



STATE OF ALABAMA
DEPARTMENT OF FINANCE
DIVISION OF PURCHASING

INVITATION TO BID

INVITATION TO BID NO: 09-R-2208763

REQ. AGENCY : 087000
DEPT OF REHABILITATION SERVICES
AGENCY REQ. NO. : 0935623
T-NUMBER :
DATE ISSUED : 07/30/09
VENDOR NO. :
VENDOR PHONE NO. :
SNAP REQ. NO. : 1421414
BUYER NAME : JENNIFER LORETZ

FOR: SECURITY SYSTEM - 0935623

BUYER PHONE NO. : (334) 242-7370-
PURCHASING PHONE NO: (334) 242-7250

BID MUST BE RECEIVED BEFORE:
DATE: 08/20/09 TIME: 5:00 PM

BIDS WILL BE PUBLICLY OPENED:
DATE: 08/21/09 TIME: 10:00 AM

TO BE COMPLETED BY VENDOR

INFORMATION IN THIS SECTION SHOULD BE PROVIDED, AS APPROPRIATE. BID RESPONSE MUST BE IN INK OR TYPED WITH ORIGINAL SIGNATURE AND NOTARIZATION.

1. DELIVERY: CAN BE MADE _____ DAYS OR _____ WEEKS AFTER RECEIPT OF ORDER
 2. TERMS: _____(DISCOUNTS ARE TAKEN WITHOUT REGARD TO DATE OF PAYMENT.)
 3. PRICE VALID FOR ACCEPTANCE WITHIN _____ DAYS.
 4. VENDOR QUOTATION REFERENCE NUMBER, IF ANY: _____
(THIS NUMBER WILL APPEAR ON THE PURCHASE ORDER.)
 5. E-MAIL ADDRESS: _____
INTERNET WEBSITE: _____
 6. GENERAL CONTRACTOR'S LICENSE NO: _____
TYPE OF G.C. LICENSE: _____
- RETURN INVITATION TO BID:

US MAIL

COURIER

STATE OF ALABAMA
DEPARTMENT OF FINANCE
DIVISION OF PURCHASING
P O BOX 302620
MONTGOMERY, AL 36130-2620

STATE OF ALABAMA
DIVISION OF PURCHASING
RSA UNION BUILDING
100 N. UNION ST., SUITE 192
MONTGOMERY, AL 36104

***** IMPORTANT NOTE: *****

BIDDERS MUST COMPLY WITH ALL "BID RESPONSE INSTRUCTIONS" ON PAGE 2, TO INCLUDE ITEM 7 - COPY REQUIREMENT.

SIGNATURE AND NOTARIZATION REQUIRED

I HAVE READ THE ENTIRE BID AND AGREE TO FURNISH EACH ITEM OFFERED AT THE PRICE QUOTED. I HERBY AFFIRM I HAVE NOT BEEN IN ANY AGREEMENT OR COLLUSION AMONG BIDDERS IN RESTRAINT OF FREEDOM OF COMPETITION BY AGREEMENT TO BID AT A FIXED PRICE OR TO REFRAIN FROM BIDDING.

SWORN TO AND

FEIN OR SSN

AUTHORIZED SIGNATURE (INK)

SUBSCRIBED BEFORE ME THIS

COMPANY NAME

TYPE/PRINT AUTHORIZED NAME

_____ DAY OF _____

MAIL ADDRESS

TITLE

NOTARY PUBLIC

CITY, STATE, ZIP

TOLL FREE NUMBER

TERM EXP: _____

PHONE INCLUDING AREA CODE

FAX NUMBER

STANDARD TERMS & CONDITIONS

VENDOR NAME :

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INVITATION TO BID

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AUTHORITY:

THE DEPARTMENT OF FINANCE CODE OF ADMINISTRATIVE PROCEDURE, CHAPTER 355-4-1 EFFECTIVE DECEMBER 20, 2001 IS INCORPORATED BY REFERENCE AND MADE A PART OF THIS DOCUMENT. TO RECEIVE A COPY CALL (334)242-7250, OR OUR WEBSITE WWW.PURCHASING.ALABAMA.GOV .

INFORMATION AND ASSISTANCE TO MINORITY BUSINESSES IN THE TECHNICAL COMPLETION OF REQUIRED FORMS MAY BE OBTAINED FROM THE OFFICE OF MINORITY BUSINESS ENTERPRISE, 1-800-447-4191.

BID (ITB) RESPONSE INSTRUCTIONS

REV: 04/07/09

1. TO SUBMIT A RESPONSIVE BID, READ THESE INSTRUCTIONS, ALL TERMS, CONDITIONS AND SPECIFICATIONS.
2. BID ENVELOPES/PACKAGES/BOXES MUST BE IDENTIFIED ON FRONT, PREFERABLY LOWER LEFT CORNER AND BE VISIBLE WITH THE BID NUMBER AND OPENING DATE. EACH INDIVIDUAL BID (IDENTIFIED BY A UNIQUE BID NUMBER) MUST BE SUBMITTED IN A SEPERATE ENVELOPE. RESPONSES TO MULTIPLE BID NUMBERS SUBMITTED IN THE SAME ENVELOPE/COURIER PACKAGE, THAT ARE NOT IN SEPERATE ENVELOPES PROPERLY IDENTIFIED, WILL BE REJECTED. THE DIVISION OF PURCHASING DOES NOT ASSUME RESPONSIBILITY FOR LATE BIDS FOR ANY REASON INCLUDING THOSE DUE TO POSTAL, OR COURIER SERVICE. BID RESPONSES MUST BE IN THE DIVISION OF PURCHASING OFFICE PRIOR TO THE "RECEIVE DATE AND TIME" INDICATED ON THE BID.
3. BID RESPONSES (PAGE 1, PRICE SHEET AND ADDENDUMS (WHEN SIGNATURE IS REQUIRED)) MUST BE IN INK OR TYPED ON THIS DOCUMENT. OR EXACT FORMAT WITH SIGNATURES BEING HANDWRITTEN ORIGINALS IN INK (PERSON SIGNING BID, NOTARY, AND NOTARY EXPIRATION), OR THE BID WILL BE REJECTED. UNLESS INDICATED IN THE BID, ALL PRICE PAGES MUST BE COMPLETED AND RETURNED. IF AN ITEM IS NOT BEING BID, IDENTIFY IT AS NB (NO-BID). PAGES SHOULD BE SECURED. THE DIVISION OF PURCHASING DOES NOT ASSUME RESPONSIBILITY FOR MISSING PAGES. FAXED BID RESPONSES WILL NOT BE ACCEPTED.
4. THE UNIT PRICE ALWAYS GOVERNS REGARDLESS OF THE EXTENDED AMOUNT. A UNIT PRICE CHANGE ON A LINE MUST BE INITIALED BY THE PERSON SIGNING THE BID, OR THAT LINE WILL BE REJECTED. THIS INCLUDES A CROSS-OUT, STRIKE-OVER, INK-OVER, WHITE-OUT, ERASURE, OR ANY OTHER METHOD CHANGING THE PRICE.
5. A "NO BID" MUST BE RETURNED TO REMAIN ON A CLASS/SUBCLASS. RETURN PAGE 1 MARKED "NO-BID". IDENTIFY IT ON THE ENVELOPE AS A "NO-BID". FAILING TO RESPOND TO 3 ITB'S WITHIN THE SAME CLASS/SUBCLASS WILL AUTOMATICALLY PURGE THE VENDOR FROM THAT CLASS/SUBCLASS. RESPONDING WITH 6 "NO-BIDS" WITHIN THE SAME CLASS/SUBCLASS WILL AUTOMATICALLY PURGE THE VENDOR FROM THAT CLASS/SUBCLASS. A "NO-BID" RECEIVED LATE IS CONSIDERED A NO RESPONSE.
6. THE DIVISION OF PURCHASING IS NOT RESPONSIBLE FOR MISINTERPRETATION OF DATA FAXED FROM THIS OFFICE.
7. THE DIVISION OF PURCHASING REQUIRES AN ORIGINAL AND A MINIMUM OF ONE COMPLETE EXACT COPY (TO INCLUDE SIGNATURE AND NOTARY) OF THE INVITATION-TO-BID RESPONSE. THE ORIGINAL AND THE COPY SHOULD BE SUBMITTED TOGETHER AS A BID PACKAGE.
8. AN IMPROPERLY SUBMITTED BID, LATE BID, OR BID THAT IS CANCELLED ON OR BEFORE THE OPENING DATE WILL BE HELD FOR 90 DAYS AND THEN DESTROYED. THE BID MUST BE RETRIEVED DURUIG REGULAR WORK HOURS, MONDAY - FRIDAY, EXCEPT STATE HOLIDAYS. AFTER THE BID IS DESTROYED, THE DIVISION OF PURCHASING ASSUMES NO RESPONSIBILITY FOR THE DOCUMENT.

DISQUALIFIED/CANCELLED BID

BIDS THAT ARE IMPROPERLY SUBMITTED OR RECEIVED LATE WILL BE A RESPONSE FOR RECORD, BUT WILL NOT BE RETURNED OR A NOTIFICATION MAILED.

THE FOLLOWING IS A PARTIAL LIST WHEREBY A BID RESPONSE WILL BE DISQUALIFIED:

- BID NUMBER NOT ON FACE OF ENVELOPE/COURIER PACKAGE/BOX
- RESPONSES TO MULTIPLE BID NUMBERS IN SAME ENVELOPE NOT PROPERLY IDENTIFIED
- BID RECEIVED LATE
- BID NOT SIGNED/NOT ORIGINAL SIGNATURE
- BID NOT NOTARIZED/NOT ORIGINAL SIGNATURE OF NOTARY AND/OR NO NOTARY EXPIRATION
- NOTARIZED OWN SIGNATURE
- REQUIRED INFORMATION NOT SUBMITTED WITH BID
- FAILURE TO SUBMIT THE ORIGINAL BID AND A COMPLETE EXACT COPY WILL RESULT IN REJECTION OF THE BID RESPONSE
- FAILURE TO MARK RESPONSES AS "ORIGINAL" AND/OR "COPY" COULD RESULT IN THE ENTIRE BID RESPONSE BEING REJECTED

CERTIFICATION PURSUANT TO ACT NO. 2006-557

ALABAMA LAW (SECTION 41-4-116, CODE OF ALABAMA 1975) PROVIDES THAT EVERY BID SUBMITTED AND CONTRACT EXECUTED SHALL CONTAIN A CERTIFICATION THAT THE VENDOR, CONTRACTOR, AND ALL OF ITS AFFILIATES THAT MAKE SALES FOR DELIVERY INTO ALABAMA OR LEASES FOR USE IN ALABAMA ARE REGISTERED, COLLECTING, AND REMITTING ALABAMA STATE AND LOCAL SALES, USE, AND/OR LEASE TAX ON ALL TAXABLE SALES AND LEASES INTO ALABAMA. BY SUBMITTING THIS BID, THE BIDDER IS HEARBY CERTIFYING THAT THEY ARE IN FULL COMPLIANCE WITH ACT NO. 2006-557, THEY ARE NOT BARRED FROM BIDDING OR ENTERING INTO A CONTRACT PURSUANT TO 41-4-116, AND ACKNOWLEDGES THAT THE AWARDING AUTHORITY MAY DECLARE THE CONTRACT VOID IF THE CERTIFICATION IS FALSE.

SPECIAL TERMS & CONDITIONS

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INVITATION TO BID

INTENT TO AWARD

EFFECTIVE MAY 1, 2008, THE STATE OF ALABAMA - DIVISION OF PURCHASING WILL ISSUE AN 'INTENT TO AWARD' BEFORE A FINAL AWARD IS MADE. THE 'INTENT TO AWARD' WILL CONTINUE FOR A PERIOD OF FIVE (5) CALENDAR DAYS, AFTER WHICH A PURCHASE ORDER WILL BE PRODUCED. UPON FINAL AWARD, ALL RIGHTS TO PROTEST ARE FORFEITED. A DETAILED EXPLANATION OF THIS PROCESS MAY BE REVIEWED IN THE ALABAMA ADMINISTRATIVE CODE - CHAPTER 355-4-1(14).

ALTERNATE BID RESPONSE

UNLESS STATED ELSEWHERE IN THIS INVITATION-TO-BID (ITB) THE STATE OF ALABAMA WILL ACCEPT AND EVALUATE ALTERNATE BID SUBMITTALS ON ANY ITB'S. ALTERNATE BID RESPONSES WILL BE EVALUATED ACCORDING TO THE REQUIREMENTS AS ALL OTHER RESPONSES TO THIS ITB.

INTERNET WEBSITE LINK'S

INTERNET AND/OR WEBSITE LINKS WILL NOT BE ACCEPTED IN BID RESPONSES AS A MEANS TO SUPPLY ANY REQUIREMENTS STATED IN THIS ITB (INVITATION-TO-BID).

PRODUCT DELIVERY, RECEIVING AND ACCEPTANCE

IN ACCORDANCE WITH THE UNIVERSAL COMMERCE CODE (CODE OF ALABAMA, TITLE 7), AFTER DELIVERY, THE STATE OF ALABAMA HAS THE RIGHT TO INSPECT ALL PRODUCTS BEFORE ACCEPTING. THE STATE WILL INSPECT PRODUCTS IN A REASONABLE TIMEFRAME. SIGNATURE ON A DELIVERY DOCUMENT DOES NOT CONSTITUTE ACCEPTANCE BY THE STATE. THE STATE WILL ACCEPT PRODUCTS ONLY AFTER SATISFACTORY INSPECTION.

SALES TAX EXEMPTION

PURSUANT TO THE CODE OF ALABAMA, 1975, TITLE 40-23-4 (A) (11), THE STATE OF ALABAMA IS EXEMPT FROM PAYING SALES TAX. AN EXEMPTION LETTER WILL BE FURNISHED UPON REQUEST.

INVOICES

INQUIRIES CONCERNING PAYMENT AFTER INVOICES HAVE BEEN SUBMITTED ARE TO BE DIRECTED TO THE RECEIVING AGENCY, NOT THE DIVISION OF PURCHASING

BID RESPONSES AND BID RESULTS

UNEVALUATED BID RESPONSES (NOT BID RESULTS) ARE AVAILABLE ON OUR WEB SITE AT WWW.PURCHASING.ALABAMA.GOV. BID RESULTS WILL BE MADE AVAILABLE FOR REVIEW IN THE DIVISION OF PURCHASING OFFICE, BUT ONLY AFTER THE BID HAS BEEN AWARDED. WE DO NOT FAX OR MAIL COPIES OF BID RESULTS. IF A VENDOR WISHES TO REVIEW BID RESULTS IN OUR OFFICE, THEY SHOULD FAX THEIR REQUEST TO REVIEW THE BID TWO DAYS IN ADVANCE TO THE "BID REVIEW CLERK" AT (334) 242-4419. BE SURE TO REFERENCE THE BID NUMBER.

FOREIGN CORPORATION - CERTIFICATE OF AUTHORITY

ALABAMA LAW PROVIDES THAT A FOREIGN CORPORATION (AN OUT-OF-STATE COMPANY/FIRM) MAY NOT TRANSACT BUSINESS IN THE STATE OF ALABAMA UNTIL IT OBTAINS A CERTIFICATE OF AUTHORITY FROM THE SECRETARY OF STATE. SECTION 10-2B-15.01, CODE OF ALABAMA 1975. TO OBTAIN FORMS FOR A CERTIFICATE OF AUTHORITY, CONTACT THE SECRETARY OF STATE, CORPORATIONS DIVISION, (334) 242-5324. THE CERTIFICATE OF AUTHORITY DOES NOT KEEP THE VENDOR FROM SUBMITTING A BID.

BID IDENTIFICATION

REFERENCE PAGE 2, ITEM 2. DUE TO THE POSTAL SERVICE PUTTING BAR CODE LABELS ON ENVELOPES, IT CONCEALS THE BID NUMBER AND DATE IF THE VENDOR HAS WRITTEN THEM OTHER THAN THE LOWER LEFT CORNER, THEREFORE THE BID WOULD BE REJECTED FOR NOT BEING PROPERLY IDENTIFIED.

SPECIAL TERMS & CONDITIONS

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AWARD:

AWARD WILL BE MADE "ALL OR NONE" TO THE LOWEST RESPONSIBLE BIDDER MEETING ALL SPECIFICATIONS.

FREIGHT:

BID IS F.O.B. DESTINATION. ANY FREIGHT CHARGES MUST BE INCLUDED IN THE BID PRICES. DO NOT INCLUDE FREIGHT AS A SEPARATE LINE ITEM.

REQUESTED INFORMATION:

ANY ADDITIONAL INFORMATION REQUESTED FROM A VENDOR MUST BE FURNISHED WITHIN FIVE (5) DAYS FROM RECEIPT OF REQUEST.

VENDOR QUALIFICATION:

IF REQUESTED, VENDOR MUST PROVIDE DOCUMENTATION OF BEING AN AUTHORIZED MANUFACTURER'S REPRESENTATIVE FOR THE PRODUCTS LISTED. FAILURE TO PROVIDE THIS INFORMATION MAY RESULT IN REJECTION OF BID.

ATTACHMENTS

VENDOR NAME :

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INVITATION TO BID

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***** MANDATORY SITE VISIT *****

ALL POTENTIAL BIDDERS MUST TOUR THE COMPLEX AND REVIEW THE DRAWN PLANS PRIOR TO SUBMITTING A BID. FAILURE TO OBTAIN THE SIGNATURES BELOW WILL RESULT IN BID REJECTION.

APPOINTMENTS WILL BE AVAILABLE AUGUST 12 OR AUGUST 14, 2009 DURING REGULAR BUSINESS HOURS. TO SCHEDULE AN APPOINTMENT, CALL 334-293-7500 AND ASK FOR DAVE RAINEY, DAVID COUSINS, KEITH HOLLOWAY OR JERRY KEY.

VENDOR REP NAME & DATE

VENDOR REP SIGNATURE

AGENCY REP NAME & DATE

AGENCY REP SIGNATURE

PRICE SHEET

VENDOR NAME :

VENDOR NUMBER: -

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LINE NO.	COMMODITY/SERVICE DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	EXTENDED AMOUNT
UNLESS SPECIFIED OTHERWISE BELOW:					
SHIP TO: 087000 / 087M11					
DEPT OF REHABILITATION SERVICES					
PURCHASING SECTION					
602 SOUTH LAWRENCE ST					
MONTGOMERY AL 36104					
00001	COMMODITY CODE: 680-72-080866 SECURITY CONTROL SYSTEM, ELECTRONIC PER ATTACHED SPECIFICATIONS	1	EA	_____	_____

PAGE TOTAL _____

BID TOTAL _____

SPECIFICATIONS

FOR

INSTALLATION OF ELECTRONIC SECURITY SYSTEMS

AT THE

Alabama Department of Rehabilitation

LOCATED IN

Montgomery, Alabama

SECURITY SYSTEM

SECTION 16500 SECURITY /CCTV SYSTEM

PART 1 GENERAL

1.01 SCOPE OF WORK

This section of the specifications requires the complete installation of the Security System as indicated on the drawings and or specified herein.

The listed work shall be performed pursuant to applicable national, state, and local regulations guidelines, and manufacturer's recommendations. The information is for the requirement of the installation of electronic equipment and may not be inclusive of all national, state and local regulations.

The Contractor and his employees while on the job site shall have in their possession a current license by the **Alabama Electronic Security Board of Licensure** and will be required to display such license as required by the AESBL upon request. Contractor shall comply with all regulations, whether stated or implied, and be experience in the satisfactory installation of at least three systems of this type and size.

The Contractor shall provide a security system for buildings located at 560 and 602 Perry Street, Montgomery, Alabama, including sensors to detect tampering or attempted removal of any Outdoor HVAC Units located on ground level inside fence areas. The system shall be individually zoned, electrically supervised, connected and tested per specification. Work shall include, but is not limited to the following:

- A. Furnish and install all equipment which includes, but is not limited to, Security Control Panel, LCD Keypads, Magnetic Contacts, HVAC Kit, Power Supplies, Control Relays, Wire, Boxes and any necessary miscellaneous materials to provide a complete and workable Security Systems that meets the requirements set forth in this document, NFPA 70, and manufacturers specifications,
- B. All wiring between Main Control Panel and each sensor shall be new and in accordance with manufacturers specification, wired in accordance to NFPA 70 and be protected from physical damage and rodents. In addition, all wiring outdoor shall be protected using weather proof boxes and weather resistant flexible EMT.
- C. All Splice points shall be soldered and covered with UL listed tape or heat shrink wrapping, wired using junction boxes and be marked on its plate "SEC" with a unique number to be identified on the AS -BUILT Workshop Drawings.

SECURITY SYSTEM

- D. All work shall be complete and ready to perform its intended function. The above general outline of principal features does not in any way limit the responsibility of the Contractor to perform all work and furnish all plans, labor and materials required by plans and specifications.
- E. All work shall be in accordance with applicable codes, regulations, and manufacturer's recommendations and performed in a neat and skilled manner with the site left free of all debris. It is the Contractor's responsibility to obtain all applicable permits.
- F. The system shall be programmed for scheduled "auto arm" and shall announce on each floor prior to arming. Contractor is to work with owner to interface telephone paging system to be used as an alternative method of announcement.
- G. Outdoor Sirens shall be housed in UL tamper resistant metal enclosures.
- H. Contractor is to familiarize themselves with the existing security system in building 602. If any existing devices are to be used with new control, all wiring shall be in accordance with this specification.
- I. No non-operational devices should be removed that would degrade the walls.
- J. Any penetration of fire walls shall be properly installed to maintain the fire wall rating.
- K. Security Systems shall be interfaced with CCTV System's PTZ Cameras. Contractor should consult with owner for proper configuration.

1.02 SITE INSPECTION

Contractor shall visit the work sites prior to bid preparations for thorough familiarizations of the existing conditions and scope of work. Failure by the Contractor to familiarize himself with the work and conditions shall not be grounds for additional compensation or extension of completion time.

During the work site visit, contractor will be presented with building plans showing the approximate location of electronic security components.

1.03 JOB CONDITIONS

The submission of a bid shall be taken as evidence that an examination has been made of the job site and difficulties, if any, reported to the Owner. Later claims for labor, work, materials, and equipment required for any difficulties encountered which could have been foreseen, shall not be recognized and all such difficulties shall be properly

remedied at no additional cost to the Owner.

All workmanship and materials must be approved by the Owner or his authorized representative before payment will be made.

SECURITY SYSTEM

1.04 TIME OF COMPLETION

All work must be complete and ready for use according to the time schedules given by Owner or his authorized representative after notice to proceed date.

1.05 WARRANTY

All workmanship and materials shall be guaranteed for a period on two (2) year in writing from date of acceptance or as required under each division of the specifications.

1.6 REFERENCES

A. Underwriters Laboratories (UL):

1. UL 609 – Local Burglar Alarm Units and Systems
2. UL 611 – Central Station Burglar-Alarm Units
3. UL 1076 – Proprietary Burglar Alarm Units and Systems
4. UL 1610 – Central Station Burglar-Alarm Units

B. Federal Communications Commission (FCC):

1. Code of Federal Regulations Title 47 - Part 15 – Radio Frequency Devices.
2. Code of Federal Regulations Title 47 - Part 68 – Connection of Terminal Equipment to the Telephone Network.

C. National Fire Protection Association (NFPA):

1. NFPA 70 – National Electrical Code.

1.07 SYSTEM DESCRIPTION

SECURITY SYSTEM

- A. The system shall be a Burglary Alarm System that includes the following capabilities:
 - 1. Listed for UL Commercial Burglary
 - 2. Supports up to 128 zones.
 - 3. Supports up to eight (8) separate partitions.
 - 4. Supports up to 150 users.
 - 5. Provides integrated security, access control, and CCTV switching capability.
 - 6. Provides supervision of peripheral devices.
 - 7. Supports up to 96 optional relay outputs.
 - 8. Supports long-range radio (LRR) communication.
 - 9. Provides scheduling capability to allow for automated operations.
 - 10. Supports up to eight (8) alphanumeric paging devices.
 - 11. Supports panel linking.
 - 12. Supports alarm reporting via Internet.
 - 13. Interfaces with automation software.
 - 14. Capable of being installed using existing wiring.
 - 15. Supports Isolation Modules to isolate specific groups of initiating devices as per plans.

- B. Any item may be substituted for the specified item provided that in every technical sense, the substituted item provides the same or better capability and functionality. The following is a list of Manufacturers that may provide the necessary requirements listed within this specification:
 - 1. Ademco Vista 128BP w/ Commercial Enclosure

1.8 SUBMITTALS

- A. General: Submittals shall be made in accordance with the Conditions of the Contract and Submittal Procedures Section.

- B. Shop Drawings and Schematics shall depict the Security System in final proposed “as built” configuration. The following must be provided:
 - 1. Connection diagrams for interfacing equipment.
 - 2. A list of connected equipment.
 - 3. Locations for all major equipment and components including but not limited to Class II Power Sources, EOL Devices, Audible Devices, and Junction boxes to be installed under this specification.

SECURITY SYSTEM

C. Product Data: The following shall be provided:

1. Technical data sheets.
2. A complete set of instruction manuals.

D. Quality Assurance Submittals: The following shall be submitted:

1. A completed NFPA 731, ed. 06', "Certification of Completion" form.

1.9 QUALITY ASSURANCE

- A. The alarm manufacture shall be certified as being compliant with ISO9001.
- B. The Contractor shall be a **Licensed Low Voltage General Contractor** by the State of Alabama to ensure proper installation of system. The contractor will provide a copy of this license with the bid.

1.10 TRAINING

- A. Operator training shall be conducted for a minimum of **1** session, with a session length of **2** hours at the customer's site.
- B. Training shall include, but not be limited to Arming/Disarming, bypassing, zone locations, alarm memory, trouble indication, reducing false alarms, changing user codes, adding user codes, changing user codes and procedures to following to change information with the Central Station.

PART 2

2.1 SYSTEM PERFORMANCE

- A. Control Panel - The control panel shall be an eight (8)-partition, **UL Commercial Burglary Control Panel with UL Grade Enclosure** that supports up to 128 zones using basic hardwired, polling loop, and

wireless zones. It shall also provide supervision of the bell output, RF receivers, and relay modules. In addition, the control shall provide the ability to schedule time-driven events, and allow certain operations to be automated by pressing a single button. The system shall be capable of interfacing with an ECP long range radio (LRR) unit that can send Contact ID messages, and alphanumeric paging devices.

1. Basic Hardwired Zones - The control shall provide nine (9) style-B hardwire zones with the following characteristics:
 - a. EOLR supervision (optional for zones 2-8): Shall support N.O. or N.C. sensors (**EOLR supervision shall be required for all zones**).
 - b. Individually assignable to one of eight (8) partitions.

2. Optional Expansion Zones:

- a. Polling Loop Expansion – The control shall support up to 119 additional hardwire zones using a built-in two-wire polling (multiplex) loop interface. The polling loop shall provide power and data to remote point modules, and constantly monitor the status of all zones on the loop. Maximum current draw shall not exceed 128 mA. The polling loop zones shall have the following characteristics:

- (1) Interface with Addressable Point Module devices that provide Class B, Style Y or a combination of Class B, Style Y, and Class A, Style zones.
- (2) Individually assignable to one of eight (8) partitions.
- (3) Supervised by the control panel.
- (4) A 12,000 ft (3658 m) wire runs capability without using shielded cable.
- (5) Each Addressable Point Module enclosure shall be tamper protected.

- b. Wireless Expansion – The control shall support up to 128 wireless zones using a RF receiver (fewer if using hardwire and/or polling loop zones). Wireless zones shall have the following characteristics:

- (1) Supervised by control panel for check-in signals (except certain non-supervised transmitters).
- (2) Tamper-protection for supervised zones.
- (3) Individually assignable to one of eight (8) partitions.
- (4) Supports wireless devices listed for **Commercial Burglary**

3. **Partitions** – The control shall provide the ability to operate eight (8) separate areas, each functioning as if it had its own control. Partitioning features shall include:

- a. A Common Lobby partition (1-8), which can be programmed to perform the following functions:
 - (1) Arms automatically when the last partition that shares the common lobby is armed.
 - (2) Disarms when the first partition that shares the common lobby is disarmed.
- b. A Master partition (9), used strictly to assign keypads for the purpose of viewing the status of all eight (8) partitions at the same time (master keypads).
- c. Assignable by zone.
- d. Assignable by keypad.
- e. Assignable by relay to one or all eight (8) partitions.
- f. Ability to display burglary, panic and/or trouble conditions at all other partitions' keypads (selectable option).
- g. Certain system options selectable by partition, such as entry/exit delay and subscriber account number.
- h. Buildings 602 and the 602 Annex shall be on the same partition as they are physically connected with a 3rd floor bridge. Building 560 will be on a separate partition.

4. User Codes – The control shall accommodate 150 user codes, all of which can operate any or all partitions. Certain characteristics must be assignable to each user code, as follows:

- a. Authority level (Master, Manager, or several other Operator levels). Each User Code (other than the installer code) shall be capable of being assigned the same or a different level of authority for each partition that it will operate.
- b. Opening/Closing central station reporting option.
- c. Specific partitions that the code can operate.
- d. Global arming capability (ability to arm all partitions the code has access to in one command).
- e. Use of an RF (button) to arm and disarm the system (RF key must first be enrolled into the system).

5. Peripheral Devices – The control shall support up to 30 addressable ECP devices, which can be any combination of keypads, RF receivers, relay modules, annunciator modules, and interactive phone modules. Peripheral devices have the following characteristics:

- a. Each device set to an individual address according to the device's instructions.
- b. Each device enabled in system programming.
- c. Each device's address shall be capable of supervision (via a programming option).

6. Keypad/Annunciator – The control shall accommodate up to 16 keypads or six (6) touch-screen (i.e., advanced user interface) keypads. The keypads shall be capable of the following:

- a. Performing all system arming functions.
- b. Being assigned to any partition.
- c. Providing four programmable single-button function keys, which can be used for:
 - (1) Panic Functions –activated by wired and wireless keypads; reported separately by partition.
 - (2) Keypad Macros –32 keypad macro commands per system (each macro is a series of keypad commands). Assignable to the A, B, C, and D keys by partition.

7. Optional Output Relays - A total of 96 relay outputs shall be accommodated using relay modules. Each relay module shall provide four (4) Form C (normally open and normally closed) relays for general purpose use or two (2) Class-B, Style-Y supervised notification appliance circuit outputs, when using the 4204CF module. The relays shall be capable of being:

- a. Programmed to activate in response to system events.
- b. Programmed to activate using time intervals.
- c. Activated manually.
- d. Assigned an alpha descriptor.
- e. A combination of (ECP) and (polling loop) relays.

8. Optional Vista Interactive Phone Module – The control shall support Modules, which permit access to the security system in order to perform the following functions:

- a. Obtain system status information.
- b. Arm and disarm the security system.
- c. Control relays.

9. Optional LED Annunciator – The control shall support annunciators, which are capable of:

- a. Visually identifying a zone or point that is in alarm or trouble.
- b. Programmable for system silence/reset.
- c. Up to 96 LED's may be used in one system.
- d. A total of four (4) FSA-24 or 12 FSA-8 annunciators may be used in one system.
- e. An optional key-switch shall be available for UL listed Silence and Reset capability.

- 10. Commercial Wireless Equipment** – The Control shall be compatible with UL Listed Commercial Wireless Security equipment including:
- a. Commercial Burg Receiver. – The receiver shall be capable of receiving as many points as the control panel is rated for. Up to two (2) Receivers may be used on any system. Receivers may be remotely located anywhere on the system Keypad/Annunciator bus.
 - b. Wireless Universal Contact Monitoring Transmitter - This device shall be capable of making any conventional UL listed contact device a wireless device. The device shall be UL listed as follows: UL 985 for fire and UL 365, 609, 1023, 1076 and 1610 for security and nurse call.
 - c. Wireless Hold Up Switch/Transmitter – This device shall be UL 636 listed for commercial burglary applications.
- 11. Optional Key-switch** – The control shall support a Key-switch on any one of the system's 8 partitions. If used, zone 7 is no longer available as a protection zone.
- 12. Voltage Triggers** – The system shall provide voltage triggers, which change state for different conditions. Used with LRR (Long Range Radio) equipment or other devices such as a remote keypad sounder, Key-switch ARMED and READY LED's, or a printer to print the systems event log.
- 13. Event Log** – The System shall maintain a log of different event types enabled in programming). The event log shall provide the following characteristics:
- a. Stores up to 512 events.
 - b. Viewable at the keypad or through the use software.
 - c. Printable on a serial including zone alpha descriptors.
 - d. Sends printed events to up to eight alpha numeric pagers.
- 14. Scheduling** - Provides the following scheduling capabilities:
- a. Open/close schedules (for control of arming/disarming and reporting).
 - b. Holiday schedules (allows different time windows for open/close schedules).
 - c. Timed events (for activation of relays, auto-bypassing and un-bypassing, auto-arming and disarming, etc.).
 - d. End User Output Programming Mode (provides 20 timers for relay control).
 - e. The system shall automatically adjust for daylight savings time.

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15. Communication Features - Supports the following formats and features for the primary and secondary central station receivers:

a. Formats

- (1) Ademco Low Speed (Standard or Expanded).
- (2) Sescoa/Radionics.
- (3) ADEMCO Express.
- (4) ADEMCO High Speed.
- (5) ADEMCO Contact ID.

b. Backup reporting – The system shall support backup reporting via the following:

- (1) Secondary phone number.
- (2) ECP long range radio (LRR) interface.
- (3) Option to select long range radio (LRR) or dialup as the primary reporting method (dynamic signaling feature).

c. Internet reporting – The system shall be capable of communicating with the central station via the internet. It shall provide the user with the ability to control the system via a browser interface (i.e., AOL, Netscape, and Internet Explorer). All packet data transmitted to the monitoring station shall be encrypted with a minimum of 1024 bits of encryption.

16. Audio Alarm Verification Option - Provides a programmable Audio Alarm Verification (AAV) option that can be used in conjunction with an output relay to permit voice dialog between an operator at the central station and a person at the premises.

17. Cross-Zoning Capability - Helps prevent false alarms by preventing a zone from going into alarm unless its cross-zone is also faulted within 5 minutes.

18. Pager Interface – The Control Panel shall be capable of sending event information to an alphanumeric pager via a VA-8201 pager interface device.

19. Exit Error False Alarm Prevention Feature – The System shall be capable of differentiating between an actual alarm and an alarm caused by leaving an entry/exit door open. If not subsequently disarmed, the control panel shall:

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- a. Bypass the faulted E/E zone(s) and/or interior zones and arm the system.
- b. Generate an Exit Error report by user and by zone so the central station knows it was an exit alarm and who caused it.

22. Built-in User's Manual and Descriptor Review - For end-user convenience, the control panel shall contain a built-in User's Manual. It shall include the following capabilities:

- a. By depressing any of the function keys on the keypad for five (5) seconds, a brief explanation of that function shall scroll across the alphanumeric display.
- b. By depressing the READY key for five (5) seconds, all programmed zone descriptors shall be displayed (one at a time). This feature shall provide a check for installers and ensure all descriptors have been entered properly.

23. Programming - The Control shall be capable of being programmed locally or remotely using Software and shall be capable of:

- a. Uploading and downloading all programming information at 300 baud.
- b. Uploading and displaying firmware revision levels from the control.

24. Panel Linking - The Control shall be capable of being networked together with up to eight other controls and being operated by any keypad within the system. It shall provide the ability for users to:

- a. Control multiple zones, partitions, and/or buildings from a central location.
- b. Check status, arm and disarm any partition from any keypad in the system.
- c. Globally arm or disarm partitions based upon user authority.

25. Automation Software - The Control shall be capable of interfacing with automation software via an RS232 input on a single partition. The control panel shall be the ADEMCO VISTA-128BP Commercial Burglary Partitioned Security System or equivalent. (Refer to 1.07-B)

26. Arming Notification – The system should alert everyone in the buildings when the security system is armed. There must be an audible and visual alert on every floor.

2.2 ENCLOSURE & DEVICES

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- A. **Vista ULKT – Commercial Enclosure** – The Vista 128 PC Board shall be installed in a Vista ULKT enclosure and all “Terminal Boxes” shall utilize **UL commercial grade**, metal cabinet, suitable for wall mounting. The dimensions shall not exceed 14.5 inches (36.8 cm) in height, 12.5 inches (31.8 cm) in width or 3 inches (7.6 cm) in depth.
- B. **Magnetic Sensors Concealed** – Sensor shall be a UL Listed 4944SN-WH Addressable Recessed Contact, 5/8” Gap, Epoxy sealed switch.
- C. **Magnetic Sensors Surface Mount** – Sensor shall be a UL Listed 4939SN-BR, Addressable, 1.25” Gap, Epoxy sealed switch housing.
- D. **HVAC Kit** – Sensor shall be a GRI-HVAC1K, Epoxy sealed switch housing.
- E. **Wireless Transmitter** – Transmitter shall be the same manufacturer of the control and be UL listed for commercial use.
- F. **Remote Panic Button** – US-HUB2 Series DPDT. The qualified equal will be Ademco or Amseco products.
- G. **Serial Input Module** – Micro-Miniature V-Plex Adapter shall include one supervised, one unsupervised input.
- H. **Power Supply** – Atronix 3 AMP SMP with 100VA Open Frame Transformer Power Supply. The qualified equal will be Honeywell. It is the responsibility of the Contractor bidding on job to calculate power supply/back up battery requirements and present these **calculations with submittals**.
- I. **VSI V-PLEX SHORT ISOLATOR** – Detects and isolates polling loop branches with complete or resistive shorts. UL 1610.

2.3 ELECTRICAL POWER REQUIREMENTS

- A. **System Power** – The Burglary Alarm System shall operate using standard 120 volts AC, 50/60 Hz power.
 - 1. Control Primary Power – Transformer power shall be 16.5 VAC, 40VA.
 - 2. Backup Battery – A rechargeable 12 VDC, gel type, lead acid backup battery shall be provided. The battery shall be rated between 7 and 34-ampere hours (AH).
 - 3. Alarm Power – Alarm power shall be 12 VDC, 1.7 amps for each bell output
 - 4. Auxiliary Standby Power – Standby power shall be 12 VDC, 750 mA maximum.
 - 5. Fusing – The battery input, auxiliary, and bell outputs shall be protected

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using PTC circuit breakers. All outputs shall be power limited.

2.4. ENVIRONMENTAL CONDITIONS

A. Environmental Conditions – The Fire and Burglary Alarm System shall be designed to meet the following environmental conditions.

1. Storage Temperature – The system shall be designed for a storage temperature of -10° C to 70°C.
3. Operating Temperature - The system shall be designed for an operating temperature of 0° C to 50°C (32° F to 120°F).
3. Humidity - The system shall be designed for normal operation in an 85% relative humidity environment.
4. Electromagnetic Interference – The system shall meet or exceed the requirements of FCC Part 15, Class B devices, FCC Part 68, IEC EMC directive.

PART 3

3.1 GENERAL

A. Submission of a proposal confirms that the Contract Documents and site conditions are accepted without qualifications.

3.2 Pre Wire

A. The Contractor upon completion of pre-wiring shall perform the following test on all field wiring.

1. The electrical resistance of all field conductors shall be measured. If any field conductor is found to be outside of the control manufacturers acceptable resistance or ampacity range, it shall be replaced.
2. An EOL (End of Line) resistor shall be placed after the last device on all zones or be manufactured within the sensor.
3. All field conductors prior to its termination at the control panel shall be checked for excessive resistance and ground faults. If excessive resistance or ground faults are indicated, corrective measures shall be taken to correct problem before termination and operation of system.

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3.03 INSTALLATION

- A. The System shall be installed and tested in accordance with the Manufacturer's Installation instructions. The following conditions are applicable:
1. In order to ensure a complete, functional System, for bidding purposes, where information is not available from the Owner upon request, the worst case condition shall be assumed.
 2. Interfaces shall be coordinated with the Owner's representative, where appropriate.
 3. All necessary back-boxes, pull-boxes and conduit, shall be furnished and installed by low voltage contractor Licensed by the State of Alabama to provide complete and reliable System installation. Exact location of all boxes, conduit, and wire runs shall be presented to the Owner or his representative for approval in advance of any installation.
 4. All connectors, cable, and wire shall be provided by contractor and installed according to all national, state and local regulations.
 5. All Conduit fill shall not exceed forty percent (40%). All wires shall be gathered and tied up to create an orderly installation.
 6. All splice points shall be solder and tape in accordance with industry practice standards. This includes where EOL devices are connected to field wiring.
 7. Magnetic Contacts shall be configured and wired to annunciate independently. Each sensor shall be addressable.
 8. Initiating circuit shall be wired in groups with isolation modules to isolated shorts from the rest of the initiating circuit. See block diagram.

3.4 TESTING AND CERTIFICATION

- A. The Contractor shall demonstrate the functionality of the System upon completion of installation, documenting the result of all tests and providing these results to the Owner. The System shall be tested in accordance with the following:
1. The Contractor shall conduct a complete inspection and test of all installed equipment. This includes testing and verifying connection to equipment of other Divisions.
 2. The Contractor shall provide staff to test all devices and all operational features of the System for witness by the Owner's representative and the Authority having jurisdiction. The Contractor shall provide two-way radio communications to assist in the testing. All testing must be witnessed by

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the owner's representative, prior to acceptance.

3. The testing and certification shall take place as follows:

1. System shall be tested in conjunction with the manufacturers representative.
2. All deficiencies noted in the above test shall be corrected.
3. Test results shall be submitted to the consultant or owner's representative.
4. System test witnessed by owner's representative and correction of any deficiencies noted.
5. The owner's representative shall accept the System.
6. A letter of certification shall be provided to indicate that the tests have been performed and all devices are operational.

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PART 4 GENERAL

4.01 SCOPE OF WORK

The listed work shall be performed pursuant to applicable national, state, and local regulations guidelines, and manufacturer's recommendations. The information is for the requirement of the installation of electronic equipment and may not be inclusive of all national, state and local regulations.

The Contractor and his employees while on the job site shall have in their possession a current license by the **Alabama Electronic Security Board of Licensure** and will be required to display such license as required by the AESBL upon request. Contractor shall comply with all regulations, whether stated or implied. Work shall include, but is not limited to the following:

- A. Furnish and install all equipment shown on the drawings which includes, but is not limited to, Digital Video Recorders, Color Cameras, Covert Cameras, Auto Iris Varifocal Lenses, Indoor/Outdoor Housings, Power Supplies, Connectors, Cable and Wiring that meets NFPA 70 and the Manufacturers specifications.
- B. All work shall be in accordance with applicable codes, regulations, and manufacturer's recommendations and performed in a neat and skilled manner with the site left free of all debris. It is the Contractor's responsibility to obtain all applicable permits.
- C. All work shall be complete and ready to perform its intended function. The above general outline of principal features does not in any way limit the responsibility of the Contractor to perform all work and furnish all plans, labor and materials required by plans and specifications.

4.2 SITE INSPECTION

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Contractor shall visit the work site prior to bid preparations for thorough familiarizations of the existing conditions and scope of work. Failure by the Contractor to familiarize himself with the work and conditions shall not be grounds for additional compensation or extension of completion time.

During the work site visit, contractor will be presented with building plans showing the approximate location of video security components.

4.03 **JOB CONDITIONS**

The submission of a bid shall be taken as evidence that an examination has been made of the job site and difficulties, if any, reported to the Owner. Later claims for labor, work, materials, and equipment required for any difficulties encountered which could have been foreseen, shall not be recognized and all such difficulties shall be properly remedied at no additional cost to the Owner.

All workmanship and materials must be approved by the Owner or his authorized representative before payment will be made.

4.04 **TIME OF COMPLETION**

All work must be complete and ready for use according to the time schedules given by Owner or his authorized representative after notice to proceed date.

4.05 **WARRANTY**

All workmanship and materials shall be guaranteed for a period on two (2) years in writing from date of acceptance or as required under each division of the specifications.

4.6 **REFERENCES**

1. Underwriters Laboratories (UL):
 - A. Canadian ICES-003
 - B. Consultative Committee for International Radio (CCIR)
 - C. Conformity for Europe (CE)
 - D. Electronic Industry Association (EIA)
 - E. Federal Communications Commission (FCC)
 - F. Joint Photographic Experts Group (JPEG)

- G. National Television System Committee (NTSC)
- H. Phase Alternation by Line (PAL)

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- I. Underwriters Laboratories Inc. (UL)
2. Federal Communications Commission (FCC):
 - A. Code of Federal Regulations Title 47 - Part 15 – Radio Frequency Devices.
 - B. Code of Federal Regulations Title 47 - Part 68 – Connection of Terminal Equipment to the Telephone Network.
- C. National Fire Protection Association (NFPA):
 1. NFPA70 – National Electrical Code.

4.7 SUMMARY

- A. The Digital Recording and Transmission system shall offer the latest in digital technology, providing unparalleled stability, security, and ease of use, with advanced algorithms, fast capture rates, and a unique, flexible Graphical User Interface (GUI).

4.8 DEFINITIONS

- A. No Substitutes: The exact make and model number identified in this specification shall be provided without exception.
- B. Or Equal: Any item may be substituted for the specified item provided that in every technical sense, the substituted item provides the same or better capability and functionality.
- C. Or Approved Equal: A substitute for the specified item may be offered for approval by the Owner. The proposed substitution must, in every technical sense, provide the same or better capability and functionality as the specified item. Such requests for approval shall be submitted in accordance with the provisions of PART 1.8 – SUBMITTALS, and must be obtained within the time frames outlined.

4.9 SYSTEM DESCRIPTION

- A. The Digital Recording and Transmission system shall offer the latest in digital technology, providing unparalleled stability, security, and ease of use, with advanced algorithms, fast capture rates, and a unique, flexible Graphical User Interface (GUI). Available in at a minimum a 32 channel configuration with recording capability up to 960/960 IPS (NTSC). The system is a complete analog digital video recording solution that can also be configured as a comprehensive hybrid network digital video recorder. The hybrid configuration will support analog

video simultaneously with IP video and display them in the familiar 32 channel, or greater, user interface. The combination of multiplexing, motion detection, audio, text insertion, image rates, mapping capabilities, and remote notification technologies shall provide an extremely flexible and reliable system.

B. Equal or approved Digital Video Recorders are listed as follows:

1. 4Max – MAX480CPH-32
2. Pelco – DSR321000
3. Honeywell – HF3248R500N

4.10 SUBMITTALS

A. General: Submittals shall be made in accordance with the Conditions of the Contract and Submittal Procedures Section.

B. Shop Drawings and Schematics: Shall depict the Digital Recording and Transmission system in final proposed “as built” configuration. The following must be provided:

1. Connection diagrams for interfacing equipment.
2. List of connected equipment.
3. Locations for all major equipment components to be installed under this specification.

C. Product Data: The following shall be provided:

1. Technical data sheets.
2. A complete set of instruction manuals.

D. Quality Assurance Submittals: The following shall be submitted:

1. Checkout Completion Report: The Contractor shall provide the Owner with a checkout report for each Digital Recording and Transmission system. The report shall include:
 - a. A complete list of every device.
 - b. The date it was tested, and by whom.
 - c. If retested, the date it was retested, and by whom.
 - d. The final test report shall indicate that every device was tested successfully.
 - e. A Letter of Certification of Completion.

E. Manufacturer’s Instructions: The Contractor shall deliver **TBD** sets of System Operation and Maintenance Manuals (if available) to the Owner.

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- F. Notice of Completion: When the final acceptance has been satisfactorily completed, the Owner shall issue a notice of completion to the Contractor.

4.11 QUALITY ASSURANCE

- A. Manufacturer's Qualifications: The Digital Recording and Transmission System's manufacturer shall provide technical assistance and support.

4.12 DELIVERY, STORAGE, AND HANDLING

- A. General: Delivery, storage, and handling of the Digital Recording and Transmission system shall be in accordance with the manufacturer's recommendations.
- B. Ordering: The manufacturer's ordering instructions and lead-time requirements must be followed in order to avoid installation delays.
- C. Delivery: The Digital Recording and Transmission system shall be delivered in the manufacturer's original, unopened, undamaged container with identification labels intact.
- D. Storage and Protection: The Digital Recording and Transmission system shall be stored and protected from exposure to harmful weather conditions and at the environmental conditions recommended by the manufacturer.

4.13 Converters

- C. PS/2 Keyboard Mouse Converter shall allow a standard Keyboard and Mouse to be connected to a PC up to 350' via Cat5 unshielded twisted pair cable in a point to point configuration. The Converter shall be a MuxLab PS/2 Keyboard Mouse Converter 500047 Kit or equivalent.
- D. Active VGA Balun shall allow VGA video to be transmitted via unshielded copper twisted cable in a point to point configuration. This product supports resolutions up to 1800X1440 for applications. The Converter shall be a MuxLab Active VGA Balun Kit or equivalent.

4.14 Monitors

- A. The monitor shall be a 19" TFT LCD Professional Display designed to work with multiplexers and digital recorders with a 1280 X 1024

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resolution. This product is designed specifically for video surveillance applications. The monitor shall be an AGNPRO EP Series EP19AV or equivalent.

4.15 Cameras

- A. Indoor cameras - shall be of the mini dome type encompassing the latest in color Digital Signal Processing (DSP) technology. The camera shall offer 1/3" format with 540 TV Lines of horizontal resolution and a minimum illumination of 0.7 lux. The lens shall be 3.7 – 12mm (F1.6) Vari-focal Auto Iris lens. The camera shall be a Honeywell 3" High Resolution Color Dome Camera VDN-495 or equivalent.

Hidden, covert, cameras shall be disguised as smoke detectors.

- B. Outdoor Fixed Camera – shall be a High Performance 1/2" format Digital CCD Color Camera based on unique 15 bit digital video processing technology and employing XF-Dynamic. The lens shall be a 1/2" format 4.5 – 10 mm DC iris, CS mount F 1.6 -360, 4 pin. The housing shall be for cameras/lens up to 10.3", 24 VAC heater, sunshield, feed through cabling. The camera shall be a Bosch/Philip Series 0610 or equivalent.
- C. CCTV cameras shall be UL listed and shall be the standard product of Bosch/Philip Autodome color modular camera system (Series 300) and complying with manufacturers A&E specifications or equal. Installation of each camera shall include mounting brackets and or camera housing and fully compatible with the camera provided. The PTZ camera shall be capable of 26X optical zoom Day/Night features. The camera shall be a Bosch/Philip VG4-323ECS, or equivalent, with appropriate mount.
- D. The Contractor shall complete the following:

1. Coordinate with other trades and or the Information Technology Department personnel in regards to network access for Digital Video Recorder, and equipment location prior to wiring.
2. Install cameras and Head-end equipment according to specification and plans provided.
3. Visually and physically check all camera connections
4. Power all camera and Head-End Equipment and adjust accordingly verifying proper operation of equipment and cameras.

4.16 WARRANTY

General: The warranty period shall be a minimum of thirty-six (36) months from the manufacture date code under normal use and service. Hard Drives are included in

this warranty. A letter of warranty shall be issued in writing from contractor to owner or his representative.

4.17 MAINTENANCE

- A. Preventative Maintenance Agreement During Warranty: As a separate price item, the Contractor shall provide preventative maintenance during the warranty period. Maintenance shall include, but not be limited to:
 - 1. Labor and materials, at no additional cost, to repair Digital Recording and Transmission system Digital Recorder.
 - 2. Labor and materials, at no additional cost, to provide test and adjustments to the Digital Recording and Transmission system Digital Recorder.
 - 3. Regular inspections.
- B. Preventative Maintenance Agreement: As a separate price item, the Contractor shall provide a complete Maintenance Agreement for a period of **24** months after the conclusion of the warranty period. The Maintenance Agreement shall include, but not be limited to:
 - 1. Labor and materials, at no additional cost, to repair Digital Recording and Transmission system Digital Recorder.
 - 2. Labor and materials, at no additional cost, to provide test and adjustments to the Digital Recording and Transmission system Digital Recorders.
 - 3. Regular inspections.

4.18 TRAINING

- A. Operator training shall be conducted for a minimum of **8** sessions, with a session length of **2** hours at the customer's site.
- B. Training shall include, but not be limited to Digital Recording and Transmission system operation and diagnostics.

PART 5 – PRODUCTS

5.1 SYSTEM PERFORMANCE

- A. The Digital Recording and Transmission System shall include, as a minimum, the following features/functions/specifications:

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1. The Digital Recording and Transmission System must be protected by a extensive support services, including, After-Sales Technical Assistance, access to Technical Online Support, and Online Training using web conferencing.
 2. The Digital Recording and Transmission System and its components shall be thoroughly tested before shipping from the manufacturer's facility.
 3. The Digital Recording and Transmission System shall utilize the same user interface, regardless of platform, offering compatibility across the entire series.
 4. The Digital Recording and Transmission System shall consist of three (3) major components:
 - a. Digital Recorder
 - b. Remote Video Software
 - c. Video Management Software
- B. The Digital Recorder shall include, as a minimum, the following features/functions/specifications:
1. The Digital Recorder shall be compatible with Local Area Networks (LAN) such as Ethernet, Token Ring, Cable Modems, DSL, FDDI, and IP over ATM, IrDA (infrared), Wireless.
 2. The Digital Recorder shall come preconfigured with a DHCP enabled IP address and subnet mask to allow for installation in many IP settings without the need to reconfigure TCP/IP settings.
 3. The Digital Recorder shall be available with at least thirty-two (32) BNC composite video inputs. All models must include corresponding BNC looping video outputs, with selectable termination via a dip-switch setting. The factory default setting of the dip-switches shall be termination on.
 4. The thirty-two (32) input Digital Recorder shall offer recording options of 240 or 480 ips, with real-time live video viewing of up to sixteen (16) images, each with 30 ips per camera.
 5. The Digital Recorder shall allow the user to adjust the resolution, quality, sensitivity, and number of images per second each camera will record. These adjustments shall be configurable per video input.

6. The Digital Recorder, regardless of number of inputs, shall offer the following on board storage hard drive capacity options with at least three removable drive bays:

- a. 2.0 Terabytes
- b. 1.5 Terabytes
- c. 1.0 Terabytes
- d. 750 Gigabytes
- e. 500 Gigabytes
- f. 250 Gigabytes

The Digital Recorder should ideally be configured in a RAID fashion so a drive failure would not cause the loss of any data.

There must be enough disk drive space that customer will have at least two weeks of video before data is overwritten.

- 6. The Digital Recorder must be designed to fit into a 19" EIA rack.
- 7. The Digital Recorder shall have, at a minimum, an internal 10/100 ethernet Network Interface Card (NIC) .
- 8. The Digital Recorder shall have the ability to easily backup important video to an internal or external media location, or an attached network storage device. The unit must not stop recording during the backup process.
- 9. The operator shall be able to monitor the status of the recording process by viewing a backup progress bar displayed on the main display screen. The backup progress bar must automatically disappear from the main screen when the backup function has been completed successfully. The unit must feature a "Scheduled Backup" option, allowing the operator to schedule the backup of video by date and time.
- 10. When backing up the video to a CD, the unit shall include the ability to record the video on to multiple CD's, automatically prompting the user to insert the next CD when the previous CD is full.

11. JPEG images exported from the digital recorder must be automatically digitally signed to verify the authenticity of the image, and ensure they have not been tampered with or edited in any way. A digital signature verification program must be supplied with the digital recorder for installation on any computer. Using this program, the operator shall simply input the site code of the digital recorder that the image was originally extracted from, and press verify. If the image has not been tampered with, the program shall display the message “original image file”. If the image has been tampered with, the program must draw a red square around the image and display the message “entire image changed” or “wrong site code”.
12. The digital recorder shall incorporate advanced hardware watchdog circuitry for unsurpassed system reliability.
13. The digital recorder must be compatible with multiple vendor IP video cameras providing at least eight (8) IP camera inputs in addition to the analog camera inputs already specified.
14. The Digital Recorder shall include backup viewer software, allowing the user to playback the exported video in its proprietary format on a PC. The backup viewer must have essentially the same search features as the digital recorder’s software.
15. The Digital Recorder must include a CD-RW recorder and two (2) front accessible USB inputs as standard.
16. The Digital Recorder shall include a minimum of the following front panel controls, devices, and LED’s:
 - a. CD-RW Drive
 - b. Power LED
 - c. Two USB inputs
17. The Digital Recorder shall include a minimum of the following rear-panel connectors:
 - a. BNC Connectors for Camera Inputs and Looping Outputs
 - b. 75-Ohm termination dip-switches
 - c. Sensor/Alarm Inputs
 - d. Control Outputs
 - e. 110V/220V auto-switching power-supply
 - f. PS/2 Mouse Input
 - g. PS/2 Keyboard Input
 - h. USB Ports
 - i. Audio Line In
 - j. Audio Microphone In

- k. S-Video Output (on Real Time models)
- l. SVGA Monitor Output
- m. RS-422/485 Interface (with RX, TX, and Operation LED's)
- n. RCA Video Out
- o. RCA Audio Inputs
- p. RJ-45 Network Jack (with Activity and Link LED's)

18. An optional TV Out card must be available from the manufacturer of the Digital Recorder to provide four analog video outputs on the back of the unit. The outputs shall be programmable to sequence through any number of cameras, and the operator shall have the ability to temporarily stop the defined sequence and manually select a camera to the output. The

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sequence must be easily reactivated by simply enabling the sequence again.

19. All Digital Recorders shall include the following components from the manufacturer:
 - a. PS/2 Mouse
 - b. PS/2 Keyboard
 - c. DVR Repair Disc
 - d. Remote Video Software Disc
 - e. Power Adapter
 - f. PTZ Adapter
 - g. Rack mount attachments with screws
 - h. DVR key
 - i. User Manual

20. The Digital Recorder shall come pre-configured for fast and seamless integration within existing IT infrastructures. The unit must offer the following network setup options:
 - a. The ability to enable or disable access to the digital recorder from remote locations.
 - b. A designated time-out period that the connection will be terminated after unsuccessful user attempts to connect to the digital recorder.
 - c. An Emergency port used to connect with the Alarm Monitor Software.
 - d. A primary port used to connect to remote software.
 - e. An Image port used to transfer video to the remote software.
 - f. A Search port, used to transfer search information to the remote software.
 - g. The ability to enable or disable access by the Web Viewer Software, allowing a user to view live video using a Microsoft Internet Explorer browser.
 - h. The ability to adjust the resolution setting when sending video to remote clients.
 - i. The ability to throttle the bandwidth of the digital recorder to ensure that images and system messages are delivered as quickly as possible within the capabilities of the network's available bandwidth.
 - j. The ability to define the modem and PPP information to dial to a remote client when an Alarm Event is activated.
 - k. The ability to view the IP configuration of the digital recorder.

21. The Digital Recorder must include an Alarm log to record and display information pertaining to alarm events, an Event log to record and display information pertaining to user logins, digital recorder reboots, and other related information, and a System log to record/display hardware information pertaining to scan disks, system recording successes and

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failures, and other related information. The user shall have the ability to export the log information in one (1) week increments.

22. The Digital Recorder shall include a User Management Console, which allows the user to create, edit, and delete user accounts. Each account can be assigned different privileges that limit the usage of the system. Privileges shall include, but not be limited to, the following functions:
 - a. Search
 - b. Setup
 - c. Pan/Tilt
 - d. Backup
 - e. Shutdown
 - f. Intensive
 - g. Forbidden Cameras
 - h. User Ranking
 - i. Auto Log Off
23. To make managing a large amount of units easy and organized, the Digital Recorder must allow the option of utilizing a Central User Management System. This option shall allow, from one location, the creation, deletion, and management of user accounts on multiple unit. The user accounts can be modified from any Digital Recorder as well as the Management Station. Any changes made on a unit must be sent to the Management Station for broadcast to all units.
24. The Digital Recorder shall include a hidden camera feature, which allows an administrator to hide certain cameras from a user. The camera must still be recorded, but the user will not be able to view the cameras in live or search mode.
25. The Digital Recorder shall allow the user to view the following system information:
 - a. Video format of the digital recorder (NTSC or PAL).
 - b. Software version of the digital recorder.
 - c. The user specified unique identification name used by other software to connect to the digital recorder.
 - d. The serial number of the digital recorder.
 - e. A user specified contact number.
 - f. Digital recorder manufacturer's technical support number.
 - g. A note space for the user to type in any details about the system.
26. The sixteen (16) and thirty-two (32) input digital recorder shall include sixteen (16) sensor inputs, for use with devices such as motion detectors, glass breakage alarms, door and window sensors, etc., and the inputs must be configurable via software for Normally Open (NO), or Normally

SECURITY SYSTEM

Closed (NC). The operator shall have the option of displaying a sensor status bar on the main display screen, and when the operator places the mouse pointer directly over a sensor, the associated sensor title must be displayed on the screen.

27. The digital recorder shall include the capability of recording two (2), four (4), eight (8) or sixteen (16) of channels “Line-In” type audio (depending on model). The data size (per channel) shall be no more than 1,625 bytes per second.
28. During power-up, the digital recorder shall run a series of self-tests, and display messages as the various hardware and software sub-systems are activated. After power-up, the digital recorder’s software must load automatically and display the main screen.
29. The digital recorder’s main video display screen shall include a minimum of the following buttons and features:
 - a. Loop/Full Screen: Allows the operator to view the video display area using the entire viewing area of the monitor. The operator may also sequence through selectable screen division’s sets, with an adjustable dwell time to specify the amount of time that elapsed before switching to the next screen division group.
 - b. Second 16: On 32 channel units, displays the second set of sixteen (16) cameras.
 - c. First 16: On 32 channel units, displays the first set of sixteen (16) cameras.
 - d. Date/Time: Displays the current date and time. This date/time shall also be “stamped” into the recorded video and displayed whenever the video is played back.
 - e. Search: Displays the search features that allow the operator to search previously recorded video.
 - f. PTZ: Opens the options for controlling PTZ enabled cameras.
 - g. Setup: Accesses the set-up menu from which all customizable settings can be edited.
 - h. Backup: Opens the backup options.
 - i. Login: Allows the login of a different user.
 - j. Exit: Allows Shut Down, Restart, Log On, Log Off and Restart in Windows Mode.
 - k. Current User: Displays the name of the user currently logged in to the digital recorder.
 - l. Remote Client Status: Displays whether anyone is connected remotely to the digital recorder.
 - m. Sensor Status Bar: Displays the sensor status for each camera that is set up to use sensors.

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- n. Control Output Status and Activation Bar: Displays the output status and allows the user to activate an output relay.
 - o. Screen Division Buttons: Allows the user to select the desired screen division to the video display area.
30. The camera status for each camera shall be displayed next to the camera number (or name) in the video display area. The information must include:
- a. Camera number and custom name.
 - b. Recording status, which must show whether a camera is currently being recorded, whether a camera that has been set up for motion only recording is currently being recorded, or whether a camera is NOT currently being recorded.
 - c. Special recording status, which must indicate whether a camera's associated sensor has been activated, and/or when the user activates the instant recording option for the selected camera.
31. The following screen division sets shall be available to the operator of the digital recorder:
- a. Display the first four videos (1-4) in the video display area.
 - b. Display the next four videos (5-8) in the video display area.
 - c. Display the next four videos (9-12) in the video display area.
 - d. Display the next four videos (13-16) in the video display area.
 - e. Display videos one through nine (1-9) in the video display area.
 - f. Display videos eight, nine, ten through sixteen (8, 9, 10-16) in the video display area.
 - g. Display all sixteen (16) videos in the video display area.
32. The digital recorder shall allow for user definable, descriptive camera names of up to fourteen (14) alpha-numeric characters. The font size must be adjustable, and the option to bold the characters must be available.
33. To optimize the clarity and detail of recorded video, the digital recorder shall have the ability to adjust each video input's brightness, contrast, and hue. The user must be able to easily return the video settings to the system's default, either individually or all at once, with a simple mouse click.
34. The digital recorder shall incorporate advanced video motion detection, including the ability to create at least five (5) motion detection regions, with adjustable sensitivity, per video input, utilizing "click and drag" of the system mouse. Each region must be resizable by dragging the sides and/or corners, and the operator shall have the ability to move each region anywhere within the setup area. The user must be able to easily remove all motion regions from the setup area with a simple mouse click.

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35. When motion occurs in programmed detection region, a colored box shall be displayed on the main screen around the region where the motion occurred.
36. The digital recorder shall include the option of displaying the associated video full screen upon a motion or sensor event, and enabling an audio alarm. The audio alarm shall be either a default beep, or a custom created sound file (.wav), unique to the application. The sound file shall be played through speakers attached to the digital recorder.
37. The digital recorder shall include the ability for pre-alarm and post-alarm recording, which must record video for a specified time before and/or after a motion or sensor alarm has occurred. The time period must be selectable from one (1) to sixty (60) seconds.
38. The digital recorder shall incorporate a “Regular Interval Recording” feature, allowing the unit to record a single frame every few seconds, every few minutes, every few hours, etc... to show that the unit is still functioning even when motion is not taking place. The amount of time must be user programmable. This option shall only work when motion recording or sensor recording is selected.
39. The digital recorder shall include intensive recording, which allows the programmer to increase the pictures per second of any camera when a sensor or motion alarm event occurs.
40. The digital recorder must include a video loss alarm function to allow an alarm event to occur when a camera loses signal for any reason (e.g. power failure, cable being cut, camera damage, etc...). When a video loss event occurs, the operator shall have the option to enable an alarm beep utilizing the internal speaker of the digital recorder, and/or activate an alarm output.
41. The digital recorder must include Alarm Monitor software to stream video across a LAN to a client PC when an alarm is detected on the unit. The operator shall have the ability to stop, play forward and backward, frame by frame or real speed, the video that streams across. The program shall automatically load at startup and appear in the taskbar. It must constantly monitor for a signal from the digital recorder, and when an alarm signal is detected The Alarm Monitor must notify the operator of an event via a pop-up message window. An alarm beep must also be activated to alert the user. The Alarm Monitor image viewer shall also allow the user to search through past events that have been recorded on the client PC.
42. To increase the amount of pertinent video that is saved by the digital recorder, and to keep it for a longer period of time, the operator must have

SECURITY SYSTEM

the ability to utilize recording schedules. For general installations, pre-defined schedules with basic configurations shall be standard. Up to thirty-two (32) user- definable recording schedules to maximize the recording efficiency of the digital recorder must also be available. Schedules may be defined by the following:

- a. Day of Week.
 - b. Time of Day
 - c. Camera Number
 - d. None, Continuous, Sensor Input, or Motion Recording
 - e. Relay Output(s) Activation
43. Each of the digital recorder's thirty-two (32) detailed customized schedules shall allow the operator to "link" camera(s) and relay output(s) activation to particular sensor input(s). The schedules can be activated by date/time, motion alarms, and/or sensor inputs. Advanced options must also be available that allows the user to send alarm events, either motion or sensor activated, to the remote emergency agent software or the video management software.
44. Instant recording must be available to manually start a camera recording, superseding the current schedule. This recording shall be started with a simple double right-click of the mouse on the desired video image, and the label "INSTANT" shall be placed on the upper right corner of the video. When this manual recording is activated, it must automatically flag the specific video so that an index search can be performed at a later date for easy retrieval.
45. The digital recorder shall have the ability to export single images in the JPG file format, save video clips in the AVI format, or output to a VCR using the S-Video port. A digital signature must be attached to every JPG and AVI file exported by the unit for use with the bundled Digital Verifier application. This function must be unique to the unit and its verification software and shall not interfere with viewing files using other applications.
46. The digital recorder shall incorporate an internal RS-422/RS-485 adapter, with the ability to control multiple pan/tilt/zoom (PTZ) cameras. Depending on the model, control must include multiple pan, tilt, zoom, and focus speeds, iris control (including return to auto-iris), focus control (including return to auto-focus), programming presets, and viewing presets. When an operator places the mouse pointer directly over a preset, the associated preset title must be displayed on the screen.
47. The digital recorder shall include on-screen play controls to playback the recorded video frame by frame (either forward or reverse), or play at normal speed (either forward or reverse). An on-screen hour/minute slide

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control bar must also be available to allow the operator to select the hour and minute of the desired video. The slide bar must be controlled either by clicking and dragging the slider, or using the wheel on the manufacturer supplied mouse.

48. The digital recorder shall offer on-screen brightness controls to brighten up an image to get more detail, zoom controls to allow the user to digitally zoom in on an image, and speed controls to increase or decrease the playback speed. When recording images with extensive motion using 720x480 resolution, the unit shall offer the option of interweaving two frames to create a smooth detailed image, alleviating the “digital blur” that can interfere with the quality of the video when recording high speed moving images. This feature shall be activated with a simple mouse click.
49. The digital recorder shall include a time synchronization option, allowing a single channel of video to playback in real-time.
50. The digital recorder shall allow the operator to perform an index search based upon motion detection, sensor activation, instant record events, and/or ATM/POS transactions, greatly reducing the amount of time required to search through saved video. When searching ATM/POS events, the user must have the option of searching for a specific transaction number, or searching for all transactions. A simple double-click on any one of the search results shall retrieve the associated segment of video.
51. The digital recorder shall include the ability to provide a twenty-four (24) hour visual overview of a single camera by separating a twenty-four (24) hour period into twenty-four (24) images, each representing the first second of each hour. The operator must then have the ability to further narrow the search down to ten (10) minute and one (1) minute increments by simply double-clicking a displayed image.
52. The digital recorder must allow the operator to specify a region on an image and perform a search based upon any motion that had occurred in that region. To indicate the progress of the search being performed, a status bar shall be displayed on the screen. The search results must be displayed in a separate column, listed by date and time. A simple double-click on any one of the search results shall retrieve the associated segment of video.
53. The digital recorder shall automatically adjust for Daylight Savings Time changes, with no loss of video when the hour jumps forward. When the hour falls back, the unit shall record both duplicated hours, and allow the operator to select which duplicated hour to play back.

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The digital recorder shall allow the user to print a recorded image to a local or network printer, utilizing the printing options of the available printer.

The digital recorder shall allow for exporting single images in the JPEG file format, and saving video clips in an AVI format. This shall allow compatibility with any PC that supports these file formats. The AVI setup must allow the user to enter a record duration and image quality setting as well as the desired codec from a pre-defined list.

C. The Remote Video Software shall include, as a minimum, the following features/functions/specifications:

1. The remote viewing software shall allow a user to fully operate and maintain the Digital Recorder remotely, and must connect using standard TCP/IP protocol through connection types such as DSL, Cable Modems, T1, ISDN, LAN, or 56K dial-up connections.

2. The remote software shall provide the user with most of the features and functions available at the local Digital Recorder. The remote features and functions must include viewing live video, searching through archived video, exporting images and video clips, and virtually all setup functions.

3. The remote video software shall allow up to five (5) users to simultaneously connect to a single Digital Recorder. Each user can perform functions on the unit and not effect the other users. The unit shall only allow one user to access the setup and PTZ functions at any given time.

4. To ensure that only authorized personnel are allowed to log in to the Digital Recorder, the remote video software shall utilize user accounts with assigned privileges, allowing or denying access to different functions.

5. The remote video software must be included with each unit, with the following minimum requirements:

- a. Pentium IV 2.0 GHz or Equivalent
- b. 256MB System Memory
- c. DirectX 9 or Higher
- d. Compatible Video Card
- e. Internet or LAN Connection
- f. TCP/IP Installed
- g. Microsoft Windows® 2000, or XP OS
- h. 1024 x 768 Display Resolution
- i. 32 Bit Color Depth or Better

PART 6 – EXECUTION

6.1 EXAMINATION

- A. Submission of a proposal confirms that the contract documents and site conditions are accepted without qualifications unless exceptions are specifically noted.
- B. The site shall be visited on a regular basis to appraise ongoing progress of other trades and contractors, make allowances for all ongoing work, and coordinate the requirements of this contract in a timely manner.
- C. The Digital Recording and Transmission system must be inspected before installation, and shall be free of any cosmetic defects or damage.

6.2 PREPARATION

- A. Prior to installation, the Digital Recording and Transmission system shall be configured and tested in accordance with the manufacturer's instructions.

6.3 INSTALLATION

- A. The Digital Recording and Transmission system must be installed, programmed, and tested in accordance with the manufacturer's instructions.
 - 1. In order to ensure a complete, functional Digital Recording and Transmission system, for bidding purposes, where information is not

SECURITY SYSTEM

available from the Owner upon request, the worst-case condition shall be assumed.

2. Interfaces shall be coordinated with the Owner's representative, where appropriate.
3. All necessary back boxes, racks, connectors, supports, conduit, cable, and wire must be furnished and installed to provide a complete and reliable Digital Recording and Transmission system installation. Exact location of all boxes, conduit, and wiring runs shall be presented to the Owner for approval in advance of any installation.
4. All conduit, cable, and wire shall be installed parallel and square with building lines, including raised floor areas. Conduit fill shall not exceed forty percent (40%). All wires shall be gathered and tied up to create an orderly installation.
5. Covert cameras shall be installed during the period of time when the building is not occupied. Contractor shall confer with owner the types of covert cameras along with their exact locations prior to bid. See plans for areas of protection.

6.4 TESTING AND CERTIFICATION

- A. The Contractor shall demonstrate the functionality of the Digital Recording and Transmission system upon completion of installation, documenting the result of all tests and providing these results to the Owner. The Digital Recording and Transmission system shall be tested in accordance with the following:
 1. The Contractor shall conduct a complete inspection and test of all installed Digital Recording and Transmission system equipment. This includes testing and verifying operation with connected equipment.
 2. The Contractor shall provide staff to test all devices and all operational features of the system for witness by the Owner's representative and the Authority Having jurisdiction. All testing must be witnessed by the Owner's representative, prior to acceptance.
 3. The testing and certification shall take place as follows:
 - a. The Digital Recording and Transmission system shall be tested in conjunction with the manufacturer's representative.
 - b. All deficiencies noted in the above test shall be corrected.

SECURITY SYSTEM

- c. Test results shall be submitted to the consultant or Owner's representative.
 - d. The test and correction of any deficiencies shall be witnessed by the owner's representative, and note.
 - e. The Owner's representative shall accept the system.
 - f. The system test shall be witnessed by the Authority Having Jurisdiction. Any deficiencies noted during the testing must be corrected.
4. A letter of certification shall be provided to indicate that the tests have been performed, and all devices are operational.

PART 7 SUMMARY OF MAJOR COMPONENTS REQUIRED

7.1 BUILDING 560

6	Motion detectors
6	Door contacts
3	Keypad
20	HVAC tilt switch
4	Siren
1	Speaker
1	Remote panic button
4	Indoor fixed dome camera
2	Outdoor PTZ camera
1	Digital Video Recorder
1	DVR monitor

7.2 BUILDING 602

5	Motion detectors
7	Door contacts
2	Keypad
7	HVAC tilt switch
2	Siren
6	Indoor fixed dome camera
6	Indoor covert camera
1	Outdoor fixed camera
5	Motion detectors

7.3 BUILDING 602 ANNEX

3	Motion detectors
3	Door contacts
2	Keypads
1	Siren
1	Speaker
3	Indoor fixed dome camera
2	Indoor covert camera
2	Outdoor PTZ camera
1	Digital Video Recorder
1	DVR monitor
3	Motion detectors

END OF SECTION

Invitation to bid 09-R-2208763

Page 13, 2.1, A, 26 The system must alert everyone in the buildings when the security system is armed. There must be an audible and visual alert on every floor. Building 560 and buildings 602/602 Annex shall be alerted independently. The audible alert may be either a recorded message or a digitized voice.

Page 14, 2.2, B Magnetic sensors concealed - Sensor shall be be a UL listed addressable recessed contact, 5/8" gap, epoxy sealed switch, high security.

Page 14, 2.2, C Magnetic Sensors Surface Mount – Sensor shall be a UL listed, Addressable, 1.25" gap, epoxy sealed switch housing, high security.

Page 14, 2.2, J (New) Motion detectors shall be dual technology; infrared and microwave.

Page 14, 2.2, K (New) Sirens/Speakers – The sirens and speakers specified on the plans may be combined into one unit that can perform these features.

Page 16, 3.03, A. 2 Interfaces to other systems (i.e., entry control, video surveillance, etc.) shall be coordinated with the Owner's representative where appropriate.

Page 16, 3.03 A. 9.(New) Any above ceiling wiring must use plenum rated wiring/cable

Page 16, 3.03, A, 10 (New) HVAC sensors shall be combined into one zone.

Page 21, 4.9 A The Digital Recording and Transmission system shall offer the latest in digital technology, providing unparalleled stability, security, and ease of use, with advanced algorithms, fast capture rates, and a unique, flexible Graphical User Interface (GUI). Available at a minimum 16 channel configuration with recording capability up to 960/960 IPS (NTSC). The system is a complete analog digital video recording solution that can also be configured as a comprehensive hybrid network digital video recorder. The hybrid configuration will support analog video simultaneously with IP video and display them in the familiar 32 channel, or greater, user interface. The combination of multiplexing, motion detection, audio, text insertion, image rates, mapping capabilities, and remote notification technologies shall provide an extremely flexible and reliable system. There shall be one DVR in each building for a total of three recording devices.

Page 24, 4.15, A Indoor cameras – shall be of the mini dome type, some enclosed in vandal resistant enclosures, encompassing the latest color Digital Signal Processing (DSP) technology. The camera shall offer 1/3" format with 540 TV Lines of horizontal resolution and a minimum illumination of 0.7 lux. The lens shall be a Honeywell 3" high resolution color dome camera VDN-495 or equivalent. Hidden, covert, cameras shall be disguised as functional motion detectors.

Page 24, 4.15, B Outdoor fixed camera – shall be a high performance 1/2" format digital CCD color camera based on digital video processing technology. The lens shall be a 1/2" format 5-50mm auto iris, CS mount f1.6-360, 4pin. The housing shall be for camera/lens up to 10.3", 24 VAC heater, sunshield, feed through cabling.

Page 25, 4.17, A. Preventative Maintenance Agreement during warranty: The Contractor shall provide preventative maintenance during the warranty period. Maintenance shall include, but not be limited to:

Page 25, 4.17, A. 1. Labor and materials, at no additional cost, to repair the digital video recording (DVR) device and provide a loaner DVR in the event the device must be shipped off for repair.

Page 25, 4.17, A, 3 Inspections and adjustments to occur at quarterly intervals.

Page 25, 4.17, A, 4 (New) Labor and materials, at no addition cost, to repair or replace any faulty camera or camera component.

Page 26, 5.1, B, 4 The sixteen (16) input, or greater, Digital Recorder shall offer

recording options of 240 or 480 ips with real-time live video viewing of up to sixteen (16) images, each with 30 ips per camera.

Page 27, 5.1, B, 6 The Digital Recorder, regardless of number of inputs, shall provide at least 1TB of recording storage capacity and must provide, at a minimum, two weeks of recorded video storage.

Page 27, 5.1, B, 6(second) The digital recorder must be designed to fit into a 19” EIA rack OR must be capable of being placed on a shelf mounted in a 19” EIA rack.

Page 39, 6.3 A. 6.(New) Any above ceiling wiring/cabbling must use plenum rated wiring/cable

Page 39, 6.3, A. 7 (New) All video cameras and devices must be properly grounded to prevent lightning damage. This includes internal and external equipment.

Page 39, 6.3, A. 8 (New) Any electrical outlets, or other commercial power needs, must be included in the bid price.

Page 40, 7.1
BUILDING 560

8	Motion detectors
3	Door contacts
4	Keypad
20	HVAC tilt switch
5	Indoor Siren
1	Speaker
1	Remote panic button
4	Indoor fixed dome camera
1	Outdoor PTZ camera
3	Outdoor fixed camera
1	Digital Video Recorder
1	DVR monitor
1	Outdoor siren

Page 40, 7.2
BUILDING 602

11	Motion detectors
8	Door contacts
2	Keypad
10	HVAC tilt switch
3	Indoor Siren
4	Indoor fixed dome camera
8	Indoor covert camera
2	Outdoor fixed camera

1	Digital Video Recorder
2	Indoor fixed dome camera, vandal resistant

Page 41, 7.3

BUILDING 602 ANNEX

3	Motion detectors
3	Door contacts
2	Keypads
3	Indoor Siren
1	Indoor Speaker
1	Outdoor fixed dome camera
2	Indoor fixed dome camera
3	Indoor covert camera
4	Outdoor fixed camera
1	Digital Video Recorder
1	DVR monitor
1	Outdoor Siren
1	Remote Panic Button



INVITATION TO BID NO: 2208763 ADDENDUM NO: 01

STATE OF ALABAMA
DEPARTMENT OF FINANCE
DIVISION OF PURCHASING

REQ. AGENCY : 087000
DEPT OF REHABILITATION SERVICES
AGENCY REQ. NO. : 0935623
T-NUMBER :
DATE ISSUED : 08/14/09
VENDOR NO. :
VENDOR PHONE NO. :
SNAP REQ. NO. : 1421414
BUYER NAME : JENNIFER LORETZ
BUYER PHONE NO. : (334) 242-7370

INVITATION TO BID ADDENDUM

FOR: SECURITY SYSTEM - 0935623

BID MUST BE RECEIVED BEFORE:
DATE: 08/20/09 TIME: 5:00 PM

BIDS WILL BE PUBLICLY OPENED:
DATE: 08/21/09 TIME: 10:00 AM

PLEASE READ ALL INSTRUCTIONS CAREFULLY

THE FOLLOWING CHANGES ARE HEREBY ADDED TO AND MADE A PART OF
(INVITATION TO BID NUMBER 2208763)

THE PURPOSE OF THIS ADDENDUM IS TO AMEND/INCLUDE THE INFORMATION IN
THE ATTACHMENT (2208763-ADDENDUM01REHABSVS.PDF)

THE BID RETURN AND BID OPEN DATES REMAIN THE SAME.

THE ADDEDNUM MUST BE SIGNED AND RETURNED. FAILURE TO DO SO WILL
RESULT IN BID REJECTION. THE COPY REQUIREMENT ON PAGE 2 OF THE
ORIGINAL ITB ALSO APPLIES TO THE ADDENDUM.

* * * * * END OF ADDENDUM * * * * *

STATEMENT OF UNDERSTANDING

I UNDERSTAND THE ADDENDUM AND THAT IT MUST BE SIGNED IN INK AND RETURNED
(UNLESS INDICATED OTHERWISE) WITH THE BID OR SEPARATELY, PROPERLY IDENTIFIED AND
RECEIVED PRIOR TO DATE AND TIME SPECIFIED.

ADDENDUM NOTARIZATION
NOT REQUIRED

COMPANY NAME

AUTHORIZED SIGNATURE (INK)

MAIL ADDRESS

TYPE/PRINT AUTHORIZED NAME

CITY, STATE, ZIP

PHONE INCLUDING AREA CODE