CENTERVILLE-CENTER TOWNSHIP LIBRARY
ADDITION & REMODEL

LWC Commission No. 19634.00

ADDENDUM #3
January 02, 2020

LWC, Inc.
712 East Main Street
Richmond, IN 47374

To Prospective Bidders:

This addendum is a modification of the Contract Documents for the above referenced project and is hereby incorporated into and becomes a part of said Contract Documents. Acknowledge receipt of this Addendum in the space provided on the Bid Form. Failure to do so may subject the Bidder to disqualification. It is to be considered in the Proposals and covers additions to or changes in the Contract Documents as indicated below.

This addendum consists of (1) page.

Attachments:

- Bidders questions and answers to date
- Drawings: None
- Specifications: 087100 – Door Hardware

PROJECT CLARIFICATIONS / GENERAL NOTES

- Bids are be due **Wednesday, January 8, 2020, by 4:00pm** at the Centerville-Center Township Library.
- Last day for addenda is **Friday, January 3, 2020, by 4:00pm**. All questions must be submitted by **noon, Thursday, January 2, 2019**, in order to be answered

DRAWINGS

A. NONE

SPECIFICATIONS

ITEM NO. 1 Spec 087100 – Door Hardware

A. Revise Hardware Set 09 – Hinges are included twice.

B. Add Hardware Set 10.

END OF ADDENDUM # 3

LWC INCORPORATED

Addendum 003 RFI Log

Commission Number: 19634.00
Project Name: Centerville-Center Township Library - Addition & Remodel

RFI Number	Date IN	Date OUT	Due Date	Description/Response	Sheet/Spec Reference	PCO Number	CO Number
Thor Construction 001	12/30/19	1/2/20		Dr #214 - No hardware set assigned to this opening - verify hardware required if not existing; this opening is shown as "existing" - are the door, fram & hardware all existing? Dr #215 - No hardware set assisnged to this opening - verify hardware requirements.			
				ANSWER: Door 214 is a relocated door. The door, frame, and hardware should all be salvaged and reused. A new Hardware Set #10 has been added to Specification Section 087100 - Door Hardware to be used for Door 215.			
Pridemark Construction 001	12/30/19	1/2/20		Dr #214 - No hardware set assigned to this opening - verify hardware required if not existing; this opening is shown as "existing" - are the door, fram & hardware all existing? Dr #215 - No hardware set assisnged to this opening - verify hardware requirements.			
				ANSWER: See answer above to Thor Construction 001			
Whisenhunt Construction 001	12/30/19	1/2/20		Dr #214 - No hardware set assigned to this opening - verify hardware required if not existing; this opening is shown as "existing" - are the door, fram & hardware all existing? Dr #215 - No hardware set assisnged to this opening - verify hardware requirements.			
				ANSWER: See answer above to Thor Construction 001			

Whisenhunt Construction 002	12/30/19	1/2/20		Under qualification requirements, it state landscaper must be a member of ANLA or the PLN. Is there flexibility with this requirement to allow us to bid on the job? Are there actual shrubs, etc. specified for the planting areas or just seeding disturbed areas?			
				ANSWER: The requirement to be a member of ANLA or PLN can be waived due to the limited scope of work on this project. There are no actual shrubs at this time due to the limited budget. The scope of landcaping includes seeding disturbed areas and providing mulch at landscaped areas. Plantings will be determined at a later date.			
Metal Sales Inc 001	12/19/19	12/24/19		Thank you for taking my call this afternoon. In response to the above referenced project, Metal Sales Manufacturing Corporation (MSMC) is submitting its substitutions for the Metal Roof and Soffit Panels listed below, as instructed in the specification. • Lock Seam 360 Metal Roof Panel by AMS; • PAC Clad Flush Narrow Vent System by Petersen Aluminum. Attached for your review and consideration are MSMC's proposed Metal Roof and Soffit Panels identified in the CSI 13.1A Substitution Request Forms, along with MSMC's Condensed Technical Reference guides. Also attached are MSMC's Type 2 Standard Weather Tightness Warranty, PVDF Fluorocarbon System Warranty, MS Colorfast System Warranty and Magna-Loc Care and Maintenance information. • Magna-Loc 180 Standing-Seam Metal Roof Panel System; • Soffit/Wall Metal Panel System. Please do not hesitate contacting me, via e-mail, at mmctamney@metalsales.us.com, if you have any questions, or require any additional information.			

				ANSWER: Subject to compliance with requirements, Magna-Loc 180 Standing-Seam Metal Roof Panel System and Soffit/Wall Metal Panel System may be used on this project.			
Lightsource 001	12/30/19	1/2/20		I have a couple of electrical contractors looking to bid the above job. Other than one fixture type, we aren't listed on the fixture schedule. However, there is a column in the schedule (drawing E-003) showing "other acceptable manufacturers" would need to get pre-approval. We have since put together a submittal packages in hopes that we can bid this job, below is the link. It would be appreciated if you could forward the below link to the appropriate person. All I can see for contacts are "JMS" and "RLS", but no names for me to hunt down! Thanks, John Edwards / Lightsource			
				ANSWER: These products are under review. An answer is forthcoming in a future Addendum.			

SECTION 087100 – DOOR HARDWARE

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

A. This Section includes commercial door hardware for the following:

1. Swinging doors.
2. Overhead coiling doors

B. Door hardware includes, but is not necessarily limited to, the following:

1. Mechanical door hardware.

C. Related Sections:

1. Division 08 Section “Hollow Metal Doors and Frames”.
2. Division 08 Section “Stile and Rail Wood Doors”.
3. Division 08 Section “Overhead Coiling Doors”.
4. Division 08 Section “Aluminum Clad Wood Windows”

D. Codes and References: Comply with the version year adopted by the Authority Having Jurisdiction.

1. ANSI A117.1 - Accessible and Usable Buildings and Facilities.
2. ICC/IBC - International Building Code.
3. NFPA 70 - National Electrical Code.
4. NFPA 101 - Life Safety Code.
5. State Building Codes, Local Amendments.

E. Standards: All hardware specified herein shall comply with the following industry standards:

1. ANSI/BHMA Certified Product Standards - A156 Series
2. UL10C – Positive Pressure Fire Tests of Door Assemblies

1.3 SUBMITTALS

A. Product Data: Manufacturer's product data sheets including installation details, material descriptions, dimensions of individual components and profiles, operational descriptions and finishes.

B. Door Hardware Schedule: Prepared by or under the supervision of supplier, detailing fabrication and assembly of door hardware, as well as procedures and diagrams. Coordinate the final Door Hardware

Schedule with doors, frames, and related work to ensure proper size, thickness, hand, function, and finish of door hardware.

1. Format: Comply with scheduling sequence and vertical format in DHI's "Sequence and Format for the Hardware Schedule."

2. Organization: Organize the Door Hardware Schedule into door hardware sets indicating complete designations of every item required for each door or opening. Organize door hardware sets in same order as in the Door Hardware Sets at the end of Part 3. Submittals that do not follow the same format and order as the Door Hardware Sets will be rejected and subject to resubmission.

3. Content: Include the following information:

    a. Type, style, function, size, label, hand, and finish of each door hardware item.
    b. Manufacturer of each item.
    c. Fastenings and other pertinent information.
    d. Location of door hardware set, cross-referenced to Drawings, both on floor plans and in door and frame schedule.
    e. Explanation of abbreviations, symbols, and codes contained in schedule.
    f. Mounting locations for door hardware.
    g. Door and frame sizes and materials.
    h. Warranty information for each product.

4. Submittal Sequence: Submit the final Door Hardware Schedule at earliest possible date, particularly where approval of the Door Hardware Schedule must precede fabrication of other work that is critical in the Project construction schedule. Include Product Data, Samples, Shop Drawings of other work affected by door hardware, and other information essential to the coordinated review of the Door Hardware Schedule.

C. Keying Schedule: Coordinate keying with Owner prior to the ordering of permanent cylinders/cores..

D. Informational Submittals:

1. Product Test Reports: Indicating compliance with cycle testing requirements, based on evaluation of comprehensive tests performed by manufacturer and witnessed by a qualified independent testing agency.

E. Operating and Maintenance Manuals: Provide manufacturers operating and maintenance manuals for each item comprising the complete door hardware installation in quantity as required in Division 01, Closeout Submittals.

1.4 QUALITY ASSURANCE

A. Manufacturers Qualifications: Engage qualified manufacturers with a minimum 5 years of documented experience in producing hardware and equipment similar to that indicated for this Project and that have a proven record of successful in-service performance.

B. Installer Qualifications: A minimum 3 years documented experience installing both standard and electrified door hardware similar in material, design, and extent to that indicated for this Project and whose work has resulted in construction with a record of successful in-service performance.

C. Door Hardware Supplier Qualifications: Experienced commercial door hardware distributors with a minimum 5 years documented experience supplying both mechanical and electromechanical hardware installations comparable in material, design, and extent to that indicated for this Project. Supplier recognized as a factory direct distributor by the manufacturers of the primary materials with a warehousing facility in Project's vicinity. Supplier to have on staff a certified Architectural Hardware Consultant (AHC) available during the course of the Work to consult with Contractor, Architect, and Owner concerning both standard and electromechanical door hardware and keying.

D. Source Limitations: Obtain each type and variety of door hardware specified in this section from a single source unless otherwise indicated.

E. Each unit to bear third party permanent label demonstrating compliance with the referenced standards.

F. Keying Conference: Conduct conference to comply with requirements in Division 01 Section "Project Meetings." Keying conference to incorporate the following criteria into the final keying schedule document:

1. Requirements for key control storage and software.
2. Installation of permanent keys, cylinder cores and software.
3. Address and requirements for delivery of keys.

G. Pre-Submittal Conference: Conduct coordination conference in compliance with requirements in Division 01 Section "Project Meetings" with attendance by representatives of Supplier(s), Installer(s), and Contractor(s) to review proper methods and the procedures for receiving, handling, and installing door hardware.

1. Prior to installation of door hardware, conduct a project specific training meeting to instruct the installing contractors' personnel on the proper installation and adjustment of their respective products. Product training to be attended by installers of door hardware for wood doors. Training will include the use of installation manuals, hardware schedules, templates and physical product samples as required.
2. Review sequence of operation narratives for each unique access controlled opening.
3. Review and finalize construction schedule and verify availability of materials.
4. Review the required inspecting, testing, commissioning, and demonstration procedures

H. At completion of installation, provide written documentation that components were applied to manufacturer's instructions and recommendations and according to approved schedule.

1.5 COORDINATION

A. Templates: Obtain and distribute to the parties involved templates for doors, frames, and other work specified to be factory prepared for installing standard and electrified hardware. Check Shop Drawings of other work to confirm that adequate provisions are made for locating and installing hardware to comply with indicated requirements.

1.6 WARRANTY

A. General Warranty: Reference Division 01, General Requirements. Special warranties specified in this Article shall not deprive Owner of other rights Owner may have under other provisions of the Contract Documents and shall be in addition to, and run concurrent with, other warranties made by Contractor under requirements of the Contract Documents.

B. Warranty Period: Written warranty, executed by manufacturer(s), agreeing to repair or replace components of standard and electrified door hardware that fails in materials or workmanship within specified warranty period after final acceptance by the Owner. Failures include, but are not limited to, the following:

1. Structural failures including excessive deflection, cracking, or breakage.
2. Faulty operation of the hardware.
3. Deterioration of metals, metal finishes, and other materials beyond normal weathering.
4. Electrical component defects and failures within the systems operation.

C. Standard Warranty Period: One year from date of Substantial Completion, unless otherwise indicated.

D. Special Warranty Periods:
1. Seven years for heavy duty cylindrical (bored) locks and latches.
2. Five years for standard duty cylindrical (bored) locks and latches.
3. Five years for exit hardware.
4. Twenty five years for manual surface door closer bodies.
5. Five years for motorized electric latch retraction exit devices.
6. Two years for electromechanical door hardware.

1.7 MAINTENANCE SERVICE

A. Maintenance Tools and Instructions: Furnish a complete set of specialized tools and maintenance instructions as needed for Owner's continued adjustment, maintenance, and removal and replacement of door hardware.

PART 2 - PRODUCTS

2.1 SCHEDULED DOOR HARDWARE

A. General: Provide door hardware for each door to comply with requirements in Door Hardware Sets and each referenced section that products are to be supplied under.

B. Designations: Requirements for quantity, item, size, finish or color, grade, function, and other distinctive qualities of each type of door hardware are indicated in the Door Hardware Sets at the end of Part 3. Products are identified by using door hardware designations, as follows:

C. Named Manufacturer's Products: Product designation and manufacturer are listed for each door hardware type required for the purpose of establishing requirements. Manufacturers' names are abbreviated in the Door Hardware Schedule.

D. Substitutions: Requests for substitution and product approval for inclusive mechanical and electromechanical door hardware in compliance with the specifications must be submitted in writing and in accordance with the procedures and time frames outlined in Division 01, Substitution Procedures. Approval of requests is at the discretion of the architect, owner, and their designated consultants.

2.2 HANGING DEVICES

A. Hinges: ANSI/BHMA A156.1 certified butt hinges with number of hinge knuckles as specified in the Door Hardware Sets.

1. Quantity: Provide the following hinge quantity, unless otherwise indicated:

    a. Two Hinges: For doors with heights up to 60 inches.
    b. Three Hinges: For doors with heights 61 to 90 inches.
    c. Four Hinges: For doors with heights 91 to 120 inches.
    d. For doors with heights more than 120 inches, provide 4 hinges, plus 1 hinge for every 30 inches of door height greater than 120 inches.

2. Hinge Size: Provide the following, unless otherwise indicated, with hinge widths sized for door thickness and clearances required:

    a. Widths up to 3’0”: 4-1/2” standard or heavy weight as specified.
    b. Sizes from 3’1” to 4’0”: 5” standard or heavy weight as specified.

3. Hinge Weight and Base Material: Unless otherwise indicated, provide the following:

    a. Exterior Doors: Heavy weight, non-ferrous, ball bearing or oil impregnated bearing hinges unless Hardware Sets indicate standard weight.
    b. Interior Doors: Standard weight, steel, ball bearing or oil impregnated bearing hinges unless Hardware Sets indicate heavy weight.

4. Hinge Options: Comply with the following where indicated in the Hardware Sets or on Drawings:

    a. Non-removable Pins: Provide set screw in hinge barrel that, when tightened into a groove in hinge pin, prevents removal of pin while door is closed; for the all out-swinging lockable doors.

5. Acceptable Manufacturers:

    a. Bommer Industries (BO).
    b. Hager Companies (HA).
    c. Ives (IV).
    d. McKinney Products (MK).
    e. Stanley Hardware (ST).

2.3 CYLINDERS AND KEYING

A. General: Cylinder manufacturer to have minimum (10) years experience designing secured master key systems and have on record a published security keying system policy.

B. Source Limitations: Obtain each type of keyed cylinder and keys from the same source manufacturer as locksets and exit devices, unless otherwise indicated.

1. Acceptable Manufacturers:

    a. Stanley Best (BE).

b. No substitutions allowed.

C. Cylinders: Original manufacturer cylinders complying with the following:

1. Mortise Type: Threaded cylinders with rings and cams to suit hardware application.
2. Rim Type: Cylinders with back plate, flat-type vertical or horizontal tailpiece, and raised trim ring.
3. Bored-Lock Type: Cylinders with tailpieces to suit locks.
4. Mortise and rim cylinder collars to be solid and recessed to allow the cylinder face to be flush and be free spinning with matching finishes.
5. Keyway: Match Facility Restricted Keyway.

D. Permanent Cores: Manufacturer's standard; finish face to match lockset; complying with the following:

1. Interchangeable Cores: Core insert, removable by use of a special key; usable with other manufacturers' cylinders.

E. Patented Cylinders: ANSI/BHMA A156.5, Grade 1, certified patented cylinders employing a utility patented and restricted keyway requiring the use of a patented key. Cylinders are to be protected from unauthorized manufacture and distribution by manufacturer’s United States patents. Cylinders are to be factory keyed with owner having the ability for on-site original key cutting.

1. Acceptable Manufacturers:

a. Stanley Best (BE) – Match existing system.
b. No Substitution.

F. Keying System: Each type of lock and cylinders to be factory keyed.

1. Conduct specified "Keying Conference" to define and document keying system instructions and requirements.
2. Furnish factory cut, nickel-silver large bow permanently inscribed with a visual key control number as directed by Owner.
3. Existing System: Key locks to Owner's existing system.

G. Key Quantity: Provide the following minimum number of keys:

1. Change Keys per Cylinder: Two (2)
2. Master Keys (per Master Key Level/Group): Five (5).
3. Construction Keys (where required): Ten (10).

2.4 MECHANICAL LOCKS AND LATCHING DEVICES

A. Cylindrical Locksets, Grade 1 (Heavy Duty): ANSI/BHMA A156.2, Series 4000, Grade 1 certified.

1. Furnish with solid cast levers, standard 2 3/4” backset, and 1/2" (3/4" at rated paired openings) throw brass or stainless steel latchbolt.

2. Locks are to be non-handed and fully field reversible.

3. Extended cycle test: Locks to have been cycle tested in ordinance with ANSI/BHMA 156.2 requirements to 2 million cycles.

4. Acceptable Manufacturers:

    a. Corbin Russwin Hardware (RU) – CL3300 Series.
    b. Sargent Manufacturing (SA) – 10 Line.
    c. Schlage (SC) – ND Series.
    d. Stanley Best (BE) – 9K Series.

2.5 LOCK AND LATCH STRIKES

A. Strikes: Provide manufacturer's standard strike with strike box for each latch or lock bolt, with curved lip extended to protect frame, finished to match door hardware set, unless otherwise indicated, and as follows:

1. Flat-Lip Strikes: For locks with three-piece antifriction latchbolts, as recommended by manufacturer.
2. Extra-Long-Lip Strikes: For locks used on frames with applied wood casing trim.
3. Aluminum-Frame Strike Box: Provide manufacturer's special strike box fabricated for aluminum framing.
4. Double-lipped strikes: For locks at double acting doors. Furnish with retractable stop for rescue hardware applications.

B. Standards: Comply with the following:

1. Strikes for Mortise Locks and Latches: BHMA A156.13.
2. Strikes for Bored Locks and Latches: BHMA A156.2.
3. Strikes for Auxiliary Deadlocks: BHMA A156.36.
4. Dustproof Strikes: BHMA A156.16.

2.6 CONVENTIONAL EXIT DEVICES

A. General Requirements: All exit devices specified herein shall meet or exceed the following criteria:

1. At doors not requiring a fire rating, provide devices complying with NFPA 101 and listed and labeled for "Panic Hardware" according to UL305. Provide proper fasteners as required by manufacturer including sex nuts and bolts at openings specified in the Hardware Sets.

2. Except on fire rated doors, provide exit devices with hex key dogging device to hold the pushbar and latch in a retracted position. Provide optional keyed cylinder dogging on devices where specified in Hardware Sets.

3. Devices must fit flat against the door face with no gap that permits unauthorized dogging of the push bar. The addition of filler strips is required in any case where the door light extends behind the device as in a full glass configuration.

4. Lever Operating Trim: Where exit devices require lever trim, furnish manufacturer's heavy duty escutcheon trim with threaded studs for thru-bolts.

    a. Lock Trim Design: As indicated in Hardware Sets, provide finishes and designs to match that of the specified locksets.
    b. Where function of exit device requires a cylinder, provide a cylinder (Rim or Mortise) as specified in Hardware Sets.

5. Vertical Rod Exit Devices: Where surface or concealed vertical rod exit devices are used at interior openings, provide as less bottom rod (LBR) unless otherwise indicated. Provide dust proof strikes where thermal pins are required to project into the floor.

6. Dummy Push Bar: Nonfunctioning push bar matching functional push bar.

7. Rail Sizing: Provide exit device rails factory sized for proper door width application.

8. Through Bolt Installation: For exit devices and trim as indicated in Door Hardware Sets.

B. Conventional Push Rail Exit Devices (Heavy Duty): ANSI/BHMA A156.3, Grade 1 certified panic and fire exit hardware devices furnished in the functions specified in the Hardware Sets. Exit device latch to be stainless steel, pullman type, with deadlock feature.

1. Acceptable Manufacturers:

a. Corbin Russwin Hardware (RU) - ED4000 / ED5000 Series.
b. Sargent Manufacturing (SA) - 80 Series.
c. Stanley Precision (PR) - Apex 2000 Series.
d. Von Duprin (VD) - 35A/98 XP Series.

2.7 DOOR CLOSERS

A. All door closers specified herein shall meet or exceed the following criteria:

1. General: Door closers to be from one manufacturer, matching in design and style, with the same type door preparations and templates regardless of application or spring size. Closers to be non-handed with full sized covers including installation and adjusting information on inside of cover.

2. Standards: Closers to comply with UL-10C for Positive Pressure Fire Test and be U.L. listed for use of fire rated doors.

3. Cycle Testing: Provide closers which have surpassed 15 million cycles in a test witnessed and verified by UL.

4. Size of Units: Comply with manufacturer's written recommendations for sizing of door closers depending on size of door, exposure to weather, and anticipated frequency of use. Where closers are indicated for doors required to be accessible to the physically handicapped, provide units complying with ANSI ICC/A117.1.

5. Closer Arms: Provide heavy duty, forged steel closer arms unless otherwise indicated in Hardware Sets.

6. Closers shall not be installed on exterior or corridor side of doors; where possible install closers on door for optimum aesthetics.

7. Closer Accessories: Provide door closer accessories including custom templates, special mounting brackets, spacers and drop plates as required for proper installation. Provide through-bolt and security type fasteners as specified in the hardware sets.

8. All closers shall have an adjustable hold open function.

B. Door Closers, Surface Mounted (Heavy Duty): ANSI/BHMA A156.4, Grade 1 surface mounted, heavy duty door closers with complete spring power adjustment, sizes 1 thru 6; and fully operational adjustable according to door size, frequency of use, and opening force. Closers to be rack and pinion type, one piece cast iron or aluminum alloy body construction, with adjustable backcheck and separate non-critical valves for closing sweep and latch speed control. Provide non-handed units standard.

1. Acceptable Manufacturers:

a. Corbin Russwin Hardware (RU) – DC6000 Series.
b. LCN Closers (LC) - 4040 Series.
c. Sargent Manufacturing (SA) - 351 Series.
d. Norton Door Controls (NO) - 7500 Series.
e. Stanley (ST) – D4550 series.

2.8 ARCHITECTURAL TRIM

A. Door Protective Trim

1. General: Door protective trim units to be of type and design as specified below or in the Hardware Sets.

2. Size: Fabricate protection plates (kick, armor, or mop) not more than 2" less than door width (LDW) on stop side of single doors and 1” LDW on stop side of pairs of doors, and not more than 1" less than door width on pull side. Coordinate and provide proper width and height as required where conflicting hardware dictates. Height to be as specified in the Hardware Sets.

3. Protection Plates: ANSI/BHMA A156.6 certified protection plates (kick, armor, or mop), fabricated from the following:

a. Stainless Steel: 300 grade, 050-inch thick.

4. Options and fasteners: Provide manufacturer's designated fastener type as specified in the Hardware Sets. Provide countersunk screw holes.

5. Acceptable Manufacturers:

a. Burns Manufacturing (BU).
b. Hager Companies (HA).
c. Ives (IV).
d. Rockwood Manufacturing (RO).
e. Trimco (TC).

2.9 DOOR STOPS AND HOLDERS

A. General: Door stops and holders to be of type and design as specified below or in the Hardware Sets.

B. Door Stops and Bumpers: ANSI/BHMA A156.16, Grade 1 certified door stops and wall bumpers. Provide wall bumpers, either convex or concave types with anchorage as indicated, unless floor or other types of door stops are specified in Hardware Sets. Do not mount floor stops where they will impede traffic. Where floor or wall bumpers are not appropriate, provide overhead type stops and holders.

1. Acceptable Manufacturers:

    a. Burns Manufacturing (BU).
    b. Hager Companies (HA).
    c. Ives (IV).
    d. Rockwood Manufacturing (RO).
    e. Trimco (TC).

2.10 ARCHITECTURAL SEALS

A. General: Thresholds, weatherstripping, and gasket seals to be of type and design as specified below or in the Hardware Sets. Provide continuous weatherstrip gasketing on exterior doors and provide smoke, light, or sound gasketing on interior doors where indicated. At exterior applications provide non-corrosive fasteners and elsewhere where indicated.

B. Sound-Rated Gasketing: Assemblies that are listed and labeled by a testing and inspecting agency, for sound ratings indicated.

C. Replaceable Seal Strips: Provide only those units where resilient or flexible seal strips are easily replaceable and readily available from stocks maintained by manufacturer.

D. Acceptable Manufacturers:

1. National Guard Products (NG).
2. Pemko Manufacturing (PE).
3. Reese Enterprises, Inc. (RE).
4. Zero (ZE).

2.11 FABRICATION

A. Fasteners: Provide door hardware manufactured to comply with published templates generally prepared for machine, wood, and sheet metal screws. Provide screws according to manufacturers recognized installation standards for application intended.

2.12 FINISHES

A. Standard: Designations used in the Hardware Sets and elsewhere indicate hardware finishes complying with ANSI/BHMA A156.18, including coordination with traditional U.S. finishes indicated by certain manufacturers for their products.

B. Provide quality of finish, including thickness of plating or coating (if any), composition, hardness, and other qualities complying with manufacturer's standards, but in no case less than specified by referenced standards for the applicable units of hardware

C. Protect mechanical finishes on exposed surfaces from damage by applying a strippable, temporary protective covering before shipping.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine scheduled openings, with Installer present, for compliance with requirements for installation tolerances, labeled fire door assembly construction, wall and floor construction, and other conditions affecting performance.

B. Notify architect of any discrepancies or conflicts between the door schedule, door types, drawings and scheduled hardware. Proceed only after such discrepancies or conflicts have been resolved in writing.

3.2 PREPARATION

A. Hollow Metal Doors and Frames: Comply with ANSI/DHI A115 series.

B. Wood Doors: Comply with ANSI/DHI A115-W series.

3.3 INSTALLATION

A. Install each item of mechanical and electromechanical hardware and access control equipment to comply with manufacturer's written instructions and according to specifications.

1. Installers are to be trained and certified by the manufacturer on the proper installation and adjustment of fire, life safety, and security products including: hanging devices; locking devices; closing devices; and seals.

B. Mounting Heights: Mount door hardware units at heights indicated in following applicable publications, unless specifically indicated or required to comply with governing regulations:

1. Standard Steel Doors and Frames: DHI's "Recommended Locations for Architectural Hardware for Standard Steel Doors and Frames."
2. Wood Doors: DHI WDHS.3, "Recommended Locations for Architectural Hardware for Wood Flush Doors."
3. Where indicated to comply with accessibility requirements, comply with ANSI A117.1 "Accessibility Guidelines for Buildings and Facilities."
4. Provide blocking in drywall partitions where wall stops or other wall mounted hardware is located.

C. Retrofitting: Install door hardware to comply with manufacturer's published templates and written instructions. Where cutting and fitting are required to install door hardware onto or into surfaces that are later to be painted or finished in another way, coordinate removal, storage, and reinstallation of surface protective trim units with finishing work specified in Division 9 Sections. Do not install surface-mounted items until finishes have been completed on substrates involved.

D. Thresholds: Set thresholds for exterior and acoustical doors in full bed of sealant complying with requirements specified in Division 7 Section "Joint Sealants."

E. Storage: Provide a secure lock up for hardware delivered to the project but not yet installed. Control the handling and installation of hardware items so that the completion of the work will not be delayed by hardware losses before and after installation.

3.4 FIELD QUALITY CONTROL

A. Field Inspection: Supplier will perform a final inspection of installed door hardware and state in report whether work complies with or deviates from requirements, including whether door hardware is properly installed, operating and adjusted.

3.5 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.

3.6 CLEANING AND PROTECTION

A. Protect all hardware stored on construction site in a covered and dry place. Protect exposed hardware installed on doors during the construction phase. Install any and all hardware at the latest possible time frame.

B. Clean adjacent surfaces soiled by door hardware installation.

C. Clean operating items as necessary to restore proper finish. Provide final protection and maintain conditions that ensure door hardware is without damage or deterioration at time of owner occupancy.

3.7 DEMONSTRATION

A. Instruct Owner's maintenance personnel to adjust, operate, and maintain mechanical and electromechanical door hardware.

3.8 DOOR HARDWARE SETS

1. MK - McKinney
2. PE - Pemko
3. RO - Rockwood
4. SA - Sargent
5. BE - Stanley Security Solutions Inc (BE)
6. YA - Yale
7. SU – Securitron
8. CRL – CR Laurence
9. BC - Blumcraft

Hardware Schedule

Set: 01

Doors: 100A and 102A

Description: Exterior Aluminum Clad (Vestibule) Pair – Egress Function

6	Hinge (Heavy Weight)	T4A3786NRP 4-1/2” x 4-1/2”	US26D	MK
2	Exit Device	FM8704	US32D	SA
2	Cylinder Core			BE
2	Door Closer	351 CPSH	EN	SA
3	Silencer	608/608CA		RO
1	Threshold	253x3AFG		PE
2	Kickplate	10” x Width of Door	US32D	RO
1	Seals, Sweeps & Astragal	By Alum Door Mfr		OT

Notes: Entry by key when locked or push/pull operation by exit device dogging.
Door closer mounting accessories as required.

Set: 02

Doors: 100B and 102B

Description: Interior All-Glass (Vestibule) Pair – Egress Function

2	Recessed hinge/closer	CRL8556	US32D	CRL
2	Exit Device	PA100D4GKBS	US32D	BC
2	Cylinder Core			BE
2	Top Pivot	CRL as needed	US32D	CRL
1	Top and Bottom Rails	CRL as needed	US32D	CRL

Notes: Coordinate recessing closer in concrete floor.

Set: 03

Doors: 102C, 109B, 110A

Description: Interior Single Wood Door – Classroom Function

3	Hinge	TA2714 4-1/2" x 4-1/2"	US26D	MK
1	Classroom Lock	28 70 7G37 LL	US26D	SA
1	Cylinder Core			BE
1	Door Closer	351 CPSH	EN	SA
2	Kickplate	10” x Width of Door	US32D	RO

Set: 04

Doors: 104A, 104B, 112, 202B, 216
Description: Interior Single Wood Door – Storage Function

3	Hinge	TA2714 4-1/2" x 4-1/2"	US26D	MK
1	Storeroom Lock	28 70 10G04 LL	US26D	SA
1	Cylinder Core			BE
1	Door Closer	351 CPSH	EN	SA
2	Kickplate	10" x Width of Door	US32D	RO
1	Wall Stop	406/409 to suit	US26D	RO
3	Silencers	608/608CA		RO

Set: 05

Doors: 111
Description: Interior Double Wood Door – Storage Function

6	Hinge	TA2714 4-1/2" x 4-1/2"	US26D	MK
1	Storeroom Lock	28 70 10G04 LL	US26D	SA
1	Cylinder Core			BE
2	Door Closer	351 CPSH	EN	SA
2	Flush Bolt	555/557 to suit door	US26D	RO
1	Dust Proof Strike	570	US26D	RO
4	Kickplate	10" x Width of Door	US32D	RO
6	Silencers	608/608CA		RO

Set: 06

Doors: 109A
Description: Exterior Aluminum Clad Single Door – Egress Function

1	Continuous Hinge	KCFM x Hgt		PE
1	Exit Device	70 8813 ETL	US32D	SA
1	Cylinder Core			BE
1	Door Closer	351 CPSH	EN	SA
1	Threshold	253x3AFG		PE
1	Kickplate	10" x Width of Door	US32D	RO
1	Seals, Sweeps & Astragal	By Alum Door Mfr		OT

NOTE: There should be no exterior door hardware to open this door from the exterior.

Set: 07

Doors: 113A
Description: Exterior Aluminum Single Door – Egress Function

1	Continuous Hinge	KCFM x Hgt		PE
1	Exit Device w Storeroom Lock	70 8804 ETL	US32D	SA
1	Cylinder Core			BE
1	Door Closer	351 CPSH	EN	SA
1	Threshold	253x3 AFG		PE
1	Kick Plate	10” x Width of Door	US32D	RO
1	Seals, Sweeps & Astragal	By Alum Door Mfr		OT

Set: 08

Doors: 202A
Description: Exterior Aluminum Single Door – Storeroom Function

1	Continuous Hinge	KCFM x Hgt		PE
1	Storeroom Set	28 70 10G04 LL	US26D	SA
1	Cylinder Core			BE
1	Door Closer	351 CPSH	EN	SA
1	Threshold	253x3 AFG		PE
1	Kickplate	10” x Width of Door		PE
1	Seals, Sweeps & Astragal	By Alum Door Mfr		OT

Set: 09

Doors: 105, 108
Description: Restroom Push/Pull with Maintenance Deadbolt

3	Hinge	TA2714 4-1/2" x 4-1/2"	US26D	MK
1	Push Plate	70C	US32D	RO
1	Pull Plate	107 x 70C	US32D	RO
1	Double Cylinder Lock	484	US32D	SA
1	Door Closer	351 UO	EN	SA
1	Wall Stop	406/409 to suite	US32D	RO
3	Silencer	608/608CA		RO

Set: 10

Doors: 215
Description: Restroom Privacy

3	Hinge	TA2714 4-1/2" x 4-1/2"	US26D	MK
1	Privacy Set	28 7U 65 LL	US26D	SA
1	Wall Stop	406/409 to suite	US32D	RO
3	Silencer	608/608CA		RO

END OF SECTION 087100