

## **Platte County R-3 School District**

Platte County High School Electronic Security System Upgrades

Request for Proposal (RFP)

November 6th, 2018

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#### **Notice to Bidders**

The Platte County R-3 School District wishes to obtain bids for Platte County High School Electronic Security Upgrades.

The Platte County R-3 School District will receive sealed proposals from Bidders until December, 6th, 2018, at 2:00 p.m., at which time, the bids received will be opened.

The Platte County R-3 School District reserves the right to reject any or all bids and to waive informalities or irregularities in bids. Any and all substitutions must be pre-approved by Platte County R-3 School District.

Each sealed bid shall contain Bid Proposal, e-Verify and Bidders Qualification; forms for each are attached to this RFP.

#### Bids shall be in sealed envelopes labeled:

Platte County R-3 School District
Platte County High School Electronic Security Upgrades
Mr. Jay Harris
Executive Director of Operations
Platte County R-3 School District
998 Platte Falls Road
Platte City, MO 64079

Bids received after the time and date above specified shall be returned, unopened, to the Bidder.

Any questions related to this RFP or bid requirements, please contact:

Mr. Jay Harris 816.858.5420 harrisj@platteco.k12.mo.us

#### **Instructions to Bidders**

**PROPOSALS:** All proposals must be made on the forms provided herein. All proposals must be legibly written. No alterations in proposals or in the printed forms will be acceptable unless each alteration is signed by the Bidder. No alterations or physical changes shall be made by anyone, in any bid, after its submission by the Bidder.

**SIGNATURE OF BIDDERS:** Each Bidder shall sign a proposal, using the customary name under which the Bidder does business, utilizing the customary signatures of an authorized representative, and providing a full business address, including identity of any registered or local agent.

**WITHDRAWAL OF BID:** A Bidder may withdraw its proposal at any time prior to the expiration of the time and date during which proposals may be submitted, by written request submitted by the Bidder to the Platte County R-3 School District. A Bidder may correct any mistakes in its bid by submitting a written request to the Platte County R-3 School District, provided the written request is made and the bid is corrected and resubmitted prior to the expiration of the time and date during which proposals may be submitted.

**BID PROPOSAL INSTRUCTIONS:** A Bidder shall submit a completed Bid Proposal Form. Each project is identified on the Bid Proposal Form

**INSURANCE:** Contractor shall provide certificates of insurance and renewals thereof on standard ACORD forms. This inclusion shall not make the Platte County R-3 School District a partner or joint venture with the Contractor in its operations hereunder. The School District shall be notified by receipt of written notice from the insurer at least thirty (30) days prior to material modification or cancellation of any policy listed in the certificate.

Contractor will provide the School District with proof of liability insurance in the minimum amount of \$1,000,000.00 listing Platte County R-3 Schools as additionally insured.

Contractors will also provide proof of Worker's Compensation insurance in the minimum amount of \$500,000.00 listing Platte County R-3 Schools as additionally insured.

**EXCEPTIONS:** The bidder shall furnish a statement on company letterhead giving a complete description of any exception to the terms, conditions, and specifications. Failure to furnish the statement will mean that the bidder agrees to meet all requirements of the Request for Proposal.

**RESPONSIBILITY OF CONTRACTOR:** The Contractor shall furnish all labor, transportation, tools, equipment, machinery, and all suitable appliances, requisite for execution of this agreement and shall be solely answerable for the same and for the safe, proper, and lawful construction, maintenance, and use thereof. Contractor shall be solely answerable for all damage to any Platte County R-3 School District property, to other contractors or other employees of the School District, to the neighboring premises, or to

any private or personal property, due to improper, illegal, or negligent conduct of itself or its subcontractors, employees, or agents in and about said work, or in the execution of the work covered by this agreement, or any extra work undertaken as herein provided.

Contractor shall not assign this agreement. The agreement will be terminated in the event the contractor sells the business. The School District reserves the right to continue with the new owner or select another contractor.

**RELATIONS WITH OTHER CONTRACTORS:** The Contractor shall cooperate with all other contractors who may be performing work on behalf of the School District, and workers who may be employed by the School District, on any work in the vicinity of the work to be done under this agreement, and the Contractor shall so conduct its operations as to interfere to the least possible extent with the work of such contractors or workers.

**PROTECTION OF PUBLIC AND PRIVATE PROPERTY:** The Contractor shall assume full responsibility for the protection of all public and private property, structures, sewers, and utilities, both above and below ground, along, beneath, above, across or near the site or sites of the work being performed under this agreement, or which are in any manner affected by the prosecution of the work or the transportation of men or materials in connection therewith.

**COMPLIANCE WITH O.S.H.A. REGULATIONS:** The Contractor shall comply with all regulations of the Occupational Safety and Health Administration (OSHA) and hold the School District and its representatives harmless from all actions resulting from the Contractor's failure to comply with said regulations, orders and citations.

**VERBAL STATEMENTS NOT BINDING:** It is understood and agreed that the written terms and provisions of this agreement shall supersede all prior verbal statements of any and every official and/or other representative of the School District, and such statements shall not be effective or be construed as entering into, or forming a part of, or altering in any way whatsoever, the written agreement.

**PAYMENTS:** Payment shall be made to the Contractor upon completion of the work.

**COMPLETION:** The Platte County R-3 School District wishes to have this work completed by July 19th, 2019.

**TERMINATION:** Platte County R-3 School District reserves the right to terminate the agreement without notice for just cause which may include but not limited to some of the following: unauthorized staff of the contractor (sex offenders, convicted felons, etc.); weapons on school property; inappropriate behavior with students or staff; use of alcohol, tobacco or drugs on school property; use of unauthorized sub-contractors or 1099 employees; use of illegal alien employees; lapse of insurance coverage; failure to complete work as specified; poor quality of work; damage to school district property; etc.

#### **EXHIBIT 'A'**

#### **PROPOSAL FORM**

#### PLATTE COUNTY HIGH SCHOOL

#### 1501 Branch Street, Platte City, MO 64079

#### **Platte County High School Electronic Security Upgrades**

Compa	ny Name of Bidder:
Addres	ss of Bidder:
Phone	No. of Bidder:
Email <i>A</i>	Address of Bidder:
TO:	Platte County School District
	998 Platte Falls Road
	Platte City, MO 64079

The undersigned, having familiarized themselves with the local conditions effecting the cost of the Work at the place where the Work is to be performed and with all the Bidding Documents, including the Drawings, Standards, the Form of Agreement, Addenda and all other Bid and Contract Documents and having examined the location of the proposed work and identified all existing conditions effecting the work, and having given consideration to the availability of labor and materials, hereby proposes and agrees to provide and furnish any and all labor, materials, superintendence, necessary tools, equipment, storage, permits and all utility and transportation service necessary to perform and complete in a workmanlike and timely manner all of the Work required for the referenced project and in all strict conformance with all Bid and Contract Documents (including Addenda Nos. \_\_\_\_, \_\_\_\_\_, and \_\_\_\_\_\_, the receipt of which is hereby acknowledged), for the lump sums hereinafter specified. We, the undersigned, also agree to furnish to the Owner a Performance Bond and Payment Bond in the amount of 100 percent of the Contract Sum. Form of the Bond shall be AIA Document A312 from the American Institute of Architects, as modified by Owner.

The following lump sum amounts shall be shown in both words and figures. In the case of a discrepancy between the words and the figures, the words shall govern.

The L	ump Sum of			
				Dollars
(\$		).		
HIGH	SCHOOL ADDITIONAL 3-YEAR SER'	VICE AGREEME	NT BEYOND INITIAL 1-YEAR WAI	RRANTY:
The L	ump Sum of			
				Dollars
(\$		).		
FOR B	ASE BID WORK PAXTON:			
The L	ump Sum of			
				Dollars
(\$		).		
	ON ADDITIONAL 3-YEAR SERVICE Aump Sum of			
THE	ump cum or			
(\$		).		
	ollowing represents the subcontra ntracted amount is 10% or more o			ect whos
	Name of Subcontractor		Trade	
1				<u>—</u>
2				
3			-	<u>—</u>
4.				

and exceptions otherwise speci and equipment	to the requirements of t fically stated below, it is and services to be pr	s that the following list states any and all variations from these Contract Documents and the Drawings that, under the intent of this Bid that the labor, products, mate rovided will be in strict accordance with all Continuecessary, IF NONE, STATE "NONE" IN LINE BELOW).
_	y Schools and that this B	nat the right to reject any and all Bids has been rese id may not be withdrawn for a period of ninety (90)
Dated this	day of	20
(Seal)		(Name of Bidder)
		(Address of Bidder)
		Authorized Officer
		Title

#### **EXHIBIT 'B'**

### **STATEMENT OF BIDDER'S QUALIFICATIONS**

Each bidder for the work included in the specifications and bid documents shall submit with their bid the data requested in the following information. This data must be included in and made a part of each bid document and be contained in the sealed envelope. Failure to comply with this instruction may be regarded as justification for rejecting the contractor's bid.

Name of Bidder:
Business Address:
When Organized:
Date Incorporated:
Number of years engaged in conducting business under present firm name:
If you have operated business under a different name, please give name and location.
Have you ever failed to complete any work awarded to your company? If so, where and why?
Have you ever defaulted on a contract? If so, where and why?

currently, or	ol district, government entity or tax-based organizations you work for have worked for in the past three (3) years. Please include name of point of contact and contact information.
,	
	ss and telephone number of at least three references who are familiar with the nce of your company on similar jobs:
Reference 1:	
Reference 2:	
recording 21	
Reference 3:	

## COUNTY OF PLATTE

## **AFFIDAVIT**

Before me, the undersigned authority, person	onally appeared	_, who,
being by me duly sworn, deposed as follows:		
My name is	, I am of sound mind, capable of ma	aking this
affidavit, and personally acquainted with the facts	herein stated:	
1. I am an officer/agent ofhave the authority to make these affirmations.		and
2 has enrolled authorization program with respect to the employe contract with the Planarticipation is confirmed by the following docum  3 does not know unauthorized alien in connection with the contractor School District.	eses working in connection with atte County School District. Such centation attached hereto:  owingly employ any person who is an	
In witness whereof I have hereunto subscriday of, 20	•	seal this
(Seal)		
	Notary Public  My Commission Expires:	



# PLATTE COUNTY SCHOOL DISTRICT ELECTRONIC SECURITY STANDARDS

DATE: TUESDAY, NOVEMBER 6TH, 2018

#### **SUMMARY**

- A. These standards serve to guide the implementation of the District's Safety and Security Masterplan, established to increase the safety and security of students, staff, visitors, facilities, and property of the Platte County School District.
- B. The Platte County School District will be converting, upgrading, and expanding electronic security systems across facilities per the criteria of this narrative.
- C. Currently installed Electronic Security Systems are obsolete, approaching end of life, are inconsistently applied, or are non-existent.
- D. The intent of this document is to establish and maintain a consistent Electronic Security System Standard across all district facilities. It is in the interest of Platte County School District to leverage available technology within each sub-system, reduce administrative complexity, and increase functionality by integration described within these standards.
- E. Any and all substitutions, alternates, or modifications from these standards require written pre-approval from the Platte County R-3 School District and the Design Consultant prior to the mandatory pre-bid meeting.

#### **GENERAL**

- A. All Electronic Security Contractors wishing to perform Work for the Platte County School District shall be factory certified to design, supply, install, warranty, and support the Electronic Security Subsystems.
- B. The Work shall consist of providing all labor, equipment, materials, and services, as well as performing all related work necessary to provide a complete and functional installation of the new Electronic Security Systems or additional Electronic Security Devices.
- C. This narrative is schematic in nature and is intended to depict the general scope of Work required. It is the Electronic Security Contractor's responsibility to design, furnish, and install a properly working system.

#### **EXISTING CONDITIONS**

- A. Prospective Electronic Security Contractors (ESC) shall visit and inspect the site where the work required by Platte County Schools Request for Proposal (RFP) is to be performed. ESC shall inform themselves of the conditions under which the work is to be performed, the obstacles which may be encountered, the demolition and temporary removal and reinstallation required to provide access to the Work, and all other relevant matters affecting the performance of the Work. Site inspections shall be scheduled with Jay Harris at Platte County School District.
- B. ESC shall not be afforded additional compensation or project schedule extensions for work execution issues in which the ESC could have informed themselves of had they diligently performed the required site inspection prior to the submission of their Proposal.
- C. The ESC shall attend mandatory pre-bid meeting at the Platte County Schools District Office, 998 Platte Falls Road, Platte City, Missouri 64079 at 10:00am on November 30<sup>th</sup>.
- D. It shall be the ESC's responsibility to advise Jay Harris before 2:00pm on December 4th, 2018 of conflicting scope requirements, omissions, errors or ambiguities of information that require clarification, and to request such clarification from design consultant prior to 2:00pm on December 4th, 2018.
- E. Any drawings are schematic in nature. Existing devices indicated on drawings are taken from the best information available and they are not to be construed as "AS BUILT" conditions. The information is shown to help establish the extent of the new Work.

8345 Lenexa Drive, Suite 300 (913) 742-5000 HENDERSONENGINEERS.COM Lenexa, KS 66214

F. Verify all existing conditions at the project site and perform the Work as required to meet the intent of the Work indicated.

#### PERMITS, STANDARDS, & GUIDELINES

- A. The Electronic Security Contractor shall be responsible for obtaining and paying for any and all required permits, licenses, plan reviews, inspections, etc., including building permits, required by all authorities having jurisdiction over the Work.
- B. It shall be the Electronic Security Contractor's responsibility to identify and comply with all applicable provisions of federal, state and municipal safety laws, regulations, and building codes as they apply to the Work required.
- C. Electronic Security Contractor shall be responsible for the job site safety of the Electronic Security Contractor's employees, agents, suppliers and Subcontractors.
- D. All equipment and installations shall meet or exceed minimum requirements of ADA, ANSI, ASTM, IEEE, NEC, NEMA, NFPA, OSHA, UL, and the State Fire Marshall.
- E. Low voltage shall be installed in accordance with BICSI "Telecommunications Distribution Methods Manual", BICSI "Information Technology Systems Installation Methods Manual"
- F. Mounting heights for equipment and devices requiring operational access shall conform to ADA requirements.

#### **EXISTING ELECTRONIC SECURITY SYSTEMS**

- A. The current Video Surveillance System installed across Platte County School District facilities is typically a mixture of Axis Internet Protocol (IP) cameras and various analog cameras. These are served by a Pelco Digital Sentry Video Management System. Digital Sentry Encoders are used to integrate analog cameras into the Digital Sentry Digital Video Recorders (DVR), which are distributed across facilities. Several of the DVRs are used to serve multiple facilities. The intent of the school district is to:
  - 1. Transition to a new a VMS with centralized servers for all facilities.
  - 2. Use all existing Axis IP cameras with the new VMS; replace failed IP cameras with new.
  - Replace analog cameras and cabling with new IP cameras and category cabling.
  - 4. Add new IP cameras and cabling as needed to meet surveillance goals.
- B. The current Access Control System is Cisco Physical Access Manager with Cisco Physical Access Gateways distributed throughout facilities. From general observations, these were typically located near the controlled doors and were Powered over Ethernet (PoE). The intent of the school district is to:
  - 1. Transition to a new Access Control System and Software
  - 2. Use existing electrified door hardware
  - 3. Replace card readers
  - 4. Consolidate controllers to centralized cabinets within the telecom rooms
  - 5. Install new cabling between controller and electrified door hardware
  - 6. Expand Access Control System to serve additional doors and devices
- C. Type, condition, and presence of entry intercoms are inconsistent across buildings. Existing intercoms are typically Aiphone analog units. The intent of the school district is to:
  - 1. Replace all analog audio intercoms with Session Initiation Protocol (SIP) Video Intercoms
  - 2. Add new SIP Video Intercoms as needed

#### **SUBMITTALS**

- A. Prior to beginning any work, the ESC shall submit a spreadsheet to the Platte County School District having the following information for all new Electronic Security equipment that will be connected to a building's network:
  - 1. Room Number of Equipment Location (Example: Room 113)
  - 2. Equipment Type (Example: POE Camera)
  - 3. Manufacturer (Example: Axis)
  - 4. Model Name (Example: 1080p Indoor Network Camera)
  - 5. Model Number (Example: P3346-VE)

- 6. Mac Address (Example: 14:A9:9F:0D:3D:16)
- 7. IP Address, IPV4 and IPV6 (coordinate with District IT Department)
- 8. WAN Access Required? (Example: No)
- 9. PoE / PoE+ (Example: Yes, PoE+)
- 10. Anticipated and maximum Bandwidth demands (Example: 133/460 kbps)
- 11. QoS (Quality of Service) (Example: Medium)
- 12. Serving Telecom Room (Example: MDF 120)
- 13. Network Switch and Port.
- B. Upon completion of any work, submit electronic copies of Operation and Maintenance Manuals to Platte County School District. Create cover page and properly index data. Include the following types of information:
  - 1. All previously submitted data, updated where revised
  - 2. All warranty data
  - 3. All device settings with applicable screen shots of entry pages
  - 4. As-build drawings.

#### **PROJECT SCHEDULE**

- A. Work shall be sequenced and performed using methods work schedules that will minimize disruption to the District's normal use of the facility, and that will in no way endanger the facility's occupants and visitors.
- B. Work shall be performed outside of school hours. Work shall be performed on evenings, nights, weekends, holidays, and breaks unless otherwise approved by District.
- C. Within 7 calendar days after receipt of notice to proceed, the Electronic Security Contractor shall submit a construction schedule for the Work to the Platte County School District.
- D. Interruption of Existing Electronic Safety or Security System Service: Do not interrupt service to facilities unless coordinated and permitted by the Platte County School District. Notify the District no less than one week in advance of proposed interruption of service. Do not proceed with interruption of service without the District's written permission.

#### **DEMOLITION**

- A. All equipment and material removed during the performance of the Work shall be offered to the District. Equipment and material accepted by the District shall be delivered to a location on the site designated by the District. All equipment and material not accepted by the District shall be deemed property of the Contractor and shall be promptly removed from the site and legally disposed of by the Contractor.
- B. Contractor shall be responsible for removal and reinstallation of all existing building structure, fixtures, finishes, and other building components (i.e., ceiling, walls, light fixtures, roofing, windows and doors, etc.) required to perform the Work.
- C. Contractor shall repair all building structure, improvements, permanent and moveable fixtures and finishes including paving and landscaping damaged as a result of Work performed under this Contract. Work shall be performed by skilled tradesmen with materials matching existing structure, improvements, fixtures and finishes. All repairs shall be completed to the satisfaction of the District.

#### **ACCESS CONTROL SYSTEMS REQUIREMENTS**

- A. Access Control System (ACS) shall be RS2 Technologies hardware and RS2 Technologies Access It! Universal.NET software.
- B. The ACS shall monitor end devices and report an alarm for the following events:
  - 1. Door Forced Alarm
  - 2. Door Held Open Too Long
  - 3. Panic / Duress Buttons
  - 4. Invalid, Lost, Stolen, Expired, or Terminated Credential
- C. The ACS shall monitor power supply issues and report an alarm for the following events:
  - 1. Trouble Alarm: Normal power-off, load assumed by battery.

- Trouble Alarm: Low battery
- Tamper Alarm: Equipment Cabinets opened
- D. Access Control Panels shall utilize a unified UL listed enclosure containing integral electrified lock power supplies.
- All controlled access points, duress buttons, alarms, cameras, intercoms, and any other devices E. integrated into the access control system shall be programmed into the interactive map feature in the Access It! Software giving operators full functional control of the system through graphic map screen.
- Doors with ADA operators and managed by ACS shall be cabled, configured, and programmed to require presentation of a valid credential before the door is unlocked and the ADA push-button is permitted to actuate its respective door opener.
- G. Network connecting the Central Workstation / Server, other workstations/enrollment stations, and fieldinstalled controllers/panels shall be via a dedicated VLAN on the District-provided network. Controllers shall maintain a current copy of the credential database. In the event of a temporary LAN/WAN outage, the ACS shall still operate; when LAN/WAN connection is restored, the ACS shall automatically upload events/logs to the Central Server and download a current copy of the credential database.
- All controllers, power supplies, and back-up batteries shall be installed in NEMA rated enclosures, rated for their environment. Enclosures shall have keyed locks and tamper switches. All enclosures at a facility shall be keyed alike.
- End-of-line resistors shall be installed at door position and other sensors providing circuit supervision to I. all controller inputs.
- The Salient CompleteView Video Management System shall be integrated with RS2 Access It! to provide the following features:
  - 1. View live video within Access It!
  - Playback recorded video within Access It!
  - Recorded video automatically associated to alarms
  - View and manage cameras from multiple CompleteView NVRs simultaneously
  - PTZ camera control
  - Display current recording status of cameras
  - Live video window popup on event (with CompleteView Spotlight) 7.
  - Playback controls include Play, Stop, Skip to beginning/end, Skip forward/back
- New Card Readers shall be HID multiCLASS SE Readers. Existing 125kHz proximity card readers shall be upgraded to HID multiCLASS SE Readers. Readers shall support legacy 125kHz proximity cards, 13.56MHz iCLASS, iCLASS Seos, MIFARE Classic, and MIFARE DESFire EV1. The card readers shall include and connect via Open Supervised Device Protocol (ODSP). Card reader communication cables shall be routed, unspliced, to Access Control Panels.
- Contractor shall be responsible for establishing or migrating existing user credentials to 13.56MHz cards. Contractor shall provide cards as noted on plans or drawings.
- Contractor shall review Access Control System configurations with owner and program accordingly. At minimum, the contractor shall configure the following for owner:
  - Configure User Access Schedules, such as electronically scheduled hours at beginning of school day and for after school events.
  - Configure User Access Level Groups
  - Configure Maps and Floor Plans
  - Configure alarms, priorities, and notification methods including but not excluded to forced doors, propped doors, invalid/revoked credentials, unauthorized egress, panic alarms, and tampering.

#### **VIDEO MANAGEMENT SYSTEMS REQUIREMENTS**

- The Video Management System shall be Salient CompleteView. All software licensing shall be provided by ESC for additional cameras, intercoms, integrations, and clients for respective scope of work.
  - Licensing shall be a one-time, per camera fee and not associated with a hardware MAC address. No client instance software based limitations shall apply.

- 2. Advanced Mapping shall be configured with color coded field of view cones.
- Shall record full resolution while utilizing dynamic resolution scaling to scale transmissions to manage client-side processing and minimize transmission bitrates.
- B. Network Video Recorder (NVR) shall be the Salient PowerProtect Platform. New servers may or may not be required for each project. If project utilizes existing servers, ESC shall evaluate available capacity on existing servers prior to RFP submission to determine whether additional server or storage hardware are needed. Provide unit pricing at time of bid, when it is determined by ESC that additional servers may be required.
- C. Security cameras shall be Axis IP cameras. The locations, quantities, and models are as noted on drawings. The following pixel density criteria shall serve as guidelines for typical camera placements.
  - 1. All exterior entrances (captured from interior), 88ppf
  - 2. All exterior entrances (captured from exterior), 46ppf
  - 3. General coverage of hallways and common areas, pixel density, 18ppf
  - 4. Bathroom entrances, 35ppf
  - 5. Reception/front office, 35ppf
  - 6. Gymnasium/Cafeteria, 18ppf
  - 7. General exterior areas, 7ppf
  - 8. Exterior building perimeter, parking areas, 18-35ppf

#### D. Camera installation:

- 1. Axis recessed mounting boxes shall be used for interior camera types unless a recessed mounting box is not available for specific model or location prohibits installation or recessed mounting box. These shall be plenum rated for air handling spaces.
- 2. Exact location, conduit routing, mounting accessories and penetrations for exterior cameras shall be approved by District and documented prior to installation.
- 3. Mounting arms, surface mounting backboxes, pendant mounts, parapets, weathershields, pendant caps shall be manufactured by Axis.

#### **VIDEO ENTRY INTERCOMS REQUIREMENTS**

- A. Video Intercoms shall be Axis IP Door Stations, model number A8004-VE.
- B. The Video Intercom shall be integrated with the Access Control System such that all door releases are controlled and recorded by the ACS. The door station relay shall not be used to circumvent or bypass the ACS. The door station relay shall be wired input to the ACS, and the ACS programmed to release the respective lock. Door releases actuated by the video intercom shall be identified in ACS event logs as such.
- C. The Video Intercom shall be integrated with the Video Management System allowing release of door through VMS client software. The door station shall utilize CompleteView Spotlight on desired client workstations to establish live video display and two-way audio communications.
- D. The Video Intercom shall be added as a SIP extension to the District VOIP telephone system. The door station shall dial preprogrammed numbers as coordinated with District. Dual-tone multi-frequency (DTMF) shall be configured to initiate a lock release.
- E. A card reader from reception and administrative areas shall typically be used to release the respective entry and provide audit trail of school district personnel granting access to visitors.

#### **ANCILLARY DEVICES**

- A. Video Monitors
  - Monitors served by client workstations, such as receptionist desks shall be provided by District unless otherwise noted on drawings.
  - 2. Monitors shall be rated and warrantied for commercial 16/7 use. The following manufacturers are approved:
    - a) LG
    - b) NEC
    - c) Panasonic

- d) Samsung
- Sharp e)
- Monitors used for before or after school programs shall provide display of video intercom camera 3. for respective exterior entrance. Monitors shall be 1080P resolution with size as noted in drawings. An Axis T8705 Video Decoder shall provide live video to monitor via HDMI connection. ESC shall provide data cabling between Decoder and District's Network Switch. Monitor shall be mounted with articulating wall arm and mounted in method and with fasteners designed to support load on substrate. Exact location as coordinated with Platte County School District.

#### B. Duress Buttons

- Install Potter Amseco HUSK-20 latching undercounter panic buttons. Buttons shall be wired as normally closed. Buttons shall be supervised, end-of-line resistors wired in series near Panic Buttons. Buttons shall be key-reset only. All buttons shall be keyed alike at each facility.
- Review functionality of Duress buttons with owner and program system accordingly. Any lock down shall allow access to emergency responders.

#### Door Releases

- For areas requiring under counter release push button, ESC shall furnish and install metal enclosed momentary push button. Push button shall be protected with shroud or guard. Cabling shall be in flexible metal conduit and securely fastened every 18".
- For areas used for before or after school programs, ESC shall Furnish, Install, and Program a SDC WRC-R2 Receiver and provide 3 WRC-2B transmitters. Receiver shall be wired as auxiliary input to Access Control System and programmed to release respective doors as confirmed with the District. Receiver shall be installed within the before/after school room. Mounting location shall be deterrent of vandalism and approved by the District. Power shall be supplied to receiver from the Access Control Panel power supplies.

#### D. Request to Exit Devices

Exit switches shall be installed in accordance with International Building Code, International Fire Code, and NFPA 101 Life Safety Code for any access controlled egress doors, such as doors with electromagnetic locks. "Push to Exit" buttons shall be SDC 400M Series.

#### **Door Position Sensors**

- Magnetic Door Position Switches shall be the recessed type with cable fished or concealed within door frame and wall cavity. Switch shall be Interlogix 1078/1076 Series or equal.
- Should surface mounted door position switches be necessary due to existing conditions, a vandal resistant magnetic switch with armored cable is required. Switch shall be Interlogix 2500 Series or
- Locksets or magnetic locks with integrated door position sensors shall eliminate need for external magnetic door position switch.

#### Client Workstations

Client workstations will be provided by Platte Country School District IT Department. Coordinate and assist with VMS and ACS Client software installation.

#### Surge Protection

All exterior cameras shall be surge protected. Surge protector shall meet UL497, exceed TIA 568 Category performance standards, and be POE+ compatible. Surge protectors shall be APC PNETR6 modules mounted in APC chassis. Installations with 4 or less exterior cameras, mounting chassis shall be APC PRM4. Installations with greater than 4 exterior cameras, mounting chassis shall be APC PRM24. Grounding conductor sizing, routing, and connections shall be per the manufacture's recommendation.

#### **DOOR HARDWARE**

- All new exit rim devices shall be Von Duprin. Rim Exit Devices shall have the following:
  - Integral Request to Exit Switch, which shunts alarm notification in Access Control System for typical doors. Some doors which are used for Fire Escapes or should not be utilized during normal

- school functions as an exit may be configured to create alarm or notifications as coordinated with
- 2. Integral Latch Bolt Monitor.
- Hex Dogging
- Night Latch (except on keyless pulls), cores shall be keyed to match district.
- Quiet Electronic Latch Retraction "QEL" for electronic locking mechanism, allowing centralized power on uninterruptible power source.
- All exterior doors shall be monitored with door position sensor.
- Physical Operation of all doors being modified for the Access Control System shall be serviced to like new operating condition. Contractor shall survey conditions and service as follows:
  - Lock and Hardware fasteners or mounts shall be secure, without play, slack, or gaps exceeding tolerances on installation instructions.
  - Lock shall be free of binding, grinding, or interference with other door components. 2.
  - Exposed cabling shall be protected by metallic armored cords or electrical raceway/conduit. Armored cords or raceway/conduit shall be repaired if damaged from normal wear or vandalism.
  - Confirm access control system does not prohibit free egress in the event of fire or other 4. emergency.

#### **POWER SUPPLIES**

- Power supplies shall be LifeSafety Power MCLASS and utilize a consolidated enclosure with RS2 System Control Processors. If wall space constraints do not allow for a consolidated enclosure, separated enclosures may be used with equivalent capabilities and specifications.
- Power supplies shall monitor health and status of power supply, batteries, and outputs. Power supplies shall have integral tamper switch and temperature monitor. Thresholds shall be established and configured by ESC to recognize abnormal/trouble current draw conditions caused by electrified locking hardware. Test schedules, reporting, and trouble email notifications shall be coordinated with the District IT Department. Data cabling to power supply network module from the District's switch shall be provided by ESC.
- C. All outputs shall be Class 2 Power Limited.
- Power supply shall have battery back-up, providing automatic switch over upon AC failure. Minimum battery back-up capacity shall be calculated by ESC to provide 2 hours of at stand by load or 1 hour at alarm load, whichever is greater. Batteries and enclosures shall be provided by ESC.
- Voltages and current requirements of power supplies shall be compatible with existing and/or new hardware. Any existing electrified locking hardware with holding current or current in-rush which would exceed the centralized power supplies' capacity should be replaced with an equivalent electrified locking device having lower current draw. Existing electrified locking hardware shall not create a condition where cabling distance creates excessive voltage drop.

#### **NETWORK**

- A. The electronic security system shall reside on a converged network established by the District. The District will provide all network switches and infrastructure between telecom rooms and facilities. The ESC shall be responsible for furnishing copper category data cabling, patch panels, patch cords, and terminations between the District provided network switch and new security devices.
- The District will be responsible for providing client workstations meeting or exceeding Salient Systems and/or RS2 Technologies recommended specifications. The data cabling shall assume to be existing to client workstations unless otherwise noted.
- Coordinate the following with the District's IT and Security Operations departments:
  - Quantity of additional data ports (PoE and non-PoE) required at each Telecommunications Room/Rack.
  - IP / Mac Addresses of all new Electronic Security equipment that will be connected to the building's 2. Electronic Security Network.
  - 3. Additional bandwidth requirements of the new Video Surveillance cameras from each

- Telecommunications Room to each camera.
- 4. Additional storage requirements of the new Video Surveillance cameras to be recorded onto the District's existing NVR / Storage Server(s).
- 5. All camera setup information, including passwords.

#### **EQUIPMENT ROOMS**

- A. ESC shall be responsible for providing power to new Access Control Panels and Power Supplies, which shall be installed by a licensed electrician or electrical sub-contractor. Provide new circuit breakers for installation in existing panelboards/switchboards, of the same manufacturer and type as the existing panelboard/switchboard circuit breakers. Short circuit current interrupting rating of any new breaker shall match existing panel rating.
- B. For dedicated Electronic Security Equipment Room(s), provide plywood backboard as shown as indicated with ¾" thick fire retardant treated plywood (FRTW) such as Dricon. Plywood shall be A-C grade and void free. Paint "A" side with two coats of white fire-retardant paint taking care to mask fire rating stamp. Install with "C" side to the attaching wall.
- C. Panels tops shall be installed below 6'-0" above finished floor.
- D. Ground cable shields, drain conductors, and equipment to eliminate shock hazard and to minimize ground loops, common-mode returns, noise pickup, cross talk, and other impairments. Properly ground/bond all ACS equipment in accordance with manufacturer's instructions. All grounding and bonding connectors shall be listed by a Nationally Recognized Testing Laboratory (NRTL) as required by the NEC, such as UL. All grounding and bonding conductors shall be stranded copper.

#### **CABLING AND PATHWAYS**

- A. As part of a complete and functioning Electronic Security System and associated infrastructure, provide conductors and cables of appropriate type.
- B. Conductor and cable requirements are unique to each manufacturer equipment / device. Unless otherwise noted, exact conductor and cable types are to meet the requirements of the Electronic Security manufacturer. Size conductors per manufacturer recommendations and power/voltage drop based on installed cable length.
- C. Provide additional Telecommunications Structured Cabling System to support a complete and functioning Electronic Security System.
  - 1. The maximum allowable horizontal cable length is 295 feet (90 meter). This maximum allowable length does not include an allowance for the length of 16 feet (4.88 meter) to the workstation equipment. The maximum allowable length does not include an allowance for the length of 16 feet (4.88 meter) in the horizontal cross-connect.
  - 2. Utilize Direct Attach Method as defined in ANSI/BICSI 005-2013, the horizontal cabling on the remote camera device end directly attaching (or connecting) to the device through a connectorized cable or hard-wired termination.
  - 3. Copper Category Network Cabling:
    - a) Shall be Category 6E. Cabling type shall be of consistent manufacturer at each school. The following cables are pre-approved:
      - (1) Belden 4800 Series
      - (2) BerkTek LANmark 2000
      - (3) Commscope CS37P
      - (4) Superior Essex NextGain
    - b) Shall follow the District IT Department's color standards.
      - (1) Green shall be used for Access Control System
      - (2) Yellow shall be used for Video Surveillance System
    - c) All horizontal cables shall be plenum (CMP, MPP, OFNP, or OFCP) rated
    - d) Horizontal cables installed in "wet" locations as defined by the NEC (such as conduits embedded or routed below a ground floor slab) shall be suitable for installation in such

environments. Unlisted cables shall transition to an indoor rated cable within 50 feet (15.24 meter) of the entrance point as required the NEC. No portion of outdoor only (unlisted) cables may be installed with the cable jacket exposed in any plenum or other air handling space nor shall they be allowed to transition between different levels of the building. Rigid metallic conduit shall be used to route outdoor (unlisted) cabling to within 50 feet (15.24 meter) of the transition point to indoor rated cabling in accordance with the NEC.

- Copper Category Connectivity:
  - Shall be Category 6E, 1 Gigabit.
  - b) Patch Panels shall be identical to existing Leviton patch panels
- Patch Cords: 5.
  - Shall be 6E a)
  - Shall follow the District IT Department's color standards.
    - (1) Green shall be used for Access Control System
    - (2) Yellow shall be used for Video Surveillance System
- Wire Management:
  - Provide a Panduit horizontal wire manager, identical to existing, below each new patch panel.
- D. Conductors and cables shall be UL Listed and Approved for the intended application.
- Install continuous conductors between outlets, devices and boxes without splices or taps. Do not pull connections into raceways. Leave at least 12 inches of conductor in backbox at each device location.
- Low Voltage Cables shall follow existing communications pathways when available. Cables shall run parallel and perpendicular to building lines.
- Cables shall remain unattached to pathways or other cables and shall simply lay at rest on the supports provided by its pathway (including cable trays, wire basket, j-hooks, conduit, etc.). Wire ties, velcro straps, electrical tape or any other method shall not be used to attach cables to cable supports or to create cable bundles.
- Cables shall not be supported or attached to conduits, other cable bundles, piping, duct work, ceiling wires or other ceiling supports. Where not in conduit, utilized listed open cabling support methods (Jhooks, cable tray, etc).
- Rigidly terminate conduits entering sheet metal enclosures to the enclosure with a bushing and locknut I. on the inside and a locknut or an approved hub on the outside. Conduit shall enter the enclosure squarely.
- A licensed electrician shall install all control wire operating at 120V nominal and above. Work shall conform to NFPA 70.
- K. Do not install kinked, scored, deformed, or abraded cable. Remove and discard cable if damaged during installation and replace it with new cable.
- Provide fire resistant materials of a type and composition necessary to restore fire ratings to all wall, floor or ceiling penetrations; including membrane penetrations. All materials shall be classified or listed as a complete system by UL and meet NEC and local codes. Provide fire-rated pathway device anywhere cables are required to pass through fire-rated walls, floors or partitions.
- M. All cables that extend beyond the envelope/footprint of the building shall be installed with entrance protectors.
- Label all cabling with machine-printed labels according to the labeling scheme identified by the District IT Department. Cables shall be labeled within 6" at each end.

#### **PENETRATIONS**

- Α. Exterior penetrations
  - Prior to penetrating exterior walls, review locations of penetrations with and obtain approval from the District.
  - For raceways penetrating exterior walls, effectively seal raceways by installing a conduit fitting at 2. the boundary of the two spaces and filling it with an approved pliable material after conductors or

cables have been installed. Provide fitting whenever raceways pass from non-cooled to cooled spaces, raceways transition from outside a facility or enclosure to inside, or whether buried or exposed.

- B. Structural penetrations
  - 1. No penetrations which would affect the integrity of any structural member are allowed.
- C. Slab or core penetrations
  - 1. No penetrations slab or core penetrations are anticipated as existing pathways are assumed to be adequate for scope of work. Should slab or core penetration be required, obtain approval from the District and design consultant.
- D. Fire Rated penetrations
  - Provide fire resistant materials of a type and composition necessary to restore fire ratings to all wall, floor or ceiling penetrations; including membrane penetrations. All materials shall be classified or listed as a complete system by UL (or an approved NRTL by the Design Consultant and AHJ) and meet NEC and local codes. The use of partial systems or components of systems is not allowed unless specifically identified in the documents.
  - 2. All penetrations through fire rated floors and walls shall be sealed to prevent the passage of smoke, flame, toxic gas or water through the penetration before, during or after a fire. The fire rating (F and T) of the penetration seal shall be at least that of the floor or wall into which it is installed, so that the original fire rating of the floor or wall is maintained as required by referenced building codes.

#### **TESTING**

- A. Official Acceptance shall include, but is not limited to, satisfactory testing of all systems.
- B. The ESC shall be responsible for testing and delivering final test reports to Platte County School District. Prior to performing any tests, ESC shall submit test plan and report template to Platte County School District and design consultant for approval.
- C. Platte County Schools and Design Consultant reserves the right to observe the conduct of any or all portions of the testing process.
- D. All cables that fail testing are to be corrected prior to substantial completion and acceptance by Platte County Schools. Replace entire cable if bad pair or conductor is found.
- E. The Video Management System installation shall be tested for following functionality:
  - 1. Automatic call up of events from Access Control System
  - 2. Automatic call up of Video Intercom
  - 3. Two-way communications configured with Video Intercom
  - 4. Door release of entry having Video Intercom through Client Software
  - 5. Mapping placement of cameras
- F. The Access Control System shall be tested for the following functionality:
  - 1. Door Force Alarms
  - 2. Propped Door Alarms
  - Logging of door releases initiated through Video Intercom, by both VMS Client and using DTMF from desired VOIP Phone.
- G. The Video Intercom System shall be tested for the following functionality:
  - 1. Calling up live video on VMS Clients
  - 2. Establishing two-way audio through VMS Clients
  - 3. Establishing two-way audio through VOIP phone
  - 4. Playback of archived video recordings through VMS Clients
- H. The Structured Cabling System shall be tested for:
  - 1. Wire Map
  - 2. Length
  - 3. Insertion Loss

- Near-end crosstalk (NEXT) loss.
- Power sum near-end crosstalk (PSNEXT)
- 6. Equal-level far-end crosstalk (ELFEXT)
- Power sum equal-level far-end crosstalk (PSELFEXT)
- Return loss
- Propagation delay
- 10. Delay skew

#### **OWNER TRAINING**

- Train Platte County School District IT and maintenance personnel on procedures and schedules for troubleshooting, servicing, and maintaining equipment.
- Demonstrate methods of determining optimum alignment and adjustment of components and settings for system controls.
- C. Review equipment list and data in maintenance manuals.
- D. Conduct up to 3 training sessions, minimum of 2 hours each with representatives of Platte County School District. Provide tutorial on software and device components. Training sessions are expected to be upon completion. 30 days after completion, and 90 days after completion.

#### WARRANTY

- At a minimum, the manufacturer(s) equipment shall be covered by a 1-year parts and labor warranty covered by the ESC starting from Substantial Completion.
- All Warranty Work shall be completed by factory-certified technician(s) of the component(s) being
- C. Any manufacturer's equipment warranty exceeding the initial 1-year parts and labor warranty shall be extended to Platte County School District.
- At time of bid, provide optional price for 3-Year Service Agreement which will extend parts and labor warranty additional 3-years beyond initial 1-year warranty.

	MBOLS LEGEND
SYMBOL	DESCRIPTION
€w}	CLIENT WORKSTATION FOR VIDEO SURVEILLANCE AND ACCESS CONTROL
HCR <sup>XX</sup>	PROXIMITY CARD READER (XX = TYPE SEE CARD READER SCHEDULE ON THIS SHEET)
◆CR <sup>XX</sup>	PEDESTAL MOUNT LONG RANGE PROXIMITY CARD READER (XX = TYPE SEE CARD READER SCHEDULE ON THIS SHEET)
HOB	DOOR BELL PUSHBUTTON
(DR)	DOOR RELEASE (UNDER COUNTER PUSH BUTTON)
<b>∮M</b> 〉	DOOR POSITION SWITCH, LATCH BOLT MONITOR, AND REQUEST TO EXIT
(EL)	ELECTRIFIED LOCKING DEVICE, REQUEST TO EXIT SENSOR, DOOR POSITION SWITCH, AND LATCH BOLT MONITOR
€0>	ELECTRIFIED LOCKING DEVICE, REQUEST TO EXIT SENSOR, DOOR POSITION SWITCH, AND LATCH BOLT MONITOR (ELECTRIC DOGGING BY ACS ON SCHEDULE)
(EP)	EMERGENCY PHONE - PEDESTAL
HEM	EMERGENCY DOOR RELEASE WITH ALARM SDC-492 OR OTHER PER AUTHORITY HAVING JURISDICTION
KIC)XX	VIDEO AND AUDIO INTERCOM (WALL MOUNTED) (XX = TYPE SEE INTERCOM SCHEDULE ON THIS SHEET)
<del> </del> KP	INTRUSION ALARM KEYPAD
(MD)	MOTION DETECTOR
(PB)	PANIC BUTTON (MOUNTED UNDER COUNTER)
HPB>	PANIC BUTTON (WALL MOUNTED)
HRE	REQUEST TO EXIT PUSH BUTTON (WALL MOUNTED)
HSP)	SPEAKER (DOOR BELL)
Н <del>ОН</del>	HOLD OPEN
<b>⟨</b> VM⟩	CASH VAULT MONITOR
⊏⋪	SECURITY CAMERA (CEILING MOUNTED)
H⊡¤	SECURITY CAMERA (WALL MOUNTED)

	ABBREVIATIONS
(,	ALL ABBREVIATIONS SHOWN ARE NOT NECESSARILY USED ON THE DRAWINGS)
ACP	ACCESS CONTROL PANEL
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
BR	BIOMETRIC READER
CC	CENTRAL CONTROL DOOR CONTROL SYSTEM
DCS	DOOR CONTROL SYSTEM
DSP	DIGITAL SIGNAL PROCESSOR
DVR	DIGITAL VIDEO RECORDER
E	EXISTING DEVICE
F	DOOR FRAME MOUNTED DEVICE
FOR	FIBER OPTIC RACK
GT	GUARD TOUR CARD READER
ICS	INTERCOM CONTROL SYSTEM
K	ELECTRICALLY OPERATED BY KEY
KP	KEY PAD
KVM	KEYBOARD VIDEO MOUSE SWITCH
MBS	MAINTENANCE BYPASS SWITCH
NEC	NATIONAL ELECTRIC CODE
NVR	NETWORK VIDEO RECORDER
RMS	REMOTE MONITORING STATION
SP	SCRAMBLE PAD
UPS	UNINTERRUPTIBLE POWER SUPPLY
UPSDP	UNINTERRUPTIBLE POWER SUPPLY DISTRIBUTION PANEL
VCS	VIDEO CONTROL SYSTEM
VMS	VIDEO MANAGEMENT SYSTEM

TYPE	FORM FACTOR	DESCRIPTION	MOUNTING	LOCATIONS	IMAGER SIZE RESOLUTION	POWER	MODE	LS	COLOR	COMMENTS
01		DOME CAMERA	ARM, PENDANT, SURFACE	INDOOR	1/3" 2MP	POE	AXIS	P3225-LV	WHITE	3.0-10.5MM MOTORIZED VARIFOCAL, 60FPS, FORENSIC CAPTURE WDR, LIGHTFINDER, OPTIMIZED IR, H.264, ZIPSTREAM, IP52, IK08
02		DOME CAMERA	ARM, PENDANT, SURFACE	INDOOR/ OUTDOOR	1/3" 2MP	POE	AXIS	P3225-LVE	WHITE	3.0-10.5MM MOTORIZED VARIFOCAL, 60FPS, FORENSIC CAPTURE WDR, LIGHTFINDER, OPTIMIZED IR, H.264, ZIPSTREAM, IP66, IK10
03		DOME CAMERA	ARM, PENDANT, SURFACE	INDOOR	1/2.5" 8MP	POE	AXIS	P3228-LV	WHITE	3.5-10.0MM MOTORIZED VARIFOCAL, 30FPS, FORENSIC CAPTURE WDR, LIGHTFINDER, OPTIMIZED IR, H.264, ZIPSTREAM, IP52, IK08
04		DOME CAMERA	ARM, PENDANT, SURFACE	INDOOR/ OUTDOOR	1/2.5" 8MP	POE	AXIS	P3228-LVE	WHITE	3.5-10.0MM MOTORIZED VARIFOCAL, 30FPS, FORENSIC CAPTURE WDR, LIGHTFINDER, OPTIMIZED IR, H.264, ZIPSTREAM, IP66, IK10
05	(1)	MINI DOME CAMERA WITH FLUSH MOUNT	ARM, PENDANT, SURFACE	INDOOR	1/3" 2MP	POE	AXIS	M3045-V & T94B05L	WHITE	2.8MM FIXED LENS, 30FPS, WDR, LIGHTFINDER, H.264, ZIPSTREAM, IP42, IK08
06		360 DEGREE FISHEYE DOME CAMERA	ARM, PENDANT, SURFACE	INDOOR/ OUTDOOR	1/1.7" 12MP	POE	AXIS	M3058-PLVE	WHITE	1.2MM PANORAMIC VIEW, 30FPS, ONBOARD DEWARP, FORENSIC WDR, IR, LIGHTFINDER, H.264, ZIPSTREAM, IP66, IK10
07		360 DEGREE MULTI DIRECTIONAL CAMERA	ARM, PENDANT, SURFACE	INDOOR/ OUTDOOR	1/2.8" 4 X 2MP	POE	AXIS	P3707-PE	WHITE	2.8-6.0MM VARIFOCAL, 30FPS, 360 DEGREE MULTISENSOR, H.264, ZIPSTREAM, IP67, IK09

TYPE	FORM FACTOR	TECHNOLOGY	MOUNTING	LOCATIONS	READ RANGE	POWER	MODELS	COLOR	COMMENTS
01		125 kHz AND 13.56MHz PROXIMITY, NFC, & BLE	MULLION OR SURFACE	INDOOR/ OUTDOOR	iCLASS: 3.1" MIFARE: 2.8" PROX:2.8"	AVG.100mA PEAK 170mA AT 12VDC	HID RP10	BLACK	TAMPER, GREEN/RED LED, iCLASS, SEOS, MIFARE, PROX, OPEN SUPERVISED DEVICE PROTOCOL
02		125 kHz AND 13.56MHz PROXIMITY, NFC, & BLE	MULLION OR SURFACE	INDOOR/ OUTDOOR	iCLASS: 3.1" MIFARE: 2.8" PROX:2.8"	AVG.100mA PEAK 170mA AT 12VDC	HID RP15	BLACK	TAMPER, GREEN/RED LED, iCLASS, SEOS, MIFARE, PROX, OPEN SUPERVISED DEVICE PROTOCOL
03		125 kHz AND 13.56MHz PROXIMITY, NFC, & BLE	SINGLE GANG SWITCHBOX	INDOOR/ OUTDOOR	iCLASS: 4.7" MIFARE: 4.7" PROX:2.8"	AVG.100mA PEAK 170mA AT 12VDC	HID RP40	BLACK	TAMPER, GREEN/RED LED, iCLASS, SEOS, MIFARE, PROX, OPEN SUPERVISED DEVICE PROTOCOL
04		125 kHz AND 13.56MHz PROXIMITY, NFC, & BLE	INTEGRAL TO DOOR HARDWARE	INDOOR	iCLASS: 4.7" MIFARE: 2.3" PROX:2.8"		MORTISE LOCKSET WITH INTEGRAL CARD READER	BLACK	NOT USED

IN	INTERCOM SCHEDULE												
	TYPE	FORM FACTOR	DESCRIPTION	MOUNTING	LOCATIONS	SPEAKER	POWER	MODELS	COLOR	COMMENTS			
	01		IP ADDRESSABLE VIDEO AND AUDIO DOOR STATION	WALL MOUNT	INDOOR	HANDS-FREE	POE+	AXIS A8004-VE	ALUMINUM & BLACK	SIP 2-WAY INTERCOM, ONVIF, REMOTE ENTRY CONTROL			

CAMERA LABELING			
	C-W-XX	— W = SERVING IDF	XX = CAMERA NUMBER
□□□	YY Z' - ZZ" AFF	— YY = CAMERA TYPE	
		- Z' - ZZ" = MOUNTING	HEIGHT TO CENTER ABOVE FINISHED FLOOR

## **GENERAL NOTES:**

- 1 CONTRACTOR SHALL SUPPORT ALL CABLE WITH APPROVED PATHWAY.
- 2 ALL CABLES SHALL BE ROUTED PARALLEL AND PERPENDICULAR TO THE BUILDING STRUCTURE, UNLESS OTHERWISE NOTED.
- 3 PROVIDE CONDUIT SLEEVE WITH NYLON BUSHINGS FOR NON-RATED WALL PENENTRATIONS FOR COMMUNICATIONS CABLES. PATHWAYS SHALL BE SIZED FOR FOURTY (40) PERCENT FILL.
- 4 CABLE SHALL NOT BE EXPOSED IN FINISHED SPACES. WHEN SURFACE MOUNTED CONDUIT IS REQUIRED, SUBMIT PROPOSED ROUTING AND RACEWAY TYPE TO OWNER FOR APPROVAL. RACEWAYS SHALL BE VANDAL RESISTANT AND RATED FOR ENVIRONMENT. RACEWAYS SHALL BE PAINTED AS DIRECTED BY OWNER.
- 5 PROVIDE UL LISTED FIRESTOP ASSEMBLY AT FIRE WALL PENETRATIONS FOR COMMUNICATIONS AND ELECTRONIC ACCESS CONTROL CABLES. MATERIAL AND INSTALLATION SHALL MAINTAIN THE RATED CAPACITY OF WALL AND MEET ALL APPLICABLE CODES.
- 6 VERIFY ALL CAMERA LOCATIONS PRIOR TO ROUGH-IN AND CABLE INSTALLATION. FIELD OF VIEW SHALL NOT BE OBSTRUCTED BY OTHER ELEMENTS INCLUDING, BUT NOT LIMITED TO, EXIT SIGNS, LIGHT FIXTURES, MILLWORK, SPRINKLERS, CURTAINS, AND SIGNAGE. CONFIGURE IN CORRIDOR/HALLWAY VIEW WHERE APPLICABLE. WALL MOUNT CAMERA ELEVATIONS TO BE DETERMINED BY CONTRACTOR FOR BEST FIELD OF VIEW.
- 7 ALL WIRING SHALL BE INSTALLED COMPLETE AND UNSPLICED FROM THE SERVING EQUIPMENT PANEL TO DEVICE.
- 8 ALL SECURITY CAMERAS AND ACCESS CONTROL DEVICES SHALL BE SHOWN ON SITE MAPS IN VIDEO MANAGEMENT AND ACCESS CONTROL SOFTWARE.
- 9 REMOVE ALL EXISTING AND ABANDONED ANALOG CAMERAS. DEMOLISH CABLING BACK TO SOURCE. REPLACE CEILING TILE AND PATCH HOLES.
- 10 PROVIDE SAFETY WIRE TO STRUCTURE FOR CAMERAS IN ACOUSTICAL CEILING TILES.
- 11 ALL REPLACEMENT DOOR HARDWARE TRIM SHALL BE EQUIVALENT TO EXISTING. REUSE LOCKING CYLINDERS/CORES. PROVIDE NIGHT LATCH FUNCTION ON NON "DUMMY TRIM" DOOR LEAVES.
- 12 CONFIRM SPACE REQUIREMENTS FOR ALL ACCESS CONTROL PANELS AND POWER SUPPLIES. NOTIFY DESIGN ENGINEER AND OWNER OF ISSUE WITH DEFICIENT WALL SPACE.
- 13 ALL ADA OPERATORS SHALL REQUIRE VALID CREDENTIAL PRIOR TO ACTUATION UNLESS OPENING IS ELECTRICALLY DOGGED BY ACCESS CONTROL SYSTEM.

COORDINATION WITH OWNER OF UP TO 200 USERS.

- 14 PROVIDE OWNER WITH 500 13.56MHZ CREDENTIALS FOR HIGH SCHOOL AND BUILD DATA BASE FOR CREDENTIAL HOLDERS IN
- 15 PROVIDE OWNER WITH 250 13.56MHZ CREDENTIALS FOR HIGH SCHOOL AND BUILD DATA BASE FOR CREDENTIAL HOLDERS IN COORDINATION WITH OWNER OF UP TO 100 USERS.

HENDERSON
ENGINEERS

8345 LENEXA DRIVE, SUITE 300
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1850001749
MO. CORPORATE NO: E-556D
EXPIRES 12/31/2018

PLATTE COUNTY SCHOOL DISTRICT R-IIII
HIGH SCHOOL AND PAXTON SECURITY UPGRADES

1501/1601 BRANCH ST. PL

HEI JOB NO: 1850001749

DATE: 11/6/18

DESIGNED BY: RNM

SHEET NO.



TY05 RETROFIT PANIC HARDWARE WITH QEL **ELECTRONIC LATCHING MECHANISM. RETROFIT** PANIC HARDWARE WITH REQUEST TO EXIT AND LATCH BOLT MONITOR. DOOR SHALL BE INDEPENDENTLY RELEASED BY VALID CREDENTIAL.

HENDERSON

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1850001749

MO. CORPORATE NO: E-556D

EXPIRES 12/31/2018

ENGINEERS

TY06 RETROFIT PANIC HARDWARE WITH QEL ELECTRONIC LATCHING MECHANISM. RETROFIT PANIC HARDWARE WITH REQUEST TO EXIT AND LATCH BOLT MONITOR.

TY08 RETROFIT WITH INTEGRAL REQUEST TO EXIT.

TY09 RETROFIT WITH INTEGRAL LATCH BOLT

TY10 RETROFIT PANIC HARDWARE WITH QEL ELECTRONIC LATCHING MECHANISM. RETROFIT PANIC HARDWARE WITH REQUEST TO EXIT AND LATCH BOLT MONITOR. DOOR SHALL BE INDEPENDENTLY RELEASED BY VALID CREDENTIAL. EXTERIOR ADA OPERATOR SHALL REQUIRE VALID CREDENTIAL DURING SECURE SCHEDULE PRIOR TO ACTUATION.

TY11 EXISTING CAMERA. PROVIDE VMS LICENSE, PROGRAM INTO MAPS, AND INTEGRATE/ASSOCIATE WITH RESPECTIVE

TY12 CONTRACTOR TO DETERMINE EXACT LOCATION OF CAMERA. CAMERA SHALL CAPTURE ALL SEATING IN FIELD OF VIEW. PROVIDE PENDANT OR WALL MOUNTING HARDWARE AS REQUIRED.

TY13 CONFIRM EXACT PLACEMENT WITH OWNER. TY14 COORDINATE PLACEMENT OF PANIC BUTTONS

TY15 CARD READER AT DESK TO ALLOW REMOTE ENTRY RELEASE AND ENROLLMENT OF CREDENTIALS. COORDINATE EXACT PLACEMENT WITH OWNER.

TY17 REPLACE ARMORED CORD ASSEMBLY

TY18 REPLACE CARD READER BOX WITH ONE OF APPROPRIATE SIZE.

TY19 REPLACE DOOR HARDWARE SET WITH VON DUPRIN 98 SERIES WITH QEL, INTEGRAL REQUEST TO EXIT AND LATCH BOLT MONITOR. DOOR SHALL BE INDEPENDENTLY RELEASED BY VALID CREDENTIAL.

DUPRIN 98 SERIES WITH QEL, INTEGRAL REQUEST TO EXIT AND LATCH BOLT MONITOR. TY21 REPLACE AND REPAIR MULLION WITH NEW

KEYED MULLION.

TY22 REPLACE DOOR HARDWARE SET WITH VON DUPRIN 98 SERIES WITH INTEGRAL REQUEST TO EXIT AND LATCH BOLT MONITOR. TY23 CORRECT RACEWAY AND JUNCTION BOXES.

TY25 PROVIDE 55" VMS DISPLAY. PROVIDE NEW POWER, PATHWAY, ARTICULATING MOUNT, AND AV CABLE FOR CONNECTION TO OWNER PROVIDED CLIENT WORKSTATION. COORDINATE

TY26 PROVIDE WALL ARM AND CORNER MOUNT BRACKET.

THESE DRAWINGS ARE SCHEMATIC IN NATURE. EXISTING CONDITIONS ARE FROM GENERAL OBSERVATIONS AND ARE NOT EXHAUSTIVE OF ALL FIELD CONDITIONS.

THE LOCATIONS AND DEVICES DEPICTED ON DRAWINGS ARE REPRESENTATIVE.
THE CONTRACTOR SHALL SURVEY SITE AND PROVIDE A COMPLETE AND FUNCTIONING SYSTEM MEETING THE MINIMUM REQUIREMENTS THE DISTRICT STANDARDS AND SECURITY DRAWINGS.

INSTALLATIONS SHALL COMPLY WITH ALL LOCAL BUILDING, FIRE, AND ELECTRICAL CODES. ALL INSTALLATIONS MUST SATISFY THE AUTHORITY HAVING JURISDICTION.

HEI JOB NO: 1850001749 11/6/18 DESIGNED BY: RNM

SHEET NO.

1) HIGH SCHOOL SECURITY PLAN - AREA B 1/16" = 1'-0"

# SECURITY PLAN NOTES

TY05 RETROFIT PANIC HARDWARE WITH QEL ELECTRONIC LATCHING MECHANISM. RETROFIT PANIC HARDWARE WITH REQUEST TO EXIT AND LATCH BOLT MONITOR. DOOR SHALL BE INDEPENDENTLY RELEASED BY VALID CREDENTIAL.

TY06 RETROFIT PANIC HARDWARE WITH QEL ELECTRONIC LATCHING MECHANISM. RETROFIT PANIC HARDWARE WITH REQUEST TO EXIT AND LATCH BOLT MONITOR.

TY08 RETROFIT WITH INTEGRAL REQUEST TO EXIT.

TY09 RETROFIT WITH INTEGRAL LATCH BOLT
MONITOR.

TY11 EXISTING CAMERA. PROVIDE VMS LICENSE, PROGRAM INTO MAPS, AND INTEGRATE/ASSOCIATE WITH RESPECTIVE DOOR.

TY12 CONTRACTOR TO DETERMINE EXACT LOCATION OF CAMERA. CAMERA SHALL CAPTURE ALL SEATING IN FIELD OF VIEW. PROVIDE PENDANT OR WALL MOUNTING HARDWARE AS REQUIRED.

TY17 REPLACE ARMORED CORD ASSEMBLY

TY18 REPLACE CARD READER BOX WITH ONE OF APPROPRIATE SIZE.

TY27 INSTALL CAMERA ON LOWER/BASEMENT LEVEL WATCHING LOCKER ROOM HALL.

PLATTE COUNTY SCHOOL DISTRICT R-III
HIGH SCHOOL AND PAXTON SECURITY UPGRADES

HENDERSON

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1850001749 MO. CORPORATE NO: E-556D

EXPIRES 12/31/2018

ENGINEERS

NOTE:

THESE DRAWINGS ARE SCHEMATIC IN NATURE. EXISTING CONDITIONS ARE FROM GENERAL OBSERVATIONS AND ARE NOT EXHAUSTIVE OF ALL FIELD CONDITIONS.

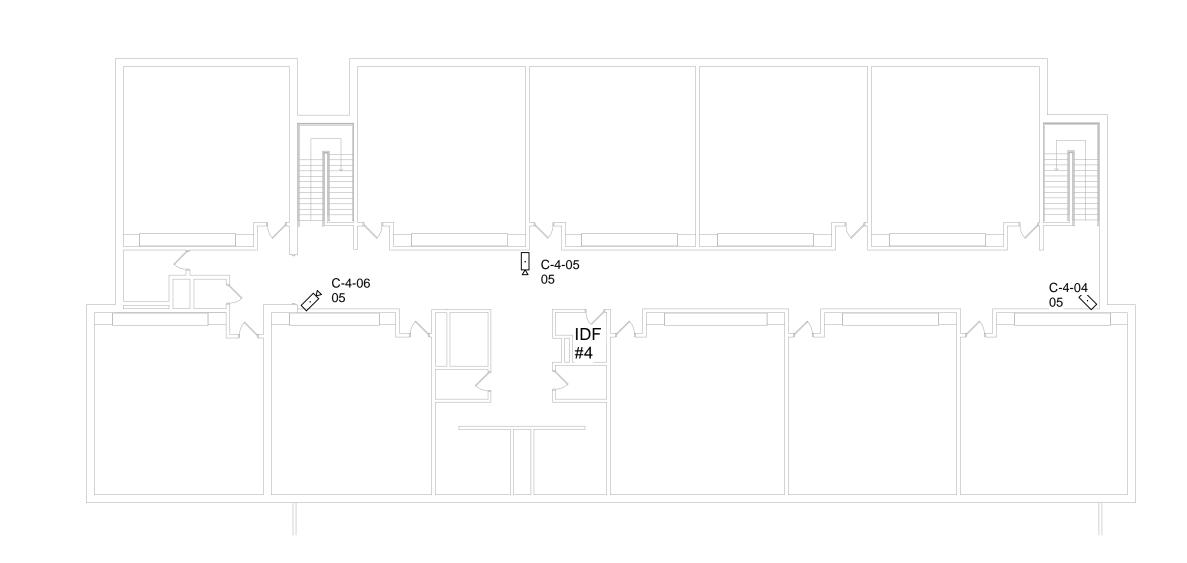
THE LOCATIONS AND DEVICES DEPICTED ON DRAWINGS ARE REPRESENTATIVE.
THE CONTRACTOR SHALL SURVEY SITE AND PROVIDE A COMPLETE AND
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HEI JOB NO: 1850001749

DATE: 11/6/18

DESIGNED BY: RNM



PAXTON SECURITY LEVEL 2 PLAN
1/16" = 1'-0"

SECURITY PLAN NOTES

TY08 RETROFIT WITH INTEGRAL REQUEST TO EXIT.
TY09 RETROFIT WITH INTEGRAL LATCH BOLT

MONITOR.

TY14 COORDINATE PLACEMENT OF PANIC BUTTONS

WITH OWNER.

TY15 CARD READER AT DESK TO ALLOW REMOTE
ENTRY RELEASE AND ENROLLMENT OF
CREDENTIALS. COORDINATE EXACT PLACEMENT
WITH OWNER.

TY19 REPLACE DOOR HARDWARE SET WITH VON DUPRIN 98 SERIES WITH QEL, INTEGRAL REQUEST TO EXIT AND LATCH BOLT MONITOR. DOOR SHALL BE INDEPENDENTLY RELEASED BY VALID CREDENTIAL.

TY20 REPLACE DOOR HARDWARE SET WITH VON DUPRIN 98 SERIES WITH QEL, INTEGRAL REQUEST TO EXIT AND LATCH BOLT MONITOR.

TY21 REPLACE AND REPAIR MULLION WITH NEW KEYED MULLION.

TY24 REPLACE WITH VON DUPRIN HARDWARE WITH INTEGRAL REQUEST TO EXIT AND LATCH BOLT MONITOR.

TY25 PROVIDE 55" VMS DISPLAY. PROVIDE NEW POWER, PATHWAY, ARTICULATING MOUNT, AND AV CABLE FOR CONNECTION TO OWNER PROVIDED CLIENT WORKSTATION. COORDINATE EXACT LOCATION WITH OWNER.

TY26 PROVIDE WALL ARM AND CORNER MOUNT BRACKET.

C-4-07 EXT DOOR #2 ─► DOOR #3 ─► C-5-04 🏈 C-5-03 06 C-5-09 EXT 07 TY26 C-5-08 EXT 07

1) PAXTON SECURITY LEVEL 1 PLAN 1/16" = 1'-0"

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PLATTE COUNTY SCHOOL DIST
HIGH SCHOOL AND PAXTON SECURITY U

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CABLE LEGEND

----- ELECTRONIC SECURITY CABLING

------ CATEGORY NETWORK CABLING

120VAC

## **GENERAL NOTES:**

CABLING SERVING LOCATIONS ARE ASSUMED. FIELD CONDITIONS MAY RESULT IN DIFFERENT SERVING LOCATIONS BASED ON EXISTING LOW VOLTAGE CABLING PATHWAYS. CONTRACTOR MAY FOLLOW EXISTING PATHWAYS. CATEGORY CABLING DISTANCES MAY NOT EXCEED 295FT. ACCESS CONTROL CABLING DISTANCES SHALL NOT EXCEED MANUFACTURERS RECOMMENDED REQUIREMENTS OR VOLTAGE DROP LIMITATIONS AS DEFINED BY NEC.

PAXTON SECURITY UPGRADES

64079

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ENGINEERS

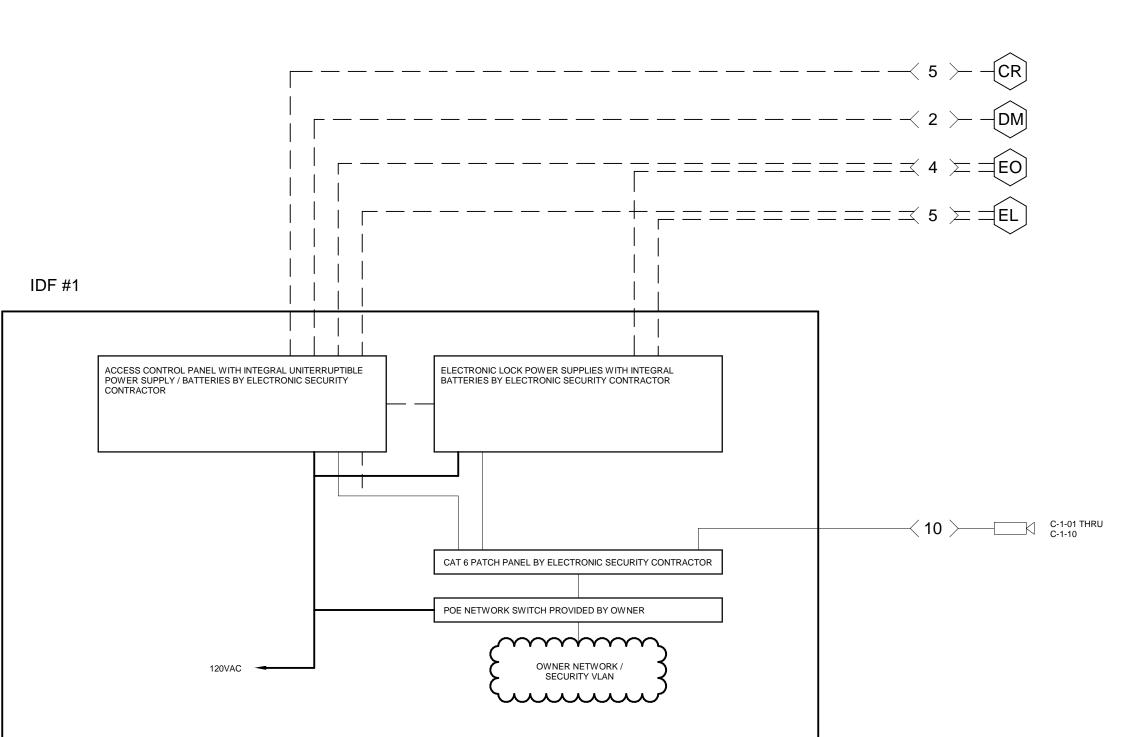
PLATTE COUNTY SCHOOLS DATA CENTER

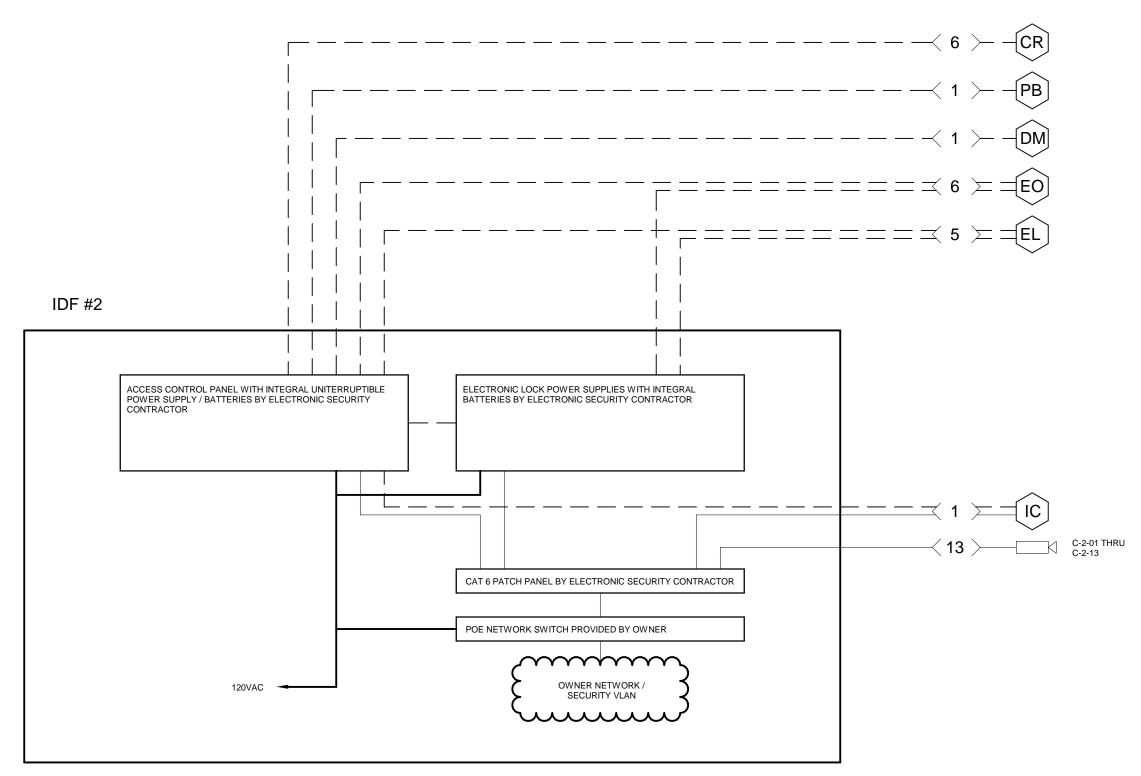
PAXTON

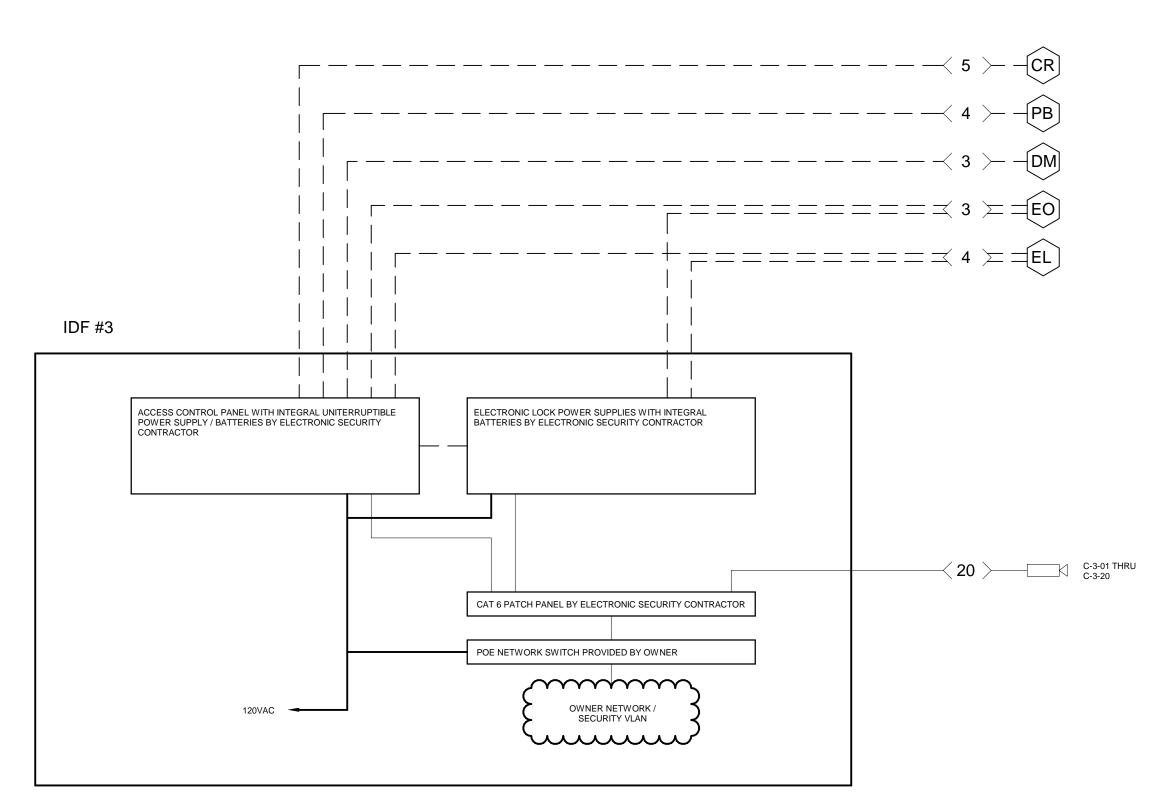
ACCESS CONTROL SYSTEM SERVER BY ELECTRICAL SECURITY CONTRACTOR. COORDINATE INSTALLATION WITH OWNER.

SALIENT POWERULTRA VIDEO MANAGEMENT SERVER BY ELECTRICAL SECURITY CONTRACTOR. COORDINATE INSTALLATION WITH OWNER.

NOTE: ACS AND VMS SERVERS PROVIDED WITH HIGH SCHOOL PROJECT







HIGH SCHOOL

HEI JOB NO: 1850001749

DATE: 11/6/18

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PLATTE COUNTY SCHOOL DISTRICT
HIGH SCHOOL AND PAXTON SECURITY UPGRADE

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EXPIRES 12/31/2018

ENGINEERS

SECURITY FASTENERS

EXPANSION ANCHORS WITH
(4) 1/4"Ø STAINLESS STEEL
FASTENERS

CAMERA INSTALLATION BOX
WITH CONDUIT CONNECTIONS

ELEVATION
AS NOTED ON

4 TYPICAL CAMERA INSTALLATION DETAIL - RECESSED ACOUSTICAL CEILING MOUNT NTS

6 TYPICAL CAMERA INSTALLATION DETAIL - WALL MOUNT WITH ARM NTS

DRAWINGS

NOTE:

MANUFACTURER GANG BOX ADAPTER.

CEILING GRID

5 TYPICAL CAMERA INSTALLATION DETAIL - SURFACE ACOUSTICAL CEILING MOUNT NTS

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#### **SECTION 008100**

#### PREVAILING WAGE DETERMINATION

#### **PART 1 - GENERAL**

1.1 This Project is contracted under the requirements of Missouri Prevailing Wage Law. This Section includes general information and forms for convenience. Detailed requirements, information, forms, and assistance may be obtained by contacting the following:

Missouri Department of Labor and Industrial Relations
 Division of Labor Standards
 Prevailing Wage Section

PO Box 449

Jefferson City, MO 65102-0449

Phone: 573-751-3403 Fax: 573-751-3721

Email: prevailingwage@labor.mo.gov

Website: www.labor.mo.gov/ls/prevailingwage

- B. Prevailing Hourly Rate of Wages: Not less than the prevailing hourly rate of wages, as set out in the wage order attached, must be paid to all workers performing work under this Contract.
  - 1. Contractor shall forfeit a penalty to the contracting public body of \$100 per day (or portion of a day) for each worker that is paid less than the prevailing rate for any work done under this Contract by the Contractor or by any Subcontractor.
  - 2. Submit certified copies of Contractor's and subcontractor's payrolls to contracting public body on a weekly basis.
- C. Safety Training Program: All on-site employees, including those of Contractor and subcontractors, are required to complete the ten-hour safety training program required under Section 292.675 RSMo, if they have not previously completed the program and have documentation of having done so.
  - 1. Contractor shall forfeit a penalty to the contracting public body of \$2500 plus an additional \$100 for each employee, including those of subcontractors, for each calendar day, or portion thereof, such employee is employed without the required training.
- D. Construction Transient Employers: Every transient employer, as defined in section 285.230 RSMo, must post in a prominent and easily accessible place at the site, a clearly legible copy of the notices listed below. Any transient employer failing to comply with these requirements shall, under section 285.234 RSMo, be liable for a penalty of \$500 per day until notices are posted as required by the statute:
  - 1. The notice of registration for employer withholding issued to such transient employer by the director of revenue.
  - 2. Proof of coverage for workers' compensation insurance or self-insurance signed by transient employer and verified by the Department of Revenue through records of the Division of Workers' Compensation.
  - 3. The notice of registration for unemployment insurance to such transient employer by the Division of Employment Security.
- E. Posting of Wage Rates: While work under this Contract is being performed, a legible list of all prevailing wage rates must remain posted in a prominent and easily accessible location at the site by the Contractor and each subcontractor on the project. Such notice shall remain posted during the full time that any worker is employed on the project.
- F. Project Notification Contractor Information Notification: Before performing any Work, submit a completed PW-2 Form "Prevailing Wage Project Notification Contractor Information Notification," available at <a href="https://www.labor.mo.gov/ls/prevailingwage">www.labor.mo.gov/ls/prevailingwage</a> under "Forms," to The Division of Labor Standards (DLS).

- G. Project Completion Notification Affidavit of Compliance: Before final payment will be made, the Contractor shall file a fully executed affidavit, PW-4 Form "Affidavit Compliance with the Prevailing Wage Law", available at <a href="https://www.labor.mo.gov/ls/prevailingwage">www.labor.mo.gov/ls/prevailingwage</a> under "Forms," to The Division of Labor Standards (DLS).
- H. Monthly Applications for Payment: Pursuant to prevailing wage laws, an Affidavit of Compliance (Form PW-4) must be filed with the District before payment will be approved. The District will withhold and retain any amounts due as a result of any violation of the prevailing wage law prior to making payment with any contractor. Include Affidavit of Compliance with each application for payment.

PART 2 - PRODUCTS (NOT APPLICABLE)

PART 3 - EXECUTION (NOT APPLICABLE)

**END OF SECTION 008100**