

1.9 SAFETY AND COMPLIANCE TESTING

- A. All equipment used for normal daily activities/operation by staff and/or students shall be mounted at ADA required heights (for example, Patch Panels).
- B. All data and voice system active components shall be UL listed.
- C. All materials and equipment shall be installed and completed in a high quality and workmanlike manner and in accordance with the best modern methods and practice. The Contractor shall be certain that all installation work areas are secure and made safe in accordance with Occupational Safety and Health Administration (OSHA) regulations.

1.10 TRAINING

- A. The Contractor shall provide at no additional cost a minimum of sixteen (16) hours of in-service on-site training with these systems. The training sessions shall be divided into segments that will facilitate the instruction of individuals in the operation of the systems. Operations Manuals and Users Guides specified in Section IV shall be provided at the time of this training.

1.11 DELIVERY/STORAGE/HANDLING

- A. All supplies and/or materials shall be held by the Contractor until needed at the site, unless they can be stored in the area in which the work is to be done and that area has been closed to occupant usage.
- B. The Contractor shall obtain the permission of the using institution's representative regarding any needed storage of materials and equipment. Such storage shall be done in such a manner as not to interfere with the building schedule. The Contractor shall be responsible for any and all accidents caused by negligence from this source. The Owner does not accept responsibility for losses of material or equipment, regardless of approval to store, in any institution's facilities or grounds.
- C. All deliveries shall be scheduled, received and will be the responsibility of the Contractor; and deliveries by "Drop Shipment" from other sources will not be accepted by the Owner.
- D. Delivery: The Contractor shall make all arrangements to unload and transport delivered materials and equipment to the job site. Equipment and materials

shall be received at the site in new condition and shall be maintained in new condition throughout the installation process.

- E. Storage: Designated telecommunication rooms may be used with the project manager's approval for material storage. Materials shall be new. Damaged or deteriorated equipment and material will not be acceptable.
- F. Cable reels shall not be rolled or stored without an appropriate underlay.

1.12 WORKSITE CONDITIONS

- A. Conditions of the projects will vary with each installation. Sequencing and planning shall be the responsibility of the contractor.
- B. The Contractor shall expect that other Contractors from other trades and Contracts may be working in the building at the same time while this contract is in progress. The Contractor shall fully cooperate with all those working in the building. Work shall be done as described in the General Conditions.
- C. The Contractor shall meet with the appointed representative of the Owner prior to the start of the project, to coordinate phasing and timing of planned installation. Prior to starting the installation, the assigned supervisor or lead technician, shall participate in a walk-through of the project with the Owner's representative to review the engineering/installation documentation and verify all installation methods and cable routes.
- D. The Contractor shall examine the site and observe the conditions under which the work will be done or other circumstances which will affect the work before submitting his bid. No subsequent allowance will be made for errors or omissions in connection with this examination.
- E. The Contractor shall obtain and pay for any and all certificates and permits required for the work to be performed.
- F. All materials and equipment shall be installed and completed in a high quality and workmanlike manner and in accordance with the best modern methods and practice. The Contractor shall be certain that all installation work areas are secure and made safe in accordance with Occupational Safety and Health Administration (OSHA) regulations.
- G. Materials installed which do not present an orderly and reasonably neat or workmanlike appearance or are not installed in accordance with these

specifications or the Contract Drawings shall be removed and replaced at the Contractor's expense when so directed by the Owner.

- H. Drawings shall be considered schematic in nature and shall represent a completed product. Contractor is responsible for installation of equipment and methods of achieving a satisfactory and intended installation. Locations of devices are intended to show a general arrangement and intended function. Coordinate with all Contract Documents and site conditions. Coordinate with other trades.
- I. Where a conflict exists between Drawings and Specifications, the Engineer shall be contacted to determine the intent. In all circumstances, the final Contract Document interpretation shall provide compliance with all codes.
- J. Wiring devices shall be located uniformly with respect to building structure and other work. Locations shall be coordinated. Should there be any interference between electrical wiring and other trades, Contractor shall notify Engineer so that proper location may be decided upon.
- K. If mention has been omitted herein of any items (installation tools) of the work or materials usually furnished for, or necessary to the completion of the cabling work (screws, anchors, clamps, tie wraps, distribution rings, miscellaneous grounding and support hardware) or if there are conflicting points in the Specifications, the Owner's attention should be called to such an item or items in sufficient time for a formal addendum to be issued. Any and all conflicting points in the Specifications and/or Drawings which are not questioned by the successful bidder and clarified prior to opening of bids shall be subject to the interpretation of the Owner after award of the contract, and its interpretation shall be binding upon the successful bidder.

PART 2 - PRODUCTS

2.1 EQUIPMENT RACK AND RACK MANAGEMENT

- A. Equipment rack(s) shall be provided for the telecommunication system. The rack shall be upright, floor standing, steel, or extruded aluminum. Equipment racks shall conform to EIA Standard RS-310C for 19" x 84" racks, capable of supporting up to 600 pounds, with Type B universal mounting rail hole pattern, and shall be complete with all mounting hardware. All unused rack space shall be blanked off with matching steel panels.
- B. Racks shall be mounted on an isolation pad and utilize non-conductive washers with appropriate sized lag screws to secure the rack to the floor. Provide Chatsworth #10605-019 rack/floor isolation kit. Racks shall be

secured to the floor with four screws per rack. Floor-mounted open racks shall be secured from the top rail to the backboard in the room with a length of cable runway to prevent movement. All racks shall be grounded to the isolated ground bar within the Telecommunications Closet (TC) and Main Cross-Connect (MC) using a standard ground lug and #6 AWG jacketed green cable in accordance with 007 portion of TIA/EIA Standards unless otherwise required NEC. Provide ground lug kit for data rack bonding.

- C. Provide horizontal and vertical cable management organizers as elsewhere specified in this section. Vertical wire management shall be Hubbell VC76H, and horizontal wire management Hubbell HC219ME3N or approve equals. Each IDF shall be connected to the MDF. Provide a minimum of four (4) rows of 5 count split front "D" ring horizontal cable management panels per rack. Provide power outlet strips in each equipment rack. Power Outlet surge strip shall be Wiremold Part Number JT06B2B or approved equal.
- D. Racks shall be Hubbell HPW84RR19, or approved equal.
- E. The Contractor shall provide a 12" ladder rack for all vertical and horizontal bulk cable management within telecommunications closets. Acceptable Parts: Cablofil CF105 Series, Hubbell 12" (w) Steel, 9" Ladder Series, or approved equivalent.
 - 1) The Contractor shall install 2 x 6 x 10 wire mesh cable tray in ceiling and telecommunications closets where deemed necessary to facilitate proper cable management. Cable Tray shall be MP Husky's Techtray, Gs Metals Flextray, or approved equal. Contractor shall have the option to provide j-hooks or mesh cable tray for cable supports for distributing cables through the building. The Contractor shall provide only cable tray in each MDF and IDF for cable support.
 - 2) Install cable management system at locations specified. Coordination with other trades will be absolutely necessary in this installation. Any major corrections of the path should be brought to the attention of the Owner and the Engineer.
- F. The Contractor shall provide wall-mounted, split-front "D"-type wire management rings above, below, and between each wall-mounted termination panel. Acceptable Parts: Hubbell 110TRA cable management troughs; and cable management rings, or approved equal.
- G. The Contractor shall provide 2" (or larger as necessary) J-shaped hooks, with rolled edges; gray baked enamel finish; complete with necessary hardware for attachment to sidewall, ceiling, or joist. J-hooks shall be used to support

voice and data cable above suspended ceilings. The Contractor shall supply the quantity necessary. J-hooks shall be spaced a maximum of four feet (4'). Manufacturer shall be Caddy Cat-6 J-hooks, or approved equal.

H. Cable Ties:

- 1) The Contractor shall provide Velcro-type cable ties. Velcro-type cable ties shall be used exclusively for cable management within the racks in the telecommunications closets. The contractor shall supply quantities as necessary for each system.
 - 2) The Contractor shall provide plastic "zip" tie wraps. "Zip" tie wraps shall be used for general cable management throughout the areas outside the telecommunications closets. The Contractor shall supply the quantity necessary.
- I. The Contractor shall provide 3/4" deep fire-retardant-treated plywood backboards, painted white (or other finish color as selected by Owner) with durable enamel paint. Plywood backboards shall conform to Product Standard PS1, Grade B-D, with one finish smooth side (Class A surface). Minimum size shall be 4 feet wide x 8 feet high. All backboards shall be marked with the legend "COMM per EIA/TIA 606 Standards".

2.2 UPS

- A. Provide one (1) UPS unit in each data equipment rack. The UPS System shall be line interactive design with a maximum transfer time of 4 milliseconds. The UPS shall be a single conversion modular UPS System with SNMP Management.
- 1) The UPS System shall provide a minimum of 2000 VA of output power with 120 Volt input.
 - 2) The UPS System shall provide a minimum battery runtime of 20 minutes at full load.
 - 3) The output waveform of UPS shall be true sine-wave.
 - 4) The UPS System shall be provided with a minimum of six NEMA 5-15R output receptacles.
 - 5) The system shall be covered by a two-year on-site warranty.

- 6) The front panel display shall indicate load level, battery charge level, and replacement battery indication.
- 7) The UPS System shall be rack-mounted in the bottom of each 19" equipment rack.
- 8) Provide grounding per EIA/TIA 607 requirements.

2.3 SURGE PROTECTION

- A. The Contractor shall provide transient surge protection on the AC power feeds to all equipment, feeds and on all telephone station and central office lines leaving or entering the main building, all classrooms, and portable classrooms (as applicable). This protection shall include equipment with switches, hubs, and similar devices.
- B. The Contractor shall note in the submittal drawings, the type and location of these protection devices as well as all wiring information.
- C. Provide ventilation panels, louvers, blower fans, etc., as required to provide heat dissipation to conform to the equipment manufacturers' environmental specifications.
- D. Surge protection devices shall be grounded as required by the equipment manufacturers and comply with UL, ANSI, NEC, State and local agencies.
- E. Surge protection devices shall have a 5 nanosecond or less response time for clipping excessive voltage. The devices shall consist of solid state circuitry, shall automatically reset after an operation with no degradation in protective capability, and shall have an indicating light to indicate when the unit is now operational. Devices shall be direct plug-in type, plug strip type, or hard-wired connection type as applicable to the respective component of equipment.
- F. Provide devices for AC power system surge protection by CITELE, Cylix, or DiTek.
- G. Provide devices for data/telephone systems surge protection by CITELE, Cylix, or DiTek.

2.4 VOICE CABLING

- A. Cabling for all locations shall be four (4) pair, unshielded, Category 6 plenum-rated jacket from each jack to a Patch Panel in Communications Closet.

Horizontal Category 6 cabling and components shall be as specified in "Data Cabling System" below.

- B. The Owner will be utilizing a voice over IP telephone solution and therefore, the standards described for data listed below will apply.
- C. All Voice Outlets shall be identical to Cat6 data outlets specified below for the data cabling system.
- D. 110 blocks shall be manufactured by Hubbell or approved equal.
- E. Provide cabling as recommended by the manufacturer to interconnect the telecommunication system rack in each closet and the main distribution rack. Each IDF shall be connected to the MDF by voice backbone cabling as indicated on contract drawings. All backbone cable pairs shall be end-to-end terminated on Category 6 110 type mass termination blocks.
- F. Voice Backbone:
 - 1) Unshielded 24 AWG multi-pair copper cables shall be used as the vertical riser cables to connect the Telecommunications Closets to the Main Cross-Connect. The cable shall support voice and low speed data.
 - 2) The bending radius and pulling strength requirements of all backbone cables shall be observed during handling and installation. The multi-pair copper cables shall be in non-plenum form and placed in conduit as required.
 - 3) The cable shall consist of solid-copper conductors insulated with expanded polyethylene covered by a Plenum-Rated skin, be conformance tested to meet EIA/TIA 568A for Category 6 cables, be UL7 Listed as CMP. The copper riser cable shall meet or exceed the following electrical specifications listed below:

a) Electrical Specifications:

Average DC Resistance	26.5Ω/1,000 ft (8.7Ω/100m), maximum
Average DC Resistance Unbalance	1.7%, maximum
Mutual Capacitance @ 1kHz	16 nF/1000 ft (5.25 nF/100 m), maximum
Capacitance Unbalance (pair to ground)	201pF/1,000 ft (65.94 pF/100m) maximum

b) Attenuation (db/100 m):

Frequency	Attenuation (Max.)
1.00 MHz	2.3 dB
5.00 MHz	4.9 dB
10.00 MHz	8.5 dB
16.00 MHz	12 dB

c) Near-End Crosstalk (NEXT) dB/100 m [328 ft]:

Frequency	Pair-to-Pair NEXT (Max.)
1.00 MHz	13.8 dB
4.00 MHz	11.2 dB
10.00 MHz	10.2 dB
16.00 MHz	9.2 dB

d) Cable shall be available in 25 pair counts. UL7 Listed for Fire Safety. ISO 9001 Certified Manufacturer.

2.5 DATA CABLING

A. Provide a complete data communications system consisting of the following:

- 1) Accessories and Appurtenances
- 2) Cable Management Devices
- 3) Fiber Optic Cable and Terminators (as indicated on drawings)
- 4) Copper and Fiber Patch cables
- 5) Remote Jacks
- 6) Termination/Patch Panels
- 7) Twisted Pair Data Cables

2.6 FIBER

A. Fiber:

- 1) Fiber shall be provided between the Telecommunications Closets (IDF) and Main Cross-connect (MDF); and provided with twelve (12) strands as designated on the contract drawings.
- 2) All fiber shall be from the same manufacturer. A mix of fibers from different manufacturers may not be used without written permission.
- 3) All Multimode Fiber shall meet the following specifications:
 - a) Fibers shall comply with ANSI/EIA/TIA 492A specifications and IS 11801 standards.
 - b) Fibers shall have dual wavelength capability; transmitting at 850 and 1300nm ranges.
 - c) All fibers shall be color coded to facilitate individual fiber identification.
 - d) Fibers shall have D-LUX® coating or approved equivalent to ensure color retention, minimize microbending losses and improve handling. The coating shall be mechanically strippable.
 - e) Short Term: 340 lbs. Long Term: 170 lbs.

2.7 PATCH PANELS

- A. Patch panel shall be high density such that 24-ports occupy 1 rack unit and 48-ports occupy 2 rack units, and 96-ports occupy 4 rack units.
- B. Shall use Category 6, UMJ8 RJ45 jacks in 6- or 8-port modules. Patch panel jack (UMJ 8 position/8 conductor) shall terminate to a 110Dtype insulation displacement contact, printed circuit board or lead frame mounted connector.
- C. Patch panel jack shall support termination of 22, 24 and 26 AWG solid conductor; four pair unshielded twisted pair copper cable.

2.8 WORK AREA OUTLETS

- A. All Category 6 work area outlets shall meet or exceed NEXT and all other Category 6 transmission performance requirements for connecting hardware, as specified in ANSI/TIA/EIA-568-B.2 Commercial Building Telecommunications Cabling Standard and be part of the UL® LAN Certification and Follow-up program.

SECURITY EQUIPMENT

Intrusion detection devices generally utilized are wired motion detectors and door contacts.

Devices are wired from the device to Vuance panels. Panels are IP-enabled and via the site network are managed by a head-end server/software.

Head-end server/software is available from VSS (Steel server/software). Head end software provides for site-based or remote management functions and integration with security camera systems available from VSS. This integration is available for both analog and IP cameras.

Dial-up communication from the site to the existing ADP MAS system, monitored by the UCC, is via a DMP dialer. The only purpose of this dialer is to retrofit into the legacy ADT alarm system.

Intrusion Detection

Intrusion Detection	Manufacturer	Unit Desc	
Central Command Alarm Transmission	DMP	DMP Digital Dialer XT30DS-G (DMP PANEL WITH ON-BOARD DIALER IN SMALL ENCLOSURE)	www.DMP.com
Intrusion Detection Panels	Vuance VSS	Access Control: Intelligent Reader Module IP Comm: Communication Daughterboard Intrusion Detection: Input Module	www.vuance.com www.vssc corp.com
Intrusion Detection Headend	VSS	Steel	www.vssc corp.com
Motion Detectors, Door Contact, Glass Break, etc.	Vendor Provided	Dry Contact	

Single Door Control (Usually at Elementary Schools)

Single door control includes wired door locks, door egress bar, and AIPhone intercom/camera unit.

Door hardware is wired to the AIPhone unit on the exterior of the building controlling the door. The door unit is wired to an LCD/Intercom unit in the main office that allows staff to unlock the door remotely.

Single Door Control	Manufacturer	Unit Desc	
Door Control	AIPhone	Any	www.aiphone.com

Access Control

Access control door hardware includes wired magnetic locks, push-to-exit buttons, egress motion detectors, HID readers, and keypads.

Devices are wired from the device to Vuance panels. Panels are IP-enabled and via the site network are managed by a head-end server/software.

Delayed Egress for hardware is provided by Vonduprin, Detex, and Specialite.

Head-end server/software is available from VSS (Steel server/software). Headend software provides for site-based or remote management functions and integration with security camera systems available from VSS. This integration is available for both analog and IP cameras.

Access Control	Manufacturer	Unit Desc	
Central Command Alarm Transmission	DMP	DMP Digital Dialer XT30DS-G (DMP PANEL WITH ON-BOARD DIALER IN SMALL ENCLOSURE)	www.DMP.com
Access Control Panels	Vuance VSS		www.vuance.com www.vssc corp.com
Access Control Headend	VSS	Steel	www.vssc corp.com
Egress Doors	Vonduprin		
	Detex		
	Specialite		

Readers, Door Contacts, Magnetic Locks	Vendor Provided	HID Compliant	
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CCTV Video Security (Analog)

Stationary analog security cameras are provided by GE and VSS. PTZ analog security cameras are provided by Pelco.

Cameras are wired via Siamese coax cable (i.e. coax cable and power cable in the same "jacket") to a head-end where the Siamese cable is split and the coax connected to a VSS Alloy Analog Network Video Recorder (NVR) that supports both analog and IP cameras. The power cable is connected to an Altronix power supply that powers the cameras.

VSS video recording units are capable of being configured to operate and integrate with intrusion detection/access control management systems. Headend software provides for site-based or remote access and management functions. This integration is available for both analog and IP cameras.

Security Monitors are LCD screens that have a minimum screen size of 19 inches. Output to the security monitor(s) is via a coax cable run from the headend NVR to the monitor. Each NVR supports 1-2 security monitors, but the output signal can be split if security monitors are desired in multiple locations. The general guideline is 1 security monitor per 16 cameras.

CCTV (Analog)	Manufacturer	Unit Desc	
Connectivity	Cisco	POE Switches	www.cisco.com
UI, Mapping, Integration	VSS	VSS Alloy Analog	www.vsscorp.com
Analytics	ObjectVideo	By Design	www.objectvideo.com
Analog Cameras	GE	DR-RWM-1500 VFA3	www.ge.com
	Pelco	Spectra Series PTZ 6700 Multiplexor KYBD300 joystick	www.pelco.com
	VSS	VAC-D480VFIR Dome	www.vsscorp.com

IP Video Security (IP cameras)

IP security cameras are provided by Axis and Cisco.

Cameras are wired via Ethernet to the nearest IDF/MDF and connected to a Cisco Power-Over-Ethernet (POE) switch that provides power for the camera and network connectivity. Switches are connected between closets via customer-provided fiber.

Via the network, cameras are managed at the head end by the VSS Alloy User-Interface (UI) appliance server. The server manages the cameras, recording of video to Cisco Multi-Services Platform records, user access, site maps, and integration with 3rd party systems. Units are capable of integrating with 3rd party intrusion detection/access control systems.

Systems are accessible both locally and remotely.

Headend software provides for site-based or remote management functions and integration with security camera systems available from VSS.

Security Monitors are LCD screens that have a minimum screen size of 19 inches. Output to the security monitor(s) is via Ethernet run from the headend to the monitor. Security monitor video management appliance(s) manages the video output to the security monitors. Each video management appliance supports 1 security monitors. The general guideline is 1 security monitor per 16 cameras. Maximum viewing for High-Definition cameras is four (4) cameras per LCD simultaneously.

IP Video	Manufacturer	Unit Desc	
Connectivity	Cisco	POE Switches	www.cisco.com
Recording Engine	Cisco	2U Multi-Services Platform (12 Tb)	www.cisco.com
UI, Mapping, Integration	VSS	VSS Alloy IP (4Tb)	www.vssc corp.com
Video Encoders	Axis	Q7406 Chassis 243Q Blade	www.axis.com
Analytics	ObjectVideo	By Design	www.objectvideo.com
IP Cameras	Axis	232D+ PTZ (Exterior) USB joystick	www.axis.com
	Cisco	2520V SD Dome (Interior) 5010 HD Camera (Interior)	www.cisco.com

	Panasonic	WV-NF302 Megapixel Dome Camera (Exterior)	www.panasonic.com
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Note: HD cameras require upgraded workstations to view in HD mode.

High-Definition (HD) Camera Viewing Workstation (Recommended)

OS: Windows XP Profession SP 3

CPU: Intel 950 i7 Core - 3.07 GHz

Memory: 4-6 GB DDR3 (3.5 GB usable)

Graphics: NVidia GeforceGTX 275 1.7GB PCIE, or equivalent

Browser: Microsoft Internet Explorer 7/ Microsoft Internet Explorer 8 in Compatibility Mode

Gigabit Ethernet (GigE) network connection required

Note: Verify functional use with manufacturer prior to utilizing Vista or Windows 7 32-bit workstations

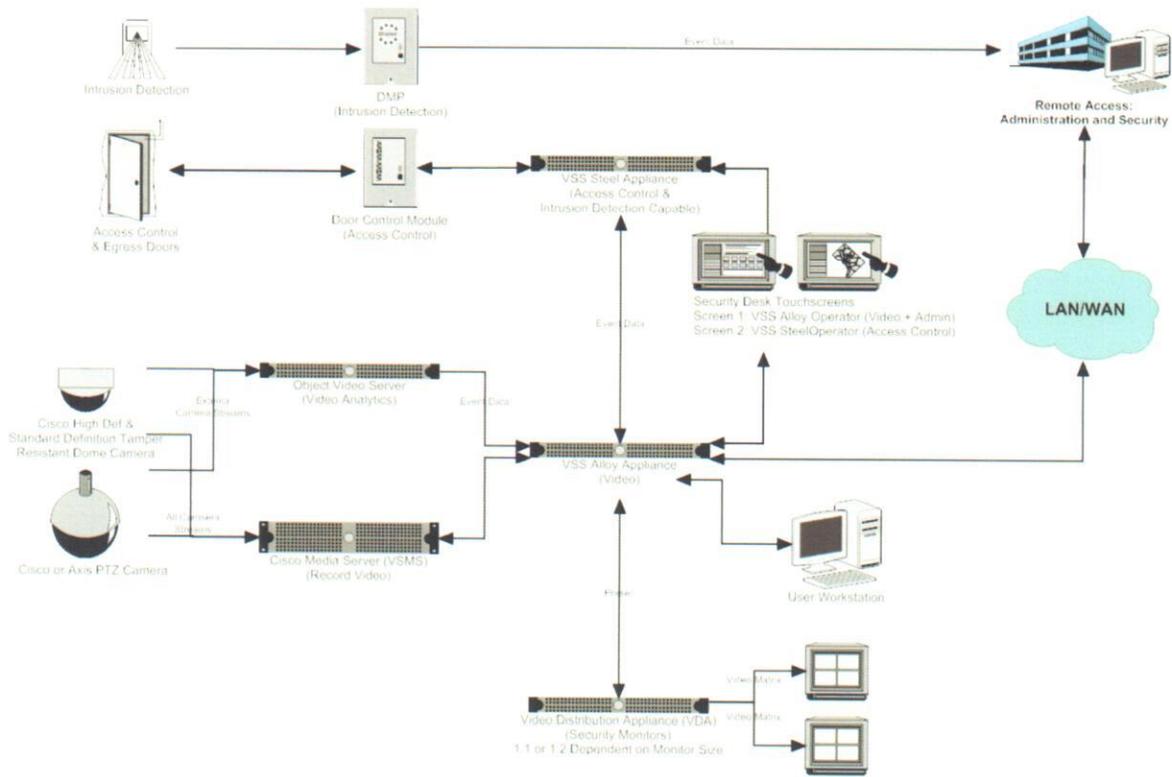
Fire

Fire Detection	Simplex Grinnell		www.simplexgrinnell.com
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Site Based

Radios	Motorola	CP200UHF	www.motorola.com
Hand wands	Garrett	SuperScanner	
x-Ray Machines	RapiScan	618XR	www.rapiscan.com
Metal Detectors	Garrett	MT5500	

SECURITY OVERVIEW



SECURITY CAMERA LOCATIONS

A. Camera Location

1) Interior Cameras:

- a) Stationary Dome Cameras: High Definition for Hallways and Large areas
- b) Stationary Dome Cameras: Standard Definition for Stairwells, Vestibules, and Small Spaces

- c) IR preferred
- d) Tamper resistant, vandal proof
- e) Facing doors with exterior access (ingress or egress)
- f) Welcome Center/Main Office
- g) X-Ray Machines/Metal Detectors
- h) Hallways
- i) Stairwells and Landings
- j) Cafeteria
- k) Serving Line
- l) Kitchen
- m) Gym
- n) Bleachers
- o) Common Areas
- p) Media Centers
- q) Computer Labs

2) Exterior Cameras:

- a) Stationary Dome Cameras: High Definition or Megapixel
- b) Pan/Tilt/Zoom Cameras: Pendant, Arm, or Corner Mount
- c) IR Preferred
- d) Tamper Resistant, Vandal Proof
- e) 360° Perimeter Protection
- f) Main Entrances and Doors with High-Traffic flow
- g) Parking Lots
- h) Basketball Courts
- i) Football Fields

SECURITY INSTALLATION, MAINTENANCE, AND SERVICE

A. Service and Support

1) Remote Service

- a) Vendor shall provide daily operational system checks to include but not limited to:
 - 1. Verification of proper functional operation of video server or alert/alarm server(s)
 - 2. Verification of proper functional operation of access control or intrusion detection server(s)

3. Verification of proper functional operation of video analytics server(s)
 4. Verification of proper functional operation of video paging components
- b) Vendor shall provide regular operational system checks to include but not limited to:
1. Visual verification of un-obscured camera images. Automated systems alone are not acceptable.
 2. Verification of operation of all alert and alarm devices
 3. Verification that cameras are recording as defined.
 4. Schedule to be provided by vendor
- c) Vendor shall provide unlimited phone support via toll-free number during regular business hours. Phone support to include but limited to:
1. User questions
 2. Training
 3. Password resets
- d) Vendor shall provide incident CDs at the request of the Office of Safety and Security.

2) On-Site Service

- a) Vendor shall provide all labor to maintain and service all vendor installed equipment, including but not limited to:
1. Security Cameras
 2. Intrusion Detection
 3. Access Control
 4. X-Ray Machines
 5. Metal Detectors
 6. Video Analytics
 7. Sensor Systems
 8. Headend equipment and software
 9. Security workstations
 10. Security monitors
 11. Related network infrastructure and devices
- b) Vendor shall provide on-site training at the request of the Office of Safety and Security and/or individual sites.

- c) Vendor shall provide remote and on-site support for incident investigation at the request of the Office of Safety and Security and/or the District of Columbia Metropolitan Police Department.

3) Notification

- a) Vendor shall provide same-day notification of any system and/or device outages including but not limited to cameras, video servers, analog-to-IP converters, alert/alarm servers, alert devices, access control devices, intrusion detection and any ancillary equipment integrated into the proposed solution related to physical security.
- b) Vendor shall provide dispatch of a local technician to site to address outages of any physical security devices.
- c) Vendor shall provide a response schedule for outages.

4) Equipment Repair/Replacement

- a) Vendor shall provide complete plan for equipment and parts replacement and repair.
- b) Vendor shall manage warranty replacements for installed equipment.
- c) Vendor shall include shipping and handling of all equipment and parts in offering.

5) Service Level Agreement

- a) Vendor shall provide performance commitments and Service Level Agreements for proposed offering.
- b) Vendor shall provide staffing commitments and resumes of staff to be assigned to project for the period of performance.

SECURITY CONTRACTOR

A. Staff

- 1) All on-site and remote staff shall be required to provide a life-time national criminal background check with no felony convictions. Misdemeanors will be reviewed for approval. Staff includes, but is not limited to:
 - a) On-site installation crews
 - b) On-site maintenance and service staff
 - c) Remote maintenance and service staff
 - d) Any manufacturer representative that may provide support for the proposed solution
 - e) Sales and management representatives for vendor
 - f) Customer reserves the right to request the above-described background check from the Vendor for any personnel that Vendor wishes to access, review, or discuss the implemented solution
- 2) Background checks are to be submitted annually and at the Customer request.
- 3) Vendor shall have at a minimum the following qualifications and certifications:
 - a) District of Columbia Security Alarm Dealer. Submit copy of dealer license with proposal.
 - b) Cisco Authorized Technology Provider for Physical Security
 - c) VSS Authorized Dealer or Authorized Installer
 - d) Dedicated Micros Reseller and/or Development Partner
 - e) Axis Reseller and/or Development Partner
 - f) Object Video Reseller and/or Development Partner
 - g) Panasonic Reseller and/or Development Partner
 - h) Cisco Certified CCNA, CCDA, or CCNP on staff and assigned to account
 - i) Hold a security license for the jurisdiction of the installation
- 4) Vendor shall include any documentation for the following:
 - a) District of Columbia business
 - b) District of Columbia Resident-owned business
 - c) Office located in a District of Columbia HUB Zone

B. Workplace

- 1) Contractor shall provide copy of:
 - a) Safety Policies and Safety Training programs
 - b) Code of Conduct

C. Documentation

- 1) Contractor shall provide copy of:
 - a) Sample Installation, Quality Assurance, and Close-out documentation
 - b) Sample Training Material including manuals and video

D. References

- 1) Contractor shall provide references:
 - a) Of project(s) in similar scope and size
 - b) Of project(s) in the District of Columbia

CONVERGED IP VIDEO MANAGEMENT SYSTEM

PART 1- GENERAL

A. General

- 1) All equipment and materials used shall be standard components, regularly manufactured, regularly utilized in the manufacturer's system.
- 2) All systems and components shall be provided with the availability of a toll free technical support phone number and 24-hour technical support task order/help request via email/chat/on-line request.
- 3) All systems and components shall be provided with an explicit manufacturer warranty.

B. Section Includes

- 1) VSS Alloy Appliance Server

C. Definitions

- 1) No Substitutes: The exact make and model number identified in this specification shall be provided without exception.
- 2) 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
- 3) 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 for approval and must be obtained within the time frames outlined.

PART 2 - PRODUCTS

A. Acceptable Manufacturer

- 1) VSS (Vision Security Software), 2200 Market Street, Suite 305, Galveston Island, TX, 77550, USA Telephone: 409.763.6323, Fax: 678.868.4009 Email: info@vssc.com, Internet: www.vssc.com
- 2) Substitutions: **Not Permitted**

B. Digital Video Recording Management and Network Software

- 1) The Digital Video Recording and Management Network Software shall meet the requirements of private and public sector CCTV applications. The software shall be unique and power a line of Network Video Servers (NVR) and Workstations.
- 2) The Software shall be available on CD-R format with complete installation documentation and provide a complete and comprehensive application for the operation and maintenance of the video surveillance system.