

ADDENDUM NUMBER ONE

DATE July 17, 2018

TO THE PLANS AND SPECIFICATIONS FOR:

PAGE 1 OF 21 PAGES

RENOVATIONS AT ADMINISTRATION BUILDING
SANTA ROSA INDEPENDENT SCHOOL DISTRICT
SANTA ROSA, TEXAS

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This addendum is generally separated into sections for convenience; however, all contractors, subcontractors, materialmen, and other parties shall be responsible for reading the entire addendum. The failure to list an item or items in all affected sections of this addendum does not relieve any party affected from performing as per instructions, providing that the information is set forth any time, any place in this addendum. These documents shall be attached to and become a part of the contract documents for this project.

CLARIFICATION ITEMS

Item C-1 A Pre-Bid conference will be held on Thursday, July 26th at 10:00 a.m. CST, at the Renovation site of the Administration Building at 299 Jesus Tavila Street, Santa Rosa, Texas 78593. The Pre-Bid conference and site visit is recommended and all proposers are encouraged to attend.

SPECIFICATION ITEMS

- Item S-1 **Section 01020 – Allowances – ADD 1.6 Roof Repair Allowance**
- A. Include in Competitive Sealed Proposal for inclusion in contract sum, roof repair allowance.
 - 1. For the Base Proposal: Allow lump sum of **\$ 3,000.00**
 - B. In addition to amount of allowance, include in Competitive Sealed Proposal, for inclusion in contract sum, contractor's overhead, profit, insurance, and other direct cost.
 - C. Monies remaining in allowance at close of project will be credited to Owner by a Change Order or transferred to other allowances as directed by Architect.
- Item S-2 **Section 087100 – Finish Hardware – DELETE** the section in its entirety and **REPLACE** with the attached revised section.

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Item S-3 Section 115213 – Projection Screens and Video Equipment Brackets, 2.4 Flat Screen Display (FSD) Ceiling Brackets, B. 1. – ADD (Field verify existing height above new ceiling to existing structure for the drop required for the display bracket and display to be below the ceiling. Coordinate with Architect.)

PLAN ITEMS

Item P-1 Sheet A200 Floor Plan & Room Finish Schedule, Fixture Schedule, # 20 – ADD Field verify if Knox Box can be recessed flush and plumb into existing masonry wall with recess mounting kit. The recessed mount flange to be flush tight on face of new EIFS wall system. Carefully cut into existing plaster and CMU wall as required, verify existing conditions. If recessed mount will not work, then surface mount to existing plaster wall flush and plumb, smooth out plaster surface as needed for proper mounting. EIFS system to be cut around box for a trim, sealed finish.

SECTION 08 71 00 - FINISH HARDWARE

PART 1 GENERAL

1.01 SECTION INCLUDES

Hardware for swinging, sliding, and folding doors except special types of unique and non-matching hardware specified in other sections.

1.02 RELATED WORK

- A. Section 08 11 13 – Hollow Metal Doors and Frames
- B. Section 08 21 11 – Flush Wood Doors
- C. Section 08 36 13 – Overhead Sectional Doors
- D. Section 08 43 13 – Metal Framed Storefronts
- E. Division 26 – Electrical

1.03 REFERENCES

- A. ADA - Americans with Disabilities Act of 1990 including Accessibility Guidelines as amended by the D.O.J. September 15, 2010, as adopted by the Authority Having Jurisdiction (AHJ).
- B. ANSI A117.1 - Buildings and Facilities - Providing Accessibility and Usability for Physically Handicapped People.
- C. ANSI/BHMA A156 (.1 through .21)
- D. ANSI/DHI – A115.IG Installation Guide for Doors and Hardware.
- E. FEMA P-361 – Safe Rooms for Tornados and Hurricanes.
- F. NFPA 80 - Fire Doors and Windows.
- G. NFPA 101 – Life Safety Code
- H. IBC - International Building Code, as adopted by public Authority Having Jurisdiction (AHJ).
- I. State and local Rules and Regulations for Barrier Free Facilities, as adopted by AHJ.

1.04 DOOR HARDWARE TYPES

- A. Types of finish hardware required include, but is not necessarily limited to, the following:
 - 1. Pivot sets and intermediate pivots.
 - 2. Hinges.
 - 3. Lock cylinders.
 - 4. Keys, keying, and key control.
 - 5. Locksets, latchsets, and privacy sets.
 - 6. Exit devices.
 - 7. Closers.
 - 8. Mullions.
 - 9. Overhead, wall, and floor stops.
 - 10. Protection plates.
 - 11. Gasketing for exterior and interior doors, as required.
 - 12. Door holders.
 - 13. Door bottoms.
 - 14. Thresholds.
 - 15. Silencers.
- B. Requirements for design, grade, function, finish, size and other distinctive qualities of each type of door hardware is indicated elsewhere in this section or in the Door Hardware Schedule at the end of this section. Refer to Part 2 Products for Manufacturer's identification and allowable substitutions.

1.05 SUBMITTALS

- A. Under provisions of Section 01 34 00, submit the following:
1. Product information: Manufacturer's published technical product data for all specified door hardware items indicating compliance with the requirements.
 2. Hardware Schedule:
 - a. Hardware schedules are intended for the Contractor's coordination of the work. Review and acceptance by the Architect or Owner does not relieve the Contractor of his exclusive responsibility to fulfill the requirements as shown and specified.
 - b. Submit hardware schedule in the manner and format as specified, complying with the actual construction progress schedule requirements for each draft. Include the following information:
 - 1) Explanation of all abbreviations, symbols, codes, at the like, including door handing.
 - 2) Type, style, function, size, and finish of each hardware item.
 - 3) Door and frame sizes and materials cross referenced to the Architect's marks in the door schedule.
 - 4) Room identification (name and number) on each side of door opening as indicated on the drawings.
 - 5) Product name, model number, description, and name of manufacturer of each item.
 - 6) Fastenings and other pertinent information.
 - 7) Locations of hardware cross referenced to architectural floor plans and door schedules.
 - 8) Mounting heights and locations of each type of hardware.
 3. Key Schedule:
 - a. Require a qualified representative of the hardware supplier to personally meet with the Owner and Architect to obtain the Owner's written key requirements.
 - b. Include a separate key schedule, showing clearly how the Owner's instructions on keying of locks has been fulfilled.
 - c. Lock functions will be confirmed at this meeting before materials are ordered.
 4. Samples: Upon request, submit actual material samples.
 5. Templates: Hardware supplier will furnish hardware templates to the Contractor for each fabricator of doors, frames, and other work to be shop prepared or factory prepared for the installation of hardware. Upon request check shop drawings of such other work, to conform that adequate provisions are made for proper location and installation of hardware.
 6. Provide electrical operation technical sheets including product schematics, point to point diagrams, and electrical requirements of all electrified hardware. Completely coordinate with the general contractor, electrical engineer, electrician, security access subcontractor and the installer. Operational descriptions are for demonstration only – verify operational intent with the owner, architect and electrical engineer.
 7. Coordinate the Best Shelter system per #6, including installation and training of the owner's representatives.
- B. Under provisions of Section 01 70 00, submit the following:
1. Product information.
 2. Hardware schedule.
 3. Manufacturer's published operation and maintenance data. Include data on operating hardware, lubrication requirements, and inspection procedures related to preventative maintenance.
 4. Tools and extra materials as required.
 5. Manufacturer's warranties, revise to meet criteria as established within this section. Warranty periods shall commence upon acceptance of the building by the owner. Where warranties listed exceed the manufacturer's standard warranty, obtain in writing an extended warranty to meet the requirements above and as noted. If the manufacturer will not meet these requirements, and another approved manufacturer will comply, supply the alternate approved manufacturer.

- A. Acceptable Designs:
 - 1. Items specified in this section are products which are of acceptable design.
 - 2. Do not substitute products without Architect's written prior approval per Section 01 60 00. Requests for approval shall be submitted by factory authorized distributor firms representing the products proposed for substitution. Items that are noted to allow no substitution are matching existing materials and the owner's material inventory for servicing the facility.
- B. Qualifications:
 - 1. Manufacturer: Manufacturers named in Part 2 of this section with not less than 5 years experience in manufacturing commercial door hardware of the type indicated.
 - 2. Hardware Supplier:
 - a. A recognized architectural finish hardware supplier who has been furnishing hardware in the same state as the project for a period of not less than 5 years.
 - b. Hardware supplier's organization shall include an experienced Architectural Hardware Consultant (AHC), certified by the Door and Hardware Institute (DHI), who is physically available, at reasonable times during the course of the work, for consultation about project's hardware requirements, to Owner, Architect and Contractor. Mail or telephone correspondence is not acceptable.
 - c. Hardware supplier shall have local warehousing facilities and shall maintain an adequate parts inventory of items supplied for future service to the owner. Supplier will be a factory authorized distributor of all hardware specified.
 - 3. Installer: Company specializing in installing work of this section with not less than 5 years experience and acceptable to the manufacturers and the hardware supplier. Maintain regular work force of qualified personnel, trained, skilled, and experienced in installing door hardware and constant, competent supervision per the requirements of the General Contractor. The hardware installer shall meet with the representatives of the General Contractor and hardware supplier to jointly inventory all hardware items. Upon satisfactory inventory of products, the hardware installer accepts responsibility for all hardware items inventoried.
 - 4. Best Shelter locking system is to be installed by factory authorized personnel. Installation costs are to be included as part of the base bid and can be acquired through the area Best representatives.
- C. Regulatory Requirements:
 - 1. Provide hardware for all openings, whether specified or not, in compliance with NFPA Standard No. 80 and local building code requirements. Provide only hardware which has been tested and listed by UL or FM for types and sizes of doors required and complies with requirements of door and door frame labels. Label hardware, as required, for compliance with pressure testing criteria as dictated in IBC.
 - 2. Provide hardware which meets or exceeds handicap accessibility per local building code requirements. Conform to the Americans with Disabilities Act (ADA) of 1990 as amended by the D.O.J. September 15, 2010, as adopted by the Authority Having Jurisdiction (AHJ).

1.07 DELIVERY, STORAGE, HANDLING, AND PROTECTION

- A. Deliver, store, handle, and protect products to project site under provisions of Section 01600 and as specified herein.
- B. Require hardware supplier to:
 - 1. Tag each item or package separately, with identification related to final hardware schedule.
 - 2. Include manufacturer's basic installation instructions with each item or package.
 - 3. As material is received by hardware supplier from various manufacturers, sort and repackage in containers with each item clearly marked with appropriate opening numbers to match the approved hardware schedule. Two or more identical items may be packed in the same container.
 - 4. Deliver individually packaged hardware items at the proper times to the proper locations (shop or project site) for installation.

5. Inventory hardware jointly with representatives of the General Contractor, hardware supplier and the hardware installer until each is satisfied that count is correct. Refer to paragraph 1.6-B-3.
- C. Protect hardware from theft by cataloging and storing in a secure and lockable area. Control the handling and installation of hardware items which are not immediately replaceable, so that the completion of the work will not be delayed by hardware losses, both before and after installation. Replace lost, missing, damaged, or stolen door hardware items at no additional cost to the Owner as required to meet schedule requirements.

1.08 SEQUENCING AND SCHEDULING

- A. Coordinate work of this section with the work of other sections of work under provisions of Section 01 04 00
- B. Furnish hardware templates to each fabricator of doors, frames, and other work to be shop or factory prepared for the installation of hardware.
- C. Verify completeness and suitability of door hardware with the hardware supplier and the hardware installer.

1.09 MAINTENANCE MATERIALS

- A. Under provisions of Section 01 70 00, furnish to Owner a complete set of special wrenches and tools applicable to each different or special hardware component as needed for Owner's continued adjustment, maintenance, removal, and replacement of door hardware.
- B. Special tools and accessories shall be supplied by the hardware component manufacturer.

PART 2 PRODUCTS

2.01 MATERIALS AND FABRICATION

- A. General:
 1. Provide all door hardware for complete work, in accordance with the drawings and as specified herein.
 2. Quantities listed, in any instance, are for the Contractor's convenience only and are not guaranteed.
 3. Provide items and quantities not specifically mentioned to ensure a proper and complete operational installation. Match the quality and finish of items specified.
 4. Provide miscellaneous hardware as listed in hardware groups.
- B. Hand of door: Drawings show direction of slide, swing or hand of each door leaf. Door schedule indicates door and frame sizes, materials, required fire ratings, and other pertinent information. Furnish each item of hardware for proper installation and operation of door movement as indicated.
- C. Manufacturer's Name Plate: Do not use manufacturer's products which have manufacturer's name or trade name displayed in a visible location (omit removable name plates), except in conjunction with required UL or FM labels and as otherwise acceptable to the Architect. Manufacturer's identification will be permitted on rim of lock cylinders and latch faceplates only.
- D. Base Metals: Produce hardware units of basic metal and forming method indicated, using manufacturer's standard metal alloy, composition, temper and hardness, but in no case of lesser (commercially recognized) quality than specified for applicable hardware units by applicable ANSI A156 series standard for each type hardware item and with ANSI A156.18 for finish designations indicated. Do not furnish "optional" materials or forming methods for those indicated, except as otherwise specified.
- E. Fasteners: Provide hardware manufactured to conform to published templates, generally prepared for machine screw installation. Do not provide hardware which has been prepared for self-tapping sheet metal screws, except as specifically indicated.

1. Screws: Furnish screws for installation, with each hardware item. Provide Phillips flat head screws except as otherwise indicated. Finish exposed (exposed under any condition) screws to match hardware finish or, if exposed in surfaces of other work, to match finishes of such other work as closely as possible, including "prepared for paint" in surfaces to receive painted finish.
2. Concealed Fasteners: Provide concealed fasteners for hardware units which are exposed when door is closed, except to extent no standard units of type specified are available with concealed fasteners. Do not use thru-bolts for installation where bolt head or nut on opposite face is exposed in other work, except where it is not feasible to adequately reinforce the work. In such cases, provide sleeves for each thru-bolt or use sex screw fasteners.

2.02 HINGES

- A. Manufacturer:
 1. Listed in Door Hardware Schedule: Stanley
 2. Approved Substitutions: Per 1.06-A-2
 3. Continuous hinges are as manufactured by Stanley.
- B. Templates: Except for hinges and pivots to be installed entirely (both leaves) into wood doors and frames, provide only template produced units.
- C. Screws: Furnish Phillips flat head or machine screws for installation of units, except furnish Phillips flat head or wood screws for installation of units into wood. Finish screw heads to match surface of hinges.
- D. Hinge Pins: Except as otherwise indicated, provide hinge pins as follows:
 1. Steel Hinges: Steel pins.
 2. Non-ferrous Hinges: Stainless steel pins.
 3. Exterior doors: Non-removable pins.
 4. Reverse bevel interior doors (lockable): Non-removable pins.
 5. Interior doors: Non-rising pins.
- E. Pin Tips: Flat button and matching plug, finished to match leaves.
- F. Hinges will be the manufacturer's standard 5-knuckle concealed bearing type.
- F. Number of Hinges: Provide number of hinges indicated, but not less than 3 hinges per door leaf for doors 90" or less in height and one additional hinge for each 30" of additional height.
- G. Butt type hinges and continuous hinges are to be warranted for a period of two years.

2.03 LOCK CYLINDERS

- A. Manufacturer:
 1. Listed in Door Hardware Schedule: Best Cormax Patented
 2. Substitutions: Per 1.06-A-2
- B. Equip locks with 7-pin cylinders for small format interchangeable core pin tumbler inserts, Cormax patented key system, with brass construction cores for use during the construction phases. Temporary construction cores shall be removed upon installation of the permanent key system by the owner and returned to the hardware supplier. Plastic construction cores are not acceptable.
- C. Construct lock cylinder parts from brass/bronze, stainless steel, or nickel silver.

2.04 KEYS, KEYING, AND KEY CONTROL

- A. Keys:
 1. Material: Provide keys of nickel silver only.
 2. Quantities: These quantities are to establish a maximum allowable quantity of cut keys to service the project and may not necessarily be assigned as noted. A lesser quantity of cut keys required will not result in any credits, nor a quantity of uncut keys to be issued unless noted otherwise.
 - a. 3 change keys per each cylinder unit.

- b. 2 grand master keys.
 - c. 6 master keys per master.
 - d. 2 Construction Control Keys
 - e. 2 Permanent Control Keys
 - f. 20 construction keys.
3. Deliver keys to the Owner's representative: Send masterkeys to Owner via U.S. registered mail direct from hardware supplier.
- B. Keying:
1. Comply with Owner's written instructions for masterkeying and, except as otherwise indicated, provide individual change keys for each lock which is not designated to be keyed alike with a group of related locks.
 2. Grandmaster key all cylinder items to coordinate with the Owner's instructions. Permanently inscribe each key with the notation "DO NOT DUPLICATE".
 3. All keys and cores to be stamped.
 4. Installation review by AHC.
 5. Provide factory bitting list and hardware schedule.
- C. Key Control:
1. Provide a key control system including envelopes, labels, tags with self-locking key clips, receipt forms, 3-way visible card index, temporary markers, permanent markers, and standard metal cabinet, all as recommended by the system manufacturer, with capacity for 150% of the number of locks required for the project.
 2. Provide a hinged panel type cabinet, for wall mounting, Telkee AWC-150S or equal.
 3. Provide cylinder units with concealed key control and keys with visual key control.

2.05 LOCKSETS, LATCHSETS, AND PRIVACY SETS:

- A. Manufacturer:
1. Listed in Door Hardware Schedule: Best 9K
 2. Approved Substitutions: Per 1.06-A-2
- B. Types: Locksets, latchsets, and privacy sets as indicated in Door Hardware Schedule.
- C. Strikes: Provide manufacturer's standard wrought box strike for each latch or lock bolt. Provide dust-proof strikes for foot bolts, except where not available. At these locations, provide manufacturer's standard recessed strike. Provide roller type strikes where recommended by lock, latch or bolt manufacturer. If aluminum frames are specified, confirm with the aluminum frame supplier that the standard lock strikes will function. Provide the manufacturer's standard extended lip strikes if required.
- D. Lock Throw: Provide 3/4" minimum throw of mortise type latches and deadbolts used. Cylindrical latches will be 1/2" minimum. Comply with UL requirements for throw of bolts and latch bolts on rated fire openings.
- E. Locks and latches shall be warranted for a period of five years.

2.06 CYLINDRICAL TYPE LOCKS FOR LOCKDOWN:

- A. Manufacturer:
1. Listed in Door Hardware Schedule: Best 9KX
 2. Approved Substitutions: None – Best Shelter System
- A. Code Compliance, UL10C-3 Hour; ANSI/BHMA A156.2 Grade 1, ANSI/BHMA A156.25 and ANSI/BHMA A156.5; NFPA101 Life Safety Code and IBC Compliant; FCC Part 15, B: and UL1034 Listed.
- B. Functions; Classroom in standard mode, lock and unlock with key on outside and functions in Storeroom in lockdown mode the key retracts latch, and outside lever is always locked.
- C. Chassis latch and chassis components are brass or corrosion-treated steel.
- D. Fit modified ANSI A115.2 door preparation.
- E. Locksets and cores to be of the same manufacturer to maintain complete lockset warranty
- F. Locksets to have anti-rotational studs that are thru-bolted

- G. Keyed lever shall not have exposed “keeper” hole
- H. Each lever to have independent spring mechanism controlling it
- I. 2-3/4 inch (70 mm) backset standard, 3 3/4”, and 5” available.
- J. 9/16 inch (14 mm) throw latch bolt
- K. Provide sufficient curved strike lip to protect door trim
- L. Outside lever sleeve to be seamless, of one-piece construction made of a hardened steel alloy
- M. Keyed lever to be removable only after core is removed, by authorized control key
- N. Provide locksets with 7-pin removable and interchangeable core cylinders
- O. Coordinate the Best Shelter system per 1.05-A-6, including installation and training of the owner’s representatives.
- P. Locksets outside locked lever must withstand minimum 1400-inch pounds of torque. In excess of that, a replaceable part will shear. Key from outside and inside lever will still operate lockset.
- Q. Core face must be the same finish as the lockset.
- R. Batteries/warnings; 4 AA batteries (Included), up to 3-year battery life. Low battery warning at lock; Battery level reporting available in software.
- S. Wireless Communication; 900 MHz; Range of 400 ft. indoors, 1,200 ft. line of site (typical).
- T. Visual Indicators; Red = Lockdown, Green = Clear/restore to normal, Blue = Wireless communications indicator; others = Error/Fault/TBD.
- U. Audible Alarm; On board sounder with software-configurable on/off Tamper detection – alarm when enclosure is removed.
- V. Gateway Communications:
 - 1. 900 MHz; Range of 400 ft. indoors; 1,200 ft. line of site (typical).
 - 2. Internet connection by ethernet connection standard; Wi-Fi or cellular connections optional. Cloud connectivity; functional without internet connection.
 - 3. Gateway when connected to cloud via internet connection; internet connection allows system status updates to cloud software; once system is configured, lockdown will still be functional if internet connection not present.
 - 4. Code compliance UL 60950, FCC Part 15 Compliant.
 - 5. Power supply; 12VDC; wall mount power supply specified to be provided along with battery back-up.
 - 6. System Setup; Local webpage for basic setup and configuration. Initial training to be included in the base bid.
- W. Repeaters:
 - 1. 900 MHz; Range of 400 ft. indoors; 1,200 ft. line of site (typical).
 - 2. Repeater to extend range of network; Maximum 8 repeaters actively extending network.
 - 3. Environment; IP 67 enclosure.
 - 4. Code compliance; UL60950
 - 5. Power Supply: 12/24VDC power; Power supply specified separately.
 - 6. Inputs; 2 dry contact switch inputs available and configurable to initiate or cancel lockdown.
 - 7. Outputs; 2 form C relay outputs, 24V/1A rated.
- X. FOB:
 - 1. Wireless communications of 900 MHz; Range of 400 ft. indoors; 1,200 ft. line of site (typical).
 - 2. Buttons; 2 button FOB, one large button for Lockdown: to be pressed and held for one second to initiate lockdown; FOB to flash when working. Second button to be smaller and to be pressed for one second for battery test and wireless communication test.
 - 3. FOB to have capability to be configurable to lock single door, set of doors, or entire system.
 - 4. FOB range 200 ft. indoors (typical).
 - 5. Code compliance; FCC Part 15 B&C.
 - 6. Material; Polycarbonate
 - 7. Battery powered by standard 3V CR2450 battery.

2.07 EXIT DEVICES AND MULLIONS

- A. Manufacturer:
 - 1. Listed in Door Hardware Schedule: Precision
 - 2. Approved Substitutions: Per 1.06-A-2
- B. Provide risers, as needed, to prevent interference with door glazing kits.
- C. Coordinate electronic operations per 1.05-A-6.
- C. Provide spacers as needed for proper application of removable mullions on narrow stop type frames.
- D. Exit devices and related hardware shall be warranted for a period of five years.

2.08 CLOSERS:

- A. Manufacturer:
 - 1. Listed in Door Hardware Schedule: Stanley QDC1 Series
 - 2. Approved Substitutions: Per 1.06-A-2
- B. Size of Units: Except as otherwise specifically indicated, comply with the manufacturer's recommendations for size of door control unit, depending on the size of the door, exposure to weather and anticipated frequency of use.
- C. Provide manufacturer's standard through bolt attachment where door construction is not adequate for support.
- D. Arms:
 - 1. Provide parallel arms for all overhead closers, except as otherwise indicated. Provide drop plates as needed to prevent glazing interference.
- E. Mount all closers to the maximum allowable degree of opening by the closer manufacturer's template. Where closer arms incorporate dead stop features, mount closers to the maximum degree of opening available before conflict with adjacent structures. If not apparent on the contract documents, verify the use of open space with the Architect or Owner's Representative to determine the maximum allowable degree of opening.
- F. Access Free Manual Closers: Where manual closers are indicated for doors required to be accessible to the physically handicapped, provide adjustable units complying with ANSI A117.1 provisions for door opening force. Fire protection has precedence over handicap compatibility, check with local jurisdiction.
- G. Door closers and related hardware shall be warranted for a period of twenty five years or lifetime. Electronic closers shall be warranted for a period of two years.

2.09 OVERHEAD STOPS

- A. Manufacturer:
 - 1. Listed in Door Hardware Schedule: Architectural Builders Hardware (ABH)
 - 2. Approved Substitutions: Per 1.06-A-2
- B. Mount stops to the maximum degree of opening available before conflict with adjacent structures, or, if adjacent structures are not considered, to the maximum allowable by stop manufacturer's template.
- C. If not apparent on the contract documents, verify the use of open space with the Architect or Owner's Representative to determine the maximum allowable degree of opening.
- D. Overhead stops in exterior doors must be manufactured from stainless steel, US32D finish.
- E. Overhead stops shall be warranted for a period of two years.

2.10 WALL AND FLOOR STOPS

- A. Manufacturers:
 - 1. Listed in Door Hardware Schedule: Trimco
 - 2. Approved Substitutions: Per 1.06-A-2

- B. General: Except as otherwise indicated, provide stops (wall, floor or overhead) at each leaf of every swinging door leaf.

2.11 PROTECTION PLATES

- A. Manufacturers:
 - 1. Listed in Door Hardware Schedule: Trimco
 - 2. Approved Substitutions: Per 1.06-A-2
- B. Types: Armor Plates, Kick Plates, Mop Plates
- C. Fasteners: Provide manufacturer's standard exposed Phillips head fasteners for door trim units; either machine screws or self-tapping sheet metal type screws per manufacturer's recommendations for application to the specified door construction.
- D. Sizes: Fabricate protection plates (armor, kick or mop) not more than 2" less than door width on stop side and not more than 1" less than door width on pull side, x the height indicated.
- E. Metal Plates: Stainless Steel, 18 gauge (0.050) thick. Satin finish, US32D (630), beveled four edges (B4E).

2.12 GASKETS AND SWEEPS

- A. Manufacturer:
 - 1. Listed in Door Hardware Schedule: National Guard
 - 2. Approved Substitutions: Per 1.06-A-2
- B. General: Except as otherwise indicated, provide continuous weatherstripping at each edge of every exterior door leaf. Provide type, sizes and profiles indicated as drawn or scheduled.
- C. Fasteners: Provide non-corrosive fasteners as recommended by the manufacturer for applications indicated.
- D. Replaceable seal strips: Provide only those units where resilient or flexible seal strip is easily replaceable and readily available from stocks maintained by the manufacturer.
- E. Perimeter weatherstripping: Flexible, hollow neoprene bulb or loop insert, conforming to MIL R 6055, Class II, Grade 40.
- F. Weatherstripping at Door Bottoms: Provide door bottoms consisting of contact type resilient insert and metal housing of design and size indicated.
- G. Hot smoke seal, if required by IBC and subsequent UL testing procedures, will be supplied as an integral part of the door assembly by the door manufacturer.
- H. Gaskets and sweeps shall be warranted for a period of three years.

2.13 THRESHOLDS

- A. Manufacturer:
 - 1. Listed in Door Hardware Schedule: National Guard
 - 2. Approved Substitutions: Per 1.06-A-2
- B. Except as otherwise indicated provide standard metal threshold unit of type, size and profile as detailed or scheduled.
- C. Where there is conflict between scheduled thresholds and details, details shall have precedence. Revise details only if necessary to comply with handicap accessibility requirements. Notify the Architect of such required modifications.
- D. Project thresholds are ADA ramp type. Verify all existing conditions and revise if necessary. All thresholds must be within ADA parameters. Notify the Architect of required revisions if applicable. All thresholds and returns will have the manufacturer's standard abrasive coating (SIA).
- E. Thresholds and related items shall be warranted for a period of three years, abrasive coatings shall be warranted for a period of ten years.

2.14 SILENCERS

- A. Manufacturers:

1. Listed in Door Hardware Schedule: Trimco
2. Approved Substitutions: Per 1.06-A-2

2.15 FINISHES

- A. Exposed surfaces of hardware shall be Brushed Chrome (US26D, 626), unless otherwise indicated. Items specified in Satin Stainless Steel (US32D, 630) shall be supplied in stainless steel with no exceptions.
- B. The designations used in the schedule and elsewhere to indicate hardware finishes are the industry recognized standard commercial finishes common to the product's manufacturer listed.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Under provisions of Section 01 04 00, examine and verify that substrates and project site conditions are ready to receive work of this section.
- B. Do not begin installation until finishes indicated to be field applied have been applied to doors, frames, and similar items requiring project site finishing and are thoroughly dry and cured.
- C. Do not begin installation until unsatisfactory conditions are corrected in a manner acceptable to the installer. Beginning installation means installer accepts project site conditions and substrates as ready to receive work of this section.

3.02 INSTALLATION

- A. General: The types and approximate quantities of door hardware required for this project are indicated at the end of this section.
- B. Key Cabinet: Install in location as indicated on drawings or as directed by the Architect.
- C. Heights: Mount hardware units at heights indicated in "Recommended Locations for Builders Hardware for /standard Steel Doors and Frames" by the Door and Hardware Institute, except as specifically indicated or required to comply with governing regulations, and except as may be otherwise directed by the Architect.
- D. Substrates: Adjust and reinforce attachment substrates as necessary for proper installation and operation of hardware.
- E. Installation:
 1. Install each hardware item in compliance with the manufacturer's instructions, requirements of NFPA 80, NFPA 101, IBC, ADA, State Rules and Regulations for Barrier Free Facilities and recommendations of the DHI.
 2. Set units level, plumb and true to line and location. Adjust and reinforce the attachment substrate as necessary for proper installation and operation.
 3. Drill and countersink units which are not factory prepared for fasteners. Space fasteners and anchors in accordance with industry standards.
 4. Where not factory machined, machine cut for hardware per template, as required.
 5. Cut and fit thresholds and floor covers to profile of door frames. Join units with concealed welds. Cut smooth openings for spindles, bolts, or similar items. Screw thresholds to substrate with the manufacturer's standard flat head sleeve anchor (FHSL), 1/4-20 x 2" unless otherwise noted. Fill cavities of thresholds at sound rated openings with 1 inch thick (uncompressed thickness) low density fiberglass sill sealer insulation full width and length of the threshold. In addition to fastening requirements, set thresholds for exterior doors in a full bed of butyl-rubber or polyisobutylene mastic sealant.
 6. Do not install hardware which is incomplete or apparently improper for application. Notify the hardware supplier immediately of any such deficiencies. Failure to comply with this requirement indicates the hardware installer's acceptance of responsibility for proper application and performance.

7. The Best Shelter system is to be installed by a factory authorized installation company including training of the owner's representatives.

F. Cutting and Patching:

Wherever cutting and fitting is required to install hardware onto or into surfaces which are later to be painted or finished in another way, coordinate removal, storage and reinstallation or application of surface protections with finishing work specified in the Division-9 sections.

3.03 ADJUSTING

A. Initial Adjustment:

1. Adjust and check each operating item of hardware and each door, to ensure proper operation or function of every unit. Adjust resilient faced sound stops for continuous contact with door and threshold. Adjust weatherstripping and sweeps to completely seal doors with frames and to adjacent structures.
2. Replace units which cannot be adjusted to operate freely and smoothly as intended for the application made.

B. Final Adjustment: Wherever hardware installation is made more than one month prior to acceptance or occupancy of a space or area, return to the work during the week prior to acceptance or occupancy, and make final check and adjustment of all hardware items in such space or area. Clean operating items as necessary to restore proper function and finish of hardware and doors. Adjust door control devices to compensate for final operation of heating and ventilating equipment.

3.04 DEMONSTRATION

Instruct Owner's personnel in proper adjustment and maintenance of hardware and hardware finishes, during the final adjustment of hardware.

3.05 CLEANING AND DEBRIS

A. Cleaning:

1. Clean work under provisions of Section 01 70 00
2. Clean adjacent surfaces soiled by work of this section.

B. Debris: Under provisions of Section 01 50 00, remove debris from project site and legally dispose of off-site.

3.06 MAINTENANCE

A. Approximately six months after the acceptance of hardware in each area, the hardware installer shall:

1. Return to the project and re-adjust every item of hardware to restore proper function of doors and hardware.
2. Consult with and instruct Owner's personnel in recommended additions to the maintenance procedures.
3. Replace hardware items which have deteriorated or failed due to faulty design, materials or installation of hardware units.
4. Prepare a written report of current and predictable problems (of substantial nature) in the performance of the hardware and submit to the Architect.

3.07 PROTECTION

Under provisions of Section 01 50 00, protect work of this section as required so that work will be without damage or deterioration at the time of completion and acceptance by the Owner.

3.08 DOOR HARDWARE SCHEDULE

List of Manufacturers

AL	Altronix	Power Supplies
BE	Best	Locks, Cylinders, Shelter System
DM	Dorma	Door Position Switches, Key Switch
HE	Hanchett Entry Systems	Electric Strike
KX	The Knox Co.	Knox Box
NA	National Guard	Weatherstrip, Thresholds
PR	Precision	Exit Devices
ST	Stanley	Hinges, Closers
TK	Telkee	Key Cabinet
TR	Trimco	Stops, Push/Pulls, Flat Goods

Finish Codes

<u>Code</u>	<u>Description</u>
606	Brass
613	Oil Rubbed Bronze
626W	Brushed Chrome Weatherized
626, 652	Brushed Chrome
628	Clear Anodized Aluminum
630	Satin Stainless Steel
640	Dark Bronze Laquered
689	Painted Aluminum
690	Sprayed Dark Bronze
695	Dark Bronze Powder Coated
DKB	Dark Bronze
GREY	Grey

Option List

<u>Code</u>	<u>Description</u>
C	Quick Connect Wiring Option (Precision)
CD	Cylinder Dogging (Precision)
TS	Touchbar Monitoring Switch (Precision)
MLR	Motorized Latch Retraction (Precision)
HC	Hurricane Code Device (Precision)
SNB	Sex Bolts (Precision)
SCHRC	Schlage Removable Core Preparation (Best)
B4E	Beveled 4 Edges - Kick and Mop Plates (Trimco)
CS	Counter Sinking of Kick and Mop Plates (Trimco)
SIA	Abrasive Non-slip Coating (NGP)
SSMS/EA	Stainless Machine Screws/Expansion Anchors (NGP)
SMS-TEKS	Self-Drilling Machine Screws (NGP)

Miscellaneous Items

Provide the following items:

1	Key Cabinet	AWC-150-S		TK
8	Spare Cores	1CX-7	606	BE
1	Knox Box	3200R	DKB	KX

Alternate bid – substitute/add the following:

*1	Shelter Gateway	SHX-GTW		BE
*1	Shelter Power Supply	SHX-PTL		BE
*2	Power Supplies	AL400ULACM x LB12070		AL
*4	Shelter Repeater	SHX-RPT		BE
*1	Key Switch	KS8 (reset Shelter system)		DM
1	Cylinder (key switch)	1E-74 PATD		BE
1	Installation	Installation – Shelter		BE
1	(8) Hours Shelter Training	Training		BE

Include components and installation to complete the Best Shelter package.

SET #1 - Entry

Doors: A101A, A101B, A138A

2	Continuous Hinges	661HD	628	ST
1	Removable Mullion	KR822	689	PR
1	Exit Device	2403 S458 CD SNB	626W	PR
1	Exit Device	2401 S458 CD SNB	626W	PR
2	Rim Cylinders	12E-72 PATD	626	BE
2	Mortise Cylinders	1E-74	626	BE
2	Door Pulls	1191-4 Type N Mounting	630	TR
2	Door Closer/Drop Plates	QDC115 x 8Q00471	689	ST
2	Spacer Blocks	P45HD-110	689	ST
2	Angle Brackets	P45HD-112	689	ST
2	Door Stops	1209HA	689	TR
1	Mullion Seal	5100N		NA
2	Door Sweeps	200 NA SMS-TEKS		NA
1	Saddle Threshold	426 MS/EA SIA		NA
*2	Door Position Switches	MC4		DM

Note: This hardware set to be used as a design guideline. All items with the exception of the bold characters to be provided by the Aluminum Storefront supplier.

Perimeter gaskets by door manufacturer. Mount floor stops out of foot traffic. Operation: Card activation (if applicable) momentarily retracts latches and allows entry. Card reader by security access. Coordinate electronics to function as part of the Best Shelter security lockdown system per 1.05-A-6. Verify threshold application.

Alternate bid – substitute/add the following:

2	Continuous Hinges	661HD EPT	628	ST
*2	Power Transfers	EPT-12C		PR
*1	Exit Device	C MLR TS 2403 S458 SNB	626W	PR
*1	Exit Device	C MLR TS 2401 S458 SNB	626W	PR
*2	Wire Harnesses	WH-6E		ST
*2	Wire Harnesses	WH-12		ST
*2	Wire Harnesses	WH-192		ST
*1	Power Supply	RPSMLR2		PR

Perimeter gaskets by door manufacturer. Mount floor stops out of foot traffic. Operation: Card activation (if applicable) momentarily retracts latches and allows entry. Card reader by security access. Coordinate electronics to function as part of the Best Shelter security lockdown system per 1.05-A-6. Verify threshold application.

SET #2 - Shelter Protected

Doors: A106A, A108A, A110A, A112A, A113A, A113B, A119A, A130A, A131A, A134A, A136A, A136B, A137A

3	Hinges	CB179 4 1/2 X 4 1/2	640	ST
1	Lockset	9K3-7IN14D PATD	613	BE
1	Door Closer	QDC115	690	ST
1	Kick Plate	K0050 10" x 2" LDW B4E CS	613	TR
1	Wall Stop	1270CVSV	613	TR
3	Door Silencers	1229A	GREY	TR

Coordinate electronic Best Shelter lock with the Shelter system.

Alternate bid – substitute/add the following:

1	Shelter Electronic Lock	9KX3-7R14D PATD	613	BE
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Coordinate electronic Best Shelter lock with the Shelter system.

SET #2A - Shelter Protected

Doors: A125A, A127A

3	Hinges	CB179 4 1/2 X 4 1/2 NRP	640	ST
1	Shelter Electronic Lock	9K3-7IN14D PATD	613	BE
1	Door Closer	QDC115	690	ST
1	Kick Plate	K0050 10" x 2" LDW B4E CS	613	TR
1	Wall Stop	1270CVSV	613	TR
3	Door Silencers	1229A	GREY	TR

Alternate bid – substitute/add the following:

1	Shelter Electronic Lock	9KX3-7R14D PATD	613	BE
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Coordinate electronic Best Shelter lock with the Shelter system.

SET #2B - Shelter Protected

Doors: A102A, A102B

1	Mortise Cylinder	1E-74 PATD	613	BE
1	Mortise TT Cylinder	1EA-74	613	BE

Balance of hardware by Aluminum Storefront Supplier.

Coordinate electronic Best Shelter lock with the Shelter system.

Alternate bid – substitute/add the following:

1	Electric Strike	1006	613	HE
1	Transformer	24VDC		HE

Coordinate electronic Best Shelter lock with the Shelter system.

SET #3 - Office

Doors: A103A, A106B, A114A, A130B, A132A

3	Hinges	CB179 4 1/2 X 4 1/2	640	ST
1	Lockset	9K3-7R14D PATD	613	BE
1	Kick Plate	K0050 10" x 2" LDW B4E CS	613	TR
1	Wall Stop	1270CVSV	613	TR
3	Door Silencers	1229A	GREY	TR

SET #4 - Storage

Door: A105A

3	Hinges	CB179 4 1/2 X 4 1/2	640	ST
1	Lockset	9K3-7R14D PATD	613	BE
1	Floor Stop	1215CKU	613	TR
1	Perimeter Gasket	5050 B		NA

SET #5 - Existing Exterior Single

Door: A107A

1	Exit Device	2103 CD SNB	626W	PR
1	Rim Cylinder	12E-72 PATD	626	BE
1	Mortise Cylinder	1E-74	626	BE
1	Door Pull	1191-4 Type N Mounting	630	TR
1	Door Closer	QDC115	689	ST
1	Kick Plate	K0050 10" x 2" LDW B4E CS	630	TR
1	Door Stop	1209HA	630	TR
1	Perimeter Gasket	5075 B		NA
1	Perimeter Gasket	5040 B		NA
1	Door Sweep	200 NA SMS-TEKS		NA
1	Saddle Threshold	426 MS/EA SIA		NA
*1	Door Position Switch	MC4		DM

Modify door to accept new hardware as specified. Mount floor stop out of foot traffic. Verify threshold application.

Alternate bid – substitute/add the following:

*1	Power Transfer	EPT-2		PR
*1	Exit Device	C MLR TS 2103 SNB	630	PR
*1	Wire Harness	WH-192P		ST
*1	Power Supply	RPSMLR2		PR

Reuse existing hinges. Operation: Card activation (if applicable) momentarily retracts latches and allows entry. Card reader by security access. Coordinate electronics to function as part of the Best Shelter security lockdown system per 1.05-A-6.

SET #6 - Storage/Office

Doors: A109A, A111A, A133A

3	Hinges	CB179 4 1/2 X 4 1/2 NRP	640	ST
1	Lockset	9K3-7R14D PATD	613	BE
1	Wall Stop	1270CVSV	613	TR
1	Perimeter Gasket	5050 B		NA

SET #7 - Storage

Door: A104A

3 Hinges	CB179 4 1/2 X 4 1/2	640	ST
1 Lockset	9K3-7R14D PATD	613	BE
1 Kick Plate	K0050 10" x 2" LDW B4E CS	613	TR
1 Wall Stop	1270CVSV	613	TR
1 Perimeter Gasket	5050 B		NA

SET #8 - Restroom

Door: A115A

3 Hinges	CB168 4 1/2 X 4 1/2 NRP	640	ST
1 Pull Plate	1018-3	613	TR
1 Push Plate	1001-3	613	TR
1 Closer/Stop	QDC119	690	ST
1 Kick Plate	K0050 10" x 2" LDW B4E CS	613	TR
1 Perimeter Gasket	5050 B		NA

SET #9 - Restroom

Doors: A116A, A121A, A123A

3 Hinges	CB168 4 1/2 X 4 1/2	640	ST
1 Pull Plate	1018-3	613	TR
1 Push Plate	1001-3	613	TR
1 Door Closer	QDC115	690	ST
1 Kick Plate	K0050 10" x 2" LDW B4E CS	613	TR
1 Mop Plate	KM050 6" x 1" LDW B4E CS	613	TR
1 Wall Stop	1270CVSV	613	TR
1 Perimeter Gasket	5050 B		NA

SET #10 - Shelter Protected

Door: A117A

3 Hinges	CB179 4 1/2 X 4 1/2 NRP	640	ST
1 Lockset	9K3-7R14D PATD	613	BE
1 Door Closer	QDC115	690	ST
1 Kick Plate	K0050 10" x 2" LDW B4E CS	613	TR
1 Wall Stop	1270CVSV	613	TR
1 Perimeter Gasket	5050 B		NA

Alternate bid – substitute/add the following:

1 Shelter Electronic Lock	9KX3-7R14D PATD	613	BE
Coordinate electronic Best Shelter lock with the Shelter system.			

SET #11 – Cross Corridor

Doors: A120A, A128A

3	Rim Cylinders	12E-72 PATD	613	BE
2	Mortise Cylinders	1E-74 PATD	613	BE

Balance of hardware by Door and Frame Supplier.

SET #12 - Janitor

Door: A122A

3	Hinges	CB179 4 1/2 X 4 1/2	640	ST
1	Lockset	9K3-7D14D PATD	613	BE
1	Kick Plate	K0050 10" x 2" LDW B4E CS	613	TR
1	Wall Stop	1270CVSV	613	TR
1	Perimeter Gasket	5050 B		NA

SET #13 - Storage

Door: A126A

3	Hinges	CB179 4 1/2 X 4 1/2 NRP	640	ST
1	Lockset	9K3-7D14D PATD	613	BE
1	Wall Stop	1270CVSV	613	TR
3	Door Silencers	1229A	GREY	TR

SET #14 - Existing Exterior Pair

Door: A128B

2	Continuous Hinges	661HD	628	ST
1	Removable Mullion	KR822	689	PR
1	Exit Device	2403 S458 CD SNB	626W	PR
1	Exit Device	2401 S458 CD SNB	626W	PR
2	Rim Cylinders	12E-72 PATD	626	BE
2	Door Pulls	1191-4 Type N Mounting	626	TR
2	Door Closer/Drop Plates	QDC115 x 8Q00471	689	ST
2	Spacer Blocks	P45HD-110	689	ST
2	Angle Brackets	P45HD-112	689	ST
2	Door Stops	1209HA	626	TR
1	Mullion Seal	5100N		NA
2	Door Sweeps	200 NA SMS-TEKS		NA
1	Saddle Threshold	426 MS/EA SIA		NA
*2	Door Position Switches	MC4		DM

Note: This hardware set to be used as a design guideline. Replace only existing items that are defective or in need of repair.

Alternate bid – substitute/add the following:

2	Continuous Hinges	661HD EPT	313AN	ST
*2	Power Transfers	EPT-12C		PR
*1	Exit Device	C MLR TS 2403 S458 SNB	613	PR

*1	Exit Device	C MLR TS 2401 S458 SNB	613	PR
*2	Wire Harnesses	WH-6E		ST
*2	Wire Harnesses	WH-12		ST
*2	Wire Harnesses	WH-192		ST
*1	Power Supply	RPSMLR2		PR

Modify existing doors and frame to accept specified hardware. Reuse perimeter gaskets. Mount floor stops out of foot traffic. Operation: Card activation (if applicable) momentarily retracts latches and allows entry. Card reader by security access. Coordinate electronics to function as part of the Best Shelter security lockdown system per 1.05-A-6. Verify threshold application.

SET #15 – Cross Corridor

Door: A138B

2	Rim Cylinder	12E-72 PATD	613	BE
2	Mortise Cylinder	1E-74 PATD	613	BE

Balance of hardware by Door and Frame Supplier.

SET #16 - Meeting Room - Protected

Doors: A135A, A135B

3	Rim Cylinders	12E-72 PATD	613	BE
2	Mortise Cylinders	1E-74 PATD	613	BE

Balance of hardware by Door and Frame Supplier.

Alternate bid – substitute/add the following:

*2	Electric Hinges	CECB168-12C 4 1/2 x 4 1/2	640	ST
*2	Exit Devices	E2103 X 4908D SNB	613	PR
*2	Wire Harnesses	WH-6E		ST
*2	Wire Harnesses	WH-12		ST
*2	Wire Harnesses	WH-192		ST
*1	Power Supply	RPSMLR2		PR

Operation: Electronic trim locks on signal from the Best Shelter lockdown system. Coordinate per 1.05-A-6.

* Requires electronic coordination.

End of Section