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To: *THE PRIME CONTRACT BIDDERS AND ALL OTHERS TO WHOM CONTRACT DOCUMENTS HAVE BEEN ISSUED. THE CONTRACTOR SHALL ACKNOWLEDGE RECEIPT OF THIS ADDENDUM ON THE PROPOSAL FORM.*

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2. Provide a separate Project Schedule for this work showing how the contractor shall minimize the time of this construction. The contractor shall not start until he has all materials ordered and is reasonably sure that he can “get in and get out.” If this work is completed before the Police Station, the Architect and the Owner will issue a Partial Substantial Completion on this work.

II. SPECIFICATIONS.

- a. Section 02900 – Landscaping and Irrigation System
 - i. A description of the fountains in Ponds #2 and #3 are included below in this Addendum. See item “III.c - Sheet L.000”, below. The fountains will located be in the center of the ponds, approximately 50’ from the pond edge. The ponds are 4’-5’ deep, approximately 100’ diameters (free form).
- b. Section 03521 – Lightweight Insulating Concrete Roof Decks
 - i. This specification section is hereby added to the contract documents. See Attachment No. One (1).
- c. Section 07400 – Manufactured Metal Roof Panels
 - i. On page 3, delete the reference to Fluoropolymer Finish. The finish is Galvalume.
- d. Section 07525 – Modified Bituminous Sheet Roofing
 - i. Delete the references to Tapered Insulation in this section. Instead, refer to Specification Section 03521 – Lightweight Insulating Concrete Roof Decks (see Attachment No. One).
- e. Section 08360 – Overhead Sectional Doors
 - i. This specification section is hereby deleted and replaced by specification section 08361.
- f. Section 08361 – Overhead Sectional Doors
 - i. This specification section is hereby added to the Contract Documents. See Attachment Number Two (2).
- g. Section 08710 – Door Hardware
 - i. This specification section is hereby deleted and replace by specification section 08711.
- h. Section 08711 – Door Hardware
 - i. This specification section is hereby added to the Contract Documents. See Attachment Number Three (3).
- i. Section 10165 – Plastic Laminate Toilet Compartments
 - i. This section is hereby added to the Contract Documents. See Attachment No. Four (4).
- j. Section 13120 – Metal Building Systems
 - i. The collateral load of the building is 3 psf.
 - ii. Delete paragraph “2.5 Metal Roof Panels.” Instead, refer to Specification Section 07411 Manufactured Metal Roof Panels.

III. DRAWINGS.

- a. Sheet G.004
 - i. For the foundation of detail A.6, refer to detail 9/S.601.
 - ii. For the foundation of detail G.1, refer to 9.601(sim). Modify as needed for three CMU courses. The width of the footing does not change.
- b. Sheet TS.000
 - i. The Topographic Survey included in the set of drawings between G.005 and C.1 is not numbered. It should be numbered "TS.000".
 - ii. Replace TS.000 from the drawing set with a new TS.000 dated September 12, 2022; see Attachment No. Five (5).
 - 1. The new sheet includes a Benchmark and a revision to the Electrical provider (it is Entergy, not Slemco).
- c. Sheet L.000
 - i. Near the center of Pond 2 and Pond 3, there is an asterisk-looking symbol. This symbol represents a fountain (one fountain for each pond). The fountain is to be a Triple Aerating Bubbler fountain as manufactured by Lake Fountains & Aeration, Inc. (or equal), 1305 Central Park Drive, Sanford, FL 32771 [phone: 404.324.1515]. These fountains are to be provided and installed as part of the Base Bid. The system will include:
 - 1. 7.5 HP, 230 v, 1ph triple aerating bubbler fountain package for each pond.
 - 2. 4-4 Seowa Cable included with fountain 150ft each.
 - 3. 4-4 Seowa Cable additional pump cable 300ft total each.
 - 4. 4-21 Watt LED Light package each.
 - 5. 14-3 Seowa Cable included with lights 150ft each.
 - 6. 14-3 Seowa Cable additional light cable 300 ft total each
- d. Sheet L.003
 - i. At the bottom of the "Tree Planting Plan Plant and Material List" on the left side of the sheet, there is a note referring to some hydroseeding and lawn prep being part of Alternate No. 1. This is a mistake; it is not part of an Alternate. It is part of the Base Bid.
- e. Sheet A.130
 - i. The mobile shelving unit in the Evidence room is not part of this contract. It will be provided after construction by a separate vendor. However, there are some steel rails that are part of the mobile shelving units that will need to be recessed in the slab, so the general contractor will be required to provide a thickened slab and recesses so that the rails can be recessed; this shows up in a detail at the top right of sheet S.101. The size of the recess may vary depending on the mobile shelving unit manufacturer, so some coordination will be required.
- f. Sheet A.160
 - i. For the foundation under the Mechanical Yard, refer to 11/S.600.

- #### IV. ATTACHMENTS.

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END OF ADDENDUM N^o 3

SECTION 03521 – LIGHTWEIGHT INSULATING CONCRETE ROOF DECKS

PART 1- GENERAL

1.1 Description: Provide an insulating concrete (cellular or hybrid) roof deck system as shown on the Drawings and as needed for a complete and proper installation.

1.2 Applicator qualification: The Applicator shall be approved by the Manufacturer – Elastizell Corporation of America.

1.3 Certification: When required upon completion, a certificate from the Manufacturer and Applicator states that the materials and installation methods follow current practices.

1.4 Product data: Prior to start of the work, provide installation procedures, fire ratings, and wind uplift data for this application.

PART 2 – PRODUCTS

2.1 Insulating concrete is a slurry of cement, water, and Elastizell preformed foam to produce an insulating concrete of a specific density range. Foam concentrate shall comply with ASTM C869 when tested in accordance with ASTM C796.

2.2 Cement: Portland cement shall comply with ASTM C150

2.3 Water: Use potable water.

2.4 Aggregate: For hybrid mixtures, the expanded mineral aggregate shall comply with ASTM C332, Group I.

2.5 Use Manufacturer approved admixtures for water reducing and set acceleration.

2.6 Physical properties shall meet the following criteria: Cast Density

Minimum Compressive Strength

Range II 34-42 pcf 160psi nailed base sheet

Range III* 42-48 pcf 250 psi fully adhered system

Roofing Membrane Type

* Hybrid mixtures may be used with Range III by the addition of 1 to 2 bags of expanded aggregates.

2.7 Insulation Board: When included, a minimum 1.0 pcf EPS insulation board shall conform to ASTM C578 Type I, in thickness shown on the Drawings. EPS board shall have bond holes equal to approximately 3% of the board area. The board is placed in a bond coat and topped with a minimum 2" of insulating concrete. The EPS board may be stair-stepped or of constant thickness.

2.8 Expansion Joints: Provide Expansion joints if they are in the structural system and per NRCA recommendations. Control joint filler is not necessary at vertical protrusions.

2.9 Reinforcement: Keydeck Mesh Style No. 2160-2-1619 may be required for some fire rated systems over steel deck. Elastizell insulating concrete may contain Zell-Crete Fibers in the mixture, as required, in some instances.

PART 3 – EXECUTION

3.1 Inspection: Prior to starting work, any unsatisfactory conditions of related trades shall be corrected by others.

3.2 Installation: Install the insulating concrete roof deck system in accordance with current practices to insure proper drainage, the required insulation value, and fire and uplift ratings.

3.2.1 Preparation: General Contractor shall clear deck of all standing water, dirt, debris, ice, etc. Prepare the roof grades prior to placing the insulating concrete roof deck system.

3.2.2 Mixing and placing: Insulating concrete is mixed in approved equipment and pumped into place. EPS bond coats, double casting, and two-density casting are acceptable methods of installation.

3.2.3 Finishing: Screed the insulating concrete to the proper thickness and slope. The surface shall be free of ridges and sharp projections prior to installation of the roofing membrane.

3.2.4 Weather: Insulating concrete may be place when temperatures are 32°F and rising. If colder temperatures are anticipated, the Applicator shall take suitable precautions (heated water, etc.) for the installation of an acceptable deck. Coordinate the roofing membrane application with the insulating concrete installation to avoid prolonged exposure of the deck.

3.2.5 Testing: Check the cast density at the point of placement and adjust the mix to obtain the required cast density. A minimum 4 test specimens (3"x6" cylinders) shall be sampled at the point of placement daily or for each 100 cubic yards of material placed. Protect samples from damage, temperature extremes and test per ASTM C495. Compressive test samples shall not be oven-dried prior to testing. Manufacturer shall conduct and report test results.

3.3 Completion: For nailed base sheet applications, roofing membrane installation may begin after a nail pull test is conducted with an acceptable withdrawal resistance. This facilitates deck curing and reduces drying shrinkage. For fully adhered systems, a peel test of the membrane attachment should be conducted per the roofing manufacturer's requirement. This is dependent on the type of adhesive that the roofing manufacturer recommends.

Protect the insulating concrete roof deck from construction traffic. The roof deck should not be left exposed for longer than 7 days. The Applicator cannot be responsible for rain (moisture) entering the roof deck after the deck is cast and finished. The general contractor and roofing contractor are responsible for removing excess water in the system. Consult the roofing membrane manufacturer for their recommended nailing pattern or adhesive for securing the roofing membrane to the roof deck system.

END OF SECTION 03521

SECTION 08361 - SECTIONAL OVERHEAD DOORS

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Steel Sectional Overhead Doors.
- B. Electric Operators and Controls.
- C. Operating Hardware, tracks, and support.

1.2 RELATED SECTIONS

- A. Section 03300 - Cast-In-Place Concrete: Prepared opening in concrete. Execution requirements for placement of anchors in concrete wall construction.
- B. Section 06114 - Wood Blocking and Curbing: Rough wood framing and blocking for door opening.
- C. Section 07900 - Joint Sealers: Perimeter sealant and backup materials.
- D. Section 08710 - Door Hardware: Cylinder locks.
- E. Section 13120 - Metal Building Systems
- F. Section 16130 - Raceway and Boxes: Empty conduit from control station to door operator.
- G. Section 16150 - Wiring Connections: Electrical service to door operator.

1.3 REFERENCES

- A. ANSI/DASMA 102 - American National Standard Specifications for Sectional Overhead Type Doors.

1.4 DESIGN / PERFORMANCE REQUIREMENTS

- A. Wind Loads: Design and size components to withstand loads caused by pressure and suction of wind acting normal to plane of wall as calculated in accordance with applicable code.
 - 1. Wind load of 136 mph, risk category IV.
- B. Wiring Connections: Requirements for electrical characteristics.
 - 1. 115 volts, single phase, 60 Hz.
 - 2. 230 volts, single phase, 60 Hz.
 - 3. 230 volts, three phase, 60 Hz.
 - 4. 460 volts, three phase, 60 Hz.
- C. Single-Source Responsibility: Provide doors, tracks, motors, and accessories from one manufacturer for each type of door. Provide secondary components from source acceptable to manufacturer of primary components.

1.5 SUBMITTALS

- A. Submit under provisions of Section 01300.
- B. Product Data: Manufacturer's data sheets on each product to be used, including:

1. Preparation instructions and recommendations.
 2. Storage and handling requirements and recommendations.
 3. Installation methods.
- C. Shop Drawings: Indicate plans and elevations including opening dimensions and required tolerances, connection details, anchorage spacing, hardware locations, and installation details.
- D. Manufacturer's Certificates: Certify products meet or exceed specified requirements.
- E. Operation and Maintenance Data.

1.6 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Company specializing in manufacturing products specified in this section with minimum five years documented experience.
- B. Installer Qualifications: Authorized representative of the manufacturer with minimum five years documented experience.
- C. Products Requiring Electrical Connection: Listed and classified by Underwriters Laboratories, Inc. acceptable to authority having jurisdiction as suitable for purpose specified.

1.7 DELIVERY, STORAGE, AND HANDLING

- A. Store products in manufacturer's unopened labeled packaging until ready for installation.
- B. Protect materials from exposure to moisture until ready for installation.
- C. Store materials in a dry, ventilated weathertight location.

1.8 PROJECT CONDITIONS

- A. Pre-Installation Conference: Convene a pre-installation conference just prior to commencement of field operations, to establish procedures to maintain optimum working conditions and to coordinate this work with related and adjacent work.

PART 2 PRODUCTS

2.1 MANUFACTURERS

- A. Acceptable Manufacturer: Overhead Door Corp., 2501 S. State Hwy. 121, Suite 200, Lewisville, TX 75067. ASD. Tel. Toll Free: (800) 275-3290. Phone: (469) 549-7100. Fax: (972) 906-1499. Web Site: www.overheaddoor.com. E-mail: sales@overheaddoor.com.
- B. Requests for substitutions will be considered in accordance with provisions of Section 01600.

2.2 SECTIONAL STEEL OVERHEAD DOORS

- A. Sectional Overhead Steel Doors: 416 Series Steel Doors by Overhead Door Corporation. Units shall have the following characteristics:
1. Door Assembly: Steel door assembly with rabbeted meeting rails to form weathertight joints and provide full width interlocking structural rigidity.
 - a. Panel Thickness: 2 inches (51 mm).
 - b. Exterior Surface: Flush.
 - c. Section Material: 16-gauge, galvanized steel.
 - d. Center and End Stiles: 16-gauge steel.
 - e. Springs:
 - 1) 50,000 cycles.
 2. Finish and Color: Two coat baked-on polyester, white color.
 3. Wind Load Design: Provide to meet the Design/Performance requirements specified.
 4. Hardware: Galvanized steel hinges and fixtures. Ball bearing rollers with hardened steel races.
 5. Lock:
 - a. Keyed lock with interlock switch for automatic operator.
 6. Weatherstripping:
 - a. Flexible bulb-type strip at bottom section.
 - b. Flexible Jamb seals.
 - c. Flexible Header seal.
 7. Track: Provide track as recommended by manufacturer to suit loading required and clearances available.
 8. Electric Motor Operation: Provide UL listed electric operator, size and type as recommended by manufacturer to move door in either direction at not less than 2/3 foot nor more than 1 foot per second. Operator shall meet UL325/2010 requirements for continuous monitoring of safety devices.
 - a. Entrapment Protection: Required for momentary contact, includes radio control operation.
 - 1) Pneumatic sensing edge up to 18 feet (5.5 m) wide. Constant contact only complying with UL 325/2010.
 - 2) Electric sensing edge monitored to meet UL 325/2010.
 - 3) Photoelectric sensors monitored to meet UL 325/2010.
 - b. Operator Controls:
 - 1) Push-button and key operated control stations with open, close, and stop buttons.
 - 2) Surface mounting.
 - 3) Interior location.
 - c. Special Operation:
 - 1) Vehicle detector operation.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Do not begin installation until openings have been properly prepared.
- B. Verify wall openings are ready to receive work and opening dimensions and tolerances are within specified limits.

- C. Verify electric power is available and of correct characteristics.
- D. If preparation is the responsibility of another installer, notify Architect of unsatisfactory preparation before proceeding.

3.2 PREPARATION

- A. Clean surfaces thoroughly prior to installation.
- B. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.

3.3 INSTALLATION

- A. Install overhead doors and track in accordance with approved shop drawings and the manufacturer's printed instructions.
- B. Coordinate installation with adjacent work to ensure proper clearances and allow for maintenance.
- C. Anchor assembly to wall construction and building framing without distortion or stress.
- D. Securely brace door tracks suspended from structure. Secure tracks to structural members only.
- E. Fit and align door assembly including hardware.
- F. Coordinate installation of electrical service. Complete power and control wiring from disconnect to unit components.

3.4 CLEANING AND ADJUSTING

- A. Adjust door assembly to smooth operation and in full contact with weatherstripping.
- B. Clean doors, frames and glass.
- C. Remove temporary labels and visible markings.

3.5 PROTECTION

- A. Do not permit construction traffic through overhead door openings after adjustment and cleaning.
- B. Protect installed products until completion of project.
- C. Touch-up, damaged coatings and finishes and repair minor damage before Substantial Completion.

END OF SECTION 08361

SECTION 08711 - DOOR HARDWARE

PART 1 - GENERAL

1.01 SUMMARY

A. Section includes:

1. Mechanical and electrified door hardware
2. Electronic access control system components

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 Section "Alternates" for alternates affecting this section.
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"
 - f. "Special Function Doors"
6. Division 26 "Electrical" sections for connections to electrical power system and for low-voltage wiring.
7. Division 28 "Electronic Safety and Security" sections for coordination with other components of electronic access control system and fire alarm system.

1.02 REFERENCES

A. ULLC

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

1.03 SUBMITTALS

A. General:

1. Submit in accordance with Conditions of Contract and Division 01 Submittal Procedures.
2. Prior to forwarding submittal:
 - a. Review drawings and Sections from related trades to verify compatibility with specified hardware.
 - b. 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.

1.04 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.

1.05 DELIVERY, STORAGE, AND HANDLING

- A. Inventory door hardware on receipt and provide secure lock-up for hardware delivered to Project site. Promptly replace products damaged during shipping.
- B. 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.
- C. Maintain manufacturer-recommended environmental conditions throughout storage and installation periods.
- D. 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.
- E. 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.
- F. Deliver keys to manufacturer of key control system for subsequent delivery to Owner.

1.06 COORDINATION

- A. 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.

1.07 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.

1.08 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

2.01 MANUFACTURERS

- A. Approval of manufacturers and/or products other than those listed as "Scheduled Manufacturer" or "Acceptable Manufacturers" in the individual article for the product category shall be in accordance with QUALITY ASSURANCE article, herein.
- B. 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.
- C. 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.

2.02 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. 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.

C. Cable and Connectors:

- 1. Where scheduled in the hardware sets, provide each item of electrified hardware and wire harnesses with number and gage of wires enough to accommodate electric function of specified hardware.

2. Provide Molex connectors that plug directly into connectors from harnesses, electric locking and power transfer devices.
3. Provide through-door wire harness for each electrified locking device installed in a door and wire harness for each electrified hinge, electrified continuous hinge, electrified pivot, and electric power transfer for connection to power supplies.

2.03 HINGES

A. Manufacturers and Products:

1. Scheduled Manufacturer and Product:

- a. Ives 5BB 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. 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

9. 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.

2.04 CONTINUOUS HINGES

A. Manufacturers:

1. Scheduled Manufacturer:

- a. Ives

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.

2.05 FLUSH BOLTS

A. Manufacturers:

1. Scheduled Manufacturer:

- a. Ives

B. Requirements:

1. Provide automatic, constant latching, and manual flush bolts with forged bronze or stainless-steel face plates, extruded brass levers, and with wrought brass guides and strikes. Provide 12 inch (305 mm) steel or brass rods at doors up to 90 inches (2286 mm) in height. For doors over 90 inches (2286 mm) in height increase top rods by 6 inches (152 mm) for each additional 6 inches (152 mm) of door height. Provide dust-proof strikes at each bottom flush bolt.

2.06 COORDINATORS

A. Manufacturers:

1. Scheduled Manufacturer:

- a. Ives

B. Requirements:

1. Where pairs of doors are equipped with automatic flush bolts, an astragal, or other hardware that requires synchronized closing of the doors, provide bar-type coordinating device, surface applied to underside of stop at frame head.
2. Provide filler bar of correct length for unit to span entire width of opening, and appropriate brackets for parallel arm door closers, surface vertical rod exit device strikes, or other stop mounted hardware. Factory-prepared coordinators for vertical rod devices as specified.

2.07 CYLINDRICAL LOCKS – GRADE 1

A. Manufacturers and Products:

1. Scheduled Manufacturer and Product:

- a. Schlage ND series

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.

2.08 EXIT DEVICES

A. Manufacturers and Products:

1. Scheduled Manufacturer and Product:

- a. Von Duprin 98/35A series

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.

2.09 ACCESS CONTROL READER

A. Manufacturers and Products:

1. Scheduled Manufacturer and Product:

- a. Schlage MTB Series

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.

2.10 ACCESS CONTROL PLATFORM

A. Manufacturers and Products:

1. Scheduled Manufacturer:

- a. Schlage Engage

B. Requirements:

1. Provide a cloud-based platform capable of managing users, credentials, access rights, schedules, and audits.
2. All locks must be supplied in construction mode.
3. Provide a platform that supports a mobile application (app). Mobile application must allow for:

- a. Commissioning and configuring devices
 - b. Immediately updating door files
 - c. Retrieving audit information
 - d. Performing firmware updates
4. Provide software set up on the owner's workstation and Mobile Device which includes:
 - a. Creation of the Owner's Account
 - b. Creation of the Project Site
 - c. Creation of the Team as directed by the Owner
 - d. Addition of five users
 - e. Set up of MT20W and update firmware
 - f. Create unique credentials and verify proper commissioning of ten locks
5. Provide, at the owner's request, the following on-site training prior to the expiration of the service agreement:
 - a. Completing the following with ENGAGE software:
 - 1) Modifying the Team
 - 2) Move in/move out procedure including
 - a) Adding and Deleting Users
 - b) Adding and Deleting Doors
 - 3) Adding, assigning and programming credentials for access
 - 4) Replacing or deleting lost credentials.
 - 5) Retrieving and viewing of audit information
 - 6) Assigning temporary access
 - b. Commissioning and verifying proper functioning between locks and credentials.
 - c. Updating firmware on the locks.
6. Must include a service agreement ending a year after Substantial Completion. This service agreement includes being on-site up to 16 hours for set-up and training, as listed above.

2.11 ELECTRIC STRIKES

A. Manufacturers and Products:

1. Scheduled Manufacturer and Product:

- a. Von Duprin 6000 Series

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.

2.12 MAGNETIC LOCKS

A. Manufacturers:

1. Scheduled Manufacturer:

- a. Schlage

B. Requirements:

1. Provide magnetic locks certified to meet ANSI/BHMA A156.23 classification criteria, UL10C, and UL1034 for burglary-resistant electronic locking mechanisms.
2. Provide magnetic locks equipped with SPDT Magnetic Bond Sensing device, where specified, to monitor whether enough magnetic holding force exists to ensure adequate locking and SPDT Door Status Monitor device, where specified, to monitor whether door is open or closed. Provide bond sensors fully concealed within electromagnet to resist tampering or damage.
3. Provide fasteners, mounting brackets, and spacer bars required for mounting and details.
4. Provide power supply recommended and approved by manufacturer of magnetic locks.
5. Where magnetic locks are scheduled, provide complete assemblies of controls, switches, power supplies, relays, and parts/material recommended and approved by manufacturer of magnetic locks for each individual leaf. Switches control both doors simultaneously at pairs. Locate controls as directed by Architect.

2.13 PASSIVE INFRARED MOTION SENSORS

A. Manufacturers and Products:

1. Scheduled Manufacturer and Product:

- a. Schlage SCAN II Series

B. Requirements:

1. Provide motion sensors as specified in hardware groups.

2.14 CYLINDERS

A. Manufacturers and Products:

1. Scheduled Manufacturer and Product:

- a. Schlage Everest 29 S (FSIC)

B. Requirements:

1. Provide cylinders/cores 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. Provide cylinders in the below-listed configuration(s), distributed throughout the Project as indicated.
 - a. Conventional Patented Open: cylinder with interchangeable core with open keyway.
3. Patent Protection: Cylinders/cores requiring use of restricted, patented keys, patent protected.
4. Nickel silver bottom pins.

2.15 KEYING

A. Scheduled System:

1. New factory registered system:

- a. Provide a factory registered keying system, complying with guidelines in ANSI/BHMA A156.28, incorporating decisions made at keying conference.

B. Requirements:

1. Permanent Keying:

- a. Provide permanent cylinders/cores keyed by the manufacturer according to the following key system.
 - 1) Master Keying system as directed by the Owner.
- b. Forward biting 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.
- 2) Permanent Control Keys: 3.
- 3) Master Keys: 6.

2.16 DOOR CLOSERS

A. Manufacturers and Products:

1. Scheduled Manufacturer and Product:

- a. LCN 4040XP series

B. Requirements:

1. Provide door closers conforming to ANSI/BHMA A156.4 Grade 1 requirements by BHMA certified independent testing laboratory. 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 piston with 5/8-inch (16 mm) diameter double heat-treated pinion journal. QR code with a direct link to maintenance instructions.
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. Provide snap-on cover clip, with plastic covers, that secures cover to spring tube.
6. Hydraulic Regulation: By tamper-proof, non-critical valves, with separate adjustment for latch speed, general speed, and backcheck. Provide graphically labelled instructions on the closer body adjacent to each adjustment valve. Provide positive stop on reg valve that prevents reg screw from being backed out.

7. Provide closers with solid forged steel main arms and factory assembled heavy-duty forged forearms for parallel arm closers.
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 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.

2.17 DOOR TRIM

A. Manufacturers:

1. Scheduled Manufacturer:

- a. Ives

B. Requirements:

1. Provide push plates, push bars, pull plates, pulls, and hands-free reversible door pulls with diameter and length as scheduled.

2.18 PROTECTION PLATES

A. Manufacturers:

1. Scheduled Manufacturer:

- a. Ives

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. Size 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.

2.19 OVERHEAD STOPS AND OVERHEAD STOP/HOLDERS

A. Manufacturers:

1. Scheduled Manufacturers:

- a. Glynn-Johnson

- 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. Provide friction type at doors without closer and positive type at doors with closer.

2.20 DOOR STOPS AND HOLDERS

- A. Manufacturers:

1. Scheduled Manufacturer:

- a. Ives

- B. Provide door stops at each door leaf:

1. Provide wall stops wherever possible. Provide concave type where lockset has a push button of thumbturn.
 2. Where a wall stop cannot be used, provide universal floor stops.
 3. Where wall or floor stop cannot be used, provide overhead stop.
 4. Provide roller bumper where doors open into each other and overhead stop cannot be used.

2.21 THRESHOLDS, SEALS, DOOR SWEEPS, AUTOMATIC DOOR BOTTOMS, AND GASKETING

- A. Manufacturers:

1. Scheduled Manufacturer:

- a. Zero International

- 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.

2.22 SILENCERS

A. Manufacturers:

1. Scheduled Manufacturer:

- a. Ives

B. Requirements:

1. Provide "push-in" type silencers for hollow metal or wood frames.
2. Provide one silencer per 30 inches (762 mm) of height on each single frame, and two for each pair frame.
3. Omit where gasketing is specified.

2.23 COAT HOOKS

A. Manufacturers:

1. Scheduled Manufacturer:

- a. Ives

B. Provide coat hooks as specified.

PART 3 - EXECUTION

3.01 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. Examine roughing-in for electrical power systems to verify actual locations of wiring connections before electrified door hardware installation.
- C. Submit a list of deficiencies in writing and proceed with installation only after unsatisfactory conditions have been corrected.

3.02 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. Door Closers: Mount closers on room side of corridor doors, inside of exterior doors, and stair side of stairway doors from corridors. Mount closers so they are not visible in corridors, lobbies and other public spaces unless approved by Architect.
- M. Closer/holders: Mount closer/holders on room side of corridor doors, inside of exterior doors, and stair side of stairway doors.

- N. 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.
- O. Thresholds: Set thresholds in full bed of sealant complying with requirements specified in Division 07 Section "Joint Sealants."
- P. 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.
- Q. Perimeter Gasketing: Apply to head and jamb, forming seal between door and frame.
- R. Meeting Stile Gasketing: Fasten to meeting stiles, forming seal when doors are closed.
- S. Door Bottoms and Sweeps: Apply to bottom of door, forming seal with threshold when door is closed.

3.03 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. Spring Hinges: Adjust to achieve positive latching when door can close freely from an open position of 30 degrees.
 - 2. Electric Strikes: Adjust horizontal and vertical alignment of keeper to properly engage lock bolt.
 - 3. 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.

3.04 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.

3.05 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:

Abbreviation	Name
GLY	Glynn-Johnson Corp
IVE	H.B. Ives
LCN	Lcn Commercial Division
NOT	Not Specified In This Section
SCE	Schlage Electronic Security
SCH	Schlage Lock Company
TRM	Trimco
VON	Von Duprin
ZER	Zero International Inc

78854 OPT0292773 Version 3

Legend:



 Link to catalog cut sheet

 Electrified Opening
Hardware Group No. 01

For use on Door #(s):

119.3 201.1 201.2 202.2 202.3

Provide each RU door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER		FINISH	MFR
1	SET	All door hardware by special door supplier	DOOR MANUFACTURER'S STANDARD			
1	EA	MORTISE CYLINDER	MORTISE CYLINDER W/CONSTRUCTION CORE X CAM AND RINGS AS REQUIRED		622	SCH
1	EA	FSIC CORE	PERM CORE (AS REQ)		626	SCH

Hardware Group No. 02

For use on Door #(s):

135.1

Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER		FINISH	MFR
1	EA	CONT. HINGE	224HD		628	IVE
1	EA	STOREROOM LOCK	ND80TD RHO		626	SCH
1	EA	FSIC CORE	PERM CORE (AS REQ)		626	SCH
1	EA	SURFACE CLOSER	4040XP SCUSH TBWMS		689	LCN
1	EA	CUSH SHOE SUPPORT	4040XP-30		689	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B-CS		630	IVE
1	EA	RAIN DRIP	142AA		AA	ZER
1	EA	DOOR SWEEP	8197AA		AA	ZER
1	EA	THRESHOLD	65A-224		A	ZER

Hardware Group No. 03

For use on Door #(s):

157.1 157.2 158.1 160.1 160.2 201.3
 201.4 202.1 202.4

Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER		FINISH	MFR
1	EA	CONT. HINGE	224HD		628	IVE
1	EA	PANIC HARDWARE	98-NL-OP-110MD		630	VON
1	EA	PULL TRIM	392-7		626	VON
1	EA	RIM CYLINDER	WITH FSIC CONSTRUCTION CORE		626	SCH
1	EA	FSIC CORE	PERM CORE (AS REQ)		626	SCH
1	EA	ELECTRIC STRIKE	6300 FSE 12/24 VAC/VDC	✓	630	VON
1	EA	SURFACE CLOSER	4040XP SCUSH TBWMS		689	LCN
1	EA	PA MOUNTING PLATE	4040XP-18PA AS REQUIRED		689	LCN
1	EA	CUSH SHOE SUPPORT	4040XP-30		689	LCN
1	EA	RAIN DRIP	142AA		AA	ZER
1	EA	GASKETING	188SBK PSA		BK	ZER
1	EA	DOOR SWEEP	8197AA		AA	ZER
1	EA	THRESHOLD	65A-224		A	ZER
1	EA	KEYPAD	MTKB15 5VDC - 28VDC OR AS REQUIRED, SUPPLIED BY ACCESS CONTROL VENDOR	✓	BLK	SCE
1	EA	POWER SUPPLY	AS REQUIRED, SUPPLIED BY ACCESS CONTROL VENDOR	✓		

OPERATION

DOOR NORMALLY CLOSED AND LOCKED. INGRESS BY PIN CODE VIA KEYPAD, OR KEY IN EMERGENCY SITUATIONS. EGRESS IS FREE AT ALL TIMES.

Hardware Group No. 04

For use on Door #(s):

102.1

Provide each PR door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER		FINISH	MFR
1	EA	CONT. HINGE	112HD	☐	628	IVE
1	EA	CONT. HINGE	112XY EPT (HEIGHT AS REQ)	☐	US28	IVE
1	EA	POWER TRANSFER	EPT10 CON	☐	689	VON
1	EA	PANIC HARDWARE	CDSI-9847-EO	☐	630	VON
1	EA	ELEC PANIC HARDWARE	SD-QEL-9847-EO W/CYL HOLE-990-304L 24 VDC	☐	630	VON
1	EA	RIM CYLINDER	WITH FSIC CONSTRUCTION CORE	☐	626	SCH
2	EA	MORTISE CYLINDER	MORTISE CYLINDER W/CONSTRUCTION CORE X CAM AND RINGS AS REQUIRED	☐	622	SCH
3	EA	FSIC CORE	PERM CORE (AS REQ)	☐	626	SCH
1	EA	90 DEG OFFSET PULL	8190EZHD 10" O RHR	☐	630-316	IVE
2	EA	SURFACE CLOSER	4040XP SCUSH TBWMS	☐	689	LCN
2	EA	PA MOUNTING PLATE	4040XP-18PA AS REQUIRED	☐	689	LCN
2	EA	CUSH SHOE SUPPORT	4040XP-30	☐	689	LCN
2	EA	BLADE STOP SPACER	4040XP-61 AS REQUIRED	☐	689	LCN
1	SET	DOOR SEALS	FRAME MANUFACTURER'S STANDARD			
1	EA	MEETING EDGE SEAL	DOOR MANUFACTURER'S STANDARD			
1	EA	KEYPAD	MTKB15 5VDC - 28VDC OR AS REQUIRED, SUPPLIED BY ACCESS CONTROL VENDOR	☐	BLK	SCE
1	EA	REMOTE RELEASE	660-PB	☐	628	SCE
1	EA	POWER SUPPLY	PS902-2RS	☐	LGR	SCE

OPERATION

DOORS NORMALLY CLOSED AND LOCKED. INGRESS BY PIN CODE VIA KEYPAD OR PUSH BUTTON AT RECEPTION TO ENABLE ELECTRIC LATCH RETRACTION, OR BY KEY IN EMERGENCY SITUATIONS. EGRESS IS FREE AT ALL TIMES.

Hardware Group No. 05

For use on Door #(s):

103.1

Provide each SGL door(s) with the following:

QTY	EA	DESCRIPTION	CATALOG NUMBER	FINISH	MFR
4	EA	HINGE	5BB1 4.5 X 4.5 NRP	652	IVE
1	EA	CLASSROOM LOCK	ND70TD RHO	626	SCH
1	EA	FSIC CORE	PERM CORE (AS REQ)	626	SCH
1	EA	OH STOP	90XS X TBWMS	630	GLY
1	EA	SURFACE CLOSER	4040XP REG TBWMS	689	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B-CS	630	IVE
3	EA	SILENCER	SR64	GRY	IVE

Hardware Group No. 06

For use on Door #(s):

108.1

120.4

303.1

Provide each SGL door(s) with the following:

QTY	EA	DESCRIPTION	CATALOG NUMBER	FINISH	MFR
4	EA	HINGE	5BB1 4.5 X 4.5	652	IVE
1	EA	CLASSROOM LOCK	ND70TD RHO	626	SCH
1	EA	FSIC CORE	PERM CORE (AS REQ)	626	SCH
1	EA	SURFACE CLOSER	4040XP SCUSH TBWMS	689	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B-CS	630	IVE
1	EA	GASKETING	188SBK PSA	BK	ZER

Hardware Group No. 07

For use on Door #(s):

107.1

111.1

117.1

127.1

128.2

136.2

Provide each SGL door(s) with the following:

QTY	EA	DESCRIPTION	CATALOG NUMBER	FINISH	MFR
4	EA	HINGE	5BB1 4.5 X 4.5	652	IVE
1	EA	PRIVACY LOCK	ND40S	626	SCH
1	EA	KICK PLATE	8400 10" X 2" LDW B-CS	630	IVE
1	EA	MOP PLATE	8400 4" X 1" LDW B-CS	630	IVE
1	EA	COAT AND HAT HOOK	510C	626	IVE
3	EA	SILENCER	SR64	GRY	IVE

Hardware Group No. 08

For use on Door #(s):

300.1 302.1

Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER		FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5	☐	652	IVE
1	EA	PRIVACY LOCK	ND40S	☐	626	SCH
1	EA	KICK PLATE	8400 10" X 2" LDW B-CS	☐	630	IVE
1	EA	MOP PLATE	8400 4" X 1" LDW B-CS	☐	630	IVE
1	EA	COAT AND HAT HOOK	510C	☐	626	IVE
3	EA	SILENCER	SR64	☐	GRY	IVE

Hardware Group No. 09

For use on Door #(s):

122.1

Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER		FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5 NRP	☐	652	IVE
1	EA	STOREROOM LOCK	ND80TD RHO	☐	626	SCH
1	EA	FSIC CORE	PERM CORE (AS REQ)	☐	626	SCH
1	EA	OH STOP (OR WS AS REQ)	450S	☐	630	GLY
3	EA	SILENCER	SR64	☐	GRY	IVE

Hardware Group No. 10

For use on Door #(s):

118.1 126.1

Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER		FINISH	MFR
4	EA	HINGE	5BB1 4.5 X 4.5	☐	652	IVE
1	EA	STOREROOM LOCK	ND80TD RHO	☐	626	SCH
1	EA	FSIC CORE	PERM CORE (AS REQ)	☐	626	SCH
1	EA	SURFACE CLOSER	4040XP REG TBWMS	☐	689	LCN
1	EA	WALL STOP	WS406/407CVX	☐	630	IVE
1	EA	GASKETING	188SBK PSA	☐	BK	ZER

Hardware Group No. 11

For use on Door #(s):

104.1	106.2	109.1	112.1	119.1	120.1
120.2	123.1	125.1	139.1	140.1	148.1
149.1	150.1	151.1	152.1		

Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER		FINISH	MFR
4	EA	HINGE	5BB1 4.5 X 4.5	111	652	IVE
1	EA	STOREROOM LOCK	ND80TD RHO	111	626	SCH
1	EA	FSIC CORE	PERM CORE (AS REQ)	111	626	SCH
1	EA	ELECTRIC STRIKE	6211 FSE CON EB VOLTAGE AS REQUIRED	111	630	VON
1	EA	SURFACE CLOSER	4040XP REG TBWMS	111	689	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B-CS	111	630	IVE
1	EA	WALL STOP	WS406/407CVX	111	630	IVE
1	EA	GASKETING	188SBK PSA	111	BK	ZER
1	EA	KEYPAD	MTKB15 5VDC - 28VDC OR AS REQUIRED, SUPPLIED BY ACCESS CONTROL VENDOR	111	BLK	SCE
1	EA	POWER SUPPLY	AS REQUIRED, SUPPLIED BY ACCESS CONTROL VENDOR			

OPERATION

DOOR NORMALLY CLOSED AND LOCKED. INGRESS BY PIN CODE VIA KEYPAD, OR KEY IN EMERGENCY SITUATIONS. EGRESS IS FREE AT ALL TIMES.

Hardware Group No. 12

For use on Door #(s):

106.1

Provide each DD door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER		FINISH	MFR
4	EA	HINGE	5BB1 4.5 X 4.5	☐	652	IVE
1	EA	DUTCH DOOR BOLT	054		626	IVE
1	EA	STOREROOM LOCK	ND80TD RHO	☐	626	SCH
1	EA	FSIC CORE	PERM CORE (AS REQ)	☐	626	SCH
1	EA	ELECTRIC STRIKE	6211 FSE CON EB VOLTAGE AS REQUIRED	☐	630	VON
1	EA	SURFACE CLOSER	4040XP REG TBWMS	☐	689	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B-CS	☐	630	IVE
1	EA	WALL STOP	WS406/407CVX	☐	630	IVE
1	EA	GASKETING	188SBK PSA	☐	BK	ZER
1	EA	KEYPAD	MTKB15 5VDC - 28VDC OR AS REQUIRED, SUPPLIED BY ACCESS CONTROL VENDOR	☐	BLK	SCE
1	EA	POWER SUPPLY	AS REQUIRED, SUPPLIED BY ACCESS CONTROL VENDOR	☐		

OPERATION

DOOR NORMALLY CLOSED AND LOCKED. INGRESS BY PIN CODE VIA KEYPAD, OR KEY IN EMERGENCY SITUATIONS. EGRESS IS FREE AT ALL TIMES.

Hardware Group No. 13

For use on Door #(s):

113.1	114.1	115.1	116.1	121.1	123.2
143.1	144.1	145.1	146.1	147.1	149.2
150.2	151.2	152.2			

Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER		FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5	☐	652	IVE
1	EA	ENTRANCE LOCK	ND53TD RHO	☐	626	SCH
1	EA	FSIC CORE	PERM CORE (AS REQ)	☐	626	SCH
1	EA	WALL STOP	WS406/407CVX	☐	630	IVE
3	EA	SILENCER	SR64	☐	GRY	IVE

Hardware Group No. 14

For use on Door #(s):

102.2 141.1 142.1

Provide each SGL door(s) with the following:

QTY	EA	DESCRIPTION	CATALOG NUMBER	FINISH	MFR
4	EA	HINGE	5BB1 4.5 X 4.5 NRP	652	IVE
1	EA	PRISON W/DB	L9482T.06A X LESS INSIDE TRIM	626	SCH
2	EA	FSIC CORE	PERM CORE (AS REQ)	626	SCH
1	EA	ELECTRIC STRIKE (LOCKS WITH DEADBOLT)	6216 FSE DS CON 12/16/24/28 VAC/VDC	630	VON
1	EA	DETENTION FLUSH PULL	962	626	IVE
1	EA	OH STOP	100S	630	GLY
3	EA	SILENCER	SR64	GRY	IVE
2	EA	KEYPAD	MTKB15 5VDC - 28VDC OR AS REQUIRED, SUPPLIED BY ACCESS CONTROL VENDOR	BLK	SCE
1	EA	POWER SUPPLY	AS REQUIRED, SUPPLIED BY ACCESS CONTROL VENDOR		

OPERATION

DOOR NORMALLY LOCKED ON BOTH SIDES. LEVER ALWAYS INOPERATIVE, PROVIDE LESS INSIDE (HOLDING CELL SIDE) TRIM. INGRESS BY PIN CODE VIA KEYPAD TO RELEASE ELECTRIC STRIKE. EMERGENCY INGRESS OR EGRESS BY LATCHBOLT AND DEADBOLT ACTUATION WITH KEY IN EITHER SIDE. PRIMARY EGRESS BY KEY INSIDE OR OTHER PERSONNEL ACTIVATION OF READER OUTSIDE. MONITORED BY DOOR STATUS SWITCH IN ELECTRIC STRIKE.

Hardware Group No. 15

For use on Door #(s):

129.2 132.1 134.1 138.2

Provide each SGL door(s) with the following:

QTY	EA	DESCRIPTION	CATALOG NUMBER	FINISH	MFR
4	EA	HINGE	5BB1 4.5 X 4.5	652	IVE
1	EA	PASSAGE SET	ND10S RHO	626	SCH
1	EA	WALL STOP	WS406/407CVX	630	IVE
3	EA	SILENCER	SR64	GRY	IVE

Hardware Group No. 16

For use on Door #(s):

103.2 154.1

Provide each SGL door(s) with the following:

QTY	EA	DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5	652	IVE
1	EA	CLASSROOM LOCK	ND70TD RHO	626	SCH
1	EA	FSIC CORE	PERM CORE (AS REQ)	626	SCH
1	EA	KICK PLATE	8400 10" X 2" LDW B-CS	630	IVE
1	EA	WALL STOP	WS406/407CVX	630	IVE
3	EA	SILENCER	SR64	GRY	IVE

Hardware Group No. 17

For use on Door #(s):

128.1 129.1 131.1 132.2 134.2 136.1
138.1

Provide each SGL door(s) with the following:

QTY	EA	DESCRIPTION	CATALOG NUMBER	FINISH	MFR
4	EA	HINGE	5BB1 4.5 X 4.5	652	IVE
1	EA	PUSH PLATE	8200 8" X 16" CUT AS REQUIRED	630	IVE
1	EA	PULL PLATE	8303 8" 4" X 16" CUT AS REQUIRED	630	IVE
1	EA	SURFACE CLOSER	4040XP H TBWMS	689	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B-CS	630	IVE
1	EA	MOP PLATE	8400 4" X 1" LDW B-CS	630	IVE
3	EA	SILENCER	SR64	GRY	IVE

Hardware Group No. 18

For use on Door #(s):

101.1

Provide each PR door(s) with the following:

QTY	EA	DESCRIPTION	CATALOG NUMBER	FINISH	MFR
2	EA	CONT. HINGE	112HD	628	IVE
1	EA	PANIC HARDWARE	CDSI-HH-9847-EO W/CYL HOLE-990-304L-SNB	630	VON
1	EA	PANIC HARDWARE	RHR		
1	EA	PANIC HARDWARE	CDSI-HH-9847-EO-304L-SNB	630	VON
1	EA	RIM CYLINDER	WITH FSIC CONSTRUCTION CORE	626	SCH
2	EA	MORTISE CYLINDER	MORTISE CYLINDER W/CONSTRUCTION CORE X CAM AND RINGS AS REQUIRED	622	SCH
3	EA	FSIC CORE	PERM CORE (AS REQ)	626	SCH
1	EA	90 DEG OFFSET PULL	8190EZHD 10" O RHR	630-316	IVE
2	EA	SURFACE CLOSER	4040XP SCUSH TBWMS	689	LCN
2	EA	PA MOUNTING PLATE	4040XP-18PA AS REQUIRED	689	LCN
2	EA	CUSH SHOE SUPPORT	4040XP-30	689	LCN
2	EA	BLADE STOP SPACER	4040XP-61 AS REQUIRED	689	LCN
1	SET	DOOR SEALS	FRAME MANUFACTURER'S STANDARD		
1	EA	MEETING EDGE SEAL	DOOR MANUFACTURER'S STANDARD		
2	EA	DOOR SWEEP	8197AA	AA	ZER
1	EA	THRESHOLD	65A-224	A	ZER

Hardware Group No. 19

For use on Door #(s):

203.1

Provide each SGL door(s) with the following:

QTY	EA	DESCRIPTION	CATALOG NUMBER		FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5 NRP	☐	652	IVE
1	EA	STOREROOM LOCK	ND80TD RHO	☐	626	SCH
1	EA	FSIC CORE	PERM CORE (AS REQ)	☐	626	SCH
1	EA	ELECTRIC STRIKE	6211 FSE CON EB VOLTAGE AS REQUIRED	☐	630	VON
1	EA	SURFACE CLOSER	4040XP SCUSH TBWMS	☐	689	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B-CS	☐	630	IVE
3	EA	SILENCER	SR64	☐	GRY	IVE
1	EA	KEYPAD	MTKB15 5VDC - 28VDC OR AS REQUIRED, SUPPLIED BY ACCESS CONTROL VENDOR	☐	BLK	SCE
1	EA	POWER SUPPLY	AS REQUIRED, SUPPLIED BY ACCESS CONTROL VENDOR	☐		

OPERATION

DOOR NORMALLY CLOSED AND LOCKED. INGRESS BY PIN CODE VIA KEYPAD, OR KEY IN EMERGENCY SITUATIONS. EGRESS IS FREE AT ALL TIMES.

Hardware Group No. 20

For use on Door #(s):

105.1

Provide each SGL door(s) with the following:

QTY	EA	DESCRIPTION	CATALOG NUMBER		FINISH	MFR
4	EA	HINGE	5BB1 4.5 X 4.5	☐	652	IVE
1	EA	STOREROOM LOCK	ND80TD RHO	☐	626	SCH
1	EA	FSIC CORE	PERM CORE (AS REQ)	☐	626	SCH
1	EA	KICK PLATE	8400 10" X 2" LDW B-CS	☐	630	IVE
1	EA	WALL STOP	WS406/407CVX	☐	630	IVE
3	EA	SILENCER	SR64	☐	GRY	IVE

Hardware Group No. 21

For use on Door #(s):
133.1

Provide each PR door(s) with the following:

QTY	EA	DESCRIPTION	CATALOG NUMBER	FINISH	MFR
6	EA	HINGE	5BB1 4.5 X 4.5 NRP	652	IVE
1	EA	MANUAL FLUSH BOLT	FB458 12"	626	IVE
1	EA	STOREROOM LOCK	ND80TD RHO	626	SCH
1	EA	FSIC CORE	PERM CORE (AS REQ)	626	SCH
1	EA	COORDINATOR	3092	BLK	TRM
2	EA	SURFACE CLOSER	4040XP SCUSH TBWMS	689	LCN
1	EA	RAIN DRIP	142AA	AA	ZER
1	EA	GASKETING	188SBK PSA	BK	ZER
2	EA	DOOR SWEEP	8197AA	AA	ZER
1	EA	THRESHOLD	65A-224	A	ZER

Hardware Group No. 22

For use on Door #(s):
120.3

Provide each PR door(s) with the following:

QTY	EA	DESCRIPTION	CATALOG NUMBER	FINISH	MFR
8	EA	HINGE	5BB1 4.5 X 4.5 NRP	652	IVE
1	EA	MANUAL FLUSH BOLT	FB458 12"	626	IVE
1	EA	STOREROOM LOCK	ND80TD RHO	626	SCH
1	EA	FSIC CORE	PERM CORE (AS REQ)	626	SCH
2	EA	OH STOP (OR WS AS REQ)	450S	630	GLY
2	EA	KICK PLATE	8400 10" X 1 1/2" LDW B-CS	630	IVE
2	SET	ASTRAGAL	328AA-S	AA	ZER
2	EA	SILENCER	SR64	GRY	IVE

Hardware Group No. 23

For use on Door #(s):
124.1 130.1 137.1

Provide each PR door(s) with the following:









QTY	EA	DESCRIPTION	CATALOG NUMBER	FINISH	MFR
8	EA	HINGE	5BB1 4.5 X 4.5 NRP	652	IVE
1	EA	MANUAL FLUSH BOLT	FB458 12"	626	IVE
1	EA	STOREROOM LOCK	ND80TD RHO	626	SCH
1	EA	FSIC CORE	PERM CORE (AS REQ)	626	SCH
2	EA	OH STOP (OR WS AS REQ)	450S	630	GLY
2	SET	ASTRAGAL	328AA-S	AA	ZER
2	EA	SILENCER	SR64	GRY	IVE

Hardware Group No. AL-1

For use on Door #(s):

301.1

Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER		FINISH	MFR
1	SET	All Seals and meeting edge by aluminum door supplier	DOOR MANUFACTURER'S STANDARD			
1	EA	CONT. HINGE	224HD		628	IVE
1	EA	CLASSROOM LOCK	ND70TD RHO		626	SCH
1	EA	FSIC CORE	PERM CORE (AS REQ)		626	SCH
1	EA	SURFACE CLOSER	4040XP SCUSH TBWMS		689	LCN
1	EA	CUSH SHOE SUPPORT	4040XP-30		689	LCN
1	EA	RAIN DRIP	142AA		AA	ZER
1	EA	DOOR SWEEP	8197AA		AA	ZER
1	EA	THRESHOLD	65A-224		A	ZER

Hardware Group No. CASED

For use on Door #(s):

110.1

Provide each CO door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER		FINISH	MFR
1	EA	CASED OPENING	NO HARDWARE REQUIRED			NOT

END OF SECTION 08710

SECTION 10165 – PLASTIC LAMINATE TOILET COMPARTMENTS

PART 1 – GENERAL

SUMMARY

Section Includes:

Compartments

Screens

SUBMITTALS

Product Data

Shop Drawings

Coordination Drawings:

Before distribution to installers, submit coordination drawings specified under "Coordination" for information.

Samples of Initial Selection:

Submit manufacturer's standard samples for the following:

Panel color samples: Submit for each distinct type of panel system required.

Hardware and accessory samples: Submit for each type of panel system required.

Manufacturer's Instructions

Maintenance Data

QUALITY ASSURANCE

Regulatory Requirements:

Products and finished installations to be used by handicapped persons must comply with requirements of ANSI A117.1.

COORDINATION

Use manufacturer's instructions and data to determine anchorage requirements for panel systems. In a timely manner, distribute to affected installers of related work those system components and anchorage devices provided by panel manufacturer for incorporation into their work.

Coordination Drawings:

Prepare coordination drawings for panel system assemblies. Include information necessary to properly coordinate work of this section with other work. Distribute the affected installers of related work.

PART 2 – PRODUCTS

PANEL SYSTEMS

Compartments:

Provide compartments fabricated of partitions and erected using the following panel systems at locations indicated on the drawings:

Plastic laminate over particleboard core, floor-anchored.

Screen Systems:

Provide screens erected using the following panel systems at locations indicated on the drawings:

Plastic laminate over particleboard core, floor-anchored.

Plastic laminate over particleboard core, wall-hung.

PANEL MATERIALS

Plastic Laminate over Particleboard Core:

Plastic laminate: NEMA LD 3, minimum 0.050 inch thick.

Panel core: Particleboard; thickness required to achieve nominal overall panel thickness of not less than one inch.

Panel fabrication: Provide panels with neatly made, straight edges and corners. Bond laminate under pressure to core material. Use single laminate sheet to form each finished surface; splicing is not acceptable. Apply laminate to panel edges

before applying face laminates. Provide moisture proof seal over exposed core at cutouts.

Panel colors: As selected from manufacturer's complete set of standard colors.

Hardware, accessories, and mounting brackets: Manufacturer's standard styles.
The following materials will be acceptable:

- Chromium-plated nonferrous cast alloy ("Zamac")
- Chromium-plated brass
- Stainless steel

ACCESSORIES

General:

Provide hardware and accessories as necessary to properly install panel systems indicated.

Hinge: Self-closing, pivot type hinge, recess-mounted within door; adjustable to permit door to rest at any angle.

Latch for non-handicapped compartments: Surface-mounted type, with emergency access feature. Provide stop and keeper with rubber bumper.

Latch for handicapped compartments: Surface-mounted sliding latch (for inner side of compartment doors), with emergency access feature, designed for use by handicapped persons.

Door pull for handicapped compartments (for outer side of compartment doors): Suitable for use by handicapped persons.

Combinations coat hook with rubber bumper: Provide unit of sufficient length to prevent compartment door from striking installed toilet accessories.

Leveling-and-anchorage devices: Rust-resistant steel devices as recommended by panel manufacturer for installation of panels in conditions indicated.

Pilaster shoes: ASTM A167 (Type 302/304) minimum 20 gage stainless steel, finish to match compartment hardware. Minimum shoe height: 3 inches.

Fasteners: Tamper-resistant rustproof, exposed fasteners as recommended by panel manufacturer for installation of panels and hardware in conditions indicated. Finish to match hardware.

PART 3 – EXECUTION

INSTALLATION

Perform installation in accordance with manufacturer's instructions, except where more restrictive requirements are shown, specified, or are necessary for project conditions.

END OF SECTION 10165

