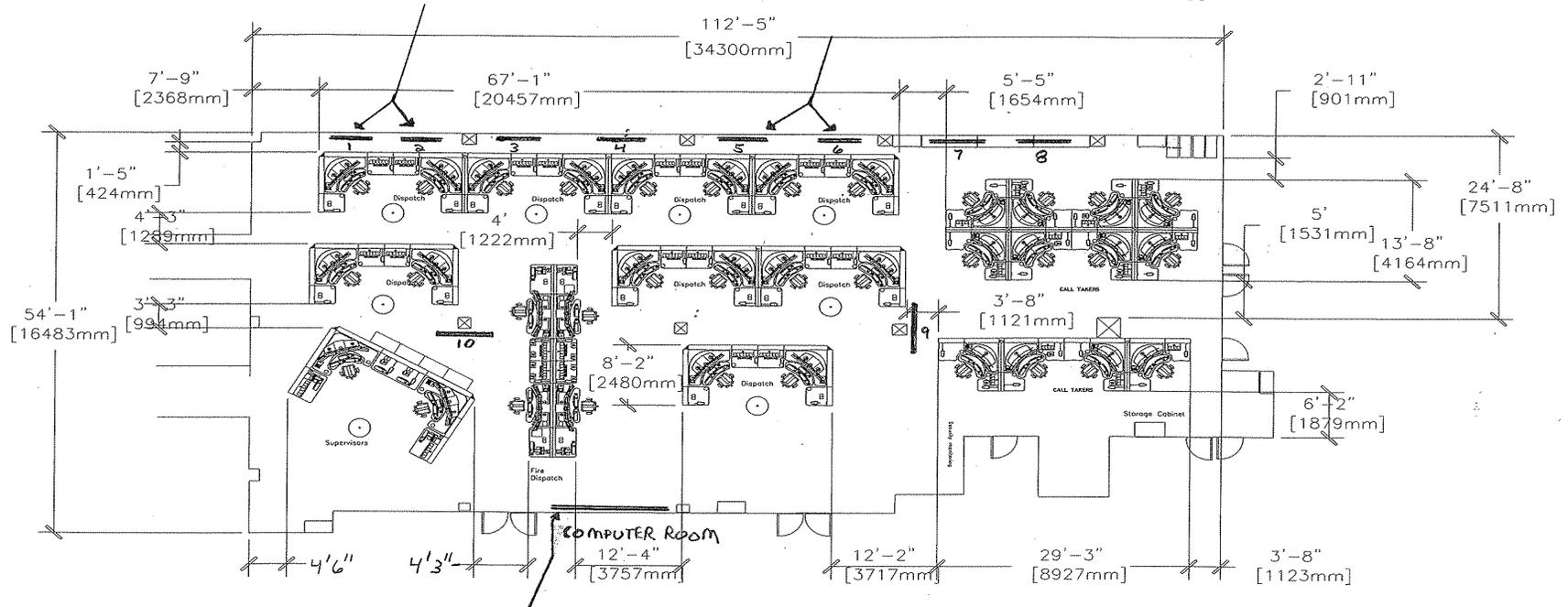
1. **Cost** – The entire cost of the project shall be evaluated including costs for the overhead monitors, video wall, controller hardware and software, collaborative A-V networking application, project planning and integration, operational support and user training.
2. **A-V System Requirements, Functions and ease of use** – The system requirements and functionality satisfactorily meets the needs as listed in Section 4 and Section 5 of this proposal and is easy to use for all Dispatch users and support personnel.
3. **Project Planning and Integration Services** – Sufficient project planning and integration services will be provided for this mission-critical 911 Dispatch environment to ensure successful project completion and minimal disruption to the existing 24 hour by 7 days per week operation.
4. **Reliable, Redundant and Secure Operation** – The A-V hardware components, software applications and systems must be designed around a robust mission-critical 911 Dispatch environment to allow for continuous and reliable operations. The A-V software applications and network interfaces must also be secure and reliable for continuous 24 hour by 7 days per week operation.
5. **Proposer Experience, Ability and References** – The vendor has experience and a track record that is satisfactory to Cobb County. Proposer shall submit references that confirm the proposer’s experience with project implementation and post implementation support of this type of mission-critical 24-hour by 7-days per week of continuous A-V system operation.

APPENDIX A - COBB 911 - EXISTING CONSOLE FURNITURE LAYOUT



## APPENDIX B - COBB 911 – PROPOSED VIDEO WALL A-V MONITOR LAYOUT

\*\*\*\*\* QUANTITY = 10 LCD/LED Display Monitors 62" x 36" x 5" (W x H x D) or 50" x 30" x 6" or equivalent including mounting hardware will be suspended from the existing ceiling and mounted flush with the 10 foot high drop ceilings or mounted to the face of an existing pillar. \*\*\*\*\*



\*\*\*\*\* Fire Control-Incident Mapping Video Wall Display System \*\*\*\*\*

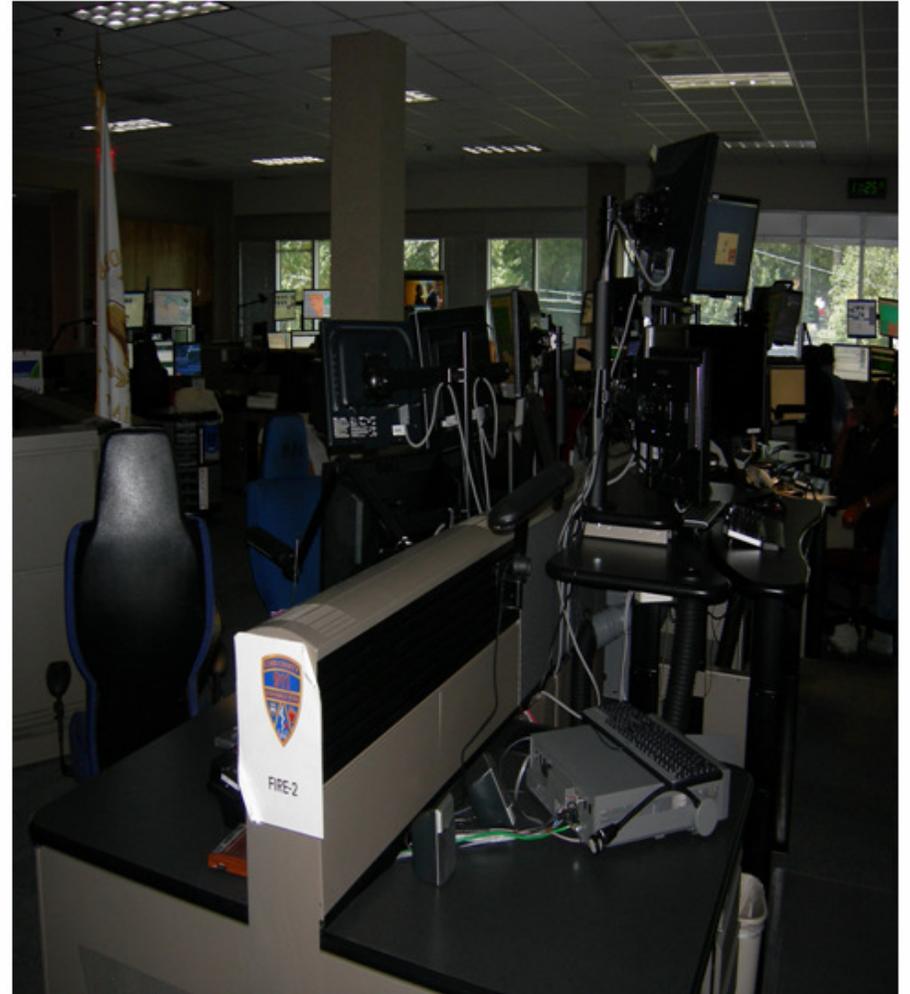
- Array of 2-high by 3-wide rear-projection modules built into the computer room wall or a 2-high by 3-wide array of LCD narrow bezel display modules mounted on a movable rack flush to the front-wall of the computer room to be viewed by Fire Dispatch.
- The computer room front-wall is approximately 14 feet wide from the door frame to the pillar and the ceiling is a 10 foot high drop ceiling.

<b>wright·line</b> technical environment solutions	Sales Representative: Patrick Frey	Prepared for: Cobb County 911 Room 2	Product: PSAP	Drawn by: Nataraj B
	Southeast	2009 © Wright Line LLC. All rights reserved. No portion of this document may be reproduced or transmitted in whole or in part without the prior written consent of Wright Line LLC.	Date: 04/30/2009	Quote: PS919050

***APPENDIX C – COBB COUNTY 911 – PROPOSED AV VIDEO WALL (MOVABLE) LOCATION***



**PICTURE 1 – Located between Pillar and Red Door (Wall Flush)**

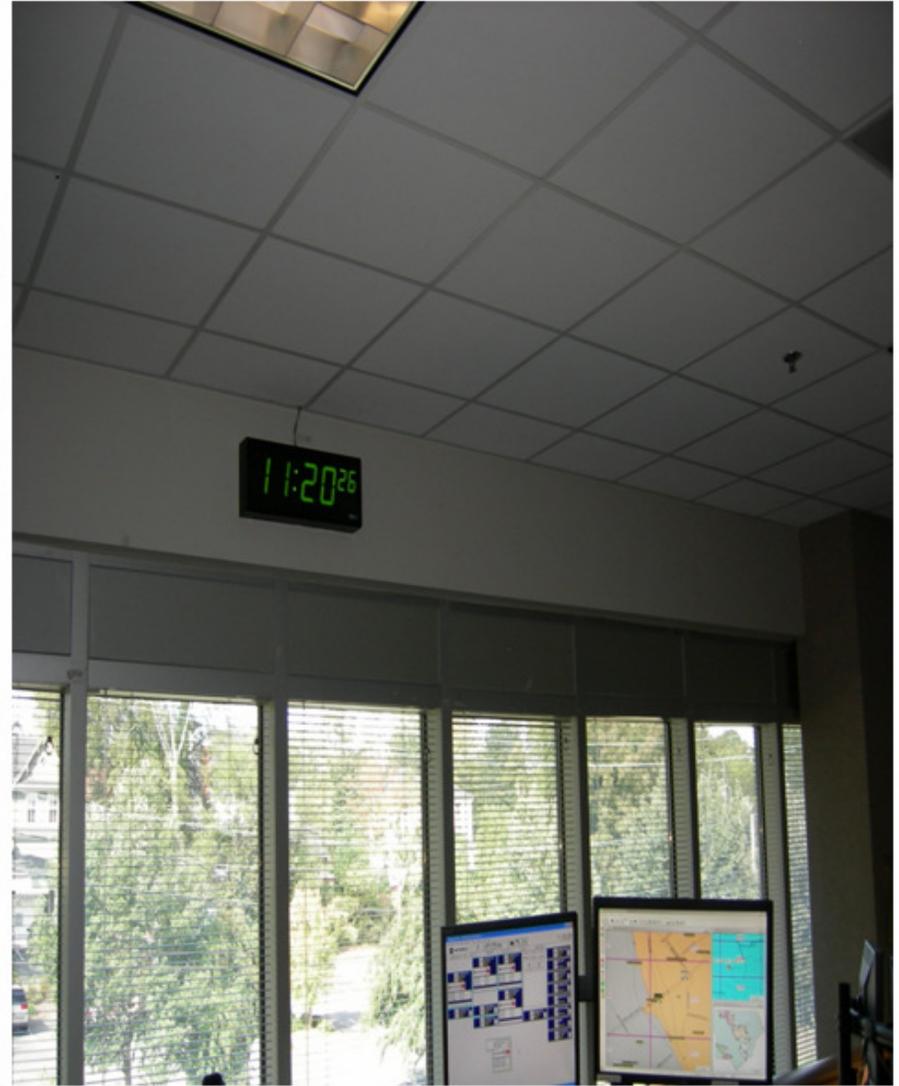


**PICTURE 2 – Four (4) Fire Positions - Perpendicular to video wall**

**APPENDIX D – COBB 911 – PROPOSED LOCATIONS OF CEILING-WALL-PILLAR MOUNTED LCD MONITORS**



**PICTURE 3 – Propose installing 2 monitors between pillars at ceiling**



**PICTURE 4 – Three sections of window walls with 10-Foot ceiling**

**APPENDIX E – COBB 911 – PROPOSED LOCATIONS OF CEILING-WALL-PILLAR MOUNTED LCD MONITORS**



**PICTURE 5 – Call-takers install 2 monitors between pillars at ceiling**



**PICTURE 6 – Call-takers view - install monitor on pillar at ceiling**

**APPENDIX F – COBB 911 – PROPOSED LOCATIONS OF CEILING-WALL-PILLAR MOUNTED LCD MONITORS**



**PICTURE 7 – Supervisor view – install monitor on pillar at ceiling**



**PICTURE 8 – Back-row view - install monitor on pillar at ceiling**