REBID ADDENDUM NO. 1

This Addendum supplements and amends the original Drawings and Specifications, and shall from the date hereon, become an integral part of the Contract Documents.

MONTGOMERY COUNTY – MUNICIPAL COURT
TROWOOD NEW BUILDING PROJECT

PREPARED BY: Tristan Hess, Senior Project Coordinator, Montgomery County Facilities Management Department, Engineering & Construction Division, 451 West Third Street, P.O. Box 972, Dayton, Ohio 45422-1403, Phone (937) 224-8925.

July 8th, 2021

TO ALL BIDDERS: This Addendum, including all items listed hereinafter, shall become a part of the Documents, shall be taken into account in preparing the Bid, and shall become a part of the Contract. The work under each branch shall be in accordance with the original Specifications unless excepted in this Addendum.

This Rebid Addendum consists of Fifty (50) 8½ x 11 pages and Two (2) plan drawing pages.

- Rebid Addendum No. 1 notes an acknowledgment (3 pages)
- Specifications (47 pages)
    - Please make note of the additions/clarifications included below
- Drawings (2 Plan Sheets)
    - Sheet A003 – Door Hardware Schedule
    - Sheet A601 – Enlarged Scale Plans

GENERAL ITEMS:

Contractors are encouraged to make use of Voluntary Substitutions for the Owner's consideration as part of the post bid evaluation. Utilize Form P-5 in the Project Manual as necessary. Delineate any cost or time benefits that the Owner may realize by accepting the proposed substitution.

The Owner reserves the right to accept or reject any Voluntary Substitutions at their discretion.

Please Note that the Building Permit Cost for this project will total $3,300.00. Trade permits are not known at this time.

QUESTIONS:

Q 01: The plans state that the site contractor will be required to provide the discharge piping for the sump pump located in the meter pit. Will asked who would be responsible for providing the sump pump to be installed in the meter pit. The site contractor or the plumbing contractor? What is the make and model of the sump pump to be provided?
A 01: The site contractor shall provide the pump. The pump make and model is called out on sheet P101 "Pump to be Zoeller Model M63 Submersible Dewatering Pump with High Water Alarm, NEMA 4X with dry contacts inside high water alarm".

Q 02: Since the ornamental has a Color Coated Surface once we grind the
Surface so we have bonded to the galvanized frame we lose the warranty from the manufacture Because we have removed the protective coating. This is after talking with Ameristar.
A 02: Please refer to specification section 32 31 19 – DECORATIVE METAL FENCES AND GATES included in this addendum.

Q 03: On the specifications they removed information on the dumpster gates. Who should we use as the supplier of these gates? And what are the specifications of the gates?
A 03: Please refer to specification section 32 31 19 – DECORATIVE METAL FENCES AND GATES included in this addendum.

SPECIFICATION ITEMS:

1. Section 08 71 00 - DOOR HARDWARE
    a. See modified specification attached.
2. Section 32 31 19 – DECORATIVE METAL FENCES AND GATES
    a. See modified specification attached.
3. Section 12 55 00 – DETENTION FURNITURE
    a. Section 2.1A.1: Subject to compliance with requirements, products from Sweeper Metal Fabricators Corp. may be incorporated into the project.

DRAWING ITEMS:

1. The following sheets have been updated and attached to this addendum.
    a. Sheet A003 – Door Hardware Schedule
    b. Sheet A601 – Enlarged Scale Plans

STATEMENT BY CONTRACTOR

Each bidder shall sign the following acknowledgment and include it as an attachment to the Bid for the **Montgomery County – Municipal Court Trotwood New Building Project**.

We acknowledge receipt of **Rebid Addendum No. 1**

Signed: _____ Date: _____

Print: _____

Company: _____

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.

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

1. Mechanical door hardware.
2. Electromechanical door hardware, power supplies.
3. Automatic operators.

C. Related Sections:

1. Division 08 Section “Hollow Metal Doors and Frames”.
2. Division 08 Section “Flush Wood Doors”.
3. Division 08 Section “Aluminum-Framed Entrances and Storefronts”.
4. Division 08 Section “Automatic Entrances”.
5. Division 08 Section “Automatic Door Operators”.
6. Division 28 Section “Access Control”.

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 80 - Fire Doors and Windows.
5. NFPA 101 - Life Safety Code.
6. NFPA 105 - Installation of Smoke Door Assemblies.
7. UL/ULC and CSA C22.2 – Standards for Automatic Door Operators Used on Fire and Smoke Barrier Doors and Systems of Doors.
8. 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.

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. Shop Drawings: Details of electrified access control hardware indicating the following:

1. Wiring Diagrams: Upon receipt of approved schedules, submit detailed system wiring diagrams for power, signaling, monitoring, communication, and control of the access control system electrified hardware. Differentiate between manufacturer-installed and field-installed wiring. Include the following:

   a. Elevation diagram of each unique access controlled opening showing location and interconnection of major system components with respect to their placement in the respective door openings.
   b. Complete (risers, point-to-point) access control system block wiring diagrams.

2. Electrical Coordination: Coordinate with related Division 26 Electrical Sections the voltages and wiring details required at electrically controlled and operated hardware openings.

D. Keying Schedule: Prepared under the supervision of the Owner, separate schedule detailing final keying instructions for locksets and cylinders in writing. Include keying system explanation, door numbers, key set symbols, hardware set numbers and special instructions. Owner to approve submitted keying schedule prior to the ordering of permanent cylinders.

E. 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.

F. 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. The manual to include the name, address, and contact information of the manufacturers providing the hardware and their nearest service representatives. The final copies delivered after completion of the installation test to include "as built" modifications made during installation, checkout, and acceptance.

G. Warranties and Maintenance: Special warranties and maintenance agreements specified in this Section.

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: Installers, trained by the primary product manufacturers, with a minimum 3 years documented experience installing both standard and electrified builders 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 in good standing 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.

1. Scheduling Responsibility: Preparation of door hardware and keying schedules.

D. Source Limitations: Obtain each type and variety of Door Hardware specified in this Section from a single source, qualified supplier unless otherwise indicated.

1. Electrified modifications or enhancements made to a source manufacturer's product line by a secondary or third party source will not be accepted.

2. Provide electromechanical door hardware from the same manufacturer as mechanical door hardware, unless otherwise indicated.

E. Regulatory Requirements: Comply with NFPA 70, NFPA 80, NFPA 101 and ANSI A117.1 requirements and guidelines as directed in the model building code including, but not limited to, the following:

1. NFPA 70 "National Electrical Code", including electrical components, devices, and accessories listed and labeled as defined in Article 100 by a testing agency acceptable to authorities having jurisdiction, and marked for intended use.

2. Where indicated to comply with accessibility requirements, comply with Americans with Disabilities Act (ADA), "Accessibility Guidelines for Buildings and Facilities (ADAAG)," ANSI A117.1 as follows:

   a. Handles, Pulls, Latches, Locks, and other Operating Devices: Shape that is easy to grasp with one hand and does not require tight grasping, tight pinching, or twisting of the wrist.
   b. Door Closers: Comply with the following maximum opening-force requirements indicated:

      1) Interior Hinged Doors: 5 lbf applied perpendicular to door.
      2) Fire Doors: Minimum opening force allowable by authorities having jurisdiction.

   c. Thresholds: Not more than 1/2 inch high. Bevel raised thresholds with a slope of not more than 1:2.

3. NFPA 101: Comply with the following for means of egress doors:

    a. Latches, Locks, and Exit Devices: Not more than 15 lbf to release the latch. Locks shall not require the use of a key, tool, or special knowledge for operation.

    b. Thresholds: Not more than 1/2 inch high.

4. Fire-Rated Door Assemblies: Provide door hardware for assemblies complying with NFPA 80 that are listed and labeled by a testing and inspecting agency acceptable to authorities having jurisdiction, for fire ratings indicated, based on testing according to NFPA 252 (neutral pressure at 40" above sill) or UL-10C.

    a. Test Pressure: Positive pressure labeling.

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

G. 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. Function of building, purpose of each area and degree of security required.
2. Plans for existing and future key system expansion.
3. Requirements for key control storage and software.
4. Installation of permanent keys, cylinder cores and software.
5. Address and requirements for delivery of keys.

H. 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 (including electromechanical hardware) for aluminum, hollow metal and wood doors. Training will include the use of installation manuals, hardware schedules, templates and physical product samples as required.
2. Inspect and discuss electrical roughing-in, power supply connections, and other preparatory work performed by other trades.
3. Review sequence of operation narratives for each unique access controlled opening.
4. Review and finalize construction schedule and verify availability of materials.
5. Review the required inspecting, testing, commissioning, and demonstration procedures

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

1.5 DELIVERY, STORAGE, AND HANDLING

A. Inventory door hardware on receipt and provide secure lock-up and shelving for door hardware delivered to Project site. Do not store electronic access control hardware, software or accessories at Project site without prior authorization.

B. Tag each item or package separately with identification related to the final Door Hardware Schedule, and include basic installation instructions with each item or package.

C. Deliver, as applicable, permanent keys, cylinders, cores, access control credentials, software and related accessories directly to Owner via registered mail or overnight package service. Instructions for delivery to the Owner shall be established at the "Keying Conference".

1.6 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.

B. Door Hardware and Electrical Connections: Coordinate the layout and installation of scheduled electrified door hardware and related access control equipment with required connections to source power junction boxes, low voltage power supplies, detection and monitoring hardware, and fire and detection alarm systems.

C. Door and Frame Preparation: Related Division 08 Sections (Steel, Aluminum and Wood) doors and corresponding frames are to be prepared, reinforced and pre-wired (if applicable) to receive the installation of the specified electrified, monitoring, signaling and access control system hardware without additional in-field modifications.

1.7 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. Ten years for mortise locks and latches.
2. Ten years for exit hardware.
3. Twenty five years for manual surface door closers.
4. Two years for overhead concealed closers.
5. Two years for electromechanical door hardware.

1.8 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.

B. Continuing Service: Beginning at Substantial Completion, and running concurrent with the specified warranty period, provide continuous (6) months full maintenance including repair and replacement of worn or defective components, lubrication, cleaning, and adjusting as required for proper door opening operation. Provide parts and supplies as used in the manufacture and installation of original products.

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.

1. 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:

a. 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.

2. Products furnished, but not installed, under this Section include the following. Coordinating, purchasing, delivering, and scheduling remain requirements of this Section.

a. Permanent cylinders, cores, and keys to be installed by Owner.

B. 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. For door widths up to 3’0”: Provide 4-1/2” standard or heavy weight as specified.
   b. For door widths from 3’1” to 4’0”: Provide 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 following applications:

      1) Out-swinging exterior doors.
      2) Out-swinging access controlled doors.
      3) 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).

B. Continuous Geared Hinges: ANSI/BHMA A156.26 certified continuous geared hinge with minimum 0.120-inch thick extruded 6060 T6 aluminum alloy hinge leaves and a minimum overall width of 4 inches. Hinges are non-handed, reversible and fabricated to template screw locations. Provide concealed flush mount (with or without inset), full surface, or half surface, in standard and heavy duty models, as specified in the Hardware Sets. Concealed continuous hinges to be U.L. listed for use on up to and including 90 minute rated door installations and U.L. listed for windstorm components where applicable. Factory cut hinges for door size and provide with removable service power transfer panel where indicated at electrified openings.

1. Acceptable Manufacturers:

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

C. Pivots: ANSI/BHMA A156.4, Grade 1, certified pivots provided either center hung or 3/4" offset type complete with top, bottom, and intermediate pivots (offset pivots only) in quantity according to manufacturer's recommendations. Space intermediate pivots equally not less than 25 inches on center apart or not more than 35 inches on center for doors over 121 inches high. Pivot hinges to have oil impregnated bronze bearing in the top pivot and a radial roller and thrust bearing in the bottom pivot with the bottom pivot designed to carry the full weight of the door. Pivots to be UL listed for windstorm where applicable.

1. Acceptable Manufacturers:

a. Dorma (DM).
b. Rixson Door Controls (RF).

2.3 POWER TRANSFER DEVICES

A. Concealed Electric Power Transfers: Provide concealed wiring pathway housing mortised into the door and frame for low voltage electrified door hardware. Furnish with sufficient number of concealed wires (up to 12) to accommodate the electrified functions specified in the Door Hardware Sets.

1. Acceptable Manufacturers:

a. Securitron (SU) - CEPT Series.
b. Precision (PH) – EPT-12C Series
c. Von Duprin (VD) - EPT-10 Series.

2.4 DOOR OPERATING TRIM

A. Flush Bolts and Surface Bolts: ANSI/BHMA A156.3 and A156.16, Grade 1, certified automatic, self-latching, and manual flush bolts and surface bolts. Manual flush bolts to be furnished with top rod of sufficient length to allow bolt location approximately six feet from the floor. Furnish

dust proof strikes for bottom bolts. Surface bolts to be minimum 8" in length and U.L. listed for labeled fire doors and U.L. listed for windstorm components where applicable. Provide related accessories (mounting brackets, strikes, coordinators, etc.) as required for appropriate installation and operation.

1. Acceptable Manufacturers:

    a. Hager (HA).
    b. Hiawatha, Inc. (HI).
    c. Rockwood Manufacturing (RO).
    d. Trimco (TR).

B. Door Push Plates and Pulls: ANS/BHMA A156.6 certified door pushes and pulls of type and design specified below or in the Hardware Sets. Coordinate and provide proper width and height as required where conflicting hardware dictates.

1. Push/Pull Plates: Minimum .050 inch thick, size as indicated in hardware sets, with square corners and beveled edges, secured with exposed screws unless otherwise indicated.
2. Door Pull and Push Bar Design: Size, shape, and material as indicated in the hardware sets. Minimum clearance of 2 1/2-inches from face of door unless otherwise indicated.
3. Offset Pull Design: Size, shape, and material as indicated in the hardware sets. Minimum clearance of 2 1/2-inches from face of door and offset of 90 degrees unless otherwise indicated.
4. Fasteners: Provide manufacturer's designated fastener type as indicated in Hardware Sets.

    a. Acceptable Manufacturers:

        1) Hager (HA).
        2) Hiawatha, Inc. (HI).
        3) Rockwood Manufacturing (RO).
        4) Trimco (TR).

2.5 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. Sargent DG1 LF1C Keyway, Owner Std.

C. Security Cylinders: ANSI/BHMA A156.5, Grade 1, patented security cylinders and keys able to be used together under the same facility master or grandmaster key system. Cylinders are to be factory keyed.

1. Acceptable Manufacturers:

a. Sargent DG1 LF1C Keyway, Owner Std.

D. Keying System: Each type of lock and cylinders to be factory keyed. Conduct specified "Keying Conference" to define and document keying system instructions and requirements. Furnish factory cut, nickel-silver large bow permanently inscribed with a visual key control number as directed by Owner. Incorporate decisions made in keying conference, and as follows:

1. Great-Grand Master Key System: Cylinders are operated by a change key, a master key, a grand master key, and a great-grand master key.

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

1. Top Master Key: One (1)
2. Change Keys per Cylinder: Two (2)
3. Master Keys (per Master Key Group): Two (2)
4. Grand Master Keys (per Grand Master Key Group): Two (2)
5. Construction Keys (where required): Ten (10)
6. Construction Control Keys (where required): Two (2)
7. Permanent Control Keys (where required): Two (2)

F. Construction Keying: Provide temporary keyed construction cores for all exterior doors, mechanical rooms and door 149B.Furnish permanent cores for installation as directed under specified "Keying Conference".

G. Key Registration List: Provide keying transcript list to Owner's representative in the proper format for importing into key control software.

H. Key Control Cabinet: Provide a key control system including envelopes, labels, and tags with self-locking key clips, receipt forms, 3-way visible card index, temporary markers, permanent markers, and standard metal cabinet. Key control cabinet shall have expansion capacity of 150% of the number of locks required for the project.

1. Acceptable Manufacturers:

a. Lund Equipment (LU).
b. MMF Industries (MM).
c. Telkee (TK).

I. Key Control Software: Provide one network version of "Key Wizard" branded key management software package that includes one year of technical support and upgrades to software at no charge, or Bonded Lock Service KeyTrak. Provide factory key system formatted for importing into “Key Wizard/KeyTrak” software.

2.6 MECHANICAL LOCKS AND LATCHING DEVICES

A. Mortise Locksets, Grade 1 (Heavy Duty): ANSI/BHMA A156.13, Series 1000, Operational Grade 1 certified mortise locksets furnished in the functions as specified in the Hardware Sets. Locksets to be manufactured with a corrosion resistant, stamped 12 gauge minimum formed steel case and be field-reversible for handing without disassembly of the lock body. Lockset trim (including knobs, levers, escutcheons, roses) to be the product of a single manufacturer. Furnish with standard 2 3/4" backset, 3/4" throw anti-friction stainless steel latchbolt, and a full 1" throw stainless steel bolt for deadbolt functions.

1. Acceptable Manufacturers:

    a. Best Access (BE) – 45H Series.
    b. Sargent Manufacturing (SA) – 8200 Series.
    c. Schlage (SC) – L9000 Series.

2.7 ELECTROMECHANICAL LOCKING DEVICES

A. Electromechanical Mortise Locksets, Grade 1 (Heavy Duty): Subject to same compliance standards and requirements as mechanical mortise locksets, electrified locksets to be of type and design as specified below.
1. Electrified Lock Options: Where indicated in the Hardware Sets, provide electrified options including: outside door lock/unlock trim control, latchbolt and lock/unlock status monitoring, and request-to-exit signaling. Unless otherwise indicated, provide electrified locksets standard as fail secure.
2. Acceptable Manufacturers:

    a. Best Access (BE) – 45HW Series.
    b. Sargent Manufacturing (SA) – 8200 Series.
    c. Schlage (SC) – LM9000 Series.

2.8 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.

B. Standards: Comply with the following:

1. Strikes for Mortise Locks and Latches: BHMA A156.13.

2.9 ELECTRIC STRIKES

A. Standard Electric Strikes: Heavy duty, cylindrical and mortise lock electric strikes conforming to ANSI/BHMA A156.31, Grade 1, UL listed for both Burglary Resistance and for use on fire rated door assemblies. Stainless steel construction with dual interlocking plunger design tested to exceed 1500 lbs. of static strength and 350 ft-lbs. of dynamic strength. Strikes tested for a minimum 1 million operating cycles. Provide strikes with 12 or 24 VDC capability and supplied standard as fail-secure unless otherwise specified. Option available for latchbolt and latchbolt strike monitoring indicating both the position of the latchbolt and locked condition of the strike.

1. Acceptable Manufacturers:

    a. Dorma (DM)
    b. Folger Adam EDC (FO).
    c. HES (HE).
    d. Trine (TR)
    e. Von Duprin (VO).

B. Provide electric strikes with in-line power controller and surge suppressor by the same manufacturer as the strike with the combined products having a five year warranty.

2.10 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. Where exit devices are required on fire rated doors, provide devices complying with NFPA 80 and with UL labeling indicating "Fire Exit Hardware". Provide devices with the proper fasteners for installation as tested and listed by UL. Consult manufacturer’s catalog and template book for specific requirements.

    a. Fire Exit Removable Mullions: Provide keyed removable mullions for use with fire exit devices complying with NFPA 80 that are listed and labeled by a testing and inspecting agency acceptable to authorities having jurisdiction, for fire and panic protection, based on testing according to UL 305 and NFPA 252. Mullions to be used only with exit devices for which they have been tested.

3. 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.

4. Flush End Caps: Provide heavy weight impact resistant flush end caps made of architectural metal in the same finish as the devices as in the Hardware Sets. Plastic end caps will not be acceptable.

5. Lever Operating Trim: Where exit devices require lever trim, furnish manufacturer's heavy duty trim with cold forged escutcheons, beveled edges, and four 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. Provided free-wheeling type trim where indicated.
    b. Where function of exit device requires a cylinder, provide an interchangeable core type keyed cylinder (Rim or Mortise) as specified in Hardware Sets.

6. Vertical Rod Exit Devices: Provide and install interior surface and concealed vertical rod exit devices as Less Bottom Rod (LBR) unless otherwise indicated.

7. Narrow Stile Applications: At doors constructed with narrow stiles, or as specified in Hardware Sets, provide devices designed for maximum 2” wide stiles.

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

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

10. 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. Mounting rails to be formed from smooth stainless steel, brass or bronze architectural materials no less than 0.072" thick, with push rails a minimum of 0.062" thickness. Painted or aluminum metal rails are not acceptable. Exit device latch to be investment cast stainless steel, pullman type, with deadlock feature.

1. Acceptable Manufacturers:

    a. Precision (PH) - Apex Series
    b. Von Duprin (VD) - 99 Series.
    c. Sargent (SA) – 80 Series

2.11 ELECTROMECHANICAL CONVENTIONAL EXIT DEVICES

A. Electrified Conventional Push Rail Devices (Heavy Duty): Subject to same compliance standards and requirements as mechanical exit devices, electrified devices to be of type and design as specified below.

1. Acceptable Manufacturers:

    a. Precision (PH) - Apex Series .
    b. Von Duprin (VD) - 99 Series.
    c. Sargent (SA) – 80 Series

2.12 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 and UBC 7-2 for Positive Pressure Fire Test and be U.L. listed for use of fire rated doors.

3. Cycle Testing: Provide closers which have surpassed 10 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.

    a. Where closers are indicated to have mechanical dead-stop, provide heavy duty arms and brackets with an integral positive stop.
    b. Where closers are indicated to have mechanical hold open, provide heavy duty units with an additional built-in mechanical holder assembly designed to hold open against normal wind and traffic conditions. Holder to be manually selectable to on-off position.
    c. Where closers are indicated to have a cushion-type stop, provide heavy duty arms and brackets with spring stop mechanism to cushion door when opened to maximum degree.
    d. Closers shall not be installed on exterior or corridor side of doors; where possible install closers on door for optimum aesthetics. Provide drop plates or other accessories as required for proper mounting.

6. Closer Covers: Provide metal closer covers for detention area, finished to match other hardware on the project.

7. Closer Covers: Provide PVC free closer covers with a painted finish to match other hardware on the project.

8. Closer Accessories: Provide door closer accessories including custom templates, special mounting brackets, spacers and drop plates, and through-bolt or security type fasteners as specified in the door Hardware Sets.

9. For doors with integral stop, provide separate concealed overhead stop, if door closer manufacturer doesn’t offer integral stop with the door closer.

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. Best (BE) – HD8000 Series.
b. LCN Closers (LC) - 4040XP Series.
c. Sargent Manufacturing (SA) - 351 Series.

C. Door Closers, Overhead Concealed (Narrow Profile): ANSI/BHMA 156.4 compliant door closers designed for narrow profile aluminum frames and doors. Closers to have fully concealed body in the frame head and track assembly in door either offset or center hung applications, with separate and independent valves for closing speed and backcheck adjustments. Narrow profile overhead concealed closers require a maximum 2-inch frame head for mounting.

1. Acceptable Manufacturers:

a. LCN Closers (LC) - 2030 Series.
b. Rixson Door Controls (RF) - 700/0700 Series.

2.13 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. Metal Protection Plates: ANSI/BHMA A156.6 certified metal protection plates (kick, armor, or mop), beveled on four edges (B4E), fabricated from the following.

a. Stainless Steel: 050-inch thick, with countersunk screw holes (CSK).

4. Fasteners: Provide manufacturer's designated fastener type as specified in the Hardware Sets.

5. Acceptable Manufacturers:

a. Hager (HA).

b. Hiawatha, Inc. (HI).
c. Rockwood Manufacturing (RO).
d. Trimco (TR).

2.14 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. Hager (HA).
b. Hiawatha, Inc. (HI).
c. Rockwood Manufacturing (RO).
d. Trimco (TR).

C. Overhead Door Stops and Holders: ANSI/BHMA A156.8, Grade 1 certified overhead stops and holders to be surface or concealed types as indicated in Hardware Sets. Track, slide, arm and jamb bracket to be constructed of extruded bronze and shock absorber spring of heavy tempered steel. Provide non-handed design with mounting brackets as required for proper operation and function.

1. Acceptable Manufacturers:

a. Dorma (DM).
b. Glynn-Johnson (GJ).
c. Rixson Door Controls (RF).
d. Sargent Manufacturing (SA).

2.15 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. Smoke Labeled Gasketing: Assemblies complying with NFPA 105 that are listed and labeled by a testing and inspecting agency acceptable to authorities having jurisdiction, for smoke control ratings indicated, based on testing according to UL 1784.

1. Provide smoke labeled perimeter gasketing at all smoke labeled openings.

C. Fire Labeled Gasketing: Assemblies complying with NFPA 80 that are listed and labeled by a testing and inspecting agency acceptable to authorities having jurisdiction, for fire ratings indicated, based on testing according to UL-10C.

1. Provide intumescent seals as indicated to meet UL10C Standard for Positive Pressure Fire Tests of Door Assemblies, and UBC 7-2, Fire Tests of Door Assemblies.

D. Sound-Rated Gasketing: Assemblies that are listed and labeled by a testing and inspecting agency, for sound ratings indicated, based on testing according to ASTM E 1408.

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

F. Acceptable Manufacturers:

1. Hager (HA).
2. National Guard Products (NA).
3. Pemko Manufacturing (PE).
4. Reese Enterprises, Inc. (RS).
5. Zero International (ZE).

2.16 ELECTRONIC ACCESSORIES

A. Key Switches: Key switches furnished standard with stainless steel single gang face plate with a 12/24VDC bi-color LED indicator. Integral backing bracket permits integration with any 1 1/4" or 1 1/2" mortise type cylinder. Key switches available as momentary or maintained action and in narrow face plate options.

1. Acceptable Manufacturers:

a. Security Door Controls (SD) - 800 Series.
b. Securitron (SU) - MK Series.

B. Door Position Switches: Door position magnetic reed contact switches specifically designed for use in commercial door applications. On recessed models the contact and magnetic housing snap-lock into a 1" diameter hole. Surface mounted models include wide gap distance design complete with armored flex cabling. Provide SPDT, N/O switches with optional Rare Earth Magnet installation on steel doors with flush top channels.

1. Acceptable Manufacturers:

a. Sargent Manufacturing (SA) – 3280 Series.
b. Securitron (SU) - DPS Series.

C. Power Supplies: Provide Nationally Recognized Testing Laboratory Listed 12VDC or 24VDC (field selectable) filtered and regulated power supplies. Include battery backup option with integral battery charging capability in addition to operating the DC load in event of line voltage failure. Provide the least number of units, at the appropriate amperage level, sufficient to exceed the required total draw for the specified electrified hardware and access control equipment.

1. Acceptable Manufacturers:

    a. Dorma (DM) – PS Series.
    b. Sargent Manufacturing (SA) – 3500 Series.
    c. Securitron (SU) - BPS Series.
    d. Von Duprin (VO) - PS.

2.17 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.

2.18 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.

2. Pre-install Hardware:
   a. Finish hardware must be pre-installed (at the door suppliers facility) on doors before shipment to jobsite. This includes hinges, pivots, locksets, exit devices, surface closers, overhead stops, flush bolts, push/pulls, and kick plates. Electrical hardware to be connected to electrical hinge by a quick connect wire through door.
   b. Install hardware to fit and function properly with optimum alignment and function.
   c. Test installed hardware before shipment to jobsite. This includes electrical hardware to confirm that the electrical components are operating correctly (bench tested).
   d. Replace hardware that is not functioning correctly before shipping.
   e. Attach all loose (corresponding) door hardware to the door - shrink wrapped secure.

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.
5. Mount overlap astragals to protect the latchbolt from the locked side. For inswing doors, mount the astragal to the inactive door leaf. For outswing doors, mount the astragal to the active door leaf.
6. For outswing exterior doors with parallel arm door closer mount, install head weather strip first, before mounting the door closer. Door closer soffit shoe will mount to the head weather strip and not the frame. This will move the door closer down slightly.
7. For push pull bar set, mount horizontal push bar at 42 inches above the floor. Mount top of pull to common end of the push bar.

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. and 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 SCHEDULE

A. The hardware sets represent the design intent and direction of the owner and architect. They are a guideline only and should not be considered a detailed hardware schedule. Discrepancies, conflicting hardware and missing items should 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 and functionality.

B. Reference hardware set assignments at the end of this schedule

C. Manufacturer's Abbreviations:

1. BA – BEA Inc
2. BE – Best Locking Systems
3. BO – Bommer
4. DM – Dorma
5. DE - DETEK
6. HE - HES
7. ID – Idec
8. MC – McKinney Products
9. NA – National Guard Products
10. PE – Pemko
11. PH – Precision
12. RF – Rixson
13. RO – Rockwood
14. RU – Corbin Russwin
15. SA – Sargent
16. SCE – Schlage Electronics
17. SN – Securitron
18. TR – Trimco

Set: 01
Door: 101A
Description: Exterior aluminum pair of doors with electrified exit devices and automatic operator.

2	Pivot Set	OPJ350 3/4" offset	626	DM
2	Side Pivot	75220	626	DM
1	Keyed Removable Mullion	KR822	689	PH
1	Exit Device Rim (nightlatch less pull, electrified)	TS MLR 2403	630	PH
1	Exit Device Rim (exit only, electrified)	TS MLR 2401	630	PH
1	***Mortise cylinder***	***63-44 with construction core***	***626***	***SA***
1	***Rim cylinder***	***63-44 with construction core***	***626***	***SA***
2	Interchangeable Cylinder Core	DG1 LF1C Keyway	626	SA
2	Offset Pull (45 degree, 12" center to center)	BF168 12 mounting	US32D	RO
1	Automatic Operator	ED900T SW, provided by section 087113.	689	DM
1	Surface Door Closer (top jamb)	8916 AF89/AF89J FCM BP89	689	DM
2	Concealed Overhead Stop	#6 series stop	630	RF
2	Door Position Switch	DPS-M-GY		SN
2	Power Transfer	EPT-12C		PH
1	Power Supply	RPSMLR2BB		PH
1	Card Reader	By card reader supplier		
1	Jamb Push Plate 1-1/2 x 4-3/4"Actuator	10PBJ1, provided by section 087113.	32D	BA
1	Vestibule Dual Push Plate Switch	10PBDGP1, provided by section 087113.	32D	BA
2	Vestibule Switch Flush Back Box	10BOX475SQFM, provided by section 087113.	BLK	BA
1	Safety Sensor	SS II (approach side mounted), provided by section 087113.	BLK	BA
1	Rain drip	16A TEK		NA
1	Threshold	425 1/4-20 Combo MS/Anchor	MIL	NA
1	Weatherstripping	By aluminum door supplier		
2	Door Sweep	200NA TEK		NA

Verify automatic operator track screws/bolts do not conflict with concealed overhead stop. Provide adaptor plate finished if they do conflict.
Operation, day mode – turn on the automatic operator and electrically dog down the exit devices (making the door push pull). Card reader will set the day mode and will enable outside push plate.
Night mode turn off the operator and undog the exit devices. Valid Card read will enable outside push plate and release the electric latch retraction.
Automatic operator will require 120VAC.

Set: 02
Door: 101B
Description: Vestibule aluminum pair of doors with push pull bar set and automatic operator

2	Pivot Set	OPJ350 3/4" offset	626	DM
2	Side Pivot	75220	626	DM
2	Push Pull Bar Set (45 degree pull, 12" center to center)	47 push bar with BF168 pull type T1 mounting	US32D	RO
1	Automatic Operator	ED900J SW, provided by section 087113.	689	DM
1	Surface Door Closer (top jamb)	8916 AF89/AF89J FCM BP89	689	DM
2	Concealed Overhead Stop	#6 series stop	630	RF
1	Jamb Push Plate 1-1/2 x 4-3/4"Actuator	10PBJ1, provided by section 087113.	32D	BA
1	Vestibule Switch Flush Back Box	10BOX475SQFM, provided by section 087113.	BLK	BA
1	Safety Sensor	SS II (approach side mounted), provided by section 087113.	BLK	BEA
	Silencers	By aluminum door supplier		

Automatic operator will require 120VAC.

Set: 03
Door: 155A
Description: Exterior aluminum pair of doors with electric exit device (nightlatch trim) and automatic operator.

2	Pivot Set	OPJ350 3/4" offset	626	DM
2	Side Pivot	75220	626	DM
1	Keyed Removable Mullion	KR822	689	PH
1	Exit Device Rim (nightlatch less pull, electrified)	TS MLR 2403	630	PH
1	Exit Device Rim (exit only, exit switch)	TS 2401	630	PH
1	***Mortise cylinder***	***63-44 with construction core***	***626***	***SA***
1	***Rim cylinder***	***63-44 with construction core***	***626***	***SA***
2	Interchangeable Cylinder Core	DG1 LF1C Keyway	626	SA
2	Offset Pull (45 degree, 12" center to center)	BF168 12 mounting	US32D	RO
1	Automatic Operator	ED900J SW, provided by section 087113.	689	DM
1	Surface Door Closer (top jamb)	8916 AF89/AF89J FCM BP89	689	DM
2	Concealed Overhead Stop	#6 series stop	630	RF
2	Door Position Switch	DPS-M-GY		SN
2	Power Transfer	EPT-12C		PH
1	Power Supply	RPSMLR2BB		PH
1	Card Reader	By card reader supplier		
1	Jamb Push Plate 1-1/2 x 4-3/4"Actuator	10PBJ1, provided by section 087113.	32D	BA
1	Vestibule Dual Push Plate Switch	10PBDGP1, provided by section 087113.	32D	BA
2	Vestibule Switch Flush Back Box	10BOX475SQFM, provided by section 087113.	BLK	BA
1	Safety Sensor	SS II (approach side mounted), provided by section 087113.	BLK	BA
1	Rain drip	16A TEK		NA
1	Threshold	425 1/4-20 Combo MS/Anchor	MIL	NA
1	Weatherstripping	By aluminum door supplier		
2	Door Sweep	200NA TEK		NA

Operation - Door always secure on exterior.
Card reader when activated will enable outside push plate and retract the latch bolt. Door 155B will also sequence open 155A.
Free egress at all times.
Automatic operator will require 120VAC.

Set: 04
Door: 155B
Description: Vestibule aluminum pair of doors with push pull bar set and automatic operator

2	Pivot Set	OPJ350 3/4" offset	626	DM
2	Side Pivot	75220	626	DM
2	Push Pull Bar Set (45 degree pull, 12" center to center)	47 push bar with BF168 pull type T1 mounting	US32D	RO
1	Automatic Operator	ED900J SW, provided by section 087113.	689	DM
1	Surface Door Closer (top jamb)	8916 AF89/AF89J FCM BP89	689	DM
2	Concealed Overhead Stop	#6 series stop	630	RF
2	Door Position Switch	DPS-M-GY		SN
1	Jamb Push Plate 1-1/2 x 4-3/4"Actuator	10PBJ1, provided by section 087113.	32D	BA
1	Vestibule Switch Flush Back Box	10BOX475SQFM, provided by section 087113.	BLK	BA
1	Sequencer module	10BR3, provided by section 087113.		BA
1	Safety Sensor	SS II (approach side mounted), provided by section 087113.	BLK	BA
	Silencers	By aluminum door supplier		

Operation - Free egress at all times.
Door to sequence open 155A 3 to 4 seconds after 155B begins to open.
Automatic operator will require 120VAC.

Set: 05
Door: 130A, ~~137~~, 156A
Description: Exterior door with Panic Hardware, pull trim with cylinder.

1	Continuous Hinge	CFM XX HD1 PT	CLR	PE
1	Exit Device rim (nightlatch, electrified)	TS MLR 2103 1703A	630	PH
1	***Rim cylinder***	***63-44 with construction core***	***626***	***SA***
1	Interchangeable Cylinder Core	DG1 LF1C Keyway	626	*SA*
1	Surface Door Closer (parallel with stop arm)	8916 DS	689	DM
1	Kick plate	K0050 10" high B4E CSK	US32D	TR
1	Door position switch	DPS-M-GY		SN
1	Power Transfer	EPT-12C		PH
1	Power Supply	RPSMLR2BB		PH
1	Card Reader	By card reader supplier		
1	Rain drip	16A TEK		NA
1	Threshold	425 1/4-20 Combo MS/Anchor	MIL	NA
1	Head Weather Strip	700NA TEK		NA
1	Strike Jamb Weather Strip	700NA TEK		NA
1	Hinge Jamb weather strip	135NA TEK		NA
1	Door Sweep	200NA TEK		NA

Install strike jamb weather strip before installing exit device. Install head weather strip before installing the door closer.
Card reader will retract latchbolt.
Free egress at all times.

Set: 06
Doors: 148B
Description: Exterior hollow metal door with asylum lockset.

3	Hinges (hvy wt)	T4A3386 NRP	26D	MC
1	Lockset (asylum F30)	45H 7W 15H S1	626	BE
2	Interchangeable Cylinder Core	DG1 LF1C Keyway	626	SA
2	***Mortise cylinder***	***63-44 with construction core***	***626***	***SA***
1	Surface Door Closer (parallel with stop arm)	8916 DS FMC	689	DM
1	Kick Plate	K0050 10” high B4E CSK	US32D	TR
1	Latch Protector	5001	US32D	TR
1	Door Position Switch	DPS-M-GY		SN
1	Rain drip	16A TEK		NA
1	Threshold	425 1/4-20 Combo MS/Anchor	MIL	NA
1	Head Weather Strip	700NA TEK		NA
2	Jamb Weather Strip	135NA TEK		NA
1	Door Sweep	200NA TEK		NA

Install head weather strip before installing the door closer.
All screws are to be security type screws.
All hardware to be for security type door.
Egress with key.

Set: 07
Doors: 149C
Description: Exterior hollow metal door with asylum lockset.

3	Hinges (hvy wt)	T4A3386 NRP	26D	MC
1	Electric Lockset (Fail Safe)	45HW 7WEL 15H S1 ***LC***	626	BE
2	Interchangeable Cylinder Core	DG1 LF1C Keyway	626	*SA*
2	***Mortise cylinder***	***63-44 with construction core***	***626***	***SA***
1	Surface Door Closer (parallel with stop arm)	8916 DS FMC	689	DM
1	Kick Plate	K0050 10” high B4E CSK	US32D	TR
1	Latch Protector	5001	US32D	TR
1	Power Transfer	EPT-12C		PH
1	Power Supply	PS610RF		DM
2	Card Reader	By card reader supplier		
1	Door Position Switch	DPS-M-GY		SN
1	Rain drip	16A TEK		NA
1	Threshold	425 1/4-20 Combo MS/Anchor	MIL	NA
1	Head Weather Strip	700NA TEK		NA
2	Jamb Weather Strip	135NA TEK		NA
1	Door Sweep	200NA TEK		NA

Install head weather strip before installing the door closer.
All screws are to be security type screws.
All hardware to be for security type door.
Egress by key or card reader unlock (both sides).
Fail safe lockset, will unlock with lose of power.

Set: 08
Door: 148A
Description: Smoke door with electric lockset.

3	Hinges (std wt)	TA2714 NRP	26D	MC
1	Electric Lockset (Fail Secure)	45HW 7WEU 15H S1	626	BE
2	***Mortise cylinder***	***63-44 with construction core***	***626***	***SA***
2	Interchangeable Cylinder Core	DG1 LF1C Keyway	626	*SA*
1	Surface Door Closer (parallel with stop arm)	8916 DS	689	DM
1	Kick Plate	K0050 10” high B4E CSK	US32D	TR
1	Power Transfer	EPT-12C		PH
1	Power Supply	PS610RF		DM
2	Card Reader	By card reader supplier		
1	Set of Smoke Seal	5020B (head and jambs)	BRN	NA

All screws are to be security type screws.
All hardware to be for security type door.

Set: 09
Door 156B
Description: Door with exit device (lever trim), delayed egress.

3	Hinges (hvy wt)	T4A3786	26D	DM
1	Exit Device Rim (nightlatch less pull, electrified delayed egress)	***DE 2108 V4908A 30 second***	630	PH
1	***Mortise cylinder***	***63-44 with const. core***	***626***	***SA***
1	***Rim cylinder***	***63-44 with const core***	***626***	***SA***
2	Interchangeable Cylinder Core	DG1 LF1C Keyway	626	SA
1	Surface Door Closer (parallel arm)	8916 SPA	689	DM
1	Wall Stop	1270CX	US26D	TR
1	Card Reader	By card reader supplier		
1	Power Transfer	EPT-12C		PH
1	Power Supply	PS161-6		PH
	Silencers	By aluminum door supplier		

Delayed egress exit device. Depressing exit device push pad, sounds alarm, after ***30 seconds*** the exit device will release. Reset alarm at the exit device via the mechanism case key cylinder. Loss of power or fire alarm activation will cause device to release immediately.
Card reader located on push side, to release the exit device for exiting.
Card reader on pull side will release electric lever for ingress.
When lever is unlocked, free ingress with the lever trim.
Delayed egress only affects the exit device touchbar.
System meets UL294

Set: 10
Door 162
Description: Wide stile aluminum door with passage latchset.

1	Pivot Set	OPJ350 3/4” offset	626	DM
1	Side Pivot	75220	626	DM
1	Latchset (passage F01)	45H 0N 15H S1	626	BE
1	Wall Stop	1270CX	US26D	TR
	Silencers	By aluminum door supplier		

Set: 11-NOT USED

Set: 12
Doors 121A, 147A
Description: Pair of doors with ***concealed*** vertical rod panic hardware, lever trim, electrified for use with card reader.

6	Hinges (hvy wt)	T4A3786 NRP	26D	MC
2	Exit Device Concealed Vertical Rod (exit only)	MLR TS 2701 CD LBR	630	PH
2	Straight Architectural Pull 18”	AP421 E 18”	US32D	TR
2	***Mortise cylinder***	***63-44 with const. core***	***626***	***SA***
2	Interchangeable Cylinder Core	DG1 LF1C Keyway	626	*SA*
2	Surface Door Closer (parallel with stop arm)	8916 DS	689	DM
2	Kick Plate	K0050 10” high B4E CSK	US32D	TR
2	Silencers	1229A		TR

Free egress at all times.

Set: 13
Doors: ~~***121C***~~, 147C, 147D
Description: Panic hardware, lever trim

3	Hinges (hvy wt)	T4A3786	26D	MC
1	Exit Device (lever)	2108 V4908A	630	PH
1	***Rim cylinder***	***63-44 with const core***	***626***	***SA***
1	Interchangeable Cylinder Core	DG1 LF1C Keyway	626	*SA*
1	Surface Door Closer (regular arm)	8916 AF89	689	DM
1	Kick Plate	K0050 10” high B4E CSK	US32D	TR
1	Wall Stop	1270CX	US26D	TR
3	Silencers	1229A		TR

Set: 14 -NOT USED

Set: 15
Door: 121B
Description: Panic hardware (delayed egress), lever trim

3	Hinges (hvy wt)	T4A3786	26D	MC
1	Exit Device (lever, electrified delayed egress)	***DE E2108 V4908A 30 sec.***	630	PH
1	***Mortise cylinder***	***63-44 with const. core***	***626***	***SA***
1	***Rim cylinder***	***63-44 with const core***	***626***	***SA***
1	Interchangeable Cylinder Core	DG1 LF1C Keyway	626	*SA*
1	Surface Door Closer (regular arm)	8916 AF89	689	DM
1	Kick Plate	K0050 10” high B4E CSK	US32D	TR
1	Wall Stop	1270CX	US26D	TR
1	Power Transfer	EPT-12C		PH
1	Power Supply	PS161-6		PH
1	Card Reader	By card reader supplier		
3	Silencers	1229A		TR

Delayed egress exit device. Depressing exit device push pad, sounds alarm, after ***30 seconds*** the exit device will release. Reset alarm at the exit device via the mechanism case key cylinder. Loss of power or fire alarm activation will cause device to release immediately.
Card reader located on push side, to release the exit device for exiting.
Card reader on pull side will release electric lever for ingress.
When lever is unlocked, free ingress with the lever trim.
Delayed egress only affects the exit device touchbar.
System meets UL294

Set: 16
Doors: 135, 136
Description: Restroom with push and pull plates.

3	Hinges (std wt)	TA2714	26D	MC
1	Push Plate	1001-9 6” x 16”	US32D	TR
1	Pull Plate	1014-3B 4” x 16”	US32D	TR
1	Surface Door Closer (regular arm)	8916 AF89	689	DM
1	Kick Plate	K0050 10” high B4E CSK	US32D	TR
1	Mop Plate	KM050 4” high B4E CSK	US32D	TR
1	Wall Stop	1270CX	US26D	TR
3	Silencers	1229A		TR

Counter sink pull through bolts under the push plate.

Set: 17
Door: 159, 160
Description: Restroom with push and pull plates.

3	Hinges (std wt)	TA2714	26D	MC
1	Push Plate	1001-9 6" x 16"	US32D	TR
1	Pull Plate	1014-3B 4" x 16"	US32D	TR
1	Surface Door Closer (regular with stop arm)	8916 IS	689	DM
1	Kick Plate	K0050 10" high B4E CSK	US32D	TR
1	Mop Plate	KM050 4" high B4E CSK	US32D	TR
3	Silencers	1229A		TR

Counter sink pull through bolts under the push plate.
For acceptable door closer manufacturers that don't offer a stop arm for pull side mount, provide concealed overhead stop in addition to the door closer.

Set: 18
Door: 128, 140, 143
Description: Passage set

3	Hinges (std wt)	TA2714	26D	MC
1	Latchset (passage F01)	45H 0N 15H S1	626	BE
1	Wall Stop	1270CX	US26D	TR
3	Silencers	1229A		TR

Set: 19 – NOT USED

Set: 20
Doors: 126, 133, 161, ***166***
Description: Privacy set.

3	Hinges (std wt)	TA2714	26D	MC
1	Latchset (privacy F19 with indicator)	45H 0L VIN 15H S1	626	BE
1	Surface Door Closer (regular arm)	8916 AF89	689	DM
1	Kick Plate	K0050 10" high B4E CSK	US32D	TR
1	Mop Plate	KM050 4" high B4E CSK	US32D	TR
1	Wall Stop	1270CX	US26D	TR
3	Silencers	1229A		TR

Set: 21
Door: 157
Description: Classroom lockset.

3	Hinges (std wt)	TA2714	26D	MC
1	Lockset (classroom F05)	45H 7R 15H S1	626	BE
1	***Mortise cylinder***	***63-44 with const. core***	***626***	***SA***
1	Interchangeable Cylinder Core	DG1 LF1C Keyway	626	*SA*
1	Wall Stop	1270CX	US26D	TR
3	Silencers	1229A		TR

Set: 22
Doors: 106, 107, 108, 109, 110, 111, 113, 114, 115, 118, 120, 124, 125, 131, 132, 134, 139, 141, 142, 144, 145, 146, 153, 165
Description: Office lockset.

3	Hinges (std wt)	TA2714	26D	MC
1	Lockset (office F04)	45H 7AT 15H S1	626	BE
1	***Mortise cylinder***	***63-44 with const. core***	***626***	***SA***
1	Interchangeable Cylinder Core	DG1 LF1C Keyway	626	*SA*
1	Wall Stop	1270CX	US26D	TR
3	Silencers	1229A		TR

Set: 23
Doors: 117, 119, 158
Description: Storeroom lockset.

3	Hinges (std wt)	TA2714	26D	MC
1	Lockset (storeroom F07)	45H 7D 15H S1	626	BE
1	***Mortise cylinder***	***63-44 with const. core***	***626***	***SA***
1	Interchangeable Cylinder Core	DG1 LF1C Keyway	626	*SA*
1	Wall Stop	1270CX	US26D	TR
3	Silencers	1229A		TR

Set: 24
Door: 149B
Description: Electric lockset locked both sides for use with (2) card readers

3	Hinges (hvy wt)	T4A3386 NRP	26D	MC
1	Electric Lockset (both levers locked (fail secure))	45HW 7WEU 15H S1 ***LC***	626	BE
2	***Mortise cylinder***	***63-44 with const. core***	***626***	***SA***
2	Interchangeable Cylinder Core	DG1 LF1C Keyway	626	*SA*
1	Surface Door Closer (parallel with stop arm)	8916 DS	689	DM
1	Kick Plate	K0050 10” high B4E CSK	US32D	TR
1	Wall Stop	1270CX	US26D	TR
1	Door Position Switch	DPS-M-GY		SN
1	Power Transfer	EPT-12C		PH
1	Power Supply	***DKPS-2A***		DM
2	Card Reader	By card reader supplier		
3	Silencers	1229A		TR

All screws are to be security type screws.
All hardware to be for security type door.
Egress by key or card reader unlock.

Set: 25
Doors: ~~***102A, 102B***~~, 105, 121D, 130B
Description: Electric lockset.

3	Hinges (hvy wt)	T4A3386 NRP	26D	MC
1	Electric Lockset (outside lever locked (fail secure))	45HW 7DEU 15H RQE S1	626	BE
1	***Mortise cylinder***	***63-44 with const. core***	***626***	***SA***
1	Interchangeable Cylinder Core	DG1 LF1C Keyway	626	*SA*
1	Surface Door Closer (parallel arm)	8916 AF89P	689	DM
1	***Surface Door Closer (regular arm)***	***8916 AF89 (Door 147B)***	***689***	***DM***
1	Kick Plate	K0050 10” high B4E CSK	US32D	TR
1	Wall Stop	1270CX	US26D	TR
1	Door Position Switch	DPS-M-GY		SN
1	Power Transfer	EPT-12C		PH
1	Power Supply	PS610RF		DM
1	Card Reader	By card reader supplier		
3	Silencers	1229A		TR

Free egress always via the inside lever.
121D and 147B are not egress doors. Locked lever courtroom side.

Set: 26
Doors: 150, 151, 152, 154
Description: Asylum lockset.

3	Hinges (hvy wt)	T4A3386 NRP	26D	MC
1	***Mortise cylinder***	***63-44 with const. core***	***626***	***SA***
1	Lockset (asylum F30)	45H 7W 15H S1	626	BE
2	Interchangeable Cylinder Core	DG1 LF1C Keyway	626	*SA*
1	Concealed Door Closer	RTS88 (package RTS27)	689	DM
3	Silencers	1229A		TR

All screws are to be security type screws. All hardware to be for security type door.

Set: 27
Doors: 121E, 147E
Description: Double Acting half height doors

2	Sets of Spring Pivots	7122	26D	BO

Set: 28
Doors: 129
Description: Electric lockset.

3	Hinges (hvy wt)	T4A3386 NRP	26D	MC
1	Electric Lockset (outside lever locked (fail secure))	45HW 7DEU 15H RQE S1	626	BE
1	***Mortise cylinder***	***63-44 with const. core***	***626***	***SA***
1	Interchangeable Cylinder Core	DG1 LF1C Keyway	626	*SA*
1	Surface Door Closer (parallel with stop arm)	8916 DS	689	DM
1	Kick Plate	K0050 10” high B4E CSK	US32D	TR
1	Door Position Switch	DPS-M-GY		SN
1	Power Transfer	EPT-12C		PH
1	Power Supply	***DKPS-2A***		DM
1	Card Reader	By card reader supplier		
3	Silencers	1229A		TR

Free egress always via the inside lever.

Set: 29
Doors: Egress Gate at Secure Parking lot
Description: Exterior grade panic hardware

1	Exit Device	V4008D2W W	693	DE
1	Strike Latch Receiver Bracket	GTSTKBKT	BLK	DE
1	Gate latch protector	GTPLFRD	BLK	
1	Spacer for narrow lever	08GSN	BLK	DE
1	Mortise Cylinder	***63-44 with const. core***	***626***	***SA***
1	Interchangeable Core	DG1 LF1C Keyway	626	SA
1	Door Stop	1209-3	630	TR

NOTE: Hinges by gate supplier.
NOTE: Back plate by gate supplier Back plate height not to exceed exit device height.
Free egress from secure parking lot side at all times. Entrance via keyed lever only.

Set: 30
Door: 121C
Description: Electric lockset locked both sides for use with (2) card readers

3	***Hinges (hvy wt)***	***T4A3386 NRP***	***26D***	***MC***
1	***Electric Lockset (both levers locked (fail secure))***	***45HW 7WEU 15H S1 LC***	***626***	***BE***
2	***Mortise cylinder***	***63-44 with const. core***	***626***	***SA***
2	***Interchangeable Cylinder Core***	***DG1 -6300 permanent core***	***626***	***SA***
1	***Surface Door Closer (regular arm)***	***8916 AF89***	***689***	***DM***
1	***Kick Plate***	***K0050 10” high B4E CSK***	***US32D***	***TR***
1	***Wall Stop***	***1270CX***	***US26D***	***TR***
1	***Door Position Switch***	***DPS-M-GY***		***SN***
1	***Power Transfer***	***EPT-12C***		***PH***
1	***Power Supply***	***DKPS-2A***		***DM***
2	***Card Reader***	***By card reader supplier***		
3	***Silencers***	***1229A***		***TR***

Door is not a required exit.

Set: 31
Door: 137
Description: Exterior door with Alarmed Panic Hardware, pull trim with cylinder.

1	*Continuous Hinge*	*CFM XX HD1 PT*	*CLR*	*PE*
1	*Exit Device rim (nightlatch, alarmed exit)*	*2103 1703A ALW WH495*	*630*	*PH*
1	*Mortise cylinder*	*63-44 with const. core*	*626*	*SA*
1	*Rim cylinder*	*63-34 with const. core*	*626*	*SA*
2	*Interchangeable Cylinder Core*	*DG1 -6300 permanent core*	*626*	*SA*
1	*Surface Door Closer (parallel with stop arm)*	*8916 DS*	*689*	*DM*
1	*Kick plate*	*K0050 10" high B4E CSK*	*US32D*	*TR*
1	*Door position switch*	*DPS-M-GY*		*SN*
1	*Power Transfer*	*EPT-12C*		*PH*
1	*Power Supply*	*DKPS-2A*		*DM*
1	*Rain drip*	*16A TEK*		*NA*
1	*Threshold*	*425 1/4-20 Combo MS/Anchor*	*MIL*	*NA*
1	*Head Weather Strip*	*700NA TEK*		*NA*
1	*Strike Jamb Weather Strip*	*700NA TEK*		*NA*
1	*Hinge Jamb weather strip*	*135NA TEK*		*NA*
1	*Door Sweep*	*200NA TEK*		*NA*

Install strike jamb weather strip before installing exit device. Install head weather strip before installing the door closer.
When alarmed exit device is armed, exiting will sound horn. Horn is reset with key cylinder on exit device mechanism case.
Entrance from outside with key cylinder in pull trim will not sound the alarm.
Free egress at all times.

Set: 32
Door: 102A, 102B
Description: Electrified Exit Device, lever trim.

	Hinges (hvy wt)	*T4A3786 NRP*	*26D*	*MC*
1	*Exit Device rim (lever, electrified)*	*TS MLR 2108 V4908A*	*630*	*PH*
1	*Rim cylinder*	*63-34 with const. core*	*626*	*SA*
1	*Interchangeable Cylinder Core*	*DG1-6300 permanent core*	*626*	*SA*
1	*Surface Door Closer (parallel with stop arm)*	*8916 DS*	*689*	*DM*
1	*Kick plate*	*K0050 10" high B4E CSK*	*US32D*	*TR*
1	*Door position switch*	*DPS-M-GY*		*SN*
1	*Power Transfer*	*EPT-12C*		*PH*
1	*Power Supply*	*RPSMLR2BB*		*PH*
1	*Card Reader*	*By card reader supplier*		
3	*Silencers*	*1229A*		*TR*

Card reader will retract latchbolt.
Free egress at all times.

HARDWARE SET ASSIGNMENTS

Door	Set No.
101A	01
101B	02
102A	32
102B	32
105	25
106	22
107	22
108	22
109	22
110	22
111	22
113	22
114	22
115	22
117	23
118	22
120	22
121A	12
121B	15
121C	30
121D	25
121E	27
124	22
125	22
126	20
128	18
129	28
130A	05
130B	25
131	22
132	22
133	20
134	22
135	16
136	16

Door	Set No.
137	31
139	22
140	18
141	22
142	22
143	18
144	22
145	22
146	22
147A	12
147B	25
147C	13
147D	13
147E	27
148A	08
148B	06
149B	24
149C	07
150	26
151	26
152	26
153	22
154	26
155A	03
155B	04
156A	05
156B	09
157	21
158	23
159	17
160	17
161	20
162	10
165	22
166	20
Egress Gate	29

END OF SECTION 087100

SECTION 323119 - DECORATIVE METAL FENCES AND GATES – ADDENDUM 1

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. Section Includes:

1. Decorative metallic-coated-steel tubular picket fences.
2. Swing gates.
3. Horizontal-slide gates.
4. Gate operators, including controls.

B. Related Requirements:

1. Section 033053 "Miscellaneous Cast-in-Place Concrete" for concrete bases for gate operators, drives, and controls and post concrete fill.
2. Division 26 Sections for electrical service and connections for system disconnect switches and powered devices including, but not limited to, motor operators, controls, and limit switches.

1.3 PREINSTALLATION MEETINGS

A. Pre-installation Conference: Conduct conference at Project site.

1.4 ACTION SUBMITTALS

A. Product Data: For each type of product.

B. Shop Drawings: For fencing and gates.

1. Include plans, elevations, sections, gate locations, post spacing, and mounting attachment details, and grounding details.
2. Gate Operator: Show locations and details for installing operator components, switches, and controls. Indicate motor size, electrical characteristics, drive arrangement, mounting, and grounding provisions.
3. Wiring Diagrams: Include diagrams for power, signal, and control wiring.

C. Samples: For each fence material and for each color specified.

1. Provide Samples 12 inches in length for linear materials.

1.5 INFORMATIONAL SUBMITTALS

A. Field quality-control reports.

B. Product Test Reports: For decorative metallic-coated-steel tubular picket fences, including finish, indicating compliance with referenced standard and other specified requirements.

1.6 CLOSEOUT SUBMITTALS

A. Maintenance Data: For gate operators to include in maintenance manuals.

1.7 QUALITY ASSURANCE

A. Installer Qualifications: Fabricator of products.

B. Mockups: Build mockups to verify selections made under Sample submittals, to demonstrate aesthetic effects, and to set quality standards for fabrication and installation.

1. Include 10-foot length of fence complying with requirements.
2. Subject to compliance with requirements, approved mockups may become part of the completed Work if undisturbed at time of Substantial Completion.

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

A. Wind Loading:

1. Fence Height: 0 to 15 feet.
2. Wind Exposure Category: B.
3. Design Wind Speed: 105 mph.
4. Design Wind Pressure: See structural drawings.

B. Lightning-Protection System: Maximum grounding-resistance value of 25 ohms under normal dry conditions.

2.2 DECORATIVE METALLIC-COATED-STEEL TUBULAR PICKET FENCES

A. Decorative Metallic-Coated-Steel Tubular Picket Fences: Comply with ASTM F2408 for light-industrial (commercial) application (class) unless otherwise indicated.

1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:

a. Ameristar Fence Products; (ASSA ABLOY) Montage Plus Classic 3R – Basis-of-Design.
b. Ametco
c. Iron World Manufacturing, LLC.
d. Master Halco.
e. Virginia Railing and Gates, LLC.

B. Posts:

1. End and Corner Posts: Square tubes 2-1/2 by 2-1/2 inches formed from 0.108-inch nominal-thickness, metallic-coated steel sheet or formed from 0.105-inch nominal-thickness steel sheet and hot-dip galvanized after fabrication.
2. Posts at Swing Gate Openings: Square tubes 3 by 3 inches formed from 0.105-inch nominal-thickness steel sheet and hot-dip galvanized after fabrication.
3. Posts at Horizontal-Slide Gate Openings up to 12 Feet: Square steel tubing 4 by 4 inches with 3/16-inch wall thickness, hot-dip galvanized.
4. Guide Posts for Class 1 Horizontal-Slide Gates: Square steel tubing 3 by 3 inches with 3/16-inch wall thickness, hot-dip galvanized; installed adjacent to gate post to permit gate to slide in space between.

C. Post Caps: Formed from steel sheet and hot-dip galvanized after forming or Aluminum castings.

D. Rails: Square tubes or Double-wall channels.

1. Size: 1-1/2 by 1-1/2 inches.
2. Metal and Thickness: 0.079-inch nominal-thickness, metallic-coated steel sheet or 0.075-inch nominal-thickness, uncoated steel sheet, hot-dip galvanized after fabrication.

E. Pickets: Square tubes.

1. Extend pickets beyond top rail as indicated and press flat and trim to produce spear point shape.
2. Picket Spacing: 4 inches clear, maximum.

F. Fasteners: Manufacturer's standard corrosion-resistant, color-coated fasteners matching fence components.

G. Metallic-Coated Steel Sheet: Galvanized-steel sheet or aluminum-zinc, alloy-coated steel sheet.

H. Interior surface of tubes formed from uncoated steel sheet shall be hot-dip zinc coated same as exterior or coated with zinc-rich thermosetting coating to comply with ASTM F2408.

I. Galvanizing: For components indicated to be galvanized and for which galvanized coating is not specified in ASTM F2408, hot-dip galvanize to comply with ASTM A123/A123M. For hardware items, hot-dip galvanize to comply with ASTM A153/A153M.

J. Finish: Organic coating complying with requirements in ASTM F2408.

2.3 SWING GATES – PERSONNEL

A. Gate Configuration: Single leaf.

B. Gate Frame Height: 72 inches.

C. Gate Opening Width: As indicated.

D. Galvanized-Steel Frames and Bracing: Fabricate members from square tubes 1-1/2 by 1-1/2 inches formed from 0.108-inch nominal-thickness, metallic-coated steel sheet or formed from 0.105-inch nominal-thickness steel sheet and hot-dip galvanized after fabrication.

E. Frame Corner Construction: Welded.

F. Additional Rails: Provide as indicated, complying with requirements for fence rails.

G. Infill: Comply with requirements for adjacent fence.

H. Picket Size, Configuration, and Spacing: Comply with requirements for adjacent fence.

1. Provide expanded metal finished to match fence to prevent reaching through to operate panic bar.

I. Hardware: Provide panic bar exit device suitable for exterior application. Provide key cylinder on ingress side.

J. Spring Hinges: BHMA A156.17, Grade 1, suitable for exterior use.

1. Function: 320 - Gate spring pivot hinge. Adjustable tension.
2. Material: Malleable iron; galvanized.

K. Exit Hardware: BHMA A156.3, Grade 1, Type 1 (rim exit device), with push pad actuating bar, suitable for exterior use.

1. Function: 04 - Entrance by trim when latch bolt is released by key or set in a retracted position by key.
2. Mounting Channel: Bent-plate channel formed from 1/8-inch-thick, steel plate. Channel spans gate frame. Exit device is mounted on channel web, recessed between flanges, with flanges extending 1/8 inch beyond push pad surface.
3. Hardware shall not allow entrance from the non-secure public parking lot.

L. Finish exposed welds to comply with NOMMA Guideline 1, Finish #2 - completely sanded joint, some undercutting and pinholes okay.

M. Galvanizing: For items other than hardware that are indicated to be galvanized, hot-dip galvanize to comply with ASTM A123/A123M. For hardware items, hot-dip galvanize to comply with ASTM A153/A153M.

N. Steel Finish: Shop painted, High-performance coating over galvanizing.

2.4 SWING GATE – DUMPSTER ENCLOSURE

A. Ametco Manufacturing Corp.; 800-362-1360 or approved equal.
1. Industrial grade, “Venetian” style (Basis of Design) with louvered infill panels.
2. Other Manufacturers: Ameristar

B. Gate Configuration: Double leaf.

C. Gate Frame Height: 96 inches.

D. Gate Opening Width: As indicated.

E. Galvanized-Steel Frames and Bracing: Fabricate members from manufacturer’s standard square tubes, sized for the gate configuration specified, metallic-coated steel hot-dip galvanized after fabrication and coated with a high performance coating system.

F. Frame Corner Construction: Welded.

G. Finish: Color to be selected by the architect from standard colors available.

H. Accessories:

1. Provide manufacturer's heavy duty components including, but not limited to, caps, hinges, latches, brackets, and fasteners.
2. Provide pad-lockable connection at vertical mid-point where both gate leafs meet.
3. Provide padlockable cane bolt at the bottom of each gate.
4. Provide gate keepers for each swinging section of gate.

2.5 HORIZONTAL-SLIDE GATES

A. Gate Configuration: Double leaf.

1. Type: Cantilever slide, with internal roller assemblies.
2. Basis-of-Design: Ameristar Transport II Classic.
3. Other manufacturers: Ametco

B. Gate Frame Height: 72 inches.

C. Gate Opening Width: As indicated.

D. Galvanized-Steel Frames and Bracing: Fabricate members from square tubing.

1. Frame Members: Square tubes 1-1/2 by 1-1/2 inches (or size required for gate structure) formed from 0.108-inch nominal-thickness, metallic-coated steel sheet or formed from 0.105-inch nominal-thickness steel sheet and hot-dip galvanized after fabrication.
2. Bracing Members: Square tubes 1-1/2 by 1-1/2 inches (or size required for gate structure) formed from 0.108-inch nominal-thickness, metallic-coated steel sheet or formed from 0.105-inch nominal-thickness steel sheet and hot-dip galvanized after fabrication.

E. Frame Corner Construction:

1. Welded frame with panels assembled with bolted or riveted corner fittings.

F. Additional Rails: Provide as indicated, complying with requirements for fence rails.

G. Infill: Comply with requirements for adjacent fence.

H. Picket Size, Configuration, and Spacing: Comply with requirements for adjacent fence.

1. Screen: Provide manufacturer's standard screen to prevent reach through at gate. Finish to match fence..

I. Finish exposed welds to comply with NOMMA Guideline 1, Finish #2 - completely sanded joint, some undercutting and pinholes okay.

J. Galvanizing: For items other than hardware that are indicated to be galvanized, hot-dip galvanize to comply with ASTM A123/A123M. For hardware items, hot-dip galvanize to comply with ASTM A153/A153M.

K. Metallic-Coated-Steel Finish: High-performance coating.

2.6 GATE OPERATORS

A. Gate Operators:

1. Door King Inc., 9150 – Basis-of-Design.

B. Provide factory-assembled automatic operating system designed for gate size, type, weight, and operation frequency. Provide operation control system with characteristics suitable for Project conditions, with remote-control stations, safety devices, and weatherproof enclosures; coordinate electrical requirements with building electrical system.

1. Provide operator designed so motor may be removed without disturbing limit-switch adjustment and without affecting auxiliary emergency operator.
2. Provide operator with UL approval.
3. Provide electronic components with built-in troubleshooting diagnostic feature.
4. Provide unit designed and wired for both right-hand/left-hand opening, permitting universal installation.

C. UL Standard: Manufacturer and label gate operators to comply with UL 325.

D. Motor Characteristics: Sufficient to start, accelerate, and operate connected loads at designated speeds, within installed environment, with indicated operating sequence, and without exceeding nameplate rating or considering service factor. Comply with NEMA MG 1 and the following:

1. Voltage: 120 V.
2. Horsepower: Not less than 1/2.
3. Enclosure: Totally enclosed.
4. Duty: Continuous duty at ambient temperature of 105 deg F and at altitude of 3300 feet above sea level.
5. Service Factor: 1.0 for totally enclosed motors.
6. Phase: One.

E. Gate Operators: Concrete base mounted and as follows:

1. Mechanical Slide Gate Operators:

a. Duty: Heavy duty, commercial/industrial.
b. Gate Speed: Minimum 60 feet per minute.
c. Maximum Gate Weight: 3000 lb.
d. Frequency of Use: 25 cycles per hour.
e. Operating Type: Wheel-and-rail drive or Roller chain, with manual release.
f. Drive Type: Enclosed worm gear and chain-and-sprocket reducers, roller-chain drive.
g. Drive Type: V-belt and worm gear or chain-and-sprocket reducers, roller-chain drive.

F. Remote Controls: Electric controls separated from gate and motor and drive mechanism, with NEMA ICS 6, Type 1 or NEMA ICS 6, Type 4 enclosure for concrete base mounting, and with space for additional optional equipment. Provide the following remote-control device(s):

1. Card Reader: Functions only when authorized card is presented. Programmable, multiple-code system, permitting four different access periods; face-lighted unit fully visible at night.

a. Reader Type: Proximity.
b. Features: Limited-time usage.

c. Gate also operated from remote station within the building, Security Room 139 and Staff Room 148 near the Sallyport.

G. Vehicle Loop Detector: System includes automatic closing timer with adjustable time delay, timer cutoff switch, and loop detector designed to open and close gate, hold gate open until traffic clears, and reverse gate. System includes electronic detector with adjustable detection patterns, adjustable sensitivity and frequency settings, and panel indicator light designed to detect presence or transit of a vehicle over an embedded loop of wire and to emit a signal activating the gate operator. System includes number of loops consisting of multiple strands of wire, number of turns, loop size, and method of placement, as recommended in writing by detection system manufacturer for function indicated, at location indicated on Drawings.

H. Obstruction Detection Devices: Provide each motorized gate with automatic safety sensor(s). Activation of sensor(s) causes operator to immediately function as follows:

1. Action: Reverse gate in both opening and closing cycles, and hold until clear of obstruction.
2. Internal Sensor: Built-in torque or current monitor senses gate is obstructed.

3. Photoelectric/Infrared Sensor System: Designed to detect an obstruction in gate's path when infrared beam in the zone pattern is interrupted.

I. Limit Switches: Adjustable switches or similar devices, interlocked with motor controls and set to automatically stop gate at fully retracted and fully extended positions.

J. Emergency Release Mechanism: Quick-disconnect release of operator drive system of the following type, permitting manual operation if operator fails. Design system so control-circuit power is disconnected during manual operation.

K. Operating Features:

1. Digital Microprocessor Control: Electronic programmable means for setting, changing, and adjusting control features with capability for monitoring and auditing gate activity. Provide unit that is isolated from voltage spikes and surges.
2. System Integration: With controlling circuit board capable of accepting any type of input from external devices.
3. Master/Slave Capability: Control stations designed and wired for gate pair operation.
4. Automatic Closing Timer: With adjustable time delay before closing and timer cutoff switch.
5. Open Override Circuit: Designed to override closing commands.
6. Reversal Time Delay: Designed to protect gate system from shock load on reversal in both directions.

L. Accessories:

1. Warning Module: Visual,-light alarm sounding three to five seconds in advance of gate operation and continuing until gate stops moving; compliant with the United States Access Board's ADA-ABA Accessibility Guidelines.
2. Battery Backup System: Battery-powered drive and access-control system, independent of primary drive system.
   a. Fail-Secure: Gate cycles on battery power, then fail-safe when battery is discharged.

3. External electric-powered solenoid or magnetic lock with delay timer allowing time for lock to release before gate operates.
4. Intercom System: Accommodate intercom at card reader bollard. Intercom by other trades. Wire intercom to connect with equipment in Security Room 139 and Staff Room 148 near the Sallyport.

5. Pushbutton doorbell: Install at Intercom/Card Reader bollard. Link to remote unit in Security Room 139 and Staff Room 148 near the Sallyport.
6. Video camera interface tied into card reader/intercom/doorbell system, displaying on hardware located in Security Room 139 and Staff Room 148 near the Sallyport.
7. Instructional, Safety, and Warning Labels and Signs: Manufacturer's standard for components and features specified.
8. Equipment Bases/Pads: Precast concrete, dimensioned and reinforced according to gate operator component manufacturer's written instructions and as indicated on Drawings.
9. Control Bollard: Provide galvanized and painted steel bollard with weatherproof housing of sufficient size to accommodate a proximity card reader and intercom unit.

2.7 STEEL AND IRON

A. Plates, Shapes, and Bars: ASTM A36/A36M.

B. Bars (Pickets): Hot-rolled, carbon steel complying with ASTM A29/A29M, Grade 1010.

C. Tubing: ASTM A500/A500M, cold-formed steel tubing.

D. Bar Grating: NAAMM MBG 531.

1. Bars: Hot-rolled steel strip, ASTM A1011/A1011M, Commercial Steel, Type B.
2. Wire Rods: ASTM A510/A510M.

E. Galvanized-Steel Sheet: ASTM A653/A653M, structural quality, Grade 50, with G90 coating.

F. Aluminum-Zinc, Alloy-Coated Steel Sheet: ASTM A792/A792M, structural quality, Grade 50, with AZ60 coating.

G. Castings: Either gray or malleable iron unless otherwise indicated.

1. Gray Iron: ASTM A48/A48M, Class 30.
2. Malleable Iron: ASTM A47/A47M.

2.8 COATING MATERIALS

A. Shop Primer for Steel: Manufacturer's standard lead- and chromate-free, nonasphaltic, rust-inhibiting primer complying with MPI#79 and compatible with topcoat.

B. Epoxy Primer for Galvanized Steel: Epoxy primer recommended in writing by topcoat manufacturer.

C. Polyurethane Intermediate Coat and Topcoat: Complying with MPI #72 and compatible with undercoat.

2.9 MISCELLANEOUS MATERIALS

A. Welding Rods and Bare Electrodes: Select according to AWS specifications for metal alloy welded.

1. For aluminum, provide type and alloy as recommended by producer of metal to be welded and as required for strength and compatibility in fabricated items.

B. Concrete: Normal-weight, air-entrained, ready-mix concrete complying with requirements in Section 033000 "Cast-in-Place Concrete" with a minimum 28-day compressive strength of 3000 psi, 3-inch slump, and 1-inch maximum aggregate size.

C. Nonshrink Grout: Factory-packaged, nonstaining, noncorrosive, nongaseous grout complying with ASTM C1107/C1107M and specifically recommended by manufacturer for exterior applications.

2.10 GROUNDING MATERIALS - Omitted

2.11 METALLIC-COATED-STEEL FINISHES

A. Galvanized Finish: Clean welds, mechanical connections, and abraded areas and repair galvanizing to comply with ASTM A780/A780M.

B. Surface Preparation: Clean surfaces of oil and other contaminants. Use cleaning methods that do not leave residue. After cleaning, apply a conversion coating compatible with the organic coating to be applied over it. Clean welds, mechanical connections, and abraded areas and apply galvanizing repair paint, complying with SSPC-Paint 20, to comply with ASTM A780/A780M.

C. High-Performance Coating: Apply epoxy primer, polyurethane intermediate coat, and polyurethane topcoat to prepared surfaces. Comply with coating manufacturer's written instructions and with requirements in SSPC-PA 1, "Paint Application Specification No. 1: Shop, Field, and Maintenance Painting of Steel," for shop painting. Apply at spreading rates recommended by coating manufacturer.

1. Match approved Samples for color, texture, and coverage. Remove and refinish, or recoat work that does not comply with specified requirements.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine areas and conditions, with Installer present, for compliance with requirements for site clearing, earthwork, pavement work, construction layout, and other conditions affecting performance of the Work.

B. Do not begin installation before final grading is completed unless otherwise permitted by Architect.

C. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

A. Stake locations of fence lines, gates, and terminal posts. Do not exceed intervals of 500 feet or line of sight between stakes. Indicate locations of utilities, lawn sprinkler system, underground structures, benchmarks, and property monuments.

1. Construction layout and field engineering are specified in Section 017300 "Execution."

3.3 DECORATIVE FENCE INSTALLATION

A. Install fences according to manufacturer's written instructions.

B. Install fences by setting posts as indicated and fastening rails and infill panels to posts.

C. Post Excavation: Drill or hand-excavate holes for posts in firm, undisturbed soil. Excavate holes to a diameter of not less than 4 times post size and a depth of not less than 24 inches plus 3 inches for each foot or fraction of a foot that fence height exceeds 4 feet.

D. Post Setting: Set posts in concrete at indicated spacing into firm, undisturbed soil.

1. Verify that posts are set plumb, aligned, and at correct height and spacing, and hold in position during setting with concrete or mechanical devices.
2. Concrete Fill: Place concrete around posts and vibrate or tamp for consolidation. Protect aboveground portion of posts from concrete splatter.

    a. Concealed Concrete: Top 2 inches below grade as indicated on Drawings to allow covering with surface material. Slope top surface of concrete to drain water away from post.

3. Posts Set in Concrete: Extend post to within 6 inches of specified excavation depth, but not closer than 3 inches to bottom of concrete.
4. Space posts uniformly at 8 feet o.c.

3.4 GATE INSTALLATION

A. Install gates according to manufacturer's written instructions, level, plumb, and secure for full opening without interference. Attach hardware using tamper-resistant or concealed means. Install ground-set items in concrete for anchorage. Adjust hardware for smooth operation and lubricate where necessary.

3.5 GATE OPERATOR INSTALLATION

A. General: Install gate operators according to manufacturer's written instructions, aligned and true to fence line and grade.

B. Excavation for Support Posts and Concrete Bases: Hand-excavate holes for bases in firm, undisturbed soil to dimensions and depths and at locations as required by gate operator component manufacturer's written instructions and as indicated.

C. Concrete Bases: Cast-in-place or precast concrete, depth not less than 12 inches, dimensioned and reinforced according to gate operator component manufacturer's written instructions and as indicated on Drawings.

D. Vehicle Loop Detector System: Cut grooves in pavement and bury and seal wire loop according to manufacturer's written instructions. Connect to equipment operated by detector.

E. Comply with NFPA 70 and manufacturer's written instructions for grounding of electric-powered motors, controls, and other devices.

3.6 GROUNDING AND BONDING - Omitted

3.7 ADJUSTING

A. Gates: Adjust gates to operate smoothly, easily, and quietly, free of binding, warp, excessive deflection, distortion, nonalignment, misplacement, disruption, or malfunction, throughout entire operational range. Confirm that latches and locks engage accurately and securely without forcing or binding.

B. Automatic Gate Operators: Energize circuits to electrical equipment and devices. Adjust operators, controls, safety devices, alarms, and limit switches.

1. Operational Test: After electrical circuitry has been energized, start units to confirm proper motor rotation and unit operation.
2. Test and adjust controls, alarms, and safeties. Replace damaged and malfunctioning controls and equipment.

C. Lubricate hardware, gate operators, and other moving parts.

D. Demonstrate functionality of access systems at operable gate.

3.8 DEMONSTRATION

A. Train Owner's personnel to adjust, operate, and maintain gates.

END OF SECTION 323119

7/8/2021 8:30:55 AM

Set: 01
Door: 101A
Description: Exterior aluminum pair of doors with electrified exit devices and automatic operator.

2	Pivot Set	OPJ350 3/4" offset	626	DM
2	Side Pivot	75220	626	DM
1	Keyed Removable Mullion	KR822	689	PH
1	Exit Device Rim (nightlatch less pull, electrified)	TS MLR 2403	630	PH
1	Exit Device Rim (exit only, electrified)	TS MLR 2401	630	PH
1	***Mortise cylinder***	***63-44 with construction core***	***626***	***SA***
1	***Rim cylinder***	***63-44 with construction core***	***626***	***SA***
2	Interchangeable Cylinder Core	DG1 LF1C Keyway	626	SA
2	Offset Pull (45 degree, 12" center to center)	BF168 12 mounting	US32D	RO
1	Automatic Operator	ED900T SW, provided by section 087113.	689	DM
1	Surface Door Closer (top jamb)	8916 AF89/AF89J FCM BP89	689	DM
2	Concealed Overhead Stop	#6 series stop	630	RF
2	Door Position Switch	DPS-M-GY		SN
2	Power Transfer	EPT-12C		PH
1	Power Supply	RPSMLR2BB		PH
1	Card Reader	By card reader supplier		
1	Jamb Push Plate 1-1/2 x 4-3/4"Actuator	10PBJ1, provided by section 087113.	32D	BA
1	Vestibule Dual Push Plate Switch	10PBDGP1, provided by section 087113.	32D	BA
2	Vestibule Switch Flush Back Box	10BOX475SQFM, provided by section 087113.	BLK	BA
1	Safety Sensor	SS II (approach side mounted), provided by section 087113.	BLK	BA
1	Rain drip	16A TEK		NA
1	Threshold	425 1/4-20 Combo MS/Anchor	MIL	NA
1	Weatherstripping	By aluminum door supplier		
2	Door Sweep	200NA TEK		NA

Verify automatic operator track screws/bolts do not conflict with concealed overhead stop. Provide adaptor plate finished if they do conflict.
Operation, day mode – turn on the automatic operator and electrically dog down the exit devices (making the door push pull). Card reader will set the day mode and will enable outside push plate.
Night mode turn off the operator and undog the exit devices. Valid Card read will enable outside push plate and release the electric latch retraction.
Automatic operator will require 120VAC.

Set: 02
Door: 101B
Description: Vestibule aluminum pair of doors with push pull bar set and automatic operator

2	Pivot Set	OPJ350 3/4" offset	626	DM
2	Side Pivot	75220	626	DM
2	Push Pull Bar Set (45 degree pull, 12" center to center)	47 push bar with BF168 pull type T1 mounting	US32D	RO
1	Automatic Operator	ED900J SW, provided by section 087113.	689	DM
1	Surface Door Closer (top jamb)	8916 AF89/AF89J FCM BP89	689	DM
2	Concealed Overhead Stop	#6 series stop	630	RF
1	Jamb Push Plate 1-1/2 x 4-3/4"Actuator	10PBJ1, provided by section 087113.	32D	BA
1	Vestibule Switch Flush Back Box	10BOX475SQFM, provided by section 087113.	BLK	BA
1	Safety Sensor	SS II (approach side mounted), provided by section 087113.	BLK	BEA
	Silencers	By aluminum door supplier		

Automatic operator will require 120VAC.

Set: 03
Door: 155A
Description: Exterior aluminum pair of doors with electric exit device (nightlatch trim) and automatic operator.

2	Pivot Set	OPJ350 3/4" offset	626	DM
2	Side Pivot	75220	626	DM
1	Keyed Removable Mullion	KR822	689	PH
1	Exit Device Rim (nightlatch less pull, electrified)	TS MLR 2403	630	PH
1	Exit Device Rim (exit only, exit switch)	TS 2401	630	PH
1	***Mortise cylinder***	***63-44 with construction core***	***626***	***SA***
1	***Rim cylinder***	***63-44 with construction core***	***626***	***SA***
2	Interchangeable Cylinder Core	DG1 LF1C Keyway	626	SA
2	Offset Pull (45 degree, 12" center to center)	BF168 12 mounting	US32D	RO
1	Automatic Operator	ED900J SW, provided by section 087113.	689	DM
1	Surface Door Closer (top jamb)	8916 AF89/AF89J FCM BP89	689	DM
2	Concealed Overhead Stop	#6 series stop	630	RF
2	Door Position Switch	DPS-M-GY		SN
2	Power Transfer	EPT-12C		PH
1	Power Supply	RPSMLR2BB		PH
1	Card Reader	By card reader supplier		
1	Jamb Push Plate 1-1/2 x 4-3/4"Actuator	10PBJ1, provided by section 087113.	32D	BA
1	Vestibule Dual Push Plate Switch	10PBDGP1, provided by section 087113.	32D	BA
2	Vestibule Switch Flush Back Box	10BOX475SQFM, provided by section 087113.	BLK	BA
1	Safety Sensor	SS II (approach side mounted), provided by section 087113.	BLK	BA
1	Rain drip	16A TEK		NA
1	Threshold	425 1/4-20 Combo MS/Anchor	MIL	NA
1	Weatherstripping	By aluminum door supplier		
2	Door Sweep	200NA TEK		NA

Operation - Door always secure on exterior.
Card reader when activated will enable outside push plate and retract the latch bolt. Door 155B will also sequence open 155A.
Free egress at all times.
Automatic operator will require 120VAC.

Set: 04
Door: 155B
Description: Vestibule aluminum pair of doors with push pull bar set and automatic operator

2	Pivot Set	OPJ350 3/4" offset	626	DM
2	Side Pivot	75220	626	DM
2	Push Pull Bar Set (45 degree pull, 12" center to center)	47 push bar with BF168 pull type T1 mounting	US32D	RO
1	Automatic Operator	ED900J SW, provided by section 087113.	689	DM
1	Surface Door Closer (top jamb)	8916 AF89/AF89J FCM BP89	689	DM
2	Concealed Overhead Stop	#6 series stop	630	RF
2	Door Position Switch	DPS-M-GY		SN
1	Jamb Push Plate 1-1/2 x 4-3/4"Actuator	10PBJ1, provided by section 087113.	32D	BA
1	Vestibule Switch Flush Back Box	10BOX475SQFM, provided by section 087113.	BLK	BA
1	Sequencer module	10BR3, provided by section 087113.		BA
1	Safety Sensor	SS II (approach side mounted), provided by section 087113.	BLK	BA
	Silencers	By aluminum door supplier		

Operation - Free egress at all times.
Door to sequence open 155A 3 to 4 seconds after 155B begins to open.
Automatic operator will require 120VAC.

Set: 05
Door: 130A, ~~***137***~~, 156A
Description: Exterior door with Panic Hardware, pull trim with cylinder.

1	Continuous Hinge	CFM XX HD1 PT	CLR	PE
1	Exit Device rim (nightlatch, electrified)	TS MLR 2103 1703A	630	PH
1	***Rim cylinder***	***63-44 with construction core***	***626***	***SA***
1	Interchangeable Cylinder Core	DG1 LF1C Keyway	626	*SA*
1	Surface Door Closer (parallel with stop arm)	8916 DS	689	DM
1	Kick plate	K0050 10" high B4E CSK	US32D	TR
1	Door position switch	DPS-M-GY		SN
1	Power Transfer	EPT-12C		PH
1	Power Supply	RPSMLR2BB		PH
1	Card Reader	By card reader supplier		
1	Rain drip	16A TEK		NA
1	Threshold	425 1/4-20 Combo MS/Anchor	MIL	NA
1	Head Weather Strip	700NA TEK		NA
1	Strike Jamb Weather Strip	700NA TEK		NA
1	Hinge Jamb weather strip	135NA TEK		NA
1	Door Sweep	200NA TEK		NA

Install strike jamb weather strip before installing exit device. Install head weather strip before installing the door closer.
Card reader will retract latchbolt.
Free egress at all times.

Set: 06
Doors: 148B
Description: Exterior hollow metal door with asylum lockset.

3	Hinges (hvy wt)	T4A3386 NRP	26D	MC
1	Lockset (asylum F30)	45H 7W 15H S1	626	BE
2	Interchangeable Cylinder Core	DG1 LF1C Keyway	626	SA
2	***Mortise cylinder***	***63-44 with construction core***	***626***	***SA***
1	Surface Door Closer (parallel with stop arm)	8916 DS FMC	689	DM
1	Kick Plate	K0050 10" high B4E CSK	US32D	TR
1	Latch Protector	5001	US32D	TR
1	Door Position Switch	DPS-M-GY		SN
1	Rain drip	16A TEK		NA
1	Threshold	425 1/4-20 Combo MS/Anchor	MIL	NA
1	Head Weather Strip	700NA TEK		NA
2	Jamb Weather Strip	135NA TEK		NA
1	Door Sweep	200NA TEK		NA

Install head weather strip before installing the door closer.
All screws are to be security type screws.
All hardware to be for security type door.
Egress with key.

Set: 07
Doors: 149C
Description: Exterior hollow metal door with asylum lockset.

3	Hinges (hvy wt)	T4A3386 NRP	26D	MC
1	Electric Lockset (Fail Safe)	45HW 7WEL 15H S1 ***LC***	626	BE
2	Interchangeable Cylinder Core	DG1 LF1C Keyway	626	*SA*
2	***Mortise cylinder***	***63-44 with construction core***	***626***	***SA***
1	Surface Door Closer (parallel with stop arm)	8916 DS FMC	689	DM
1	Kick Plate	K0050 10" high B4E CSK	US32D	TR
1	Latch Protector	5001	US32D	TR
1	Power Transfer	EPT-12C		PH
1	Power Supply	PS610RF		DM
2	Card Reader	By card reader supplier		
1	Door Position Switch	DPS-M-GY		SN
1	Rain drip	16A TEK		NA
1	Threshold	425 1/4-20 Combo MS/Anchor	MIL	NA
1	Head Weather Strip	700NA TEK		NA
2	Jamb Weather Strip	135NA TEK		NA
1	Door Sweep	200NA TEK		NA

Install head weather strip before installing the door closer.
All screws are to be security type screws.
All hardware to be for security type door.
Egress by key or card reader unlock (both sides).
Fail safe lockset, will unlock with lose of power.

Set: 08
Door: 148A
Description: Smoke door with electric lockset.

3	Hinges (std wt)	TA2714 NRP	26D	MC
1	Electric Lockset (Fail Secure)	45HW 7WEU 15H S1	626	BE
2	***Mortise cylinder***	***63-44 with construction core***	***626***	***SA***
2	Interchangeable Cylinder Core	DG1 LF1C Keyway	626	*SA*
1	Surface Door Closer (parallel with stop arm)	8916 DS	689	DM
1	Kick Plate	K0050 10" high B4E CSK	US32D	TR
1	Power Transfer	EPT-12C		PH
1	Power Supply	PS610RF		DM
2	Card Reader	By card reader supplier		
1	Set of Smoke Seal	5020B (head and jambs)	BRN	NA

All screws are to be security type screws.
All hardware to be for security type door.

Set: 09
Door 156B
Description: Door with exit device (lever trim), delayed egress.

3	Hinges (hvy wt)	T4A3786	26D	DM
1	Exit Device Rim (nightlatch less pull, electrified delayed egress)	***DE 2108 V4908A 30 second***	630	PH
1	***Mortise cylinder***	***63-44 with const. core***	***626***	***SA***
1	***Rim cylinder***	***63-44 with const core***	***626***	***SA***
2	Interchangeable Cylinder Core	DG1 LF1C Keyway	626	SA
1	Surface Door Closer (parallel arm)	8916 SPA	689	DM
1	Wall Stop	1270CX	US26D	TR
1	Card Reader	By card reader supplier		
1	Power Transfer	EPT-12C		PH
1	Power Supply	PS161-6		PH
	Silencers	By aluminum door supplier		

Delayed egress exit device. Depressing exit device push pad, sounds alarm, after ***30 seconds*** the exit device will release. Reset alarm at the exit device via the mechanism case key cylinder. Loss of power or fire alarm activation will cause device to release immediately.
Card reader located on push side, to release the exit device for exiting.
Card reader on pull side will release electric lever for ingress.
When lever is unlocked, free ingress with the lever trim.
Delayed egress only affects the exit device touchbar.
System meets UL294

Set: 10
Door 162
Description: Wide stile aluminum door with passage latchset.

1	Pivot Set	OPJ350 3/4" offset	626	DM
1	Side Pivot	75220	626	DM
1	Latchset (passage F01)	45H 0N 15H S1	626	BE
1	Wall Stop	1270CX	US26D	TR
	Silencers	By aluminum door supplier		

Set: 11-NOT USED

Set: 12
Doors 121A, 147A
Description: Pair of doors with ***concealed*** vertical rod panic hardware, lever trim, electrified for use with card reader.

6	Hinges (hvy wt)	T4A3786 NRP	26D	MC
2	Exit Device Concealed Vertical Rod (exit only)	MLR TS 2701 CD LBR	630	PH
2	Straight Architectural Pull 18"	AP421 E 18"	US32D	TR
2	***Mortise cylinder***	***63-44 with const. core***	***626***	***SA***
2	Interchangeable Cylinder Core	DG1 LF1C Keyway	626	*SA*
2	Surface Door Closer (parallel with stop arm)	8916 DS	689	DM
2	Kick Plate	K0050 10" high B4E CSK	US32D	TR
2	Silencers	1229A		TR

Free egress at all times.

Set: 13
Doors: ~~***121C***~~, 147C, 147D
Description: Panic hardware, lever trim

3	Hinges (hvy wt)	T4A3786	26D	MC
1	Exit Device (lever)	2108 V4908A	630	PH
1	***Rim cylinder***	***63-44 with const core***	***626***	***SA***
1	Interchangeable Cylinder Core	DG1 LF1C Keyway	626	*SA*
1	Surface Door Closer (regular arm)	8916 AF89	689	DM
1	Kick Plate	K0050 10" high B4E CSK	US32D	TR
1	Wall Stop	1270CX	US26D	TR
3	Silencers	1229A		TR

Set: 14 -NOT USED

Set: 15
Door: 121B
Description: Panic hardware (delayed egress), lever trim

3	Hinges (hvy wt)	T4A3786	26D	MC
1	Exit Device (lever, electrified delayed egress)	***DE E2108 V4908A 30 sec.***	630	PH
1	***Mortise cylinder***	***63-44 with const. core***	***626***	***SA***
1	***Rim cylinder***	***63-44 with const core***	***626***	***SA***
1	Interchangeable Cylinder Core	DG1 LF1C Keyway	626	*SA*
1	Surface Door Closer (regular arm)	8916 AF89	689	DM
1	Kick Plate	K0050 10" high B4E CSK	US32D	TR
1	Wall Stop	1270CX	US26D	TR
1	Power Transfer	EPT-12C		PH
1	Power Supply	PS161-6		PH
1	Card Reader	By card reader supplier		
3	Silencers	1229A		TR

Delayed egress exit device. Depressing exit device push pad, sounds alarm, after ***30 seconds*** the exit device will release. Reset alarm at the exit device via the mechanism case key cylinder. Loss of power or fire alarm activation will cause device to release immediately.
Card reader located on push side, to release the exit device for exiting.
Card reader on pull side will release electric lever for ingress.
When lever is unlocked, free ingress with the lever trim.
Delayed egress only affects the exit device touchbar.
System meets UL294

Set: 16
Doors: 135, 136
Description: Restroom with push and pull plates.

3	Hinges (std wt)	TA2714	26D	MC
1	Push Plate	1001-9 6" x 16"	US32D	TR
1	Pull Plate	1014-3B 4" x 16"	US32D	TR
1	Surface Door Closer (regular arm)	8916 AF89	689	DM
1	Kick Plate	K0050 10" high B4E CSK	US32D	TR
1	Mop Plate	KM050 4" high B4E CSK	US32D	TR
1	Wall Stop	1270CX	US26D	TR
3	Silencers	1229A		TR

Counter sink pull through bolts under the push plate.

Set: 17
Door: 159, 160
Description: Restroom with push and pull plates.

3	Hinges (std wt)	TA2714	26D	MC
1	Push Plate	1001-9 6" x 16"	US32D	TR
1	Pull Plate	1014-3B 4" x 16"	US32D	TR
1	Surface Door Closer (regular with stop arm)	8916 IS	689	DM
1	Kick Plate	K0050 10" high B4E CSK	US32D	TR
1	Mop Plate	KM050 4" high B4E CSK	US32D	TR
3	Silencers	1229A		TR

Counter sink pull through bolts under the push plate.
For acceptable door closer manufacturers that don't offer a stop arm for pull side mount, provide concealed overhead stop in addition to the door closer.

Set: 18
Door: 128, 140, 143
Description: Passage set

3	Hinges (std wt)	TA2714	26D	MC
1	Latchset (passage F01)	45H 0N 15H S1	626	BE
1	Wall Stop	1270CX	US26D	TR
3	Silencers	1229A		TR

Set: 19 – NOT USED

Set: 20
Doors: 126, 133, 161, ***166***
Description: Privacy set.

3	Hinges (std wt)	TA2714	26D	MC
1	Latchset (privacy F19 with indicator)	45H 0L VIN 15H S1	626	BE
1	Surface Door Closer (regular arm)	8916 AF89	689	DM
1	Kick Plate	K0050 10" high B4E CSK	US32D	TR
1	Mop Plate	KM050 4" high B4E CSK	US32D	TR
1	Wall Stop	1270CX	US26D	TR
3	Silencers	1229A		TR

Set: 21
Door: 157
Description: Classroom lockset.

3	Hinges (std wt)	TA2714	26D	MC
1	Lockset (classroom F05)	45H 7R 15H S1	626	BE
1	***Mortise cylinder***	***63-44 with const. core***	***626***	***SA***
1	Interchangeable Cylinder Core	DG1 LF1C Keyway	626	*SA*
1	Wall Stop	1270CX	US26D	TR
3	Silencers	1229A		TR

Set: 22
Doors: 106, 107, 108, 109, 110, 111, 113, 114, 115, 118, 120, 124, 125, 131, 132, 134, 139, 141, 142, 144, 145, 146, 153, 165
Description: Office lockset.

3	Hinges (std wt)	TA2714	26D	MC
1	Lockset (office F04)	45H 7AT 15H S1	626	BE
1	***Mortise cylinder***	***63-44 with const. core***	***626***	***SA***
1	Interchangeable Cylinder Core	DG1 LF1C Keyway	626	*SA*
1	Wall Stop	1270CX	US26D	TR
3	Silencers	1229A		TR

Set: 23
Doors: 117, 119, 158
Description: Storeroom lockset.

3	Hinges (std wt)	TA2714	26D	MC
1	Lockset (storeroom F07)	45H 7D 15H S1	626	BE
1	***Mortise cylinder***	***63-44 with const. core***	***626***	***SA***
1	Interchangeable Cylinder Core	DG1 LF1C Keyway	626	*SA*
1	Wall Stop	1270CX	US26D	TR
3	Silencers	1229A		TR

Set: 24
Door: 149B
Description: Electric lockset locked both sides for use with (2) card readers

3	Hinges (hvy wt)	T4A3386 NRP	26D	MC
1	Electric Lockset (both levers locked (fail secure))	45HW 7WEU 15H S1 ***LC***	626	BE
2	***Mortise cylinder***	***63-44 with const. core***	***626***	***SA***
2	Interchangeable Cylinder Core	DG1 LF1C Keyway	626	*SA*
1	Surface Door Closer (parallel with stop arm)	8916 DS	689	DM
1	Kick Plate	K0050 10" high B4E CSK	US32D	TR
1	Wall Stop	1270CX	US26D	TR
1	Door Position Switch	DPS-M-GY		SN
1	Power Transfer	EPT-12C		PH
1	Power Supply	***DKPS-2A***		DM
2	Card Reader	By card reader supplier		
3	Silencers	1229A		TR

All screws are to be security type screws.
All hardware to be for security type door.
Egress by key or card reader unlock.

Set: 25
Doors: ~~***102A, 102B***~~, 105, 121D, 130B
Description: Electric lockset.

3	Hinges (hvy wt)	T4A3386 NRP	26D	MC
1	Electric Lockset (outside lever locked (fail secure))	45HW 7DEU 15H RQE S1	626	BE
1	***Mortise cylinder***	***63-44 with const. core***	***626***	***SA***
1	Interchangeable Cylinder Core	DG1 LF1C Keyway	626	*SA*
1	Surface Door Closer (parallel arm)	8916 AF89P	689	DM
1	***Surface Door Closer (regular arm)***	***8916 AF89 (Door 147B)***	***689***	***DM***
1	Kick Plate	K0050 10" high B4E CSK	US32D	TR
1	Wall Stop	1270CX	US26D	TR
1	Door Position Switch	DPS-M-GY		SN
1	Power Transfer	EPT-12C		PH
1	Power Supply	PS610RF		DM
1	Card Reader	By card reader supplier		
3	Silencers	1229A		TR

Free egress always via the inside lever.
121D and 147B are not egress doors. Locked lever courtroom side.

Set: 26
Doors: 150, 151, 152, 154
Description: Asylum lockset.

3	Hinges (hvy wt)	T4A3386 NRP	26D	MC
1	***Mortise cylinder***	***63-44 with const. core***	***626***	***SA***
1	Lockset (asylum F30)	45H 7W 15H S1	626	BE
2	Interchangeable Cylinder Core	DG1 LF1C Keyway	626	*SA*
1	Concealed Door Closer	RTS88 (package RTS27)	689	DM
3	Silencers	1229A		TR

All screws are to be security type screws. All hardware to be for security type door.

Set: 27
Doors: 121E, 147E
Description: Double Acting half height doors

2	Sets of Spring Pivots	7122	26D	BO

Set: 28
Doors: 129
Description: Electric lockset.

3	Hinges (hvy wt)	T4A3386 NRP	26D	MC
1	Electric Lockset (outside lever locked (fail secure))	45HW 7DEU 15H RQE S1	626	BE
1	***Mortise cylinder***	***63-44 with const. core***	***626***	***SA***
1	Interchangeable Cylinder Core	DG1 LF1C Keyway	626	*SA*
1	Surface Door Closer (parallel with stop arm)	8916 DS	689	DM
1	Kick Plate	K0050 10" high B4E CSK	US32D	TR
1	Door Position Switch	DPS-M-GY		SN
1	Power Transfer	EPT-12C		PH
1	Power Supply	***DKPS-2A***		DM
1	Card Reader	By card reader supplier		
3	Silencers	1229A		TR

Free egress always via the inside lever.

Set: 29
Doors: Egress Gate at Secure Parking lot
Description: Exterior grade panic hardware

1	Exit Device	V4008D2W W	693	DE
1	Strike Latch Receiver Bracket	GTSTKBKT	BLK	DE
1	Gate latch protector	GTPLFRD	BLK	
1	Spacer for narrow lever	08GSN	BLK	DE
1	Mortise Cylinder	***63-44 with const. core***	***626***	***SA***
1	Interchangeable Core	DG1 LF1C Keyway	626	SA
1	Door Stop	1209-3	630	TR

NOTE: Hinges by gate supplier.
NOTE: Back plate by gate supplier Back plate height not to exceed exit device height.
Free egress from secure parking lot side at all times. Entrance via keyed lever only.

Set: 30
Door: 121C
Description: Electric lockset locked both sides for use with (2) card readers

3	***Hinges (hvy wt)***	***T4A3386 NRP***	***26D***	***MC***
1	***Electric Lockset (both levers locked (fail secure))***	***45HW 7WEU 15H S1 LC***	***626***	***BE***
2	***Mortise cylinder***	***63-44 with const. core***	***626***	***SA***
2	***Interchangeable Cylinder Core***	***DG1 -6300 permanent core***	***626***	***SA***
1	***Surface Door Closer (regular arm)***	***8916 AF89***	***689***	***DM***
1	***Kick Plate***	***K0050 10" high B4E CSK***	***US32D***	***TR***
1	***Wall Stop***	***1270CX***	***US26D***	***TR***
1	***Door Position Switch***	***DPS-M-GY***		***SN***
1	***Power Transfer***	***EPT-12C***		***PH***
1	***Power Supply***	***DKPS-2A***		***DM***
2	***Card Reader***	***By card reader supplier***		
3	***Silencers***	***1229A***		***TR***

Door is not a required exit.

Set: 31
Door: 137
Description: Exterior door with Alarmed Panic Hardware, pull trim with cylinder.

1	***Continuous Hinge***	***CFM XX HD1 PT***	***CLR***	***PE***
1	***Exit Device rim (nightlatch, alarmed exit)***	***2103 1703A ALW WH495***	***630***	***PH***
1	***Mortise cylinder***	***63-44 with const. core***	***626***	***SA***
1	***Rim cylinder***	***63-34 with const. core***	***626***	***SA***
2	***Interchangeable Cylinder Core***	***DG1 -6300 permanent core***	***626***	***SA***
1	***Surface Door Closer (parallel with stop arm)***	***8916 DS***	***689***	***DM***
1	***Kick plate***	***K0050 10" high B4E CSK***	***US32D***	***TR***
1	***Door position switch***	***DPS-M-GY***		***SN***
1	***Power Transfer***	***EPT-12C***		***PH***
1	***Power Supply***	***DKPS-2A***		***DM***
1	***Rain drip***	***16A TEK***		***NA***
1	***Threshold***	***425 1/4-20 Combo MS/Anchor***	***MIL***	***NA***
1	***Head Weather Strip***	***700NA TEK***		***NA***
1	***Strike Jamb Weather Strip***	***700NA TEK***		***NA***
1	***Hinge Jamb weather strip***	***135NA TEK***		***NA***
1	***Door Sweep***	***200NA TEK***		***NA***

Install strike jamb weather strip before installing exit device. Install head weather strip before installing the door closer.
When alarmed exit device is armed, exiting will sound horn. Horn is reset with key cylinder on exit device mechanism case.
Entrance from outside with key cylinder in pull trim will not sound the alarm.
Free egress at all times.

Set: 32
Door: 102A, 102B
Description: Electrified Exit Device, lever trim.

	Hinges (hvy wt)	***T4A3786 NRP***	***26D***	***MC***
1	***Exit Device rim (lever, electrified)***	***TS MLR 2108 V4908A***	***630***	***PH***
1	***Rim cylinder***	***63-34 with const. core***	***626***	***SA***
1	***Interchangeable Cylinder Core***	***DG1-6300 permanent core***	***626***	***SA***
1	***Surface Door Closer (parallel with stop arm)***	***8916 DS***	***689***	***DM***
1	***Kick plate***	***K0050 10" high B4E CSK***	***US32D***	***TR***
1	***Door position switch***	***DPS-M-GY***		***SN***
1	***Power Transfer***	***EPT-12C***		***PH***
1	***Power Supply***	***RPSMLR2BB***		***PH***
1	***Card Reader***	***By card reader supplier***		
3	***Silencers***	***1229A***		***TR***

Card reader will retract latchbolt.
Free egress at all times.

HARDWARE SET ASSIGNMENTS

Door	Set No.
101A	01
101B	02
102A	32
102B	32
105	25
106	22
107	22
108	22
109	22
110	22
111	22
113	22
114	22
115	22
117	23
118	22
120	22
121A	12
121B	15
121C	30
121D	25
121E	27
124	22
125	22
126	20
128	18
129	28
130A	05
130B	25
131	22
132	22
133	20
134	22
135	16
136	16

Door	Set No.
137	31
139	22
140	18
141	22
142	22
143	18
144	22
145	22
146	22
147A	12
147B	25
147C	13
147D	13
147E	27
148A	08
148B	06
149B	24
149C	07
150	26
151	26
152	26
153	22
154	26
155A	03
155B	04
156A	05
156B	09
157	21
158	23
159	17
160	17
161	20
162	10
165	22
166	20
Egress Gate	29

END OF SECTION 087100

SHEET NOTES:

GENERAL NOTES:

MANUFACTURERS ABBREVIATIONS:

BA – BEA INC.
BE – BEST LOCKING SYSTEMS.
BO – BOMMER
DE – DETEX
DM – DORMA
HE – HES
ID – IDEC
MC – MCKINNEY PRODUCTS
NA – NATIONAL GUARD PRODUCTS
PE – PEMKO
PH – PRECISION
RF – RIXSON
RO – ROCKWOOD
RU – CORBIN RUSSWIN
SCE – SCHLAGE ELECTRONICS
SN – SECURITRON
TR – TRIMCO

SHEET ISSUED IN RESPONSE TO CODE OFFICIAL REQUIREMENT.
INFORMATION SHOWN MATCHES THAT CONTAINED IN ADDENDUM #3
REVISED DOOR HARDWARE SPECIFICATION

No.	Revisions / Submissions	Date
3	ADDENDUM #3	2021/05/28
4	ADDENDUM #4	2021/06/03
5	ISSUED FOR RE-BID	2021/06/18
6	RE-BID ADDENDUM #1	2021/07/08

LWC INCORPORATED
434 East First Street Dayton, OH 45402 937.223.6500
712 East Main Street Richmond, IN 47374 765.966.3546

MONTGOMERY COUNTY

MONTGOMERY COUNTY MUNICIPAL COURT

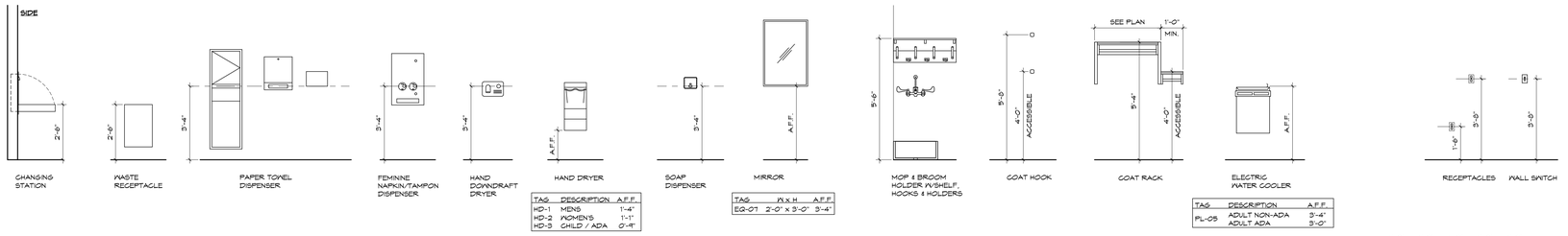
875 E. MAIN STREET
TROTWOOD, OH 45426

DOOR HARDWARE SCHEDULES

STATE OF OHIO · JOHN CHARLES FABELO · 9711799 · REGISTERED ARCHITECT
JOHN C. FABELO
LICENSE ARC.9711799, EXPIRES: 12/31/21

Comm. No.	Date	Drawn	Checked	Drawing No.
19651.00	2021/04/23	DJB	WJK	A003

C:\Revit\2020\19651.00 - Trotwood Municipal Court-R20-Arch Central_dburke@lwcinspires.com.rvt



TAG	DESCRIPTION	A.F.F.
HD-1	MENS	1'-4"
HD-2	WOMENS	1'-1"
HD-3	CHILD / ADA	0'-9"

TAG	W x H	A.F.F.
EQ-01	2'-0" x 3'-0"	3'-4"

TAG	DESCRIPTION	A.F.F.
FL-05	ADULT NON-ADA	3'-4"
	ADULT ADA	3'-0"

PLUMBING FIXTURE COORDINATION SCHEDULE

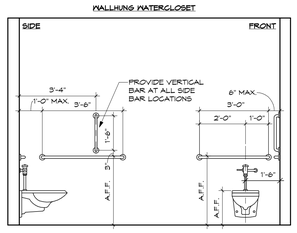
NOTES:
A. COORDINATE WITH MEP PLANS FOR EXACT FIXTURE TYPES AND SPECIFICATIONS.

TAG	ITEM TYPE	DESCRIPTION	REMARKS
FL-01	WATER CLOSET	WALLHUNG, FLUSHVALVE	
FL-02	WATER CLOSET	WALLHUNG, ADA, FLUSHVALVE	
FL-03	LAVATORY	WALLHUNG, ADULT ADA	
FL-04	LAVATORY	COUNTERTOP, OVAL	
FL-05	WATER DISPENSER	WATER COOLER, HI-LO	
FL-06	URINAL	WALLHUNG	
FL-07	URINAL	WALLHUNG, ADA	

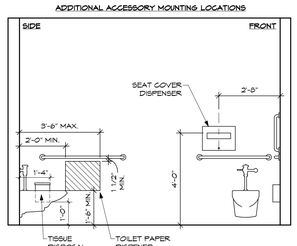
SPECIALTY EQUIPMENT SCHEDULE

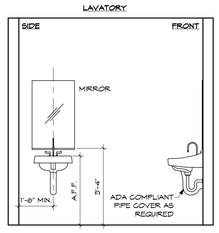
NOTES: REFER TO SPECIFICATIONS FOR OWNER PROVIDED, CONTRACTOR INSTALLED ITEMS

TAG	ITEM TYPE	DESCRIPTION
EQ-01	RESTROOM	SOAP DISPENSER, AUTOMATIC
EQ-02	RESTROOM	TOILET PAPER, SINGLE
EQ-02A	RESTROOM	TOILET PAPER, LARGE DUAL
EQ-03	RESTROOM	WASTE RECEPTACLE, SEMI-RECESSED
EQ-04	RESTROOM	PAPER TOWEL DISPENSER
EQ-05	RESTROOM	FEMININE NAPKIN DISPOSAL
EQ-06	RESTROOM	URINAL SCREEN
EQ-07	RESTROOM	WALL HUNG MIRROR
EQ-08	RESTROOM	CHANGING STATION, SURFACE MOUNTED

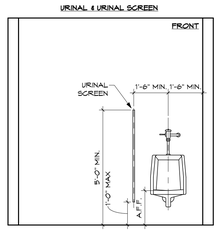


TAG	DESCRIPTION	A.F.F.	GB A.F.F.
PL-01	ADULT NON-ADA	1'-3"	-
PL-02	ADULT ADA	1'-6"	3'-0"





TAG	A.F.F.	DESCRIPTION
FL-03	2'-10"	ADULT ADA



TAG	A.F.F.	DESCRIPTION
FL-06	2'-0"	ADULT NON-ADA
FL-07	1'-5"	ADULT ADA

GENERAL NOTES:

A. NOT ALL ITEMS SHOWN MAY BE APPLICABLE TO THIS PROJECT.

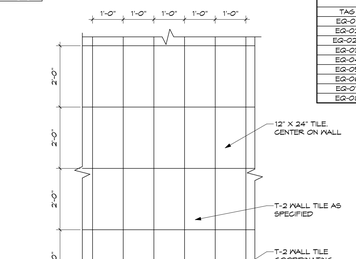
B. ALL ACCESIBLE REACH AND MOUNTING DIMENSIONS SHALL CONFORM TO THE "ICC A117.1, 2009 VERSION" STANDARDS.

C. PROJECT SPECIFIC ITEMS NOT SHOWN, OR THAT REQUIRE SELECTIVE ALTERATIONS TO LOCATION, MOUNTING, ECT., SHALL BE COORDINATED WITH ARCHITECT PRIOR TO INSTALATION.

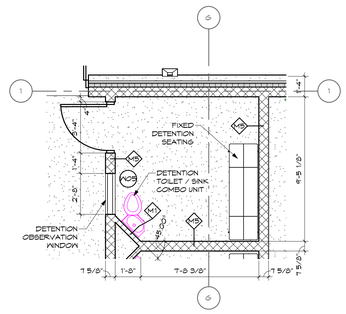
D. ALL DIMENSIONS ARE TO FINISH FACE. COORDINATE FINAL FINISH MATERIALS AND THICKNESS.

E. ALL DIMENSIONS ARE TO INCLUDE ACCESS TO OPERABLE LEVERS, CONTROLS, BUTTONS, CONSLOTS, AND/OR OTHER ITEMS THAT MAY REQUIRE INTERACTION BY A PATRON.

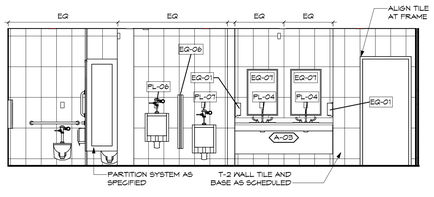
5 GENERAL - TYPICAL MOUNTING HEIGHTS



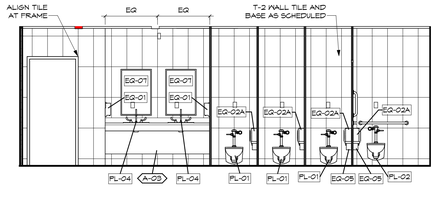
20 TYPICAL RESTROOM WALL TILE PATTERN
SCALE: 1/2" = 1'-0"



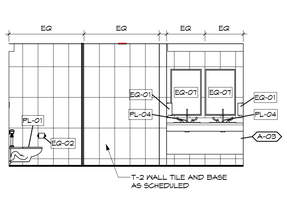
3 TYPICAL TEMPERARY HOLDING CELL
SCALE: 1/4" = 1'-0"



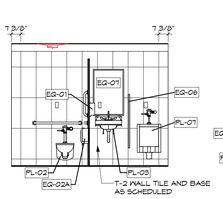
22 MEN'S RESTROOM 135
SCALE: 1/4" = 1'-0"
T-2 WALL TILE AND BASE ON ALL WALLS



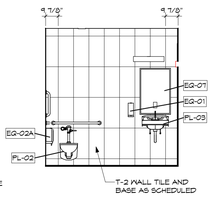
26 WOMENS RESTROOM 136
SCALE: 1/4" = 1'-0"
T-2 WALL TILE AND BASE ON ALL WALLS



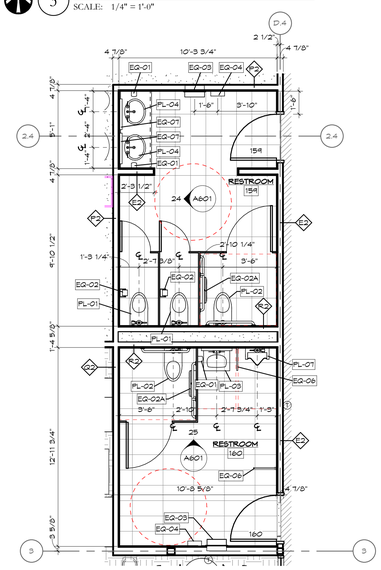
24 RESTROOM 159
SCALE: 1/4" = 1'-0"
T-2 WALL TILE AND BASE ON ALL WALLS



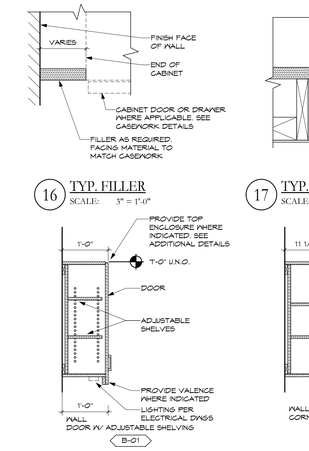
25 RESTROOM 160
SCALE: 1/4" = 1'-0"
T-2 WALL TILE AND BASE ON ALL WALLS



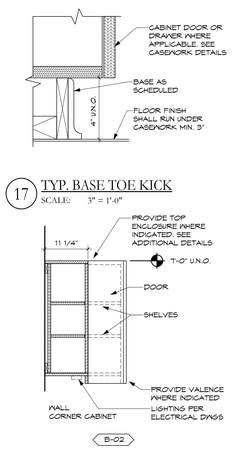
23 RESTROOM 126
SCALE: 1/4" = 1'-0"
T-2 WALL TILE AND BASE ON ALL WALLS



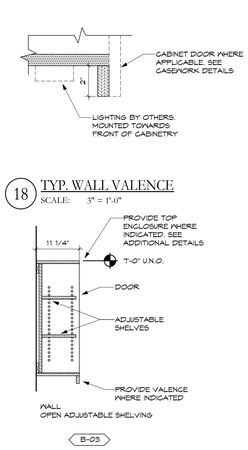
2 ENLARGED WEST RESTROOMS
SCALE: 1/4" = 1'-0"



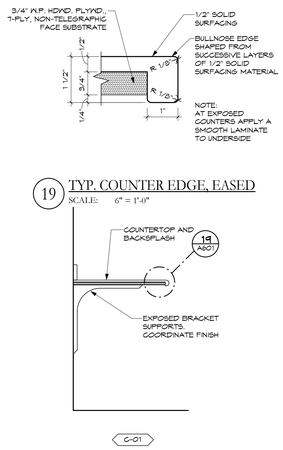
16 TYP. FILLER
SCALE: 3" = 1'-0"



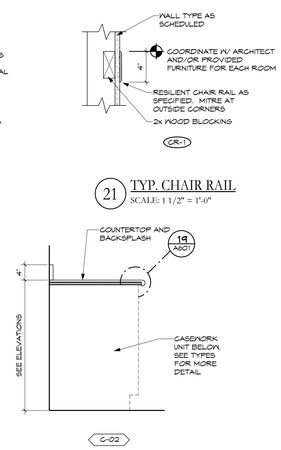
17 TYP. BASE TOE KICK
SCALE: 3" = 1'-0"



18 TYP. WALL VALENCE
SCALE: 3" = 1'-0"



19 TYP. COUNTER EDGE, EASED
SCALE: 6" = 1'-0"



21 TYP. CHAIR RAIL
SCALE: 1 1/2" = 1'-0"

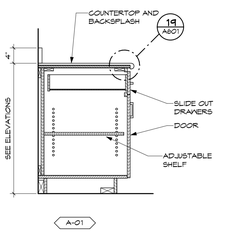
11 WALL CLOSED
SCALE: 3/4" = 1'-0"

12 WALL CORNER CABINET
SCALE: 3/4" = 1'-0"

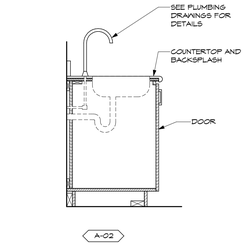
13 WALL OPEN
SCALE: 3/4" = 1'-0"

14 COUNTERTOP EXPOSED BRACKET
SCALE: 3/4" = 1'-0"

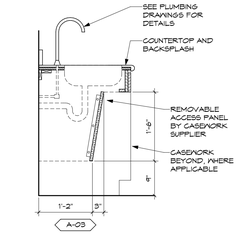
15 COUNTERTOP
SCALE: 3/4" = 1'-0"



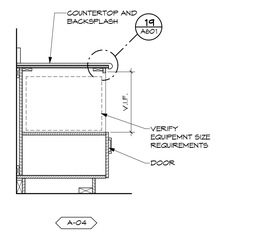
6 BASE CLOSED, DOOR & DRAWER
SCALE: 3/4" = 1'-0"



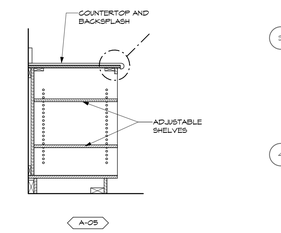
7 BASE SINK, DOOR
SCALE: 3/4" = 1'-0"



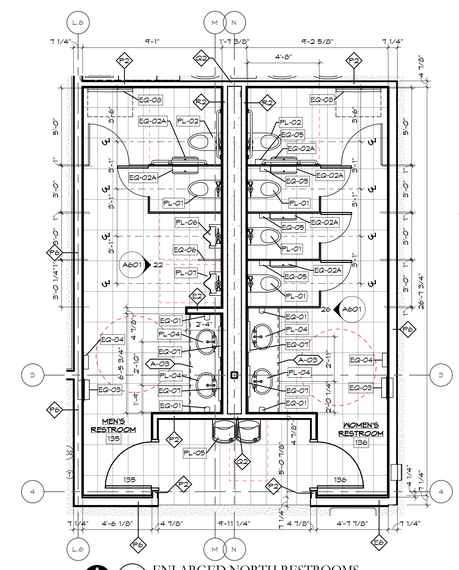
8 BASE SINK, ADA APRON CLOSED
SCALE: 3/4" = 1'-0"



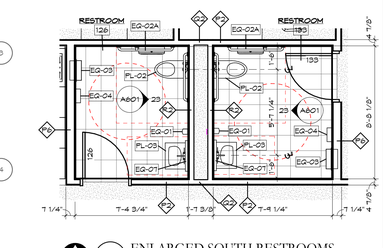
9 BASE OPEN, EQUIPMENT SHELF
SCALE: 3/4" = 1'-0"



10 BASE - OPEN W/ ADJ. SHELVING
SCALE: 3/4" = 1'-0"



4 ENLARGED NORTH RESTROOMS
SCALE: 1/4" = 1'-0"



1 ENLARGED SOUTH RESTROOMS
SCALE: 1/4" = 1'-0"

SHEET NOTES:

GENERAL NOTES:

A. ALL CASEWORK SHALL HAVE FINISHED END PANELS ON EXPOSED SURFACES, INCLUDING BELOW WORK SURFACES.
B. ALL UPPER CABINETS SHALL HAVE A VALANCE TO SCREEN UNDER COUNTER LIGHTING UNLESS NOTED OTHERWISE.
C. CONTRACTOR TO PROVIDE ONE (1) 2" DIAMETER GROMMET FOR EVERY 24" OF COUNTER AT EACH LOCATION. THESE WILL BE LOCATED IN THE FIELD IN COORDINATION WITH THE OWNER AND ARCHITECT.
D. REFER TO RELATED DETAILS FOR LOCATIONS OF WALL SWITCHES, CARD READERS, ETC. FOR ALIGNMENT REQUIREMENTS. COORDINATE LOCATIONS WITH WALL MOUNTED CHAIR RAIL OR OTHER FINISHES PRIOR TO ROUGH-IN

No.	Revisions / Submissions	Date
1	ISSUED FOR CONSTRUCTION	2021/04/23
3	ADDENDUM #3	2021/05/28
5	ISSUED FOR RE-BID	2021/06/18
6	RE-BID ADDENDUM #1	2021/07/08

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MONTGOMERY COUNTY

MONTGOMERY COUNTY MUNICIPAL COURT

875 E. MAIN STREET
TROTWOOD, OH 45426

ENLARGED SCALE PLANS, INTERIOR ELEVATIONS

STATE OF OHIO
JOHN CHARLES FABELO
9711799
REGISTERED ARCHITECT
JOHN C. FABELO
LICENSE ARC.9711799, EXPIRES: 12/31/21

Comm. No.	19651.00
Date	2021/04/23
Drawn	DJB
Drawing No.	A601
Checked	ES/WK