

Denver Public Schools Purchasing Department 1617 S. Acoma St. Denver, Colorado 80223

INVITATION TO BID 14-BS-2061 ADDENDUM NUMBER TWO December 20, 2013

THIS ADDENDUM MUST BE ACKNOWLEDGED.

THIS ADDENDUM SHALL BECOME A PART OF THIS SOLICITATION. Amend Invitation to Bid 14-BS-2061 as follows:

See attached a new bid form for this project that replaces the previous version.

ARCHITECTURAL

A. SPECIFICATIONS

- 1. SECTION 012300 ALTERNATES
 - a. Subsection 3.1 Schedule of Alternates. Add the following subheading:
 - G. Alternate no. 07: Security Systems.

Base Bid: perform work shown on sheets E501, E502, E503, and E504, and in specifications section 280000, DESIGN-BUILD SERVICES FOR SECURITY SYSTEMS. Alternate: perform work shown on attached sheets E501A, E502A, E503A, and E504A. In specifications section 280000, DESIGN-BUILD SERVICES FOR SECURITY SYSTEMS, replace the SECURITY DESIGN CRITERIA with the attached ALTERNATE #7 SECURITY DESIGN CRITERIA.

- 2. SECTION 087100 DOOR HARDWARE
 - a. Subsection 1.2 Summary
 - 1) Delete subheading '**D**'. All items to be furnished and installed by General Contractor.
 - b. Subsection 2.4 Locks and Latches
 - 1) Delete subheading 'D.1'. Mortise locks not allowed.
 - c. Subsection 2.5 Cylinders and Keying
 - 1) Subheading 'G.1'. Revise to state as follows:

"The General Contractor shall remove construction cores and install final cores. Return temporary construction cores to hardware supplier. Installation of final cores shall be a condition of Substantial Completion."

- 3. SECTION 093000 TILING
 - a. Subsection 2.4 Setting and Grouting Materials
 - 1) Delete subheading C, Polymer-Modified Tile Grout. All grout to be epoxy.
- 4. SECTION 096519 RESILIENT TILE FLOORING
 - a. Subsection 2.2 Vinyl Composition Floor Tile
 - 1) Subheading 4, Colors and Patterns, add note to provide tile from same dye lot for entirety of project.
 - b. Subsection 2.3, Installation materials
 - 1) Subheading B, add the following sub-subheading:
 - i. Use asphaltic type adhesives for concrete substrates.
 - Concrete Slab Primer: Non-staining type as recommended by flooring manufacturer.
 - c. Substection 3.3, Floor Tile Installation. Add the following subheadings:
 - J. Use a 'V' notched trowel. Caulk gun adhesive installation is prohibited.
 - K. Provide ventilation before, during, and after installation to provide a relative humidity of 40%.
- 5. SECTION 096566 RESILIENT ATHLETIC FLOORING
 - a. Add the following list of approved manufacturers:
 - i. Gerflor Teraflex Sports Flooring
 - ii. Mateflex
 - iii. Sport Floors, Inc.
 - iv. Advantage Sport USA
- 6. SECTION 096813 TILE CARPETING
 - a. Add the following list of approved products. Refer to drawings for locations:
 - i. Tandus Geotile
 - ii. Tandus Abrasive Action
- 7. SECTION 096816 SHEET CARPETING

- a. Subsection 2.2, Sheet Carpet.
 - 1) Add subheading 'B', Materials and Construction.
 - A. Face Yarn
 - 1. Yarn: 100% Antron Lumena or Legacy
 - 2. Minimum face yarn weight: 17 oz/sy
 - 3. Weave: Tufted level loop, tufted multi-level loop, or textured loop
 - 4. Gauge: 1/10 inch minimum
 - 5. Average pile density: 5,000 oz/sy minimum per ASTM D418-82
 - B. Backing
 - 1. Primary backing and bonding agent: 100% synthetic (no SBR latex)
 - 2. Secondary backing (cushion or solid vinyl)
 - a) Polyvinyl cushion, 18 lb/cu.ft. density, 1/10 inch thickness
 - b) Solid closed cell non-aqueous polymeric vinyl composite
 - C. Dimensions: 6' or 12' width roll goods
- b. Subsection 2.3. Installation Accessories
 - 1) Subheading 'B', Adhesives
- i. Adhesives shall by CRI 'Green Label' approved.
- ii. Adhesives shall be non-toxic, low VOC, non-flammable, waterproof, release-type cements as recommended and warranted by the carpet manufacturer for each substrate and installation condition. Mill-applied adhesives are acceptable.
- c. Add the following list of approved manufacturers. Refer to drawings for locations:
 - i. Collins & Aikman / Tandus
 - ii. Mannington
- 8. SECTION 123200 MANUFACTURED WOOD CASEWORK
 - a. Subsection 2.4 MANUFACTURERS
 - 1) ADD Construction Design to list of approved manufacturers.

B. DRAWINGS

- 1. SHEET A-600
 - 1) Add the attached drawing ADD-2.1, Camera Mounting @ Parapet (Alt. #7). The drawing only applies if Alternate #7 is accepted.

<u>ELECTRICAL</u>

C. SPECIFICATIONS

1. SECTION 280000, DESIGN-BUILD SERVICES FOR SECURITY SYSTEMS. Replace the SECURITY DESIGN CRITERIA with the attached ALTERNATE #7 SECURITY DESIGN CRITERIA. The base bid shall use the section initially issued with the documents.

D. DRAWINGS

- 1. **REPLACE** sheet E201 with the attached sheet.
- ADD SHEETS 501A, 502A, 503A, and 504A to the drawing set as a bid alternate. Sheets 501,502, 503, and 504 shall be the base bid.

E. MATERIAL APPROVALS AND SUBSTITUTION

No Changes

F. RFI'S & CLARIFICATION

1. No Changes

BID FORM

BASE BID

TO: SCHOOL DISTRICT NO 1 IN THE CITY AND COUNTY OF DENVER AND STATE OF COLORADO

PROJECT: Crofton renovations and addition

LOCATION: Crofton E.S. Denver, CO 80205

14-BS-2061

School	Bid Amount
Crofton E.S. Base Bid	\$
Alternate 1 Roofing - Provide EPDM in place of built-up roofing.	\$
Alternate 2 Classroom Casework – Provide base and wall cabinets	\$
Alternate 3 Solar Light Tubes – Provide 12 Solatube 750 DS open ceiling skylights with daylight dimmers	\$
Alternate 4 Additional Basketball Goals – Provide 4 additional basketball goals	\$
Alternate 5 Rooftop HVAC Units – Substitute comparable Trane Voyager rooftop units	\$
Alternate 6 Right-of-way Improvements – Perform work in right-of-way indicated in drawings	\$
Alternate 7 Security Design Criteria	\$
Unit Price 1	\$ per linear foot
Unit Price 2	\$ per linear foot
Unit Price 3	\$ per square foot
Unit Price 4	\$ each
Total	\$

If your proposal has been submitted and you wish to amend it, please modify your proposal on company letterhead. The amended proposal must be received prior to or included at the time and date set for the proposal opening. Each modification submitted to the District's Purchasing Office located at 1617 S. Acoma St. Denver, CO 80223. It must have Vendor's name and return address and the applicable RFP number and title of the RFP clearly marked on the face of the envelope.

If more than one modification is submitted, the modification bearing the latest date of receipt by the District's Strategic Sourcing Office will be considered the valid modification.

*****This addendum must be acknowledged, whether or not you amend your proposal.*****

This Addendum must be included in your submittal or proposal, providing you do not need to amend your proposal.

PRINT OR TYPE YOUR INFORMATION Name of Company: _____ Fax: _____ City/State: Zip: _____ Address: Contact Person: _____ Title: _____ Phone: _____ Authorized Representative's Signature: _____ Phone: _____ Title: _____ Printed Name: _____ Date: _____ Approved by: _____ Date: _____ Reviewed by: _____ Date: _____

14-BS-2061 Addendum # 2



SECURITY DESIGN CRITERIA – DENVER PUBLIC SCHOOLS

Minimum Security Standards for Systems

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• Note: Due to the ever changing technology associated with security systems, this is a working document. Please obtain a new copy at the onset of each new project.

Purpose

This document defines the minimum security criteria required for DPS owned and leased facilities and the spaces and assets within those facilities. This document applies security measures consistently throughout all DPS spaces and is an integral part of the planning, design, and construction of all projects. An objective of this manual is to provide cost effective design criteria that provides an appropriate level of protection to each facility. The criteria set forth in this guide are to be taken into consideration during design process and exist in addition to all other District policies and local, state, and federal guidelines and building codes. It is meant as a supplement to the Denver Public Schools Design and Construction Standards, http://fm.dpsk12.org/?page_id=90, specifically Section 17650 - Security Systems -(28 00 00 - Electronic Safety and Security).

Scope

Building security encompasses how assets (i.e., people, information, and property) can be protected from the effects of malevolent acts carried out by individuals or groups of individuals. Design guidelines shall include forethought to include the following components; deterrence, delay, and detection.

This document is designed to be a guideline which applies to any DPS educational or administrative facility. It does not differentiate between elementary schools, middle schools, high schools, or charter schools. Architects can make specific adjustments based upon the unique needs of the facility. These standards apply to new construction and all additions, alterations, and modernizations. The criteria used in this document is based on risks common to educational facilities and are consistent with other standards developed for these types of facilities. Additionally, this document recognizes risks are unique to each facility and the assets that they may house. Therefore, the criteria developed will vary by facility type, space usage, and risk categorization.

Site Perimeter

The site perimeter is part of the school grounds contacting the street and adjacent property. It defines the initial impression of a school and communicates to the public a message of accessibility or inaccessibility. The perimeter also marks the outermost line that can be protected by security measures incorporated during the design process.

Design Considerations

- Establish a defined perimeter around the school building from the building as feasible. Use layered edge treatments such as fencing, landscaping, and ground surface treatments.
- Use symbolic markers such as archways, entry posts, and student artworks to create psychological boundaries.
- Minimize the number of vehicle access points.

Joint-Use or Shared Facilities

Special consideration should be taken in the design of schools with joint-use or shared facilities such as playgrounds and recreational areas which are accessible to the community during and/or after school hours. It is critical to create boundaries between the community and the school by establishing a distinct perimeter for both the school and the joint-use facilities with separate and secure access points. Properly designed joint-use facilities can reinforce ownership and territorial integrity. Consider the following when establishing perimeters for shared facilities:

- Separate entries for facilities with frequent public use (e.g., gymnasiums, multipurpose rooms, libraries, auditoriums, and swimming pools).
- · Zone alarms for after-hours activities.
- A separate perimeter for after-hours activity areas, play field, and common spaces to keep other parts of the school secure.

Entrances

- Clearly establish and define school property lines with limited access at select entry points.
- Design the campus perimeter so visitors and guest must pass through a particular point of entrance.
- Locate entry points in highly visible areas so they can be monitored by staff and students in the course of normal activities.

Physical Barriers

• Use physical barriers to deter unauthorized access and resist vandalism.

Fencing

- Use fencing that does not permit footholds. Chain link fence shall utilize small mesh 1-inch to 1 ½-inches).
- Carefully choose materials for fences and landscaping that provide opportunities for natural surveillance and access control.

Parking Areas, Pedestrian Routes & Vehicular Routes

Vehicular routes and parking areas include the primary entry drive, parking lots, bus loading zones, parent drop-off/pickup areas, and service and delivery drives. Safe and convenient access to the school for students, parents, visitors, and community users must be a priority in designing a school site. The following areas of a school should be separate, distinct, and marked well to avoid potential problems:

- Student walkways
- Bus unloading and parent/student drop-off areas
- Special needs student drop-off
- Delivery areas
- Parking for students, staff, visitors, and community users
- · Outdoor activity area access for students
- Separate vehicular and pedestrian routes by creating barriers and well-defined routes.
- Ensure parking areas and vehicular routes are adequately lit with vandal-resistant lighting.
- Designate separate parking lots for student use, especially for high schools, in order to monitor students who may leave campus during school hours. Secure these parking lots and, if possible, supervise during peak- use times.
- Avoid long, straight parking layouts that allow cars to speed through the lot endangering pedestrians or, if unavoidable, use speed bumps.

- Place parking areas in close proximity to school buildings to facilitate visual surveillance from classroom and administration area. Provide the administrative areas and classrooms with windows overlooking parking areas
- Locate windows in school buildings along exterior pedestrian routes wherever possible to encourage surveillance and reduce the potential for undetected trespassers, vandalism, etc.

Signage

Signage is a critical element for controlling access on school campuses. Proper signage can reduce confusion over site circulation, parking, and entrance locations, thus reducing the number of people wandering into restricted areas.

Consider posting the following signs:

- Clearly marked entry signs to school grounds and/or school buildings indicating to visitors what is expected of them, including rules governing access and impermissible behavior as well as applicable local and state regulations.
- Signs numbering each entrance to the school to assist emergency responders during an incident.

Signage

Traffic regulatory and directional signs controlling traffic flow and

directing vehicles to specific appropriate points.

 On-site directional, parking, and cautionary signs for all who utilize the campus.

- Welcome signs directing visitors to main entry and administrative office as well as to an emergency contact point.
- Signs declaring school grounds as drug-free and gun-free zones.
- Signs indicating the penalty for trespassing.

Sign Elements

Keep the following points in mind when designing campus signage:

• Do not block vision at intersections.







- Display street addresses or building numbers instead of detailed descriptive information about the school grounds.
- Include other commonly spoken language(s).
- Post warning signs at intervals of no more than 100 feet.
- Ensure signs do not block lines of sight.
- Provide lighting designed to enhance natural surveillance near signage.
- Use large lettering and bold graphics with simple directions.
- Design signage to eliminate spaces permitting concealment.

Landscaping and Vegetation

Without proper planning and maintenance, landscaping may become a security problem by creating places to hide, blocking lighting, and interfering with lines of sight necessary for natural surveillance. Misplaced landscape elements may also encourage vandalism. Many landscape features, however, can be used in school design to enhance security. Elements such as landforms and vegetation can be used to define or designate space, provide some level of blast shielding, and to deter or prevent unwanted surveillance and unauthorized access.

Landscaping can also be a cost-effective method of access control. A row of trees with low-level plants can define an edge leading to an opening or entrance. Landscape materials such as boulders, mulch, and timbers can also effectively delineate spaces and control access at a lower cost than fencing or walls.

- Keep trees at least 20 feet from buildings to prevent window and roof access. If possible, do not plant trees near building, keep around site perimeter.
- Where planting is used next to windows or doors, use only low growing plants or high-branching deciduous trees at a distance which will not allow roof access.
- Avoid using dense vegetation close to buildings, as it may screen illicit activity.
- Grout landscaping stones and masonry materials so they cannot be removed by hand and used as weapons or in the commission of crimes.
- Limit shrubbery to a maximum height of 3 feet and trees to a minimum height of 6 feet at the lowest branches to ensure unimpaired visibility between three and 6 feet from the ground.

Points of Entry

The most effective way to prevent points of entry from being a security threat is to minimize the quantity. Providing only one entryway is not realistic nor safe for schools, other mitigation measures are necessary to secure multiple points of entry.

General Design Considerations

All points of entry must incorporate features to enhance security and control who enters and leaves the buildings. When designing an entrance, keep the following points in mind:

- Control entry access with a combination of direct supervision, limited points of entry, and security technology.
- Minimize the number of unmonitored entrances into the building.
- Locate entries so key areas (i.e. parent drop-off, parking, waiting zones, administration, have multiple points of surveillance.

• Provide adequate space at entries for security screening, queuing, equipment, and thorough

investigation of students if necessary.

- Provide adequate illumination with vandal resistant fixtures.
- When using a campus-plan design, secure all entry points
- Require visitors to pass through at least one close-up visual screening before they can access to bathrooms, service space, stairwells, or other amenities inside the school.
- Control access into the building through designated, supervised, or locked entry points, including windows and service entries. Grant entry by permission of supervising staff or by use of proximity cards, keys, and intercom devices.



This section lists the minimum standards that should be applied.

Burglar Alarm

The burglar alarm includes motion detection and door contact sensors. These devices provide alternative methods to detect actual or attempted intrusion into protected areas through alarm components, monitoring, and reporting systems.

Honeywell main panels currently in use, see approved system equipment below.

- Motion detectors
 - > 360° technology at entrances, main office, and classrooms as needed.
 - Long range technology in hallways.
- Door Contacts/Position Switches on every door allowing entry/exit to the building. Mount position switches on the latch edge of the door within six inches of the latch edge. With double doors, fit each door with a separate contact sensor. Doors controlled by entry control devices require coordination of intrusion detection with authorized accesses to preclude nuisance alarms

LOCKED FROM ENTRY DURING

ADMINISTRATION AREA

for authorized entries. Surface mounted position or balanced magnetic switches shall have armored cabling from the sensor to a junction box location adjacent to or above the opening.

- Labs and computer rooms require a 360° motion detector and keypad connected to main intrusion panel and programmed as a partitioned alarm.
- Duress Alarm Switch in Main Office.
- Water backflow control devices required. See 28 16 00-1 one-line drawing.

Video Surveillance

Video Insight video management system currently in use, see approved system equipment below.

Proper placement of surveillance cameras is crucial and must be included in the following areas:

- Cafeteria serving area, seating area, designated entry and exit areas.
- Student restroom entrances. Consider restroom design placement where natural surveillance can also occur (i.e. primary corridors and administration areas).
- Stairs and Stairwells. Provide open or see-through handrails and guardrails on stairs, balconies, ramps, and upper-level corridors to allow natural surveillance and eliminate hiding places.
- Labs and computer rooms.
- Main office.
- Elevator landing/lobby.
- Parking lots, roof top mounted cameras.
- Playgrounds, roof top mounted cameras.
- Student and visitor entries.
- General coverage for building exterior.

Access Control

The function of an access control system is to permit authorized personnel into or out of a controlled area. All access control systems control passage by using one or more of the three factors of identification (something a person knows, something a person has, or something a person is or does). Automated entry control devices based on these factors consist of two (2) categories: code and credential.

Undetermined manufacturer at this time.

- Equip identified access doors with conventional key and lock systems for manual override in case of system failure.
- Install latch guards to protect the electric strike and door bolt that are susceptible to tamper or picking from outside the protected space.

- Main Entrance(s)
- Visitor Entry
- Staff Parking Entry
- ECE Classroom Entry
- Kaleidoscope/ECE Program Entry
- Playground/Cafeteria entry.
- Elevators, floor call only unless specific floors are restricted, then include exit as well.
- All Telephone/Data Rooms and any doors leading to these rooms for after-hours access.

Intercom

Aiphone AX series products currently in use, see approved system equipment below.

- Master intercom control
 - Main office (one per secretary)
 - Principal office
 - Vice-principal or counselor office
 - Kaleidoscope/ECE program area.
- Door or substations
 - Designated visitor entries
 - Playground/cafeteria entry
 - Kaleidoscope/ECE program entry
 - > ADA entry

Wi-Fi

• Cover all exterior parking lots with DPS wireless network technology. Use external WAP's.

Cabling – All Systems

- All Cabling shall be Plenum rated.
- Video Surveillance To include Special System Legend icons (Security Camera, PVM). Panduit Category 6. Install cabling to closest telephone/data room.
- Burglar Alarm To include Special System Legend icons (MS, MS1, KP, C, DC, 4 conductor/22 AWG stranded for door contacts. 6 conductor/22 AWG stranded for motion detectors and keypads. 6 conductor/18 AWG stranded + shielded for panel to module and module to module. Category 6 from panel to data rack for phone line. Install cabling to closest telephone/data room.
- Access Control To include Special System Legend icons (ELR, ELRK, Panduit Category 6. Install cabling to closest telephone/data room.

• Intercom – To include Special System Legend icons (AP, MIC, AX). Panduit Category 6. Home run master intercoms and door intercoms to location of Aiphone control unit (AX), maximum distance 980 feet.

General Notes – All Drawings

- A. All cabling shall be routed in concealed accessible ceilings, raceway, or cable tray.
- B. All conduit sleeves and fire-stopping necessary for a complete system (not already provided) are the responsibility of this contractor.
- C. Cables shall be supported from a structure via approved J-hooks where no cable tray is present. Do not support solely from structural elements. All cable shall be in conduit or supported by cable tray or j-hook.
- D. Provide conduit sleeves as required, not shown. Any penetrations through walls shall be sleeved. Provide fire-stop on all sleeves. Provide bushings on all sleeves.
- E. Vinyl tie straps are prohibited. Utilize blue, plenum rated, Velcro tie straps to bundle cables throughout the facility.
- F. Cable ends shall be labeled.
- G. At CCTV camera locations, provide J-box above accessible ceiling or provide rough-in at wall. Provide plenum rated patch cord for above ceiling locations. Provide (1) data drop. Data jack to be terminated in J-box for interior applications and inside building prior to exterior wall penetration for exterior applications. Use patch cord from exterior CCTV to data jack inside building. Provide required mounting hardware.
- H. Exterior double door preparation all exterior double doors and frames to be supplied with and prepared for precision ept-5 power transfer. (1) ½" conduit from EPT to J-box above accessible ceiling. Provide Styrofoam blocking in frames that will be filled. ELR on one door only; right hand side looking at door from outside.
- I. Exterior single door preparation (1) ½" conduit from frame mounted electric strike to j-box above accessible ceiling. Provide Styrofoam blocking in frames that will be filled.
- J. All exterior doors (1) ½" conduit from recessed door contact switch to interior accessible ceiling.
- K. Access controlled doors/frames and related power supply shall be identified by DPS master drawings (plan room/archives) door tag number with nameplates in accordance with section 10426 – signage and graphics.

Flag Notes - All Drawings



Exterior wall mounted camera with flush mount, single gang, weatherproof J-box for camera. 3/4" conduit into accessible interior ceiling space w/bushing. Mounting height within 12-14' unless otherwise noted.



Interior wall mounted camera with flush mount, single gang, J-box for camera. ³/₄" conduit into accessible ceiling space w/bushing. Mounting height within 8-10' unless otherwise noted.



Parapet mounted J-box for camera. Provide 1" conduit through roof into accessible ceiling space, terminated in weatherproof box mounted to Uni-strut framing for parapet camera. Verify mounting location with DPS prior to rough-in.



Data jack at security panel. Mount within panel.



Duress alarm switch, connect to security system.

Special System Legend

	SPECIAL SYSTEM LEGEND
MS	MOTION SENSOR - ADEMCO DS9360
MS1	MOTION SENSOR - ADEMCO DS778
DC	RECESSED DOOR CONTACT SWITCH
ELR	FRAME MOUNTED ELECTRIC STRIKE & RECESSED DOOR CONTACT SWITCH
ELRK	PRECISION ELRK3 WITH POWER TRANSFER IN DOOR FRAME & RECESSED DOOR CONTACT SWITCH
KP	KEYPAD - ADEMCO 6160
AP	AIPHONE - AX-DV W/WBX-AXDV30
МІС	AIPHONE - AX-8MV
AX	AIPHONE - AX-084C
С	ADEMCO CONTROL VISTA 128P
	SECURITY CAMERA
CR	ACCESS CARD READER
WAP	WIRELESS ACCESS POINT
PS	POWER SUPPLY
P∨M	PUBLIC VIEW MONITOR

Preferred Equipment List

All equipment including monitoring devices, card readers, power supplies, burglar alarm panels, recording and storage, cameras, and related data processing equipment and computer hardware are defined in this Preferred Equipment List.

The purchase of all equipment will comply with this list. The compliance policy is exception based and requires clear documentation from procurement to justify any purchase that deviates from the list. Approval must be obtained in writing from the Project Manager.

Manufacturer	Part Number	Description
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Cameras

<u>Cameras</u>		
Sony	SNC-EM602R	1.3MP Dome Camera w/IR
Sony	SNC-EM632R	1.3MP Dome Camera w/IR
Sony	SNC-DH260	Exterior 3MP Dome Camera w/IR
Pelco	PP451	Roof Top Sled "Gravity" Mount w/weight material
Pelco	PP450	Parapet Mount
Sony	UNI-MDB3	Wall Mount
Sony	UNI-PMA1	Pole Mount Adapter
Sony	UNI-CMA1	Corner Mount Adapter
Rohn	FRM238SP5	Gravity Sled
Rohn	FRMPAD	Gravity Sled Mat
Rohn	FY253	Mast
Vigitron	Vi2301	PoE Ethernet Extender (1,4,8,16 port-change last letter in part #)
Vigitron	Vi0012	12 VDC Wall-mount Power Supply

Power Supply's

TWLinx

Lifetime Series Pro	FPX200A/100-A8D8E2 Dual Voltage Power supply		
Altronix	AL400ULX	Main Control Power Supply/Charger	
Altronix	AL400ULXB	Main Control Replacement Power Supply/Charger Board	
Altronix	AL400ULB	Electric Strike Power Supply Replacement Board	
Axis	5014-204	PoE Power Injector-30W	
Axis	0226-004	PoE Power Injector-15W	
Sony	PBU1	WIFI weather proof power box	

Signal Transmission Equipment

Aruba	MST2H13NO-US	MST200 Exterior wireless mesh node TX
Aruba	MSR2K23N1-US	MSR2000 2x2 dual radio receiver, Polarized outdoor
		antenna (ANT-2x2-5614), Lightning Arrestor (AP-LAR1),
		1M 7D Antenna Cable (AFC7DL01-00)

2090-192-30B SurgeGate 1Gb CAT6-75 suppressor for exterior cameras

NVR and Accessories

Video Insight	NVR-R-1-1-4TI	B Dell R210 1U Rack Server 4GB, 4TB
Video Insight	NVR-R-1-1-8TI	B Dell R320 2U Rack Server 4GB, 8TB
Video Insight	IPSv5	IP camera license
Video Insight	VP-1	1 Channel Encoder
Video Insight	VP-4	4 Channel Encoder
LG	32LD452B	32" 1080P Monitor
Poloo		Tilt/swivel dual-arm wall mount

Pelco PMCL-WM2A Tilt/swivel dual-arm wall mount

Peerless JMW2640D Monitor Mount

Peerless PLCK-UNL 32 " LCD Adapter (Must use to convert JMW2640D above from

CRT Monitor mount to LCD)

Peerless PLCK-1 23" LCD Adapter (Must use to convert JMW2640D above from

CRT Monitor mount to LCD) *Also need monitor adapter for

specific make and model of LCD)

Panduit UPTCP*ORY Orange 5e Patch Cords, sub* for length, 7',10',14',20'

MinuteMan E1500RM2U 1500 VA UPS

YUASA NP7-12 7.2 Ah Replacement Battery

Access Control - Intercom

Aiphone AX-8MV 8 Door Audio/Video Master Control
Aiphone MCW-S/A Desk Mount Stand for Master Control

Aiphone AX-DV Video Door Station, Surface Mount, use when mounting next to

door on same surface

Aiphone SBX-AXDV30 30 Degree Angle Surface Box for AX-DV

Aiphone AX-DVF Video Door Station, Flush Mount, comes w/mounting box

Aiphone AX-084C Main CEU for 8 Doors, 4 Masters, AX
Aiphone PS-2420UL 24V DC Power Supply for CEU (2 Required)
Aiphone RY-24L Door Release Relay, 24V DC Input

Aiphone IE-SS Door Station, audio only, (replaces LEDA)

Access Control – Card Key

Open Options SSP-D1 IP-Based Intelligent Door Controller (one required each site)

*Mercury EP1501 Open Options NSC-100

Open Options NSC-100 IP-Based Network Sub-controller (all other doors)
*Mercury MR51e

Hoffman A8N84 NEMA 1 Hinged cover enclosure, 8"x8"x4"

Hoffman A8N8PP Perforated Back Panel (6.25"x6.25") for mounting in enclosure

Hoffman AL12AR Enclosure Cylinder Lock Kit
HID 6100C iClass R10 Mullion-mount reader

Mulberry 97951 SS 1G Box, w/ 5/8" centered KO for HiD R10

Mulberry 30671 1G weatherproof outdoor gasket

HID 6120C iClass R40 Single gang recessed j-box mount reader

HID 6132C iClass RK40 Keypad Reader (elevator use)

RCI 0162 Electric Strike, Continuous Duty

RCI ICEPK Heat Reducer for Continuous Duty Strikes

Dorma ES62 Electric Strike

HES 2006M Electric Audible Buzzer

HES 1006 Electric Strike
Precision CM150-08 Door Control Board

Precision ELR151 Power Supply w/1 control board
Precision ELRK3 2100 Series Electric Lock Retrofit Kit

Precision EPT-5 Door/Frame Power Transfer

Precision 1625 Latch Guard

IR-Schlage 798C-18 Armored Door Cord, 18"x1/2" w/4-cond wire IR-Schlage 798-18 Armored Door Cord, 12"x1/2"- less wires

GE/Interlogix RCR-REX-W Request to Exit

Command Access CMAETH4W5.0X5.0-626 (CH-BB68) Heavyweight 4 Wire Power Hinge

Emergency Notification System

Video Insight TD-650 Network Media Player Video Insight TD-642-DIO Input/Output Adapter

Honeywell 270R Duress Panic Button – activates system

Intrusion

Bosch D7412GV4 Panel w/transformer, D8103 Enclosure, lock & key

Bosch B208 8 Input module for SDI2 bus

Bosch B426 Conettix IP Ethernet Interface

BoschD8103Universal EnclosureBoschD101Lock & key setBoschB920Alpha numeric keypad

Honeywell V128BP-KT1

Vista 128BPE Vista-128BP Panel

Honeywell 6150 Keypad Honeywell 6160 Keypad

Honeywell985Overhead Door ContactsGE/Sentrol1076Steel Door ContactGE/Interlogix2507AWide gap surface mountHoneywell960Door Contacts-wide gap

Honeywell 4208U Dip switch eight zone expander

Hoffman A12N126 NEMA 1 Hinged cover enclosure, 12"x12"x6" w/standard latch

Bosch DS860 Motion detector - 60' x 60'

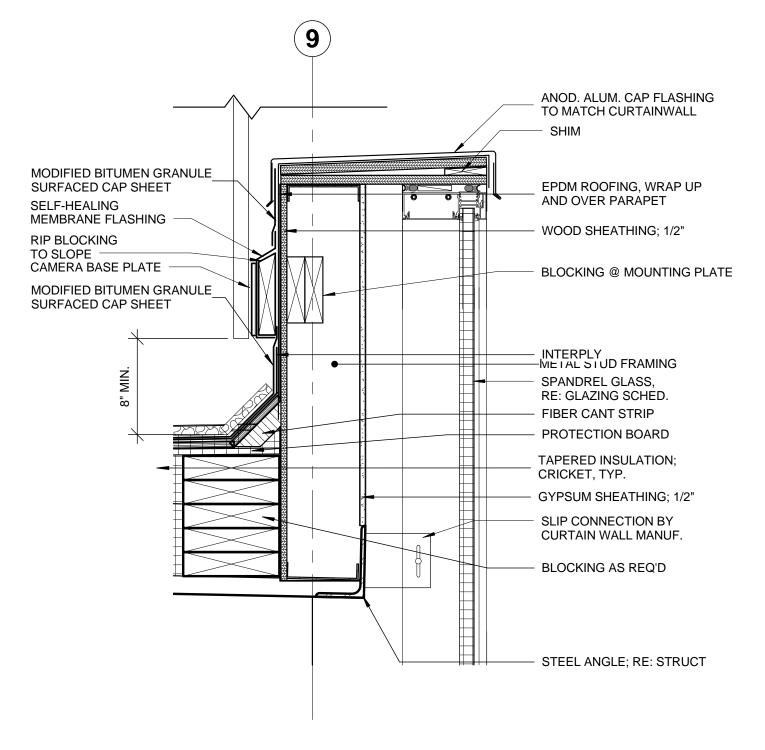
Bosch DS778 Motion detector – 200' x 15' Long Range

Bosch DS9360 Motion detector – 360 degrees

Bosch DS970 Motion detector

Ademco Wave2 Siren

^{*}Items in Red no longer in use



1 CAMERA MOUNTING AT PARAPET (ALT #7 ONLY)

HUM PHRIES POLI ARCHITECTS

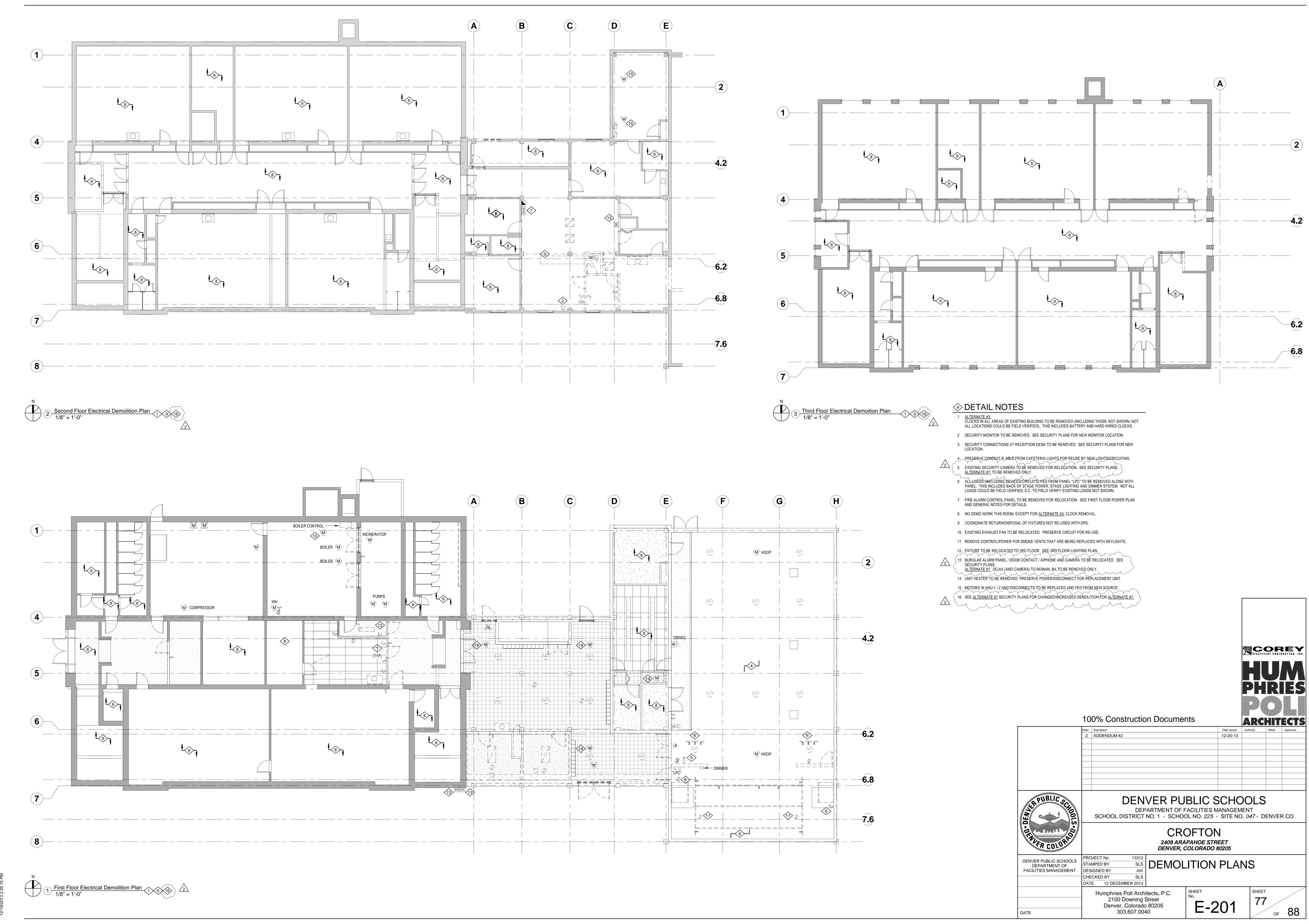
ARCHITECTS
2100 Downing Street
Denver, Colorado 80205
303.607.0040
303.607.0041 fax

Delta

Description

Date Issued

Crofton Elementary School ADDENDUM 2 CAMERA MOUNTING @ PARAPET (ALT #7) PROJECT NO.33022 SCALE: 1 1/2" = 1'-0" ISSUED:08/12/09 Drawing Number ADD-2.1



GENERAL NOTES

- A. ALL CABLING SHALL BE ROUTED IN CONCEALED ACCESSIBLE CEILINGS, RACEWAY, OR CABLE TRAY.
- B. ALL CONDUIT SLEEVES AND FIRESTOPPING NECESSARY FOR A COMPLETE SYSTEM (NOT ALREADY PROVIDED) ARE THE RESPONSIBILITY OF THIS CONTRACTOR.
- C. CABLES SHALL BE SUPPORTED FROM A STRUCTURE VIA APPROVED J-HOOKS WHERE NO CABLE TRAY IS PRESENT. DO NOT SUPPORT SOLELY FROM STRUCTURAL ELEMENTS. ALL CABLE SHALL BE IN CONDUIT OR SUPPORTED BY CABLE TRAY OR J-HOOK.
- D. PROVIDE CONDUIT SLEEVES AS REQUIRED, NOT SHOWN. ANY PENETRATIONS THROUGH WALLS SHALL BE SLEEVED. PROVIDE FIRESTOP ON ALL SLEEVES. PROVIDE BUSHINGS ON ALL SLEEVES.
- E. VINYL TIE STRAPS ARE PROHIBITED. UTILIZE BLUE, PLENUM RATED VELCRO TIE STRAPS TO BUNDLE CABLES THROUGHOUT THE FACILITY.
- F. CABLE ENDS SHALL BE LABELED.
- G. AT SECURITY MOTION DETECTION LOCATIONS, PROVIDE A 20' COIL OF SPARE CABLE AT THE DEVICE END.
- H. AT CCTV CAMERA LOCATIONS, PROVIDE J-BOX ABOVE ACCESSIBLE CEILING OR PROVIDE ROUGH-IN AT WALL. PROVIDE PLENUM RATED PATCH CORD FOR ABOVE CEILING LOCATIONS. PROVIDE 1 DATA DROP. DATA JACK TO BE TERMINATED IN J-BOX FOR INTERIOR APPLICATIONS AND INSIDE BUILDING PRIOR TO EXTERIOR WALL PENETRATION FOR EXTERIOR APPLICATIONS. USE PATCH CORD FROM EXTERIOR CCTV TO DATA JACK INSIDE BUILDING. PROVIDE REQUIRED MOUNTING HARDWARE.
- . EXTERIOR DOUBLE DOOR PREPARATION ALL EXTERIOR DOUBLE DOORS AND FRAMES TO BE SUPPLIED WITH AND PREPARED FOR PRECISION EPT-5 POWER TRANSFER. (1) 1/2" CONDUIT FROM EPT TO J-BOX ABOVE ACCESSIBLE CEILING. PROVIDE STYROFOAM BLOCKING IN FRAMES THAT WILL BE CONCRETE FILLED.
- J. EXTERIOR SINGLE DOOR PREPARATION (1) 1/2" CONDUIT FROM FRAME MOUNTED ELECTRIC STRIKE TO J-BOX ABOVE ACCESSIBLE CEILING. PROVIDE STYROFOAM BLOCKING IN FRAMES THAT WILL BE CONCRETE FILLED.
- K. ALL EXTERIOR DOORS (1) 1/2" CONDUIT FROM RECESSED DOOR CONTACT SWITCH TO INTERIOR ACCESSIBLE CEILING.
- L. ACCESS CONTROLLED DOORS/FRAMES AND RELATED POWER SUPPLY SHALL BE IDENTIFIED BY DPS MASTER DRAWINGS (PLAN ROOM/ARCHIVES) DOOR TAG NUMBER WITH NAMEPLATES IN ACCORDANCE WITH SECTION 10426 - SIGNAGE AND GRAPHICS.
- M. PROVIDE CONNECTION TO FIRE ALARM AND LIGHTING CONTROL SYSTEM.

CABLING - ALL SYSTEMS

- ALL CABLING SHALL BE PLENUM RATED.
- VIDEO SURVEILLANCE PANDUIT CATEGORY 6. INSTALL CABLING TO CLOSEST TELEPHONE/DATA ROOM.
- BURGLAR ALARM 4 CONDUCTOR/22 AWG STRANDED FOR DOOR CONTACTS. 6 CONDUCTOR/22 AWG STRANDED FOR MOTION DETECTORS. 6 CONDUCTOR/18 AWG STRANDED + SHIELDED FOR PANEL TO MODULE AND MODULE TO MODULE. INSTALL CABLING TO CLOSEST TELEPHONE/DATA ROOM.
- ACCESS CONTROL PANDUIT CATEGORY 6 + "BANANA PEEL" OR "SIAMESE" TYPE PAIR/22 AWG STRANDED, + 4 CONDUCTOR/18 AWG STRANDED + SHEILDED, + 2 CONDUCTOR/22 AWG STRANDED, + 4 CONDUCTOR/22 AWG STRANDED. INSTALL CABLING TO CLOSEST TELEPHONE/DATA ROOM.
- INTERCOM PANDUIT CATEGORY 6. HOME RUN MASTER INTERCOMS AND DOOR INTERCOMS TO LOCATION OF ALPHONE CONTROL UNIT MAXIMUM DISTANCE 980 FEET.

FLAG NOTES

- 1 DATA JACK AT SECURITY PANEL. MOUNT WITHIN PANEL.
- (3) HIGH WALL MOUNTED WEATHER-PROOF J-BOX FOR CAMERA. 3/4" CONDUIT INTO ACCESSIBLE CEILING SPACE. VERIFY MOUNTING HEIGHT WITH DPS PRIOR TO ROUGH-IN.
- ROOF MOUNTED CAMERA WITH ARM TO SUSPEND OVER WALL, J-BOX FOR CAMERA AND 3/4" CONDUIT IN TO CEILING SPACE. VERIFY LOCATION WITH DPS PRIOR TO ROUGH-IN.
- CORNER MOUNTED WEATHER-PROOF J-BOX FOR CAMERA. 3/4" CONDUIT INTO ACCESSIBLE CEILING SPACE. VERIFY
- MOUNTING HEIGHT WITH DPS PRIOR TO ROUGH-IN. 6 WALL MOUNTED WEATHER-PROOF J-BOX FOR CAMERA. 3/4" CONDUIT INTO ACCESSIBLE CEILING SPACE. VERIFY
- MOUNTING HEIGHT WITH DPS PRIOR TO ROUGH-IN. CAMERA NOTED TO BE RELOCATED AFTER REMOVAL HERE ON DEMOLITION PLAN (E-201) TO BE REMOVED ONLY IN THIS
- ALTERNATE SCOPE.
- CAMERA/CR/ELR NOTED TO BE RELOCATED AFTER REMOVAL HERE ON DEMOLITION PLAN (E-201) TO REMAIN UNDER ALTERNATE SCOPE.
- WHERE IT IS NOTED THAT DEVICES AND CABLING ARE TO BE REMOVED, EXPOSED/SURFACE CONDUIT TO BE REMOVED IF NOT BEING REUSED. CONDUIT BEHIND BRICK/PLASTER/INACCESSIBLE WALLS/CEILINGS TO BE ABANDONED IN PLACE TO AVOID REPAIR/PATCHING. J-BOX TO BE PROVIDED WITH COVER PLATE.
- NEW DEVICES WITH NEW CABLING, OR EXISTING/REPLACED WITH CABLING THAT CANNOT UTILIZE EXISTING PATHWAY, TO BE PROVIDED WITH WIREMOLD 700 SERIES PATHWAY IN EXISTING BUILDING.

SECURITY LEGEND

MS MOTION SENSOR

RECESSED DOOR CONTACT SWITCH

ELR FRAME MOUNTED ELECTRIC STRIKE & RECESSED DOOR CONTACT SWITCH

ELRK PRECISION ELRK3 WITH POWER TRANSFER IN DOOR FRAME & RECESSED DOOR CONTACT SWITCH

AP AIPHONE - AX-DV W/WBX-AXDV30

AIPHONE - AX-8MV

AIPHONE - AX-084C

C ADEMCO CONTROL

CR ACCESS CARD READER

WAP WIRELESS ACCESS POINT

PS POWER SUPPLY

PVM PUBLIC VIEW MONITOR

PANIC PANIC SWITCH

AOR AREA OF REFUGE

BURGLAR ALARM

REX REQUEST TO EXIT

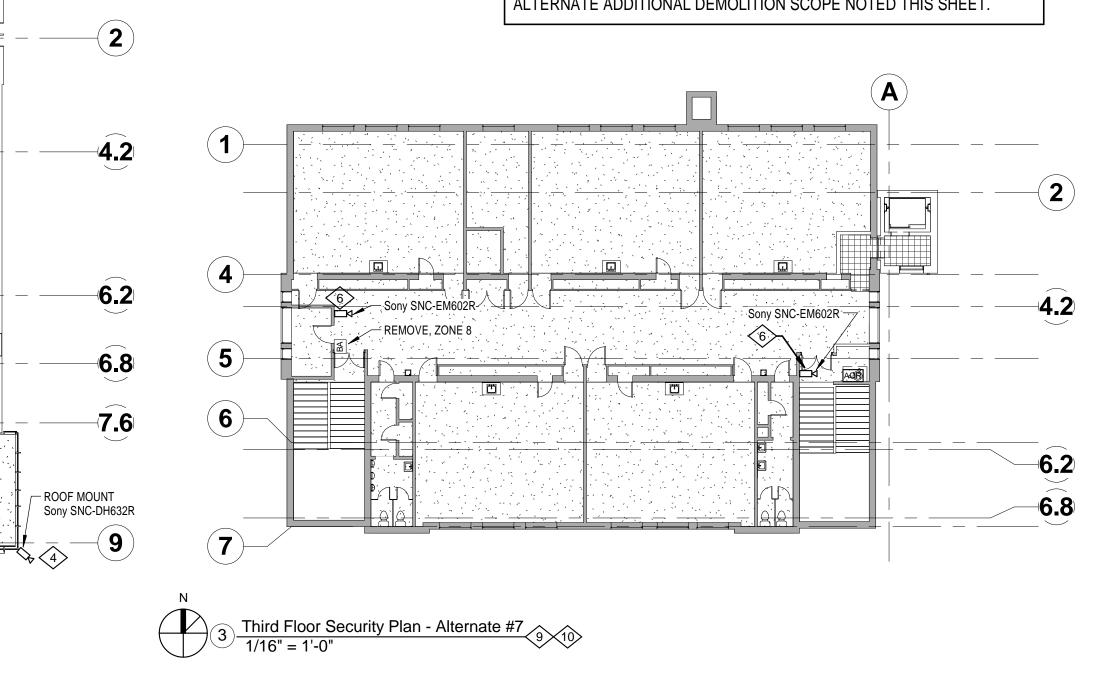
NOTE: PROVIDE REX AT ALL REQUIRED EXTERIOR ACCESS CONTROL DRIVERS (NOT ALL SHOWN, COORDINATE WITH DPS).

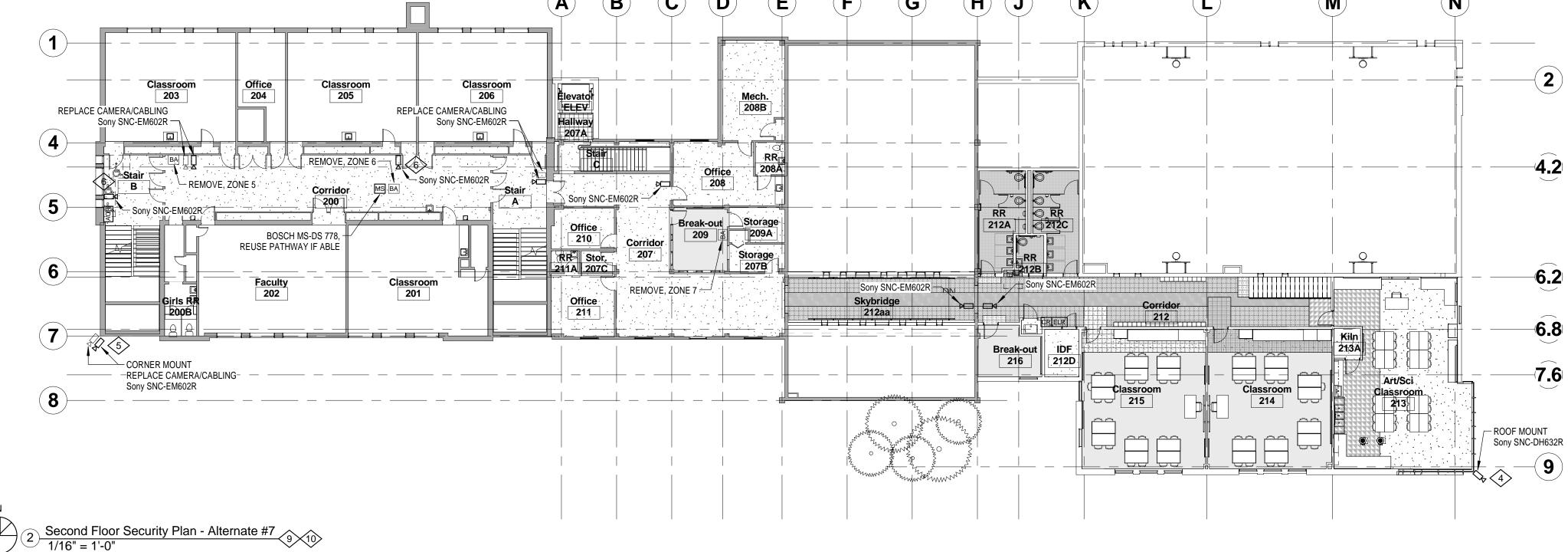
IMPORTANT NOTE

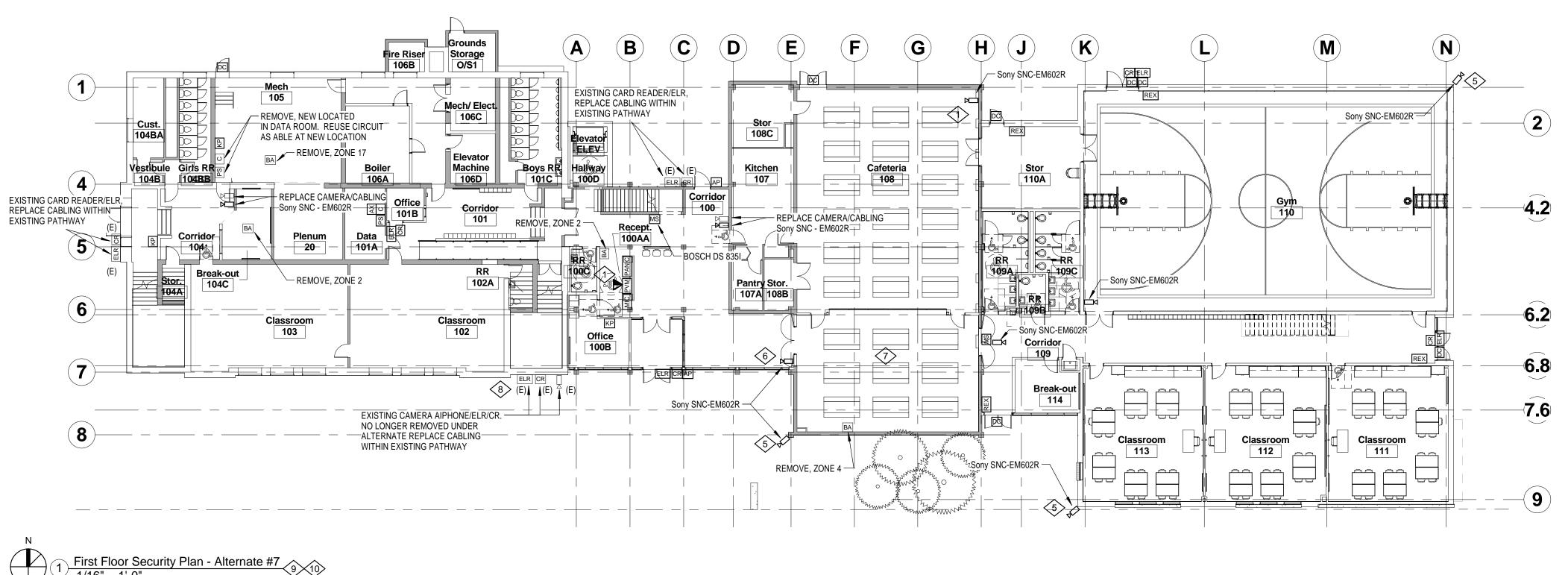
SECURITY SPECIFIED/DESIGNED BY DPS. COORDINATE ADDITIONAL REQUIREMENTS WITH DPS. G.C. TO PROVIDE SYSTEM AND CABLING, E.C. TO PROVIDE 120V POWER AND ROUGH-IN ONLY. COORDINATE WITH DPS FOR ANY 120V REQUIREMENTS (NOT SHOWN).

ALTERNATE #7

ALL ITEMS THIS SHEET ARE ALTERNATE IN LIEU OF DESIGN ON E-501 BASE BID DEMOLITION ON E-201 TO BE INCLUDED WITH ALTERNATE ALTERNATE ADDITIONAL DEMOLITION SCOPE NOTED THIS SHEET

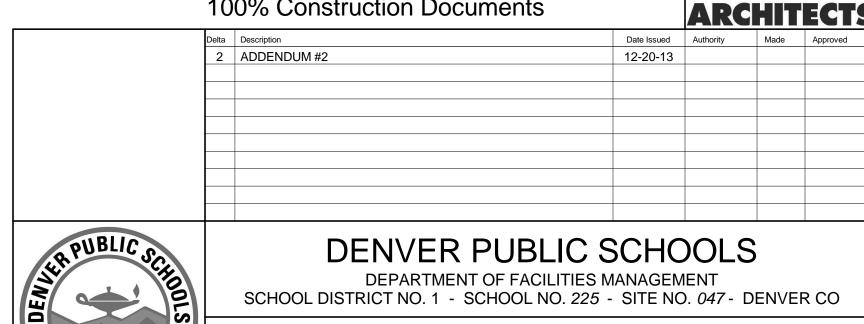


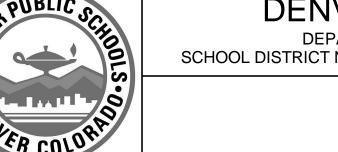






100% Construction Documents

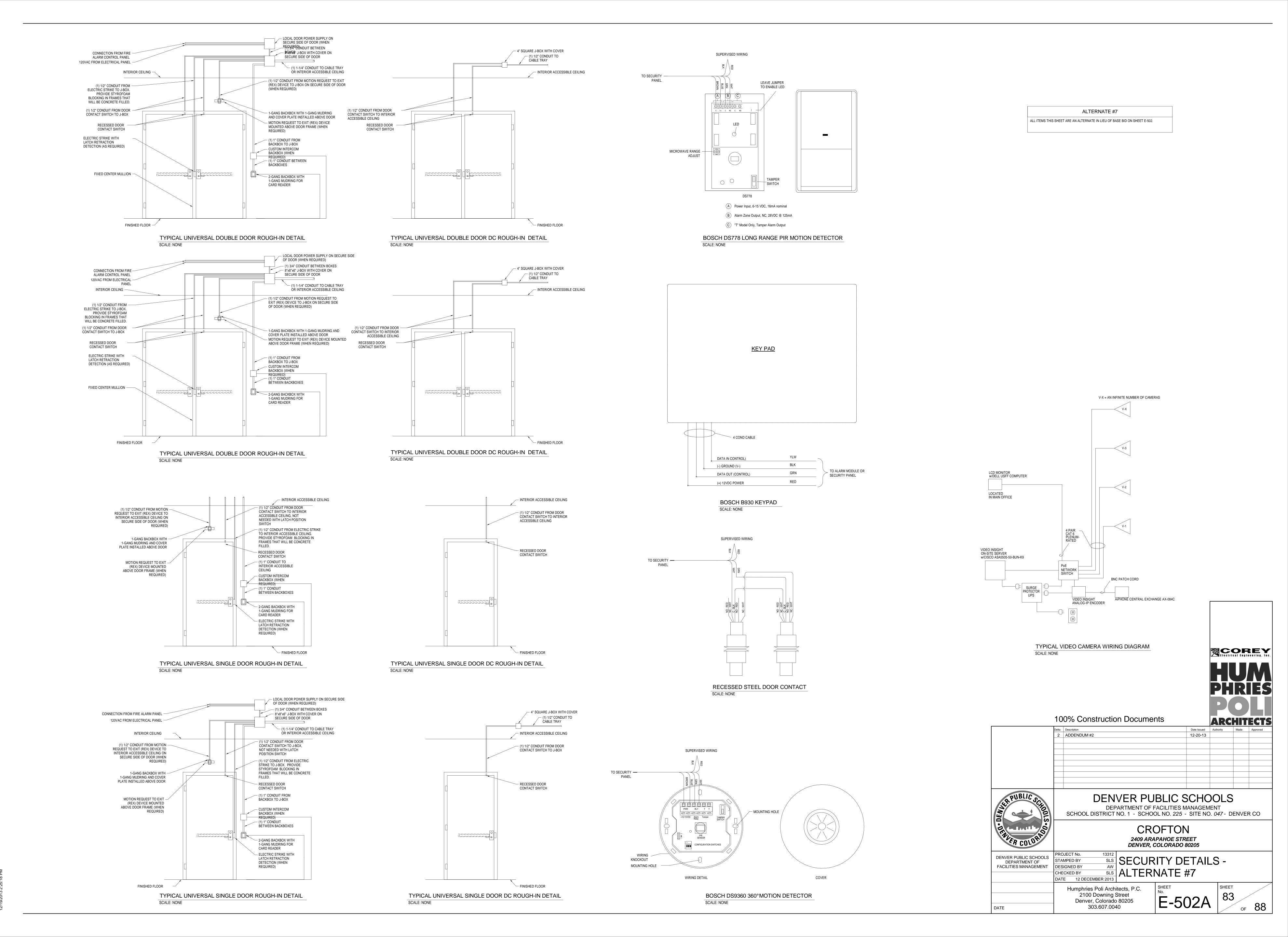


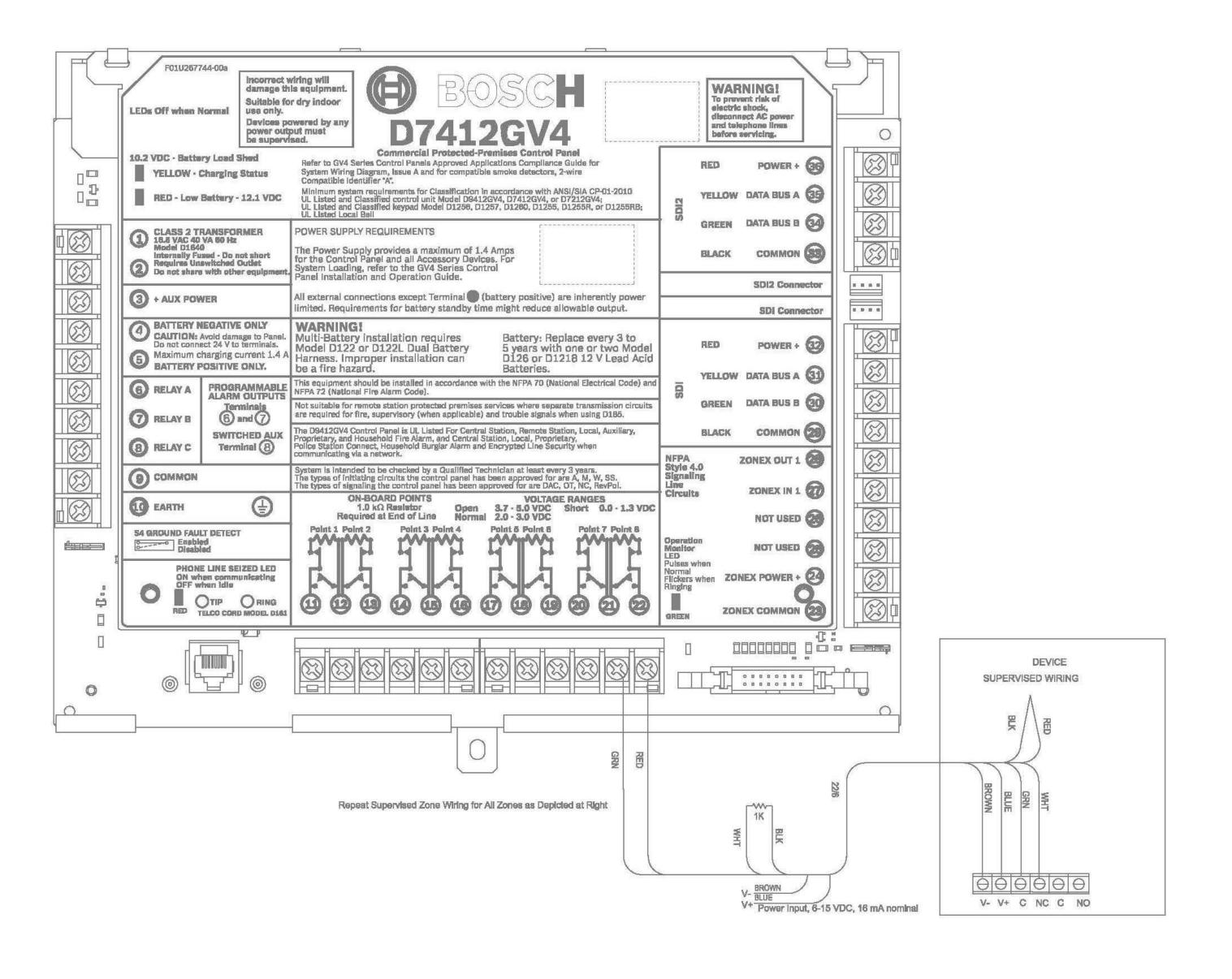


CROFTON 2409 ARAPAHOE STREET DENVER, COLORADO 80205

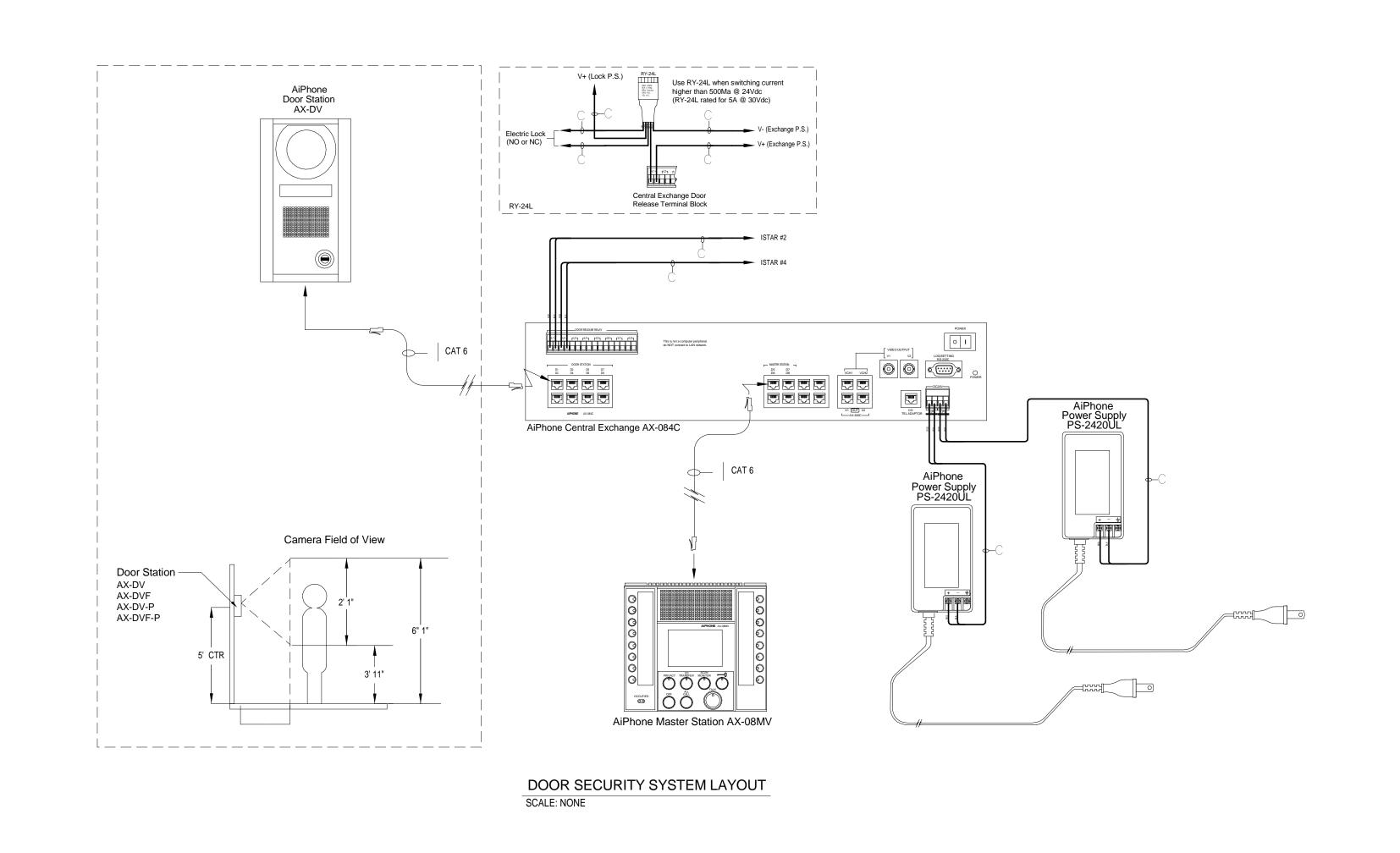
DENVER PUBLIC SCHOOLS STAMPED BY DEPARTMENT OF FACILITIES MANAGEMENT DESIGNED BY Checker ALTERNATE #7 CHECKED BY

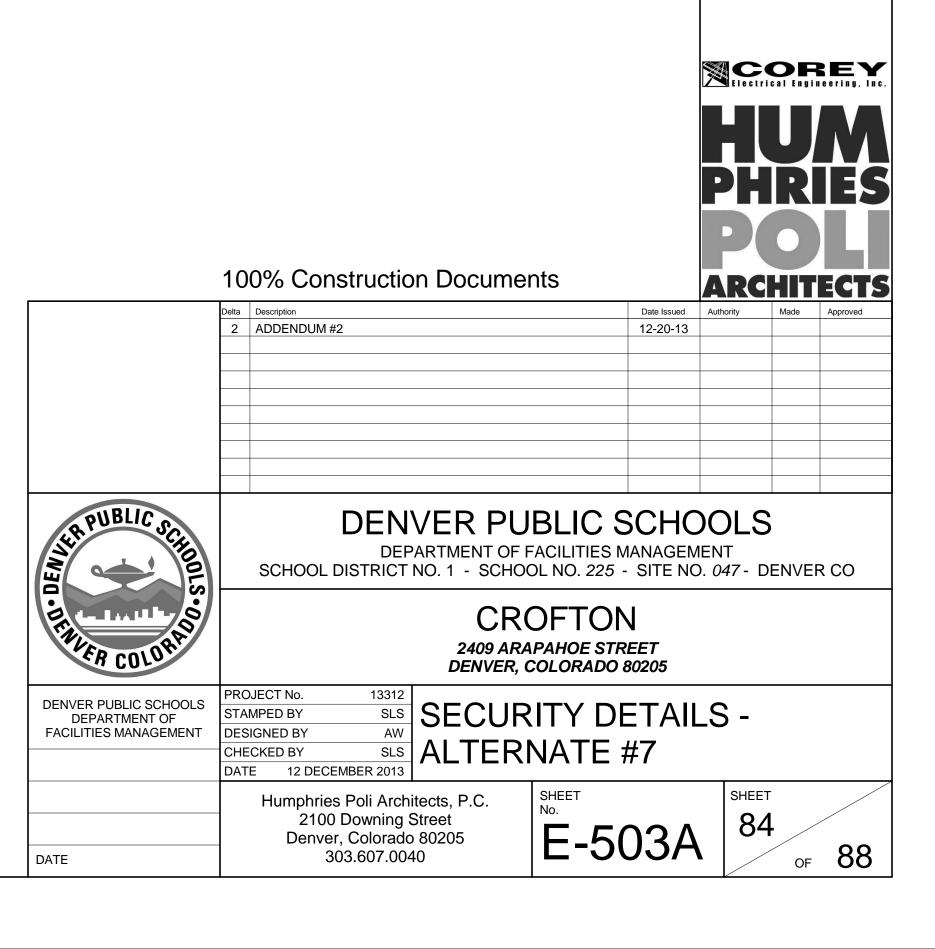
DATE 12 DECEMBER 2013 Humphries Poli Architects, P.C. 2100 Downing Street Denver, Colorado 80205 303.607.0040



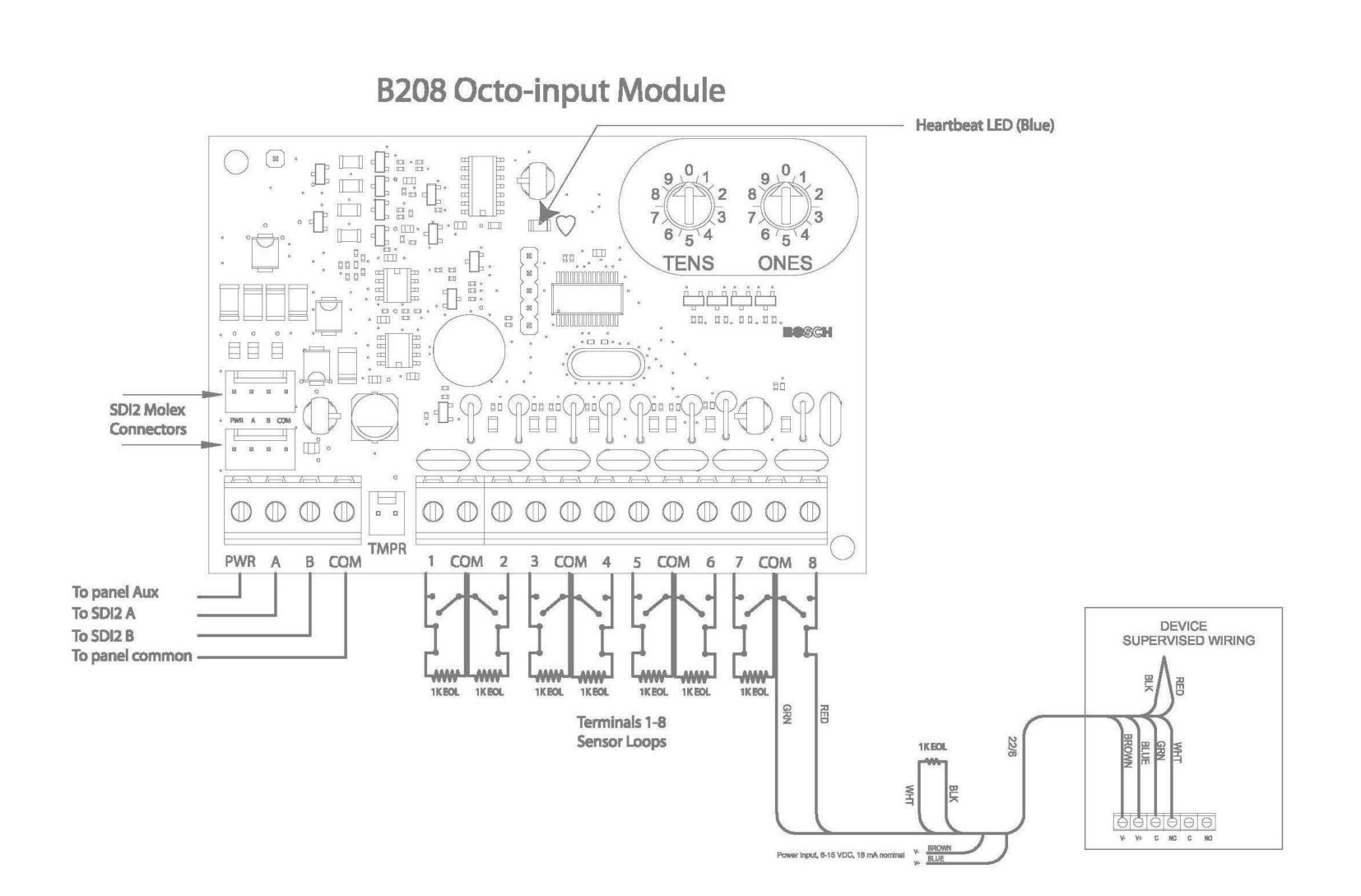


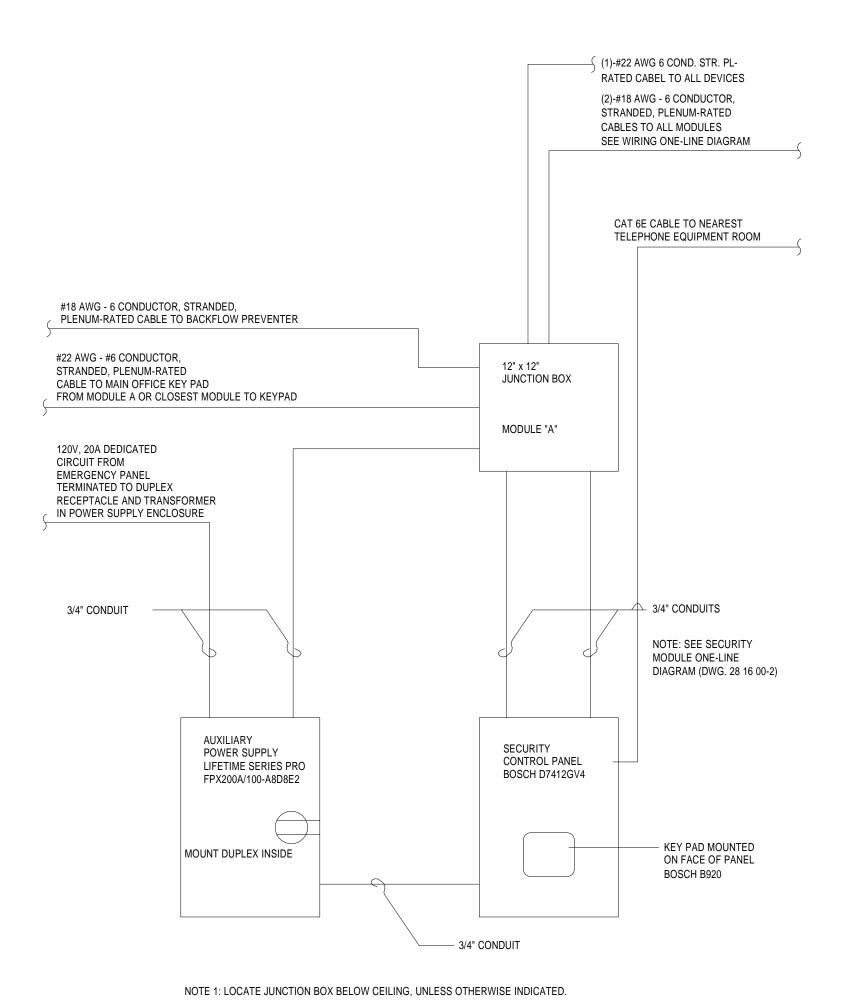
ADEMCO VISTA V128 CONTROL PANEL SCALE: NONE





ALL ITEMS THIS SHEET ARE AN ALTERNATE IN LIEU OF BASE BID ON SHEET E-504.





SECURITY PANEL ONE-LINE DIAGRAM
SCALE: NONE

