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ADDENDUM NO. 03

November 13, 2025

Pentwater Public Schools – Renovations & Improvements
600 E. Park Street
Pentwater, MI 49449

TO: ALL BIDDERS OF RECORD

This Addendum forms a part of and modifies the Bidding Requirements, Contract Forms, Contract Conditions, the Specifications and the Drawings dated September 22, 2025, by C2AE. Acknowledge receipt of the Addendum in the space provided on the Bid Form. Failure to do so may subject the Bidder to disqualification.

This Addendum consists of Pages ADD 1-1 through ADD 3-1 and C2AE Addendum No. 03, dated November 13, 2025, consisting of 28 pages.

A. SPECIFICATION SECTION 00 00 10 TITLE PAGE

1. Revise Bids Received to Tuesday, November 25, 2025, at 2:00 PM.

B. SPECIFICATION SECTION 00 20 00 NOTICE TO BIDDERS

1. Revise Bids Received to Tuesday, November 25, 2025, at 2:00 PM.
2. Bid Opening. Bids will be publicly opened and read aloud on Tuesday, November 25, 2025, shortly after the at 2:00 PM Bid receipt deadline, in the Pentwater Administration Office, 600 E. Park Street, Pentwater, MI 49449.

50 Louis St., NW, Suite 200
Grand Rapids, MI 49503
616.454.9414
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Addendum #3

Project No.:	24-0301	**Date:**	November 14, 2025
Project:	Pentwater Public Schools 2024 Bond Implementation – Bid Package #2	**A/E Firm:**	C2AE
		Project Manager:	Anthony Seifritz
Owner:	Pentwater Public Schools 600 East Park Street Pentwater, MI 49449		

The following changes, revisions, modifications, etc. shall be incorporated into the contract documents, specifications, and plans.

ACKNOWLEDGEMENTS

A2.1 The Bidder shall acknowledge receipt of Addenda #3 by indicating so in the spaces provided on the Bid Form.

SPECIFICATIONS

A2.2 **Refer To Section 08 7100 – Door Hardware (issued):**
Add Section 08 7100 in its entirety. This was previously inadvertently omitted.

SECTION 08 71 00 – DOOR HARDWARE

PART 1 GENERAL

1.1 *SUMMARY*

A. *Section includes:*
1. *Mechanical and electrified door hardware.*
2. *Electronic access control system components.*
3. *Field verification, preparation and m+odification of existing doors and frames to receive new door hardware.*

B. *Section excludes:*
1. *Windows*
2. *Cabinets (casework), including locks in cabinets*
3. *Signage*
4. *Toilet accessories*
5. *Overhead doors*

C. *Related Sections:*
1. *Division 01 “General Requirements” sections for Allowances, Alternates, Owner Furnished Contractor Installed, Project Management and Coordination.*
2. *Division 06 Section “Rough Carpentry”*
3. *Division 06 Section "Finish Carpentry”*
4. *Division 07 Section “Joint Sealants” for sealant requirements applicable to threshold installation specified in this section.*
5. *Division 08 Sections:*
   a. *“Metal Doors and Frames”*
   b. *“Flush Wood Doors”*
   c. *“Stile and Rail Wood Doors”*
   d. *“Interior Aluminum Doors and Frames”*
   e. *"Aluminum-Framed Entrances and Storefronts"*
6. *Division 09 sections for touchup, finishing or refinishing of existing openings modified by this section.*
7. *Division 26 “Electrical” sections for connections to electrical power system and for low-voltage wiring.*
8. *Division 28 “Electronic Safety and Security” sections for coordination with other components of electronic access control system and fire alarm system.*

1.2 *REFERENCES*

A. *UL, LLC*
1. *UL 10B - Fire Test of Door Assemblies*
2. *UL 10C - Positive Pressure Test of Fire Door Assemblies*
3. *UL 1784 - Air Leakage Tests of Door Assemblies*
4. *UL 305 - Panic Hardware*

B. *DHI - Door and Hardware Institute*
1. *Sequence and Format for the Hardware Schedule*

2. *Recommended Locations for Builders Hardware*
3. *Keying Systems and Nomenclature*
4. *Installation Guide for Doors and Hardware*

C. *NFPA – National Fire Protection Association*
1. *NFPA 70 – National Electric Code*
2. *NFPA 80 – 2016 Edition – Standard for Fire Doors and Other Opening Protectives*
3. *NFPA 101 – Life Safety Code*
4. *NFPA 105 – Smoke and Draft Control Door Assemblies*
5. *NFPA 252 – Fire Tests of Door Assemblies*

D. *ANSI - American National Standards Institute*
1. *ANSI A117.1 – 2017 Edition – Accessible and Usable Buildings and Facilities*
2. *ANSI/BHMA A156.1 - A156.29, and ANSI/BHMA A156.31 - Standards for Hardware and Specialties*
3. *ANSI/BHMA A156.28 - Recommended Practices for Keying Systems*
4. *ANSI/WDMA I.S. 1A - Interior Architectural Wood Flush Doors*
5. *ANSI/SDI A250.8 - Standard Steel Doors and Frames*

1.3 *SUBMITTALS*

A. *General:*
1. *Submit in accordance with Conditions of Contract and Division 01 Submittal Procedures.*
2. *Prior to forwarding submittal:*
a. *Comply with procedures for verifying existing door and frame compatibility for new hardware, as specified in PART 3, "EXAMINATION" article, herein.*
b. *Review drawings and Sections from related trades to verify compatibility with specified hardware.*
c. *Highlight, encircle, or otherwise specifically identify on submittals: deviations from Contract Documents, issues of incompatibility or other issues which may detrimentally affect the Work.*

B. *Action Submittals:*
1. *Product Data: Submit technical product data for each item of door hardware, installation instructions, maintenance of operating parts and finish, and other information necessary to show compliance with requirements.*
2. *Riser and Wiring Diagrams: After final approval of hardware schedule, submit details of electrified door hardware, indicating:*
a. *Wiring Diagrams: For power, signal, and control wiring and including:*
1) *Details of interface of electrified door hardware and building safety and security systems.*
2) *Schematic diagram of systems that interface with electrified door hardware.*
3) *Point-to-point wiring.*
4) *Risers.*

3. *Samples for Verification: If requested by Architect, submit production sample of requested door hardware unit in finish indicated and tagged with full description for coordination with schedule.*
   a. *Samples will be returned to supplier. Units that are acceptable to Architect may, after final check of operations, be incorporated into Work, within limitations of key coordination requirements.*
4. *Door Hardware Schedule:*
   a. *Submit concurrent with submissions of Product Data, Samples, and Shop Drawings. Coordinate submission of door hardware schedule with scheduling requirements of other work to facilitate fabrication of other work critical in Project construction schedule.*
   b. *Submit under direct supervision of a Door Hardware Institute (DHI) certified Architectural Hardware Consultant (AHC) or Door Hardware Consultant (DHC) with hardware sets in vertical format as illustrated by Sequence of Format for the Hardware Schedule published by DHI.*
   c. *Indicate complete designations of each item required for each opening, include:*
      1) *Door Index: door number, heading number, and Architect's hardware set number.*
      2) *Quantity, type, style, function, size, and finish of each hardware item.*
      3) *Name and manufacturer of each item.*
      4) *Fastenings and other pertinent information.*
      5) *Location of each hardware set cross-referenced to indications on Drawings.*
      6) *Explanation of all abbreviations, symbols, and codes contained in schedule.*
      7) *Mounting locations for hardware.*
      8) *Door and frame sizes and materials.*
      9) *Degree of door swing and handing.*
      10) *Operational Description of openings with electrified hardware covering egress, ingress (access), and fire/smoke alarm connections.*
5. *Key Schedule:*
   a. *After Keying Conference, provide keying schedule that includes levels of keying, explanations of key system's function, key symbols used, and door numbers controlled.*
   b. *Use ANSI/BHMA A156.28 "Recommended Practices for Keying Systems" as guideline for nomenclature, definitions, and approach for selecting optimal keying system.*
   c. *Provide 3 copies of keying schedule for review prepared and detailed in accordance with referenced DHI publication. Include schematic keying diagram and index each key to unique door designations.*
   d. *Index keying schedule by door number, keyset, hardware heading number, cross keying instructions, and special key stamping instructions.*
   e. *Provide one complete bitting list of key cuts and one key system schematic illustrating system usage and expansion. Forward bitting list, key cuts and key system schematic directly to Owner, by means as directed by Owner.*
   f. *Prepare key schedule by or under supervision of supplier, detailing Owner's final keying instructions for locks.*

C. *Informational Submittals:*
   1. *Provide Qualification Data for Supplier, Installer and Architectural Hardware Consultant.*
   2. *Provide Product Data:*
      a. *Certify that door hardware approved for use on types and sizes of labeled fire-rated doors complies with listed fire-rated door assemblies.*
      b. *Include warranties for specified door hardware.*

D. *Closeout Submittals:*
   1. *Operations and Maintenance Data: Provide in accordance with Division 01 and include:*
      a. *Complete information on care, maintenance, and adjustment; data on repair and replacement parts, and information on preservation of finishes.*
      b. *Catalog pages for each product.*
      c. *Final approved hardware schedule edited to reflect conditions as installed.*
      d. *Final keying schedule*
      e. *Copy of warranties including appropriate reference numbers for manufacturers to identify project.*
      f. *As-installed wiring diagrams for each opening connected to power, both low voltage and 110 volts.*

E. *Inspection and Testing:*
   1. *Submit written reports to the Owner and Authority Having Jurisdiction (AHJ) of the results of functional testing and inspection for:*
      a. *fire door assemblies, in compliance with NFPA 80.*
      b. *required egress door assemblies, in compliance with NFPA 101.*

1.4 *QUALITY ASSURANCE*

A. *Qualifications and Responsibilities:*
   1. *Supplier: Recognized architectural hardware supplier with a minimum of 5 years documented experience supplying both mechanical and electromechanical door hardware similar in quantity, type, and quality to that indicated for this Project. Supplier to be recognized as a factory direct distributor by the manufacturer of the primary materials with a warehousing facility in the Project's vicinity. Supplier to have on staff, a certified Architectural Hardware Consultant (AHC) or Door Hardware Consultant (DHC) available to Owner, Architect, and Contractor, at reasonable times during the Work for consultation.*
   2. *Installer: Qualified tradesperson skilled in the application of commercial grade hardware with experience installing door hardware similar in quantity, type, and quality as indicated for this Project.*
   3. *Architectural Hardware Consultant: Person who is experienced in providing consulting services for door hardware installations that are comparable in material, design, and extent to that indicated for this Project and meets these requirements:*
      a. *For door hardware: DHI certified AHC or DHC.*
      b. *Can provide installation and technical data to Architect and other related subcontractors.*
      c. *Can inspect and verify components are in working order upon completion of installation.*

d. *Capable of producing wiring diagram and coordinating installation of electrified hardware with Architect and electrical engineers.*

4. *Single Source Responsibility: Obtain each type of door hardware from single manufacturer.*

B. *Certifications:*
1. *Fire-Rated Door Openings:*
a. *Provide door hardware for fire-rated openings that complies with NFPA 80 and requirements of authorities having jurisdiction.*
b. *Provide only items of door hardware that are listed products tested by UL LLC, Intertek Testing Services, or other testing and inspecting organizations acceptable to authorities having jurisdiction for use on types and sizes of doors indicated, based on testing at positive pressure and according to NFPA 252 or UL 10C and in compliance with requirements of fire-rated door and door frame labels.*
2. *Smoke and Draft Control Door Assemblies:*
a. *Provide door hardware that meets requirements of assemblies tested according to UL 1784 and installed in compliance with NFPA 105*
b. *Comply with the maximum air leakage of 0.3 cfm/sq. ft. (3 cu. m per minute/sq. m) at tested pressure differential of 0.3-inch wg (75 Pa) of water.*
3. *Electrified Door Hardware*
a. *Listed and labeled as defined in NFPA 70, Article 100, by testing agency acceptable to authorities having jurisdiction.*
4. *Accessibility Requirements:*
a. *Comply with governing accessibility regulations cited in "REFERENCES" article 087100, 1.02.D3 herein for door hardware on doors in an accessible route. This project must comply with all Federal Americans with Disability Act regulations and all Local Accessibility Regulations.*

C. *Pre-Installation Meetings*
1. *Keying Conference*
a. *Incorporate keying conference decisions into final keying schedule after reviewing door hardware keying system including:*
1) *Function of building, flow of traffic, purpose of each area, degree of security required, and plans for future expansion.*
2) *Preliminary key system schematic diagram.*
3) *Requirements for key control system.*
4) *Requirements for access control.*
5) *Address for delivery of keys.*

2. *Pre-installation Conference*
a. *Review and finalize construction schedule and verify availability of materials, Installer's personnel, equipment, and facilities needed to make progress and avoid delays.*
b. *Inspect and discuss preparatory work performed by other trades.*
c. *Inspect and discuss electrical roughing-in for electrified door hardware.*
d. *Review sequence of operation for each type of electrified door hardware.*
e. *Review required testing, inspecting, and certifying procedures.*

f. *Review questions or concerns related to proper installation and adjustment of door hardware.*

3. *Electrified Hardware Coordination Conference:*
   a. *Prior to ordering electrified hardware, schedule and hold meeting to coordinate door hardware with security, electrical, doors and frames, and other related suppliers.*

D. *Inventory door hardware on receipt and provide secure lock-up for hardware delivered to Project site. Promptly replace products damaged during shipping.*

E. *Tag each item or package separately with identification coordinated with final door hardware schedule, and include installation instructions, templates, and necessary fasteners with each item or package. Deliver each article of hardware in manufacturer's original packaging.*

F. *Maintain manufacturer-recommended environmental conditions throughout storage and installation periods.*

G. *Provide secure lock-up for door hardware delivered to Project. Control handling and installation of hardware items so that completion of Work will not be delayed by hardware losses both before and after installation.*

H. *Handle hardware in manner to avoid damage, marring, or scratching. Correct, replace or repair products damaged during Work. Protect products against malfunction due to paint, solvent, cleanser, or any chemical agent.*

I. *Deliver keys to manufacturer of key control system for subsequent delivery to Owner.*

1.5 *COORDINATION*

A. *Comply Coordinate layout and installation of floor-recessed door hardware with floor construction. Cast anchoring inserts into concrete.*

B. *Installation Templates: Distribute for doors, frames, and other work specified to be factory or shop prepared. Check Shop Drawings of other work to confirm that adequate provisions are made for locating and installing door hardware to comply with indicated requirements.*

C. *Security: Coordinate installation of door hardware, keying, and access control with Owner's security consultant.*

D. *Electrical System Roughing-In: Coordinate layout and installation of electrified door hardware with connections to power supplies and building safety and security systems.*

E. *Existing Openings: Where existing doors, frames and/or hardware are to remain, field verify existing functions, conditions and preparations and coordinate to suit opening conditions and to provide proper door operation.*

1.6 *WARRANTY*

A. *Manufacturer's standard form in which manufacturer agrees to repair or replace components of door hardware that fail in materials or workmanship within published warranty period.*
   1. *Warranty does not cover damage or faulty operation due to improper installation, improper use or abuse.*
   2. *Warranty Period: Beginning from date of Substantial Completion, for durations indicated in manufacturer's published listings.*
      a. *Mechanical Warranty*
         1) *Locks*
            a) *Schlage ND Series: 10 years*
         2) *Exit Devices*
            a) *Von Duprin: 10 years*
         3) *Closers*
            a) *LCN 4000 Series: 30 years*

1.7 *MAINTENANCE*

A. *Furnish complete set of special tools required for maintenance and adjustment of hardware, including changing of cylinders.*

B. *Turn over unused materials to Owner for maintenance purposes.*

PART 2 PRODUCTS

2.1 *MANUFACTURERS*

A. *The Owner requires use of certain products for their unique characteristics and project suitability to ensure continuity of existing and future performance and maintenance standards. After investigating available product offerings, the Awarding Authority has elected to prepare proprietary specifications. These products are specified with the notation: "No Substitute."*
   1. *Where "No Substitute" is noted, submittals and substitution requests for other products will not be considered.*

B. *Approval of alternate manufacturers and/or products other than those listed as "Scheduled Manufacturer" or "Acceptable Manufacturers" in the individual article for the product category are only to be considered by official substitution request in accordance in section 01 25 00.*

C. *Approval of products from manufacturers indicated in "Acceptable Manufacturers" is contingent upon those products providing all functions and features and meeting all requirements of scheduled manufacturer's product.*

D. *Where specified hardware is not adaptable to finished shape or size of members requiring hardware, furnish suitable types having same operation and quality as type specified, subject to Architect's approval.*

2.2 *MATERIALS*

A. *Fabrication*
   1. *Provide door hardware manufactured to comply with published templates generally prepared for machine, wood, and sheet metal screws. provide screws according to manufacturer's recognized installation standards for application intended.*
   2. *Finish exposed screws to match hardware finish, or, if exposed in surfaces of other work, to match finish of this other work including prepared for paint surfaces to receive painted finish.*
   3. *Provide concealed fasteners wherever possible for hardware units exposed when door is closed. Coordinate with "Metal Doors and Frames", "Flush Wood Doors", "Stile and Rail Wood Doors" to ensure proper reinforcements. Advise the Architect where visible fasteners, such as thru bolts, are required.*

B. *Modification and Preparation of Existing Doors: Where existing door hardware is indicated to be removed and reinstalled.*
   1. *Provide necessary fillers, Dutchmen, reinforcements, and fasteners, compatible with existing materials, as required for mounting new opening hardware and to cover existing door and frame preparations.*
   2. *Use materials which match materials of adjacent modified areas.*
   3. *When modifying existing fire-rated openings, provide materials permitted by NFPA 80 as required to maintain fire-rating.*

C. *Provide screws, bolts, expansion shields, drop plates and other devices necessary for hardware installation.*
   1. *Where fasteners are exposed to view: Finish to match adjacent door hardware material.*

2.3 *HINGES*

A. *Manufacturers and Products:*
   1. *Scheduled Manufacturer and Product:*
      a. *Ives 5BB series*
   2. *Acceptable Manufacturers and Products*
      a. *Hager BB1191/1279 series*
      b. *McKinney TB series*

B. *Requirements:*
   1. *Provide hinges conforming to ANSI/BHMA A156.1.*
   2. *Provide five knuckle, ball bearing hinges.*
   3. *1-3/4 inch (44 mm) thick doors, up to and including 36 inches (914 mm) wide:*
      a. *Exterior: Standard weight, bronze or stainless steel, 4-1/2 inches (114 mm) high*
      b. *Interior: Standard weight, steel, 4-1/2 inches (114 mm) high*
   4. *1-3/4 inch (44 mm) thick doors over 36 inches (914 mm) wide:*
      a. *Exterior: Heavy weight, bronze/stainless steel, 5 inches (127 mm) high*
      b. *Interior: Heavy weight, steel, 5 inches (127 mm) high*

5. *2 inches or thicker doors:*
   a. *Exterior: Heavy weight, bronze or stainless steel, 5 inches (127 mm) high*
   b. *Interior: Heavy weight, steel, 5 inches (127 mm) high*
6. *Adjust hinge width for door, frame, and wall conditions to allow proper degree of opening.*
7. *Provide three hinges per door leaf for doors 90 inches (2286 mm) or less in height, and one additional hinge for each 30 inches (762 mm) of additional door height.*
8. *Where new hinges are specified for existing doors or existing frames, provide new hinges of identical size to hinge preparation present in existing door or existing frame.*
9. *Hinge Pins: Except as otherwise indicated, provide hinge pins as follows:*
   a. *Steel Hinges: Steel pins*
   b. *Non-Ferrous Hinges: Stainless steel pins*
   c. *Out-Swinging Exterior Doors: Non-removable pins*
   d. *Out-Swinging Interior Lockable Doors: Non-removable pins*
   e. *Interior non-lockable doors: Non-rising pins.*
10. *Provide hinges with electrified options as scheduled in the hardware sets. Provide with number and gage of wires enough to accommodate electric function of specified hardware. Locate electric hinge at second hinge from bottom or nearest to electrified locking component. Provide mortar guard for each electrified hinge specified.*

2.4 *CONTINUOUS HINGES*

A. *Manufacturers:*
   1. *Scheduled Manufacturer:*
      a. *Ives*
   2. *Acceptable Manufacturers:*
      a. *Select*

B. *Requirements*
   1. *Provide aluminum geared continuous hinges conforming to ANSI/BHMA A156.26, Grade 1.*
   2. *Provide aluminum geared continuous hinges, where specified in the hardware sets, fabricated from 6063-T6 aluminum.*
   3. *Provide split nylon bearings at each hinge knuckle for quiet, smooth, self-lubricating operation.*
   4. *Provide hinges capable of supporting door weights up to 450 pounds, and successfully tested for 1,500,000 cycles.*
   5. *On fire-rated doors, provide aluminum geared continuous hinges classified for use on rated doors by testing agency acceptable to authority having jurisdiction.*
   6. *Provide aluminum geared continuous hinges with electrified option scheduled in the hardware sets. Provide with number and gage of wires enough to accommodate electric function of specified hardware.*
   7. *Provide hinges 1 inch (25 mm) shorter in length than nominal height of door, unless otherwise noted or door details require shorter length and with symmetrical hole pattern.*

2.5 *CYLINDRICAL LOCKS – GRADE 1*

A. *Manufacturers and Products:*
   1. *Scheduled Manufacturer and Product:*
      a. *Schlage ND series*
   2. *Acceptable Manufacturers and Products:*
      a. *No Substitute*

B. *Requirements:*
   1. *Provide cylindrical locks conforming to ANSI/BHMA A156.2 Series 4000, Grade 1, and UL Listed for 3-hour fire doors.*
   2. *Cylinders: Refer to "KEYING" article, herein.*
   3. *Provide locks with standard 2-3/4 inches (70 mm) backset, unless noted otherwise, with 1/2-inch latch throw. Provide proper latch throw for UL listing at pairs.*
   4. *Provide locksets with separate anti-rotation thru-bolts, and no exposed screws.*
   5. *Provide independently operating levers with two external return spring cassettes mounted under roses to prevent lever sag.*
   6. *Provide standard ASA strikes unless extended lip strikes are necessary to protect trim.*
   7. *Provide electrified options as scheduled in the hardware sets.*
   8. *Lever Trim: Solid cast levers without plastic inserts and wrought roses on both sides.*
      a. *Lever Design: Field verify and match existing lever style.*

2.6 *EXIT DEVICES*

A. *Manufacturers and Products:*
   1. *Schedule Manufacturer and Product:*
      a. *Von Duprin 98/35A series*
   2. *Acceptable Manufacturers and Products:*
      a. *No Substitute*

B. *Requirements*
   1. *Provide exit devices tested to ANSI/BHMA A156.3 Grade 1 and UL listed for Panic Exit or Fire Exit Hardware.*
   2. *Cylinders: Refer to "KEYING" article, herein.*
   3. *Provide smooth touchpad type exit devices, fabricated of brass, bronze, stainless steel, or aluminum, plated to standard architectural finishes to match balance of door hardware.*
   4. *Touchpad must extend a minimum of one half of door width. No plastic inserts are allowed in touchpads.*
   5. *Provide exit devices with deadlatching feature for security and for future addition of alarm kits and/or other electrified requirements.*
   6. *Provide exit devices with weather resistant components that can withstand harsh conditions of various climates and corrosive cleaners used in outdoor pool environments.*
   7. *Provide flush end caps for exit devices.*
   8. *Provide exit devices with manufacturer's approved strikes.*

9. *Provide exit devices cut to door width and height. Install exit devices at height recommended by exit device manufacturer, allowable by governing building codes, and approved by Architect.*
10. *Mount mechanism case flush on face of doors or provide spacers to fill gaps behind devices. Where glass trim or molding projects off face of door, provide glass bead kits.*
11. *Provide cylinder or hex-key dogging as specified at non fire-rated openings.*
12. *Removable Mullions: 2 inches (51 mm) x 3 inches (76 mm) steel tube. Where scheduled as keyed removable mullion, provide type that can be removed by use of a keyed cylinder, which is self-locking when re-installed.*
13. *Provide factory drilled weep holes for exit devices used in full exterior application, highly corrosive areas, and where noted in hardware sets.*
14. *Provide electrified options as scheduled.*
15. *Top latch mounting: double- or single-tab mount for steel doors, face mount for aluminum doors eliminating requirement of tabs, and double tab mount for wood doors.*
16. *Provide exit devices with optional trim designs to match other lever and pull designs used on the project.*
17. *Field verify and match existing pull style.*

2.7 *ACCESS CONTROL READER*

A. *Manufacturers and Products:*

1. *Scheduled Manufacturer and Product:*
   a. *Schlage MTB series*
2. *Acceptable Manufacturers and Products:*
   a. *No substitute*

B. *Requirements*

1. *Provide access control card readers manufactured by a global company who is a recognized leader in the production of access control devices. Card reader manufactured for non-access control applications are not acceptable.*
2. *Provide multi-technology contactless readers complying with ISO 14443.*
3. *Provide access control card readers capable of reading the following technologies:*
   a. *CSN - DESFire® CSN, HID iCLASS® CSN, Inside Contactless PicoTag® CSN, ST Microelectronics® CSN, Texas Instruments Tag-It®, CSN, Phillips I-Code® CSN*
   b. *125 KHz proximity - Schlage® Proximity, HID® Proximity, GE/CASI® Proximity, AWID® Proximity, LenelProx®*
   c. *13.56 MHz Smart card - Schlage smart cards using MIFARE Classic® EV1/EV3, Schlage smart cards using MIFARE Plus®, Schlage smart cards using MIFARE® DESFire® EV1/EV3, Schlage smart cards using MIFARE® DESFire® EV2/EV3*
   d. *13.56 MHz NFC (mobile), 2.45 GHz Bluetooth (mobile) - Mobile means compatible with Bluetooth and NFC-enabled smartphones.*

2.8 *ELECTRIC STRIKES*

A. *Manufacturers and Products:*
   1. *Scheduled Manufacturer and Product:*
      a. *Von Duprin 6000 series*
   2. *Acceptable Manufacturers and Products:*
      a. *No substitute*

B. *Requirements*
   1. *Provide electric strikes designed for use with type of locks shown at each opening.*
   2. *Provide electric strikes UL Listed as burglary resistant that are tested to a minimum endurance test of 1,000,000 cycles.*
   3. *Where required, provide electric strikes UL Listed for fire doors and frames.*
   4. *Provide transformers and rectifiers for each strike as required. Verify voltage with electrical contractor.*

2.9 *PUSHBUTTONS*

A. *Manufacturers and Products:*
   1. *Scheduled Manufacturer and Product:*
      a. *Schlage 620/631 series*
   2. *Acceptable Manufacturers and Products:*
      a. *No substitute*

B. *Requirements*
   1. *Provide push buttons as specified in hardware groups.*

2.10 *PUSHBUTTONS*

A. *Manufacturers and Products:*
   1. *Scheduled Manufacturer and Product:*
      a. *Schlage 660 series*
   2. *Acceptable Manufacturers and Products:*
      a. *No substitute*

B. *Requirements*
   1. *Provide push buttons as specified in hardware groups.*

2.11 *CYLINDERS*

A. *Manufacturers:*
   1. *Scheduled Manufacturer and Product:*
      a. *Schlage*
   2. *Acceptable Manufacturers and Products:*
      a. *No substitute*

B. *Requirements*

1. *Provide cylinders/cores to match Owner's existing key system, compliant with ANSI/BHMA A156.5; latest revision; cylinder face finished to match lockset, manufacturer's series as indicated. Refer to "KEYING" article, herein.*

2.12 *KEYING*

A. *Scheduled System:*
   1. *Existing factory registered system, Provide cylinders/cores keyed into Owner's existing keying system. Comply with guidelines in ANSI/BHMA A156.28, incorporating decisions made at keying conference.*

B. *Requirements:*
   1. *Construction Keying:*
      a. *Temporary Construction Cylinder Keying (as req'd).*
         1) Provide construction cores that permit voiding construction keys without cylinder removal, furnished in accordance with the following requirements.
            a) *Split Key or Lost Ball Construction Keying System.*
            b) *3 construction control keys, and extractor tools or keys as required to void construction keying.*
            c) *12 construction change (day) keys.*
         2) *Owner or Owner's Representative will void operation of temporary construction keys.*
      b. *Replaceable Construction Cores (as req'd)*
         1) *Provide temporary construction cores replaceable by permanent cores, furnished in accordance with the following requirements.*
            a) *3 construction control keys*
            b) *12 construction change (day) keys.*
         2) *Owner or Owner's Representative will replace temporary construction cores with permanent cores.*
   2. *Permanent Keying:*
      a. *Provide permanent cylinders/cores keyed by the manufacturer according to the following key system.*
         Master Keying system as directed by the Owner.
      b. *Forward bitting list and keys separately from cylinders, by means as directed by Owner. Failure to comply with forwarding requirements will be cause for replacement of cylinders/cores involved at no additional cost to Owner.*
      c. *Provide keys with the following features:*
         1) *Material: Nickel silver; minimum thickness of .107-inch (2.3mm)*
         2) *Patent Protection: Keys and blanks protected by one or more utility patent(s).*
      d. *Identification:*
         1) *Mark permanent cylinders/cores and keys with applicable blind code for identification. Do not provide blind code marks with actual key cuts.*
         2) *Identification stamping provisions must be approved by the Architect and Owner.*

3) *Stamp cylinders/cores and keys with Owner's unique key system facility code as established by the manufacturer; key symbol and embossed or stamped with "DO NOT DUPLICATE" along with the "PATENTED" or patent number to enforce the patent protection.*
4) *Failure to comply with stamping requirements will be cause for replacement of keys involved at no additional cost to Owner.*
5) *Forward permanent cylinders/cores to Owner, separately from keys, by means as directed by Owner.*

e. *Quantity: Furnish in the following quantities.*
1) *Change (Day) Keys: 3 per cylinder/core that is keyed differently.*
2) *Permanent Control Keys (as req'd): 3.*
3) *Master Keys: 6.*
4) *Key Blanks: quantity as determined in the keying meeting.*

2.13 *DOOR CLOSERS*

A. *Manufacturers and Products:*
1. Scheduled Manufacturer and Product:
a. *LCN 4010/4110/4020 series*
2. *Acceptable Manufacturers and Products:*
a. *No substitute*

B. *Requirements*
1. *Provide door closers conforming to ANSI/BHMA A156.4 Grade 1 requirements by BHMA certified independent testing laboratory. Certify surface mounted mechanical closers to meet fifteen million (15,000,000) full load cycles. ISO 9000 certify closers. Stamp units with date of manufacture code.*
2. *Provide door closers with fully hydraulic, full rack and pinion action with high strength cast iron cylinder, and full complement bearings at shaft.*
3. *Cylinder Body: 1-1/2-inch (38 mm) diameter with 11/16-inch (17 mm) diameter double heat-treated pinion journal.*
4. *Hydraulic Fluid: Fireproof, passing requirements of UL10C, and requiring no seasonal closer adjustment for temperatures ranging from 120 degrees F to -30 degrees F.*
5. *Spring Power: Continuously adjustable over full range of closer sizes, and providing reduced opening force as required by accessibility codes and standards.*
6. *Hydraulic Regulation: By tamper-proof, non-critical valves, with separate adjustment for latch speed, general speed, and backcheck.*
7. *Provide closers with solid forged steel main arms and factory assembled heavy-duty forged forearms for parallel arm closers. When closers are parallel arm mounted, provide closers which mount within 6-inch (152 mm) top rail without use of mounting plate so that closer is not visible through vision panel from pull side.*
8. *Pressure Relief Valve (PRV) Technology: Not permitted.*
9. *Finish for Closer Cylinders, Arms, Adapter Plates, and Metal Covers: Powder coating finish which has been certified to exceed 100 hours salt spray testing as described in ANSI/BHMA Standard A156.4 and ASTM B117, or has special rust inhibitor (SRI).*

10. *Provide special templates, drop plates, mounting brackets, or adapters for arms as required for details, overhead stops, and other door hardware items interfering with closer mounting.*
11. *Through-bolt all wood door closers.*

2.14 *PROTECTION PLATES*

A. *Manufacturers:*
   1. *Scheduled Manufacturer:*
      a. *Ives*
   2. *Acceptable Manufacturers:*
      a. *Burns*
      b. *Trimco*

B. *Requirements*
   1. *Provide protection plates with a minimum of 0.050 inch (1 mm) thick, beveled four edges as scheduled. Furnish with sheet metal or wood screws, finished to match plates.*
   2. *Sizes plates 2 inches (51 mm) less width of door on single doors, pairs of doors with a mullion, and doors with edge guards. Size plates 1 inch (25 mm) less width of door on pairs without a mullion or edge guards.*
   3. *At fire rated doors, provide protection plates over 16 inches high with UL label.*

2.15 *OVERHEAD STOPS AND OVERHEAD STOP/HOLDERS*

A. *Manufacturers:*
   1. *Scheduled Manufacturers:*
      a. *Glynn-Johnson*
   2. *Acceptable Manufacturers:*
      a. *No substitute*

B. *Requirements*
   1. *Provide overhead stop at any door where conditions do not allow for a wall stop or floor stop presents tripping hazard.*

2.16 *DOOR STOPS AND HOLDERS*

A. *Manufacturers:*
   1. *Scheduled Manufacturers:*
      a. *Ives*
   2. *Acceptable Manufacturers:*
      a. *Burns*
      b. *Trimco*

B. *Requirements*
   1. *Provide door stops at each door leaf.*
   2. *Provide wall stops wherever possible. Provide concave type where lockset has a push button or thumbturn.*

3. *Where a wall stop cannot be used, provide overhead stops.*

2.17 *THRESHOLDS, SEALS, DOOR SWEEPS, AUTOMATIC DOOR BOTTOMS, AND GASKETING*

A. *Manufacturers:*
   1. *Scheduled Manufacturers:*
      a. *Zero International*
   2. *Acceptable Manufacturers:*
      a. *National Guard*
      b. *Reese*

B. *Requirements:*
   1. *Provide thresholds, weather-stripping, and gasketing systems as specified and per architectural details. Match finish of other items.*
   2. *Smoke- and Draft-Control Door Assemblies: Where smoke- and draft-control door assemblies are required, provide door hardware that meets requirements of assemblies tested according to UL 1784 and installed in compliance with NFPA 105.*
   3. *Provide door sweeps, seals, astragals, and auto door bottoms only of type where resilient or flexible seal strip is easily replaceable and readily available.*
   4. *Size thresholds 1/2 inch (13 mm) high by 5 inches (127 mm) wide by door width unless otherwise specified in the hardware sets or detailed in the drawings.*

2.18 *DOOR POSITION SWITCHES*

A. *Manufacturers:*
   1. *Scheduled Manufacturers:*
      a. *Schlage*
   2. *Acceptable Manufacturers:*
      a. *No substitute*

B. *Requirements:*
   1. *Provide recessed or surface mounted type door position switches as specified.*
   2. *Coordinate door and frame preparations with door and frame suppliers. If switches are being used with magnetic locking device, provide minimum of 4 inches (102 mm) between switch and magnetic locking device.*

2.19 *FINISHES*

A. *Finish: Generally, satin chromium, BHMA 626/652 (US26D) for basis of design. Verify finish for each item indicated in the sets with Architect.*

PART 3 EXECUTION

3.1 *EXAMINATION*

A. *Prior to installation of hardware, examine doors and frames, with Installer present, for compliance with requirements for installation tolerances, labeled fire-rated door assembly construction, wall and floor construction, and other conditions affecting performance. Verify doors, frames, and walls have been properly reinforced for hardware installation.*

B. *Field verify existing doors and frames receiving new hardware and existing conditions receiving new openings. Verify that new hardware is compatible with existing door and frame preparation and existing conditions.*

C. *Examine roughing-in for electrical power systems to verify actual locations of wiring connections before electrified door hardware installation.*

D. *Submit a list of deficiencies in writing and proceed with installation only after unsatisfactory conditions have been corrected.*

3.2 *PREPARATION*

A. *Where on-site modification of doors and frames is required:*
   1. *Carefully remove existing door hardware and components being reused. Clean, protect, tag, and store in accordance with storage and handling requirements specified herein.*
   2. *Field modify and prepare existing doors and frames for new hardware being installed.*
   3. *When modifications are exposed to view, use concealed fasteners, when possible.*
   4. *Prepare hardware locations and reinstall in accordance with installation requirements for new door hardware and with:*
      a. *Steel Doors and Frames: For surface applied door hardware, drill and tap doors and frames according to ANSI/SDI A250.6.*
      b. *Wood Doors: DHI WDHS.5 "Recommended Hardware Reinforcement Locations for Mineral Core Wood Flush Doors."*
      c. *Doors in rated assemblies: NFPA 80 for restrictions on on-site door hardware preparation.*

3.3 *INSTALLATION*

A. *Mount door hardware units at heights to comply with the following, unless otherwise indicated or required to comply with governing regulations.*
   1. *Standard Steel Doors and Frames: ANSI/SDI A250.8.*
   2. *Custom Steel Doors and Frames: HMMA 831.*
   3. *Interior Architectural Wood Flush Doors: ANSI/WDMA I.S. 1A*
   4. *Installation Guide for Doors and Hardware: DHI TDH-007-20*

B. *Install door hardware in accordance with NFPA 80, NFPA 101 and provide post-install inspection, testing as specified in section 1.03.E unless otherwise required to comply with governing regulations.*

C. *Install each hardware item in compliance with manufacturer's instructions and recommendations, using only fasteners provided by manufacturer.*

D. *Do not install surface mounted items until finishes have been completed on substrate. Protect all installed hardware during painting.*

E. *Set units level, plumb and true to line and location. Adjust and reinforce attachment substrate as necessary for proper installation and operation.*

F. *Drill and countersink units that are not factory prepared for anchorage fasteners. Space fasteners and anchors according to industry standards.*

G. *Install operating parts so they move freely and smoothly without binding, sticking, or excessive clearance.*

H. *Hinges: Install types and in quantities indicated in door hardware schedule but not fewer than quantity recommended by manufacturer for application indicated.*

I. *Lock Cylinders:*
   1. *Install construction cores to secure building and areas during construction period.*
   2. *Replace construction cores with permanent cores as indicated in keying section.*
   3. *Furnish permanent cores to Owner for installation.*

J. *Wiring: Coordinate with Division 26, ELECTRICAL and Division 28 ELECTRONIC SAFETY AND SECURITY sections for:*
   1. *Conduit, junction boxes and wire pulls.*
   2. *Connections to and from power supplies to electrified hardware.*
   3. *Connections to fire/smoke alarm system and smoke evacuation system.*
   4. *Connection of wire to door position switches and wire runs to central room or area, as directed by Architect.*
   5. *Connections to panel interface modules, controllers, and gateways.*
   6. *Testing and labeling wires with Architect's opening number.*

K. *Key Control System: Tag keys and place them on markers and hooks in key control system cabinet, as determined by final keying schedule.*

L. *Continuous Hinges: Re-locate the door and frame fire rating labels where they will remain visible so that the hinge does not cover the label once installed.*

M. *Door Closers & Auto Operators: Mount closers/operators on room side of corridor doors, inside of exterior doors, and stair side of stairway doors from corridors. Mount closers/operators so they are not visible in corridors, lobbies and other public spaces unless approved by Architect.*

N. *Overhead Stops/Holders: Mount overhead stopes/holders on room side of corridor doors, inside of exterior doors, and stair side of stairway doors.*

O. *Power Supplies: Locate power supplies as indicated or, if not indicated, above accessible ceilings or in equipment room, or alternate location as directed by Architect.*

P. *Thresholds: Set thresholds in full bed of sealant complying with requirements specified in Division 07 Section "Joint Sealants."*

Q. *Stops: Provide floor stops for doors unless wall or other type stops are indicated in door hardware schedule. Do not mount floor stops where they may impede traffic or present tripping hazard.*

R. *Perimeter Gasketing: Apply to head and jamb, forming seal between door and frame.*

S. *Meeting Stile Gasketing: Fasten to meeting stiles, forming seal when doors are closed.*

T. *Door Bottoms and Sweeps: Apply to bottom of door, forming seal with threshold when door is closed.*

3.4 *ADJUSTING*

A. *Initial Adjustment: Adjust and check each operating item of door hardware and each door to ensure proper operation or function of every unit. Replace units that cannot be adjusted to operate as intended. Adjust door control devices to compensate for final operation of heating and ventilating equipment and to comply with referenced accessibility requirements.*
   1. *Electric Strikes: Adjust horizontal and vertical alignment of keeper to properly engage lock bolt.*
   2. *Door Closers: Adjust sweep period to comply with accessibility requirements and requirements of authorities having jurisdiction.*

B. *Occupancy Adjustment: Approximately three to six months after date of Substantial Completion, examine and readjust each item of door hardware, including adjusting operating forces, as necessary to ensure function of doors and door hardware.*

3.5 *CLEANING AND PROTECTION*

A. *Clean adjacent surfaces soiled by door hardware installation.*

B. *Clean operating items per manufacturer's instructions to restore proper function and finish.*

C. *Provide final protection and maintain conditions that ensure door hardware is without damage or deterioration at time of Substantial Completion.*

3.6 *DOOR HARDWARE SCHEDULE*

A. *The intent of the hardware specification is to specify the hardware for interior and exterior doors, and to establish a type, continuity, and standard of quality. However, it is the door hardware supplier's responsibility to thoroughly review existing conditions, schedules, specifications, drawings, and other Contract Documents to verify the suitability of the hardware specified.*

B. *Discrepancies, conflicting hardware, and missing items are to be brought to the attention of the architect with corrections made prior to the bidding process. Omitted items not included in a hardware set should be scheduled with the appropriate additional hardware required for proper application.*

C. *Hardware items are referenced in the following hardware schedule. Refer to the above specifications for special features, options, cylinders/keying, and other requirements.*

D. *Hardware Sets:*

Hardware Group No. 01

For use on Door #(s):
120D *120H*

Each to have:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1HW 4.5 X 4.5 NRP	652	IVE
1	EA	CLASSROOM LOCK	ND70XX XXX - FIELD VERIFY AND MATCH EXISTING CYLINDER TYPE AND LEVER STYLE PRIOR TO ORDER OF MATERIALS	626	SCH
1	EA	CYLINDER	KEYED TO EXISTING - VERIFY KEYWAY WITH OWNER		
1	EA	SURFACE CLOSER	4111 SCUSH	689	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B-CS	630	IVE
1	EA	GASKETING	488S	BK	ZER

Hardware Group No. 02

For use on Door #(s):

300A

Each to have:

QTY		DESCRIPTION	CATALOG NUMBER		FINISH	MFR
3	EA	HINGE	5BB1HW 4.5 X 4.5		652	IVE
1	EA	STOREROOM LOCK	ND80XX XXX - FIELD VERIFY AND MATCH EXISTING CYLINDER TYPE AND LEVER STYLE		626	SCH
1	EA	CYLINDER	KEYED TO EXISTING - VERIFY KEYWAY WITH OWNER			
1	EA	ELECTRIC STRIKE	6400 FSE	✓	630	VON
1	EA	SURFACE CLOSER	4011		689	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B-CS		630	IVE
1	EA	WALL STOP	WS406/407CCV		630	IVE
1	EA	GASKETING	488S		BK	ZER
1	EA	MULTITECH READER	MTB11/MTB15 (AS REQ'D)	✓	BLK	SCE
1	EA	DESK MOUNT BUTTON	660-PB	✓	628	SCE
1	EA	DOOR CONTACT	679-05WD - CONNECT NEW DOOR CONTACTS TO EXISTING DOOR CONTACT CIRCUITS	✓	BLK	SCE
1	EA	POWER SUPPLY	PROVIDED BY SECURITY CONTRACTOR	✓		
1	EA	LOCKDOWN BUTTON	PROVIDED BY SECURITY CONTRACTOR	✓		
		INTERCOM PROGRAMMING AND CABLING	PROVIDED BY SECURITY CONTRACTOR	✓		

OPERATIONAL DESCRIPTION: COORDINATE SYSTEM OPERATION AND COMPONENT LOCATIONS WITH THE OWNER, THE ARCHITECT, AND ALL RELATED TRADES. ALL CONNECTIONS FROM READER AND STRIKE TO POWER SUPPLY, DOOR CONTROLLER, AND OTHER RELATED LOW VOLTAGE ACCESSORIES TO BE PROVIDED BY SECURITY CONTRACTOR.

DOOR NORMALLY CLOSED AND LOCKED VIA ACCESS CONTROL SYSTEM. PRESENTING A VALID CREDENTIAL TO THE READER OR PRESSING DOOR RELEASE BUTTON (LOCATION TBD) WILL MOMENTARILY UNLOCK THE ELECTRIC STRIKE ALLOWING ACCESS. DOOR CONTACT MONITORS WHETHER THE DOOR IS OPENED, CLOSED OR HELD OPEN TOO LONG. DOOR TO REMAIN LOCKED WITH LOSS OF POWER, ACTIVATION OF LOCKDOWN SYSTEM, OR ACTIVATION OF THE FIRE ALARM. FREE EGRESS AT ALL TIMES.

Hardware Group No. 03

For use on Door #(s):
300C

Each to have:

QTY		DESCRIPTION	CATALOG NUMBER		FINISH	MFR
3	EA	HINGE	5BB1HW 4.5 X 4.5 NRP		652	IVE
1	EA	INSTITUTION LOCK	ND82XX XXX - FIELD VERIFY AND MATCH EXISTING CYLINDER TYPE AND LEVER STYLE		626	SCH
2	EA	CYLINDER	KEYED TO EXISTING - VERIFY KEYWAY WITH OWNER			
1	EA	ELECTRIC STRIKE	6400 FSE	✓	630	VON
1	EA	OH STOP	100S		630	GLY
1	EA	SURFACE CLOSER	4011 ST-1544		689	LCN
1	EA	MOUNTING PLATE	4020-18		689	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B-CS		630	IVE
1	EA	GASKETING	488S		BK	ZER
2	EA	MULTITECH READER	MTB11/MTB15 (AS REQ'D)	✓	BLK	SCE
1	EA	DOOR CONTACT	679-05WD - CONNECT NEW DOOR CONTACTS TO EXISTING DOOR CONTACT CIRCUITS	✓	BLK	SCE
1	EA	POWER SUPPLY	PROVIDED BY SECURITY CONTRACTOR	✓		

OPERATIONAL DESCRIPTION: COORDINATE SYSTEM OPERATION AND COMPONENT LOCATIONS WITH THE OWNER, THE ARCHITECT, AND ALL RELATED TRADES. ALL CONNECTIONS FROM READER AND STRIKE TO POWER SUPPLY, DOOR CONTROLLER, AND OTHER RELATED LOW VOLTAGE ACCESSORIES TO BE PROVIDED BY SECURITY CONTRACTOR.

DOOR NORMALLY CLOSED AND LOCKED VIA ACCESS CONTROL SYSTEM. PRESENTING A VALID CREDENTIAL TO EITHER READER WILL MOMENTARILY UNLOCK THE ELECTRIC STRIKE ALLOWING ACCESS. DOOR CONTACT MONITORS WHETHER THE DOOR IS OPENED, CLOSED OR HELD OPEN TOO LONG. DOOR TO REMAIN LOCKED WITH LOSS OF POWER, ACTIVATION OF LOCKDOWN SYSTEM, OR ACTIVATION OF THE FIRE ALARM.

Hardware Group No. 04

For use on Door #(s):
300

Each to have:

QTY		DESCRIPTION	CATALOG NUMBER		FINISH	MFR
3	EA	HINGE	5BB1HW 4.5 X 4.5 NRP		652	IVE
1	EA	INSTITUTION LOCK	ND82XX XXX - FIELD VERIFY AND MATCH EXISTING CYLINDER TYPE AND LEVER STYLE		626	SCH
2	EA	CYLINDER	KEYED TO EXISTING - VERIFY KEYWAY WITH OWNER			
1	EA	ELECTRIC STRIKE	6400 FSE	✓	630	VON
1	EA	SURFACE CLOSER	4111 CUSH		689	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B-CS		630	IVE
1	EA	GASKETING	488S		BK	ZER
2	EA	MULTITECH READER	MTB11/MTB15 (AS REQ'D)	✓	BLK	SCE
1	EA	PUSH-TO-ENTER BUTTON	621GR DA NS L2/ILL	✓	630	SCE
1	EA	DESK MOUNT BUTTON	660-PB	✓	628	SCE
1	EA	DOOR CONTACT	679-05WD - CONNECT NEW DOOR CONTACTS TO EXISTING DOOR CONTACT CIRCUITS	✓	BLK	SCE
1	EA	POWER SUPPLY	PROVIDED BY SECURITY CONTRACTOR	✓		

OPERATIONAL DESCRIPTION: COORDINATE SYSTEM OPERATION AND COMPONENT LOCATIONS WITH THE OWNER, THE ARCHITECT, AND ALL RELATED TRADES. ALL CONNECTIONS FROM READER AND STRIKE TO POWER SUPPLY, DOOR CONTROLLER, AND OTHER RELATED LOW VOLTAGE ACCESSORIES TO BE PROVIDED BY SECURITY CONTRACTOR.

UNLOCKED HOURS: DOOR NORMALLY CLOSED AND LOCKED VIA ACCESS CONTROL SYSTEM AND PUSH-TO-ENTER BUTTON ON SCHOOL LOBBY SIDE SHALL BE ENABLED BY ACCESS CONTROL SYSTEM. PRESSING PUSH-TO-ENTER BUTTON ON SCHOOL LOBBY SIDE WILL MOMENTARILY UNLOCK THE ELECTRIC STRIKE ALLOWING ACCESS FROM SCHOOL LOBBY INTO WELCOME CENTER. WELCOME CENTER SIDE ALWAYS LOCKED PREVENTING FREE PASSAGE FROM WELCOME CENTER INTO THE SCHOOL. PRESENTING A VALID CREDENTIAL TO THE READER ON SCHOOL WELCOME CENTER SIDE, OR PRESSING DOOR RELEASE BUTTON (LOCATION TBD), WILL MOMENTARILY UNLOCK THE ELECTRIC STRIKE ALLOWING ACCESS FROM WELCOME CENTER INTO SCHOOL.

LOCKED HOURS: DOOR NORMALLY CLOSED AND LOCKED VIA ACCESS CONTROL SYSTEM AND PUSH-TO-ENTER BUTTON ON SCHOOL LOBBY SIDE SHALL BE DISABLED BY ACCESS CONTROL SYSTEM, THUS LOCKED IN BOTH DIRECTIONS. PRESENTING A VALID CREDENTIAL TO THE READER ON EITHER SIDE OR PRESSING DOOR RELEASE BUTTON (LOCATION TBD), WILL MOMENTARILY UNLOCK THE ELECTRIC STRIKE ALLOWING ACCESS.

DOOR CONTACT MONITORS WHETHER THE DOOR IS OPENED, CLOSED OR HELD OPEN TOO LONG. DOOR TO REMAIN LOCKED WITH LOSS OF POWER, ACTIVATION OF LOCKDOWN SYSTEM, OR ACTIVATION OF THE FIRE ALARM.

Hardware Group No. 05

For use on Door #(s):
300E

Each to have:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
1	EA	INSTITUTION LOCK	ND82XX XXX - FIELD VERIFY AND MATCH EXISTING CYLINDER TYPE AND LEVER STYLE	626	SCH
2	EA	CYLINDER	KEYED TO EXISTING - VERIFY KEYWAY WITH OWNER		
			BALANCE OF HARDWARE TO REMAIN		

NOTES:
1) FIELD VERIFY EXISTING CONDITIONS. VERIFY/COORDINATE PREPS ON EXISTING DOORS AND FRAMES TO ENSURE THE COMPATIBILITY OF NEW HARDWARE PRIOR TO ORDER OF NEW MATERIALS. PROVIDE FIELD MODIFICATIONS AND/OR NECESSARY FILLERS (PAINT TO MATCH WHERE EXISTING IS PREVIOUSLY PAINTED), REINFORCEMENTS AND FASTENERS, COMPATIBLE WITH EXISTING MATERIALS REQUIRED FOR MOUNTING NEW SPECIFIED HARDWARE AND TO COVER EXISTING DOOR AND FRAME PREPARATIONS (PER NFPA 80 IF APPLICABLE).

Hardware Group No. 06

For use on Door #(s):
900D

Each to have:

QTY		DESCRIPTION	CATALOG NUMBER		FINISH	MFR
1	EA	CONT. HINGE	112HD		628	IVE
1	EA	PANIC HARDWARE	98-NL - FIELD VERIFY AND MATCH EXISTING PULL STYLE		626	VON
1	EA	RIM CYLINDER	KEYED TO EXISTING - VERIFY KEYWAY WITH OWNER			
1	EA	ELECTRIC STRIKE	6300 FSE	✓	630	VON
1	EA	AUTO OPERATOR & ACTUATORS	MATCH EXISTING BRAND AND SERIES OF BUILDING	✓	689	
1	EA	MULTITECH READER	MTB11/MTB15 (AS REQ'D)	✓	BLK	SCE
1	EA	DOOR CONTACT	679-05HM - CONNECT NEW DOOR CONTACTS TO EXISTING DOOR CONTACT CIRCUITS	✓	BLK	SCE
1	EA	POWER SUPPLY	PROVIDED BY SECURITY CONTRACTOR	✓		
			WEATHERSTRIP BY DOOR/FRAME MANUFACTURER			

OPERATIONAL DESCRIPTION: COORDINATE SYSTEM OPERATION AND COMPONENT LOCATIONS WITH THE OWNER, THE ARCHITECT, AND ALL RELATED TRADES. ALL CONNECTIONS FROM READER AND STRIKE TO POWER SUPPLY, DOOR CONTROLLER, AND OTHER RELATED LOW VOLTAGE ACCESSORIES TO BE PROVIDED BY SECURITY CONTRACTOR.

UNLOCKED HOURS: DOOR ELECTRONICALLY UNLOCKED VIA ACCESS CONTROL SYSTEM, THUS IN PUSH/PULL MODE. PUSHING EITHER AUTO OPERATOR ACTUATOR WILL SIGNAL AUTO OPERATOR TO MOMENTARILY OPEN THE ONE LEAF.

LOCKED HOURS: DOOR NORMALLY CLOSED AND LOCKED VIA ACCESS CONTROL SYSTEM. PRESENTING A VALID CREDENTIAL TO THE READER WILL MOMENTARILY UNLOCK THE ELECTRIC STRIKE (ALLOWING ACCESS) AND ACTIVATE EXTERIOR AUTO OPERATOR ACTUATOR. PUSHING EXTERIOR AUTO OPERATOR ACTUATOR AT THIS TIME WILL SIGNAL AUTO OPERATOR TO MOMENTARILY OPEN ONE LEAF. PUSH INTERIOR ACTUATOR AT ANY TIME WILL MOMENTARILY UNLOCK THE ELECTRIC STRIKE AND SIGNAL AUTO OPERATOR TO MOMENTARILY OPEN ONE LEAF.

DOOR CONTACT MONITORS WHETHER THE DOOR IS OPENED, CLOSED OR HELD OPEN TOO LONG. DOOR TO REMAIN LOCKED WITH LOSS OF POWER OR ACTIVATION OF LOCKDOWN SYSTEM. FREE EGRESS AT ALL TIMES.

Hardware Group No. 07

For use on Door #(s):
900C

Each to have:

QTY		DESCRIPTION	CATALOG NUMBER		FINISH	MFR
1	EA	CONT. HINGE	112HD		628	IVE
1	EA	PANIC HARDWARE	98-DT		626	VON
1	EA	ELECTRIC STRIKE	6300 FSE	✓	630	VON
1	EA	SURFACE CLOSER	4111 SCUSH		689	LCN
1	EA	CUSH SHOE SUPPORT	4110-30		689	LCN
1	EA	BLADE STOP SPACER	4110-61		689	LCN
1	EA	DOOR CONTACT	679-05HM - CONNECT NEW DOOR CONTACTS TO EXISTING DOOR CONTACT CIRCUITS	✓	BLK	SCE
1	EA	POWER SUPPLY	PROVIDED BY SECURITY CONTRACTOR WEATHERSTRIP BY DOOR/FRAME MANUFACTURER	✓		

OPERATIONAL DESCRIPTION: COORDINATE SYSTEM OPERATION AND COMPONENT LOCATIONS WITH THE OWNER, THE ARCHITECT, AND ALL RELATED TRADES. ALL CONNECTIONS FROM READER AND STRIKE TO POWER SUPPLY, DOOR CONTROLLER, AND OTHER RELATED LOW VOLTAGE ACCESSORIES TO BE PROVIDED BY SECURITY CONTRACTOR.

UNLOCKED HOURS: DOOR ELECTRONICALLY UNLOCKED VIA ACCESS CONTROL SYSTEM, THUS IN PUSH/PULL MODE.

LOCKED HOURS: DOOR NORMALLY CLOSED AND LOCKED VIA ACCESS CONTROL SYSTEM.

DOOR CONTACT MONITORS WHETHER THE DOOR IS OPENED, CLOSED OR HELD OPEN TOO LONG. DOOR TO REMAIN LOCKED WITH LOSS OF POWER OR ACTIVATION OF LOCKDOWN SYSTEM. FREE EGRESS AT ALL TIMES.

END OF SECTION 08 7100 (ADM3)