

### Construction Bulletin # 03 04

Client: Abla Griffin Partnership Project Name: Highland West JH STEM Project Number: 2023-02792-00

December 28, 2023

Requested by: X Owner

Contractor:

\_\_\_\_ Salas O'Brien:

To: Mike Abla, Clay Griffin, AGP

This Construction Bulletin is issued to:

- X Offer additional information for clarification or supplemental drawings for layout assistance.
- Request cost and time impact to initiate a change to the Contract Documents. Owner approval is required, do not commence with revisions unless directed in writing. Avoid Work in areas that may be affected by proposed change until approved or rejected. Once approved, forward Change Order documentation as required by the Contract Documents.
- Direct a required change in the Contract Documents. Proceed with change(s) as indicated. Forward Change Order documentation as required by the Contract Documents.
- \_\_\_\_ Response to RFI \_\_\_\_\_.

Item No.	Description	Attachment
1	Refer to drawings for changes shown in clouds and deltas.	T502

#### END OF CB-03

	Intercom 12" Analog Clock shall be hard wired and may not use battery power for its primary power source. must be compatible with existing clock system.	Security System
	If site does not have an existing working clock system, stand-alone battery powered clocks shall be used. Stand-alone wall clock shall be American Time E56BAQD304BP	Specifications Part 1 - General
	Stand-alone dual face hallway clock shall be American Time E93BAQD204BP	2.01 Manufacturers
	An 110v electric clock receptacle shall be installed at each clock location for future devices. Systems Installation	Security System Manufacturer shall be DSC or DMP. See plans for the specific manufacturer required.(     substitutions)
	All devices shall be mounted according to the manufactures specifications.	Installer shall be certified by manufacturer to install and program the specified systems. (no substitutions)
•	All devices shall be properly adjusted and tested prior to job completion.	Peripheral device Manufacturers shall be according to equipment list. (No Substitutions)
•	All extra wire taps shall be insulated.	Cable Manufacturer shall be Genesis. (Or Equivalent) Security Systems Equipment
	Protective grommets shall be installed on all conduits to protect wire.	<ul> <li>security alarm control shall be dsc model # pc4020 or dmp model # xr550nl-g. (no substitutions)</li> </ul>
	All wire shall be run in J hooks above ceiling with a minimum space of 4" from ceiling deck. All wire shall be in separate pathways 6" from other system wiring. No wire ties allowed.	• security alarm control communicator shall be dsc model # t-linktl250. dpm n/a. (no substitutions)
	All wire ran between building shall be in conduit and shall be direct burial cable. It shall be a minimum of 5 conductor 18 AWG copper.	<ul> <li>security alarm keypad shall be dsc model # lcd4501 or dmp model # 7873. (no substitutions)</li> <li>security alarm keypad for all kitchen locations shall be dsc model # lcd4501 or dmp model # 7073. (no</li> </ul>
	Installer shall supply the electrical and or masonry contractors with specialty back boxes such as clock recessed back boxes etc. and coordinate with them to ensure that all necessary conduits, back boxes, etc. are installed in the proper locations.	<ul> <li>substitutions)</li> <li>security alarm 8 zone hardwire expander shall be dsc model # pc4108 or dmp model # 714-8. (no substitutions)</li> </ul>
•	Follow and adhere to installation practices specified by NFPA-70 National Electric Code, Edition 2008.	• security alarm 16 zone hardwire expander shall be dsc model # pc4116 or dmp model # 714-16. (no su
	Follow and adhere to installation practices specified by the Manufacturers.	<ul> <li>security alarm power supply shall be dsc model # pc4204 or dmp systems = altronix model # smp3pmc substitutions)</li> </ul>
	Quality Assurance	<ul> <li>security alarm power supply cabinet shall be dsc model # pc4051c. dmp n/a. (no substitutions)</li> <li>security alarm cabinet locks shall be dsc model # 11 or dmp model # 301. (no substitutions)</li> </ul>
	1 Qualifications	<ul> <li>security alarm 35'x35' motion detector shall be honeywell model # dt-8035. (no substitutions)</li> <li>security alarm 50'x60' motion detector shall be honeywell model # dt-8050. (no substitutions)</li> </ul>
	All products shall bear the mark of UL or ETL for performance level.	<ul> <li>security alarm window glass break sensor shall be honeywell model # fg-730. (no substitutions)</li> <li>security alarm door contact shall be ge model # 1076d-m. double pole double throw for all doors (no su each single door or double door shall be wired with 4 conductor wire.</li> </ul>
	System installation shall meet all applicable Local/State codes and safety requirements where project is located.	<ul> <li>dmp systems shall be wired with 2 zones per single door or double door. one zone for security alarm ar for "door held open alert"</li> </ul>
•	All products shall be new and un-used in original packaging.	<ul> <li>security alarm c channel door magnets shall be gri model # mc180</li> <li>security alarm surface window contact shall be aleph model # ps-1541. (or equivalent approved by mp</li> </ul>
1.04.02	2 Bidder/Installer Qualifications	<ul> <li>security alarm overhead door &amp; roof hatch contact shall be amseco model # odc-59a or for rail mount a interlogix ge2315al. (no substitutions)</li> <li>security alarm indoor siren shall be ademco model # wave2ex. (no substitutions)</li> </ul>
•	Bidding contractor shall have a minimum of 5 years experience installing school intercom systems.	security alarm indeer siten shall be address model # ds301set. (no substitutions)     security alarm outdoor siren shall be an second # ds301set. (no substitutions)     security alarm outdoor strobe shall be an second # sl401c. (no substitutions)
•	Bidding contractor shall be able to provide insurance at the request of the owner.	Contractor to provide and install a total of 5 wireless holdup buttons. 3 to be installed in administration a and 2 on the reception counters.
1.05	Delivery, Storage, and Protection	1.01 Systems Installation • installer shall be certified by manufacturer to install & program the specified systems
	Contractor shall ensure that materials delivery to work area shall be coordinated with construction site manager responsible for materials distribution to all trades.	<ul> <li>installer shall be certified by manufacturer to install &amp; program the specified systems.</li> <li>installer shall perform all programming required to complete the installation. moore public schools shall</li> </ul>
•	Contractor is responsible for all materials, tools and vehicles left on the job site.	required to assist in any part of the installation or programming.
•	Follow Manufacturer's recommendations for handling of materials.	All alarm junctions and or splices shall be soldered and insulated.
1.06	Scheduling	<ul> <li>All circuits and wiring shall be labeled at all terminating ends.</li> <li>All devices shall be mounted according to the manufactures specifications.</li> </ul>
	Contractor shall provide a detailed construction schedule with hard dates for completion of roughing in cables,	All devices shall be properly adjusted and tested prior to job completion.
	terminations and testing once scheduling sequence has been determined to the Owner's Project Manager.	• All zone expansion module shall be DMP 714-16 and Relay Output Module shall be DMP 860.
1.07	Warranty	• All cabinets shall be labeled outside with their corresponding module and zone numbers and installed v
•	Contractor shall provide a 1 year parts and labor warranty against defective workmanship and/or system component failure.	All cabinets shall be labeled inside with module number by the corresponding module and zone list defi
Part 3	- Execution	Main control panel shall have a CAT 6 cable ran between the main control and the phone company DM monitoring purposes.
3.01	Field Quality Control	Each expansion cabinets shall have two non-sheilded16 gauge 4 conductor cables ran from the main c expansion cabinet.
	Contractor shall make available all ceiling and termination work for inspection by Manufacturer's representative	All devices such as motion detectors, glass break detectors, door contacts, Keypads etc. shall be labele corresponding module and zone number. Label shall be visible from the floor.
	or owner's representative. Contractor shall replace all defective components.	All motion detectors shall be sealed to prevent air and insects from entering.
-		All steel doors shall have wide gap contacts installed.
	Adjusting	• All door contacts shall be recessed and door magnets shall be glued in place.
	No additional work outside of the contract scope of work shall be completed without the approval of the Owner or Owner's representative.	All keypads shall be wired individually back to new power supply.
	Protection	<ul> <li>All sirens shall be wired individually and connected to new power supply.</li> <li>All devices such as door contact (double doors wire as one), motion detectors, glass break detectors, et al.</li> </ul>
	It is the responsibility of the Contractor to ensure equipment is protected from dust and water during the project with appropriate materials. Remove all protective covers and protective materials from equipment prior to turnover to Owner.	<ul> <li>wired individually on separate zones with end of line resistors at the devices.</li> <li>All devices such as motion detectors, glass break detectors, door contacts, keypads, sirens, etc. shall be a such as motion detectors.</li> </ul>
	Schedules	<ul> <li>with their corresponding module and or zone number. label shall be visible from the floor.</li> <li>All air conditioning condensers accessible from the outside and roof shall have pressure switches insta</li> </ul>
•	Coordinate work with Owner's project manager and follow scheduling sequence as established by Owner's project manager.	<ul> <li>All all conditioning condenses accessible from the outside and foor shall have pressure switches install high pressure side and be connected to the security alarm.</li> <li>Protective grommets shall be installed on all conduits to protect wire.</li> </ul>
•	It is recommended that the Contractor schedule closely with any other systems contractor to ensure turnover date is met.	All devices shall be wired with NON shielded cable.
	Contractor bidding will supply the electrical and or masonry contractors with any specialty back boxes such as clock recessed back boxes etc. and coordinate with them to ensure that all necessary conduits, back boxes, etc. are installed in the proper locations.	<ul> <li>All panels, power supplies and modules shall be grounded.</li> <li>All wire shall be run in J hooks above ceiling with a minimum space of 4" from ceiling deck. All wire sha separate pathways 6" from other system wiring. No wire ties allowed. No wire shall be run between the</li> </ul>
	End of Section	<ul> <li>All wire visible from the finished floor shall be covered in decorative wire molding.</li> </ul>
1.04	Submittals	All wire ran between building shall be in conduit and shall be non shielded direct burial cable. It shall be
1.04.01	1 Prior to installation	of 4 conductor 16 AWG copper.
•	Show compete map of system design for approval by Owner.	<ul> <li>Installer shall have a commercial burglar technician on the job site at all times during installation.</li> <li>Installer will work closely with the electrical and or masonry contractors to ensure conduit, back boxes, or</li> </ul>
	End of Section	<ul> <li>access conduit, etc. are in the proper locations and accessible.</li> <li>Follow and adhere to installation practices specified by NFPA-70 National Electric Code, Edition 2008.</li> </ul>
	Clock System Installation Completion Check List	Follow and adhere to installation practices specified by the Manufacturers.
	- General	1.02 Products Installed but not Supplied Under This Section
Part 1 ·		
	Section Includes	
1.01 •	Section Includes Clock System Completion Check List	
1.01 • 1.02	Section Includes	EMT or Conduit for pathways shall have no more than two 90 degree sweeps and no continuous sectio

#### SYSTEMS SPECIFICATIONS All panel programming has been checked and is correct. Panel(s) has been tested for proper operation. 1.03 Quality Assurance All zones have been tested to verify proper description at keypad. 1.03.01 Qualifications All zones have been tested to verify proper reporting to the monitoring station. • Install all components as directed by Manufacturer's installation guidelines. All zones have been tested to verify they are in their proper partition(s). All products shall bear the mark of UL or ETL for performance level. All sirens and strobes have been tested for proper operation. System installation shall meet all applicable Local/State codes and safety requirements where project is located. All motion detectors have been adjusted for proper sensitivity and have been walk tested. All products shall be new and un-used in original packaging. anufacturer required.(no All motion detectors have been sealed to prevent air and insects from entering. stems. (no substitutions) All glass break detectors have been adjusted for proper sensitivity and tested. 1.03.02 Bidder/Installer Qualifications All cabinets are labeled on the outside with module numbers and zone numbers. tutions) Bidding contractor shall be a local licensed Commercial Burglar Alarm Company with licensed Commercial Burglar Alarm technician(s) on staff. All cabinets are labeled on the inside with module numbers by the corresponding module ar bidding contractor shall be certified by manufacturer to install & program the specified systems. All user codes have been programmed and tested for proper partition access. bidding contractor shall perform all programming required to complete the installation. moore public schools shall substitutions) The monitoring station has the correct account information such as call list, zone description not be required to assist in any part of the installation or programming. End of Section substitutions) 1.09 References bidding contractor shall have at least one year experience installing dsc/dmp equipment. substitutions) NFPA-70 National Electrical Code 2008 edition bidding contractor shall have a minimum of 5 years experience installing commercial burglar alarms. p model # 7073. (no NFPA-72 National Fire Alarm Code bidding contractor shall be able to provide insurance at the request of the owner. odel # 714-8. (no substitutions) UL 1666 - Standard for Safety of Flame Propagation Height bidding contractor shall have a commercial burglar technician on the job site at all times during installation NFPA 262 - Flame Travel and Smoke of Wires and Cables odel # 714-16. (no substitutions) 1.04 Delivery, Storage, and Protection Contractor shall ensure that materials delivery to work area shall be coordinated with construction site manager nix model # smp3pmctx. (no Local Authority Having Jurisdiction responsible for materials distribution to all trades. substitutions) 1.10 Definitions ostitutions) Contractor is responsible for all materials, tools and vehicles left on the job site. bstitutions) AWG - American Wire Gauge Follow Manufacturer's recommendations for handling of materials. bstitutions) o substitutions) BICSI - Building Industry Consulting Service International row for all doors (no substitutions) 1.05 Project Conditions EIA - Electronics Industry Alliance e for security alarm and one zone 1.05.01 Environmental Requirements FCC - Federal Communications Commission NECA - National Electrical Contractors Association Contractor shall ensure that any pollutants produced during the Work are disposed off according to local, state or alent approved by mps) national regulations. Follow the most stringent guidelines. 59a or for rail mount applications NFPA - National Fire Protection Agency It is preferred that the Contractor recycle any used or un-used components during the course of the construction UL - Underwriters Laboratory project. ions) Iled in administration area offices 1.06 Sequencing Access Control System Specifications Contractor shall coordinate with Owner's project manager on sequencing of various trades and construction teams $\overline{\ }$ for the lifecycle of the project. Access Control Equipment 1.07 Scheduling e public schools shall not be Contractor shall provide a detailed construction schedule with hard dates for completion of roughing in cables, Part 1 - Manufacture terminations and testing once scheduling sequence has been determined to the Owner's Project Manager. • Access Control Manufacturer shall be Keyscan. (No Substitutions) 1.08 Warranty Peripheral device Manufacturers shall be according to equipment list. (No Substitution Contractor shall provide a 1 year parts and labor warranty against defective workmanship and/or system componen failure. (1 year warranty shall begin at job completion) • Cable Manufacturer shall be Genesis. (Or Equivalent) Part 2 - Products 1.01 Access Control Equipment Description be DMP 860. 2.02 Source Quality Control Access Control System Manufacture shall be Keyscan (No Substitutions) • • Access Control Management Software = Aurora (This software is already installed and Materials shall be purchased from Distributors authorized by system Manufacturers to sell new and unused mbers and installed with lock. information purposes only) components. dule and zone list definitions. Reader Control Panels shall be (No Substitutions) • Part 3 -Keyscan CA 4500 = 4 Door phone company DMARC for Keyscan CA 8500 = 8 Door 3.01 Field Quality Control Each Reader Control Panel shall be equipped with (2) 16VAC 40VA Transformer • Contractor shall make available all ceiling and termination work for inspection by Manufacturer's representative or s ran from the main control to the • Each Reader Control Panel shall be equipped with (1) 12V 7AH Battery owner's representative. One 2,4 or 8 Door Reader Control Panel per site shall be equipped with (1) Keyscan Ne • has an existing 2,4 or 8 Door Control Panel with a Netcom2P already installed, then a N hads etc. shall be labeled with their e Contractor shall replace all defective components. CIM or CIM-Link modules shall be used to connect the new Control Panel to the existing All Reader Control Panels shall be linked together with either CIM or CIM-Link modules 3.02 Adjusting Each new Reader Control Panel shall be capable of 4 doors minimum No additional work outside of the contract scope of work shall be completed without the approval of the Owner or Card Readers shall be (No Substitutions) Owner's representative. HID 40NKS00000000 Signo Wall Mount reader (for use in all locations except where million required to fit) 3.03 Cleaning HID 20NKS00000000 Signo 20 Mullion Reader (For use on mullion mount locations wh • Contractor shall sweep and mop the floors of all equipment rooms or connection point closets prior to turnover to the large. Owner. ass break detectors, etc. shall be ALL READERS REQUIRE 22/6 STR OAS WIRE. Access Control Strikes and locks shall be (No Substitutions unless approved by M 3.04 Protection ads, sirens, etc. shall be labeled RCI 0163X32D ½ inch Rim(ONLY USE IF <sup>3</sup>/<sub>4</sub> INCH RIM WILL NOT FIT) RCI 0162X32D <sup>3</sup>/<sub>4</sub> inch Rim It is the responsibility of the Contractor to ensure equipment is protected from dust and water during the project with RCI F0162X32D <sup>3</sup>/<sub>4</sub> inch Rim Fire Rated appropriate materials. ressure switches installed on the RCI F2164 RECESSED ALL-IN-ONE STRIKE Remove all protective covers and protective materials from equipment prior to turnover to Owner. • Where storm doors are installed, install compatible power motor and power supply to a installed by door contractor. 3.05 Schedules Egress Motions shall be (No Substitutions) • Coordinate work with Owner's project manager and follow scheduling sequence as established by Owner's project BOSCH DS160 OR HONEYWELL IS310 manager. iling deck. All wire shall be in It is recommended that the Contractor schedule closely with any other systems contractor to ensure turnover date is Il be run between the red iron and met. Contractor bidding will work closely with the electrical and or masonry contractors to ensure conduit, back boxes, door frame access conduit, etc. are in the proper locations and accessible. End of Section ourial cable. It shall be a minimum 1.02 Submittals ring installation. conduit, back boxes, door frame | 1.03.01 Prior to installation • Show compete map of system design for approval by Owner. c Code, Edition 2008. Security System Installation Completion Check List Part 1 - General of wall cavities at the work area. **1.01** Section Includes d no continuous section over 100'. Security System Completion Check List 1.02 Completion Check List

A map of the entire system showing device numbers and wire routes has been left inside the main control panel and

a copy has been given to Jack Phillips with MPS.

	Door Contacts shall be GE Model # 1076D-M Double Pole Double Throw (To be utilized for Access Control and
	Security Alarm) (See security alarm specs)
	DOOR LOCK RELEASE BUTTON SHALL BE (NO SUBSTITUTIONS)     RCI PART # 909S ROCKER SWITCH
	Power Supply for locking hardware     **Rever supply in Kayasan Controller is for the Control and Readers only
	<ul> <li>**Power supply in Keyscan Controller is for the Control and Readers only.</li> <li>Power Supplies shall be sized to meet requirements of Strikes and locks with a maximum of 80% amp load.</li> </ul>
	<ul> <li>Power Supply shall have form "C" contacts for supervision that is connected to Keyscan Control Aux Input.</li> <li>24 VDC Securitron- AccuPower- AQM20-8C/16C, AQD5-8C or equal.</li> </ul>
	2.01 Systems Installation
	All junctions and or splices shall be soldered and insulated.
	All circuits and wiring shall be labeled at all terminating ends.
and zone descriptions.	All devices shall be mounted in accordance to the manufactures specifications.
	All devices shall be properly adjusted and tested prior to job completion.
ons etc.	All controllers shall be labeled outside with their corresponding modules and installed with lock.
	<ul> <li>All controllers shall have a Cat 6 network cable Blue in color ran from the nearest network cabinet and labeled with drop number.</li> </ul>
	All card readers shall be labeled with their corresponding reader number.
	All doors with access control shall have contacts installed for door status indication. Steel doors shall have wide     gap door contacts installed.
	<ul> <li>All doors with access control shall have egress motions installed to allow system to detect proper egress.</li> </ul>
	(including doors with panic exit hardware.)
	Protective grommets shall be installed on all conduits to protect wire.
	All panels, power supplies and modules shall be grounded.
	<ul> <li>All wire shall be run in J hooks above ceiling with a minimum space of 6" from ceiling deck. All wire shall be in separate pathways 6" from other system wiring. No wire ties allowed. No wire shall be run between the red iron and roof deck.</li> </ul>
	• All wire visible from the finished floor shall be covered in decorative wire molding.
	• All wire ran between building shall be in conduit and shall be direct burial cable.
	• Installer shall have a licensed Access Control technician on the job site at all times during installation.
	• Installer will work closely with the electrical and or masonry contractors to ensure conduit, back boxes, door frame access conduit, etc. are in the proper locations and accessible.
	Follow and adhere to installation practices specified by NFPA-70 National Electric Code, Edition 2008.
	Follow and adhere to installation practices specified by the Manufacturers.
	3.01 Bidder/Installer Qualifications
	Bidding contractor shall be a local licensed Access Control Company with licensed Access Control technician(s)
	on staff.
	<ul> <li>Bidding contractor shall have at least one year experience installing Keyscan Access Control Systems.</li> <li>Bidding contractor shall have a minimum of 5 years experience installing commercial Access Control Systems.</li> </ul>
ns)	<ul> <li>Bidding contractor shall be able to provide insurance at the request of the owner.</li> </ul>
	Bidding contractor shall have a commercial Access Control technician on the job site at all times during
	installation.
I in use. It is listed for	3.01.1 Submittals
	3.01.2 Prior to installation
	Show compete map of system design for approval by Owner.
	3.01.3 Prior to final acceptance
letcom2p module. If the site	Provide a soft CAD copy As-Built showing layout of Controller Panel, Card Readers, Power Supplies and all
Netcom 2P is not needed and ng Control Panel.	mounted equipment upon Substantial Completion.
S.	<ul> <li>Ensure all warranties specify that the Owner is entitled to all rights guaranteed by the warranty for various components.</li> </ul>
nullion mount reader size is	3.02 Quality Assurance
nuillon mount reader size is	3.02.1 Qualifications
nere single gang reader is too	Install all components as directed by Manufacturer's installation guidelines.
	All products shall bear the mark of UL or ETL for performance level.
Moore Public Schools)	• System installation shall meet all applicable Local/State codes and safety requirements where project is located.
-1	All products shall be new and un-used in original packaging.
	Access Control Installation Completion Check List
activate door hardware unless	Part 4 - General
	4.01 Section Includes
	Access Control System Completion Check List
	4.02 Completion Check List
	• A map of the entire system showing device numbers and wire routes has been left inside the main controller panel and a copy has been given to Rodney Cobb with MPS.
	All system programming has been checked and is correct.
	Panel(s) has been tested for proper operation.
	• All card readers are labeled with reader number and have been tested to verify proper operation.
	• All user card and key fobs have been programmed into system and tested to verify proper operation.
	All egress motion detectors have been adjusted for proper sensitivity and have been walk tested.
	All controllers are labeled on the outside with module numbers.
	All controllers are labeled on the inside with module numbers by the corresponding module.
	Salas O'Brien.
	2600 Van Buren St., Suite 2635 Norman, OK 73072
	Salas O'Brien Registration: CA# 7058 Expiration Date : 6/30/2025



201 N. BROADWAY SUITE 210 MOORE, OK. 73160 405.735.3477 AGP@theAGP.net www.theAGP.net

## CEDAR CREEK

KFC ENGINEERING

STRUCTURAL

SALAS O'BRIEN

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## MOORE PUBLIC SCHOOLS BOARD OF EDUCATION MOORE, OKLAHOMA



# CLASSROOM ADDITION HIGHLAND WEST JUNIOR HIGH SCHOOL

heet no:

Salas O'Brien Project Number: 2023-02792-00



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