



R G Architects, LLC

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RG A No. 15043
9 June 2016

ADDENDUM NO. 2

STATE OF DELAWARE OMB/DFM
Baylor Women's Correctional Institution
Housing Units 3&4 Bathroom Renovations
660 Baylor Boulevard
New Castle, DE 19720

R G Architects
200 West Main Street
Middletown, DE 19709
Phone: 302-376-8100 (phone)
Fax: 302-376-9851 (fax)
Email: chris@rgarchitects.net

BIDS DUE:

Thursday, June 16, 2016 at 2:30 p.m.

LOCATION:

**THOMAS COLLINS BUILDING
Division of Facilities Management Office
540 S. DuPont Highway, Suite 1 (Third Floor)
Dover, Delaware 19901
Attn: Kerry Wareham**

NOTICE TO ALL BIDDERS

1.0 GENERAL NOTES:

- 1.1 Bidders are hereby notified that this Addendum shall be and hereby becomes part of their Contract Documents, and shall be attached to the Project Manual for this project.
- 1.2 The following items are intended to revise and clarify the Drawings and Project Manual, and shall be included by the Bidder in their proposal.
- 1.3 Bidders shall verify that their Sub-bidders are in full receipt of the information contained herein.

2.0 Revisions to the SPECIFICATIONS

- 2.1 00 41 13 BID FORM – Revised Subcontractors List
- 2.2 08 71 00 DOOR HARDWARE – See attached revised door hardware specification.

3.0 Revisions to the DRAWINGS

- 3.1 A40-1; Revised H1/J1 frame dimensions. See attached sketch AD2-SK1.
- 3.2 A40-1; Revised H2/J2 frame dimensions. See attached sketch AD2-SK2.
- 3.3 Added A10-2; Phasing Plan

ADDENDUM # 2

5.0 Questions

- Q.1 It was mentioned at the walkthru that a temporary wall would have to be constructed so that the 2 bath areas can be worked on at the same time. Due to this being in a prison, please provide details on what materials need to be used to construct the temp wall. Also, what door/frame and hardware would be needed for the Temp wall?
- A.1 See attached Phasing Plan, A10-2 for description of materials to be used for temporary partitions and doors.
- Q.2 Will a dumpster be allowed to be placed on site for debris or will debris have to be hauled to the landfill daily?
- A.2 Construction debris are to be hauled out daily.
- Q.3 What is the project schedule?
- A.3 Construction commencement is anticipated to begin September 1, 2016. See attached construction phasing plan on how the project is to be phased. 100% project completion is expected to be 6 months from work visibly starting on site.
- Q.4 Can you confirm the correct contract number to be referenced in the Bid Bond Form?
- A.4 The contract number to be referenced is the one on the Bid Form; MC3804000078.
- Q.5 On drawing E11.1 there is a symbol Svs (need spec.) need to know what it stands for?
- A.5 Disregard the “vs”, this is a toggle switch specified on drawing E00-1.
- Q.6 On drawing E00.1 fixture schedule there is D1 fixture but cannot find on drawings. But do find D. Need direction?
- A.6 The fixtures indicated on the plan as D fixtures are the D1 fixtures. The fixtures indicated on the plan as D2 are the D2 fixtures.

6.0 ATTACHMENT LIST:

- A. Bid Register
- B. 00 41 13 BID FORM
- C. 08 71 00 DOOR HARDWARE
- D. AD2-SK1
- E. AD2-SK2
- F. A10-2 PHASING PLANS

PLEASE PRINT CLEARLY

State of Delaware
 BWC1 - Housing Units 3 & 4 - Shower and Bathroom Renovations
 MC3804000078



Bids Due: Thursday, June 16, 2016 at 2:30 pm
 Facilities Management Office, Thomas Collins Building
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 Dover, DE 19901

RGA # 15043

BID DOCUMENTS REGISTER

PLEASE PRINT CLEARLY

\$ 100.00 per set

<p>#01</p>	<p>Name of Company: <u>C + D</u></p> <p>Physical Address: <u>14 E 40th</u> City, State: <u>WILM., DE 19802</u></p> <p>Contact: <u>Ken Vandegrift</u> GC: YES <input checked="" type="checkbox"/> NO <input type="checkbox"/></p> <p>EMAIL: <u>KVandegrift.cd@verizon.net</u></p> <p>Fax: <u>764 7585</u></p> <p>Phone: <u>764 8013</u> Date: <u>5/19/16</u></p>
<p>#02</p>	<p>Name of Company: <u>COMMONWEALTH CONST. CO.</u></p> <p>Physical Address: <u>2317 PENNSYLVANIA AVE</u> City, State: <u>WILM., DE</u></p> <p>Contact: <u>Bill Booth</u> GC: YES <input checked="" type="checkbox"/> NO <input type="checkbox"/></p> <p>EMAIL: <u>bbooth@itscommonwealth.com</u></p> <p>Fax: <u>302-654-2604</u></p> <p>Phone: <u>302-654-6601</u> Date: <u>5-19-16</u></p>
<p>#03</p>	<p>Name of Company: <u>KENT</u></p> <p>Physical Address: <u>2 BIG OAK Rd</u> City, State: <u>SMYRNA DE</u></p> <p>Contact: <u>ESTIMATOR 2 @ BEARLAWSTREET.COM</u> GC: YES <input checked="" type="checkbox"/> NO <input type="checkbox"/></p> <p>EMAIL: <u>PETE Co. COM</u></p> <p>Fax: <u>653 2108</u></p> <p>Phone: <u>653 6469</u> Date: <u>5-19-16</u></p>
<p>#04</p>	<p>Name of Company: <u>RICH ACHUFF (SC&A)</u></p> <p>Physical Address: <u>3411 SILVERSIDE ROAD, SUITE 202</u> City, State: <u>WILMINGTON, DE 19810</u></p> <p>Contact: <u>RICH ACHUFF</u> GC: YES <input checked="" type="checkbox"/> NO <input type="checkbox"/></p> <p>EMAIL: <u>RICH@SC&A.CONSTRUCTS.COM</u></p> <p>Fax: _____</p> <p>Phone: <u>302-478-6030</u> Date: <u>5-19-16</u></p>

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<p>#05</p>	<p>Name of Company: <u>AMAKOR, INC.</u> Physical Address: <u>72 CLINTON ST. P.O. BOX 636</u> City, State: <u>DELAWARE CITY, DE 19706</u> Contact: <u>STEVE SERBU</u> GC: YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> EMAIL: <u>AMAKOR@AOL.COM</u> Fax: _____ Phone: <u>302-834-8664</u> Date: <u>5-19-16</u></p>
<p>#06</p>	<p>Name of Company: <u>BSS CONTRACTORS</u> Physical Address: _____ City, State: <u>WEST GROVE, PA 19390</u> Contact: <u>BRIAN SMITH</u> GC: YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> EMAIL: <u>BSMITH@BSSCONTRACTOR.COM</u> Fax: <u>610-345-1318</u> Phone: <u>484-256-4986</u> Date: <u>5-20-16</u></p>
<p>#07</p>	<p>Name of Company: <u>VENTRESLA BROS., INC.</u> Physical Address: <u>2300 N. DUPONT HWY</u> City, State: <u>NEW CASTLE, DE 19720</u> Contact: <u>TONY VENTRESLA</u> GC: YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> EMAIL: <u>TONY@VENTRESLABROS.COM</u> Fax: <u>658-2360</u> Phone: <u>658-6436</u> Date: <u>5-24-16</u></p>
<p>#08</p>	<p>Name of Company: <u>DESI, INC.</u> Physical Address: <u>19 CROSSAN CT.</u> City, State: <u>LANDENBERG, PA 19350</u> Contact: <u>MIKE HARRIS</u> GC: YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> EMAIL: <u>MIKE@DESIDELAWARE.COM</u> Fax: <u>610-255-4240</u> Phone: <u>610-255-4209</u> Date: <u>5-25-16</u></p>

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RGA # 15043

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<p>#09</p>	<p>Name of Company: <u>SCHLOSSER + ASSOC.</u> Physical Address: <u>2407 SUNSET LAKE ROAD</u> City, State: <u>NOVARK, DE 19702</u> Contact: <u>ANDY BAXON</u> GC: <input type="checkbox"/> YES <input type="checkbox"/> NO EMAIL: <u>ABAKERSA@HOTMAIL.COM</u> Fax: <u>302 738-5692</u> Phone: <u>302 437-5347</u> Date: <u>5/31/16</u></p>
<p>#10</p>	<p>Name of Company: _____ Physical Address: _____ City, State: _____ Contact: _____ GC: <input type="checkbox"/> YES <input type="checkbox"/> NO EMAIL: _____ Fax: _____ Phone: _____ Date: _____</p>
<p>#11</p>	<p>Name of Company: _____ Physical Address: _____ City, State: _____ Contact: _____ GC: <input type="checkbox"/> YES <input type="checkbox"/> NO EMAIL: _____ Fax: _____ Phone: _____ Date: _____</p>
<p>#12</p>	<p>Name of Company: _____ Physical Address: _____ City, State: _____ Contact: _____ GC: <input type="checkbox"/> YES <input type="checkbox"/> NO EMAIL: _____ Fax: _____ Phone: _____ Date: _____</p>

BWCI HOUSING UNITS 3 & 4 BATHROOM RENOVATIONS
CONTRACT #MC3804000078

BID FORM

UNIT PRICES

Unit prices conform to applicable project specification section. Refer to the specifications for a complete description of the following Unit Prices:

	<u>ADD</u>	<u>DEDUCT</u>
UNIT PRICE No. 1: _____ (BRIEF DESCRIPTION) _____	\$ _____	\$ _____
UNIT PRICE No. 2: _____ (BRIEF DESCRIPTION) _____	\$ _____	\$ _____
UNIT PRICE No. 3: _____ (BRIEF DESCRIPTION) _____	\$ _____	\$ _____

BWCI HOUSING UNITS 3 & 4 BATHROOM RENOVATIONS

CONTRACT #MC3804000078

BID FORM

I/We acknowledge Addendums numbered _____ and the price(s) submitted include any cost/schedule impact they may have.

This bid shall remain valid and cannot be withdrawn for thirty (30) days from the date of opening of bids (60 days for School Districts and Department of Education), and the undersigned shall abide by the Bid Security forfeiture provisions. Bid Security is attached to this Bid.

The Owner shall have the right to reject any or all bids, and to waive any informality or irregularity in any bid received.

This bid is based upon work being accomplished by the Sub-Contractors named on the list attached to this bid.

Should I/We be awarded this contract, I/We pledge to achieve substantial completion of all the work within _____ calendar days of the Notice to Proceed.

The undersigned represents and warrants that he has complied and shall comply with all requirements of local, state, and national laws; that no legal requirement has been or shall be violated in making or accepting this bid, in awarding the contract to him or in the prosecution of the work required; that the bid is legal and firm; that he has not, directly or indirectly, entered into any agreement, participated in any collusion, or otherwise taken action in restraint of free competitive bidding.

Upon receipt of written notice of the acceptance of this Bid, the Bidder shall, within twenty (20) calendar days, execute the agreement in the required form and deliver the Contract Bonds, and Insurance Certificates, required by the Contract Documents.

I am / We are an Individual / a Partnership / a Corporation

By _____ Trading as _____
(Individual's / General Partner's / Corporate Name)

(State of Corporation)

Business Address: _____

Witness: _____ **By:** _____
(SEAL) (Authorized Signature)

(Title)
Date: _____

ATTACHMENTS

- Sub-Contractor List
- Non-Collusion Statement
- Affidavit(s) of Employee Drug Testing Program
- Bid Security
- (Others as Required by Project Manuals)

BWCI HOUSING UNITS 3 & 4 BATHROOM RENOVATIONS
CONTRACT #MC3804000078

BID FORM

SUBCONTRACTOR LIST

In accordance with Title 29, Chapter 6962 (d)(10)b Delaware Code, the following sub-contractor listing must accompany the bid submittal. The name and address of the sub-contractor **must be listed for each category** where the bidder intends to use a sub-contractor to perform that category of work. In order to provide full disclosure and acceptance of the bid by the *Owner*, **it is required that bidders list themselves as being the sub-contractor for all categories where he/she is qualified and intends to perform such work.** This form must be filled out completely with no additions or deletions. **Note that all subcontractors listed below must have a signed Affidavit of Employee Drug Testing Program included with this bid.**

<u>Subcontractor Category</u>	<u>Subcontractor</u>	<u>Address (City & State)</u>	<u>Subcontractors tax payer ID # or Delaware Business license #</u>
1. Mechanical	_____	_____	_____
2. Electrical	_____	_____	_____
3. Stainless Steel Installer	_____	_____	_____
4.	_____	_____	_____
5.	_____	_____	_____
6.	_____	_____	_____
7.	_____	_____	_____
8.	_____	_____	_____
9.	_____	_____	_____

BWCI HOUSING UNITS 3 & 4 BATHROOM RENOVATIONS
CONTRACT #MC3804000078

BID FORM

NON-COLLUSION STATEMENT

This is to certify that the undersigned bidder has neither directly nor indirectly, entered into any agreement, participated in any collusion or otherwise taken any action in restraint of free competitive bidding in connection with this proposal submitted this date (*to the Office of Management and Budget, Division of Facilities Management*).

All the terms and conditions of (*Project or Contract Number*) have been thoroughly examined and are understood.

NAME OF BIDDER: _____

AUTHORIZED REPRESENTATIVE (TYPED): _____

AUTHORIZED REPRESENTATIVE (SIGNATURE): _____

TITLE: _____

ADDRESS OF BIDDER: _____

E-MAIL: _____

PHONE NUMBER: _____

Sworn to and Subscribed before me this _____ day of _____ 20_____.

My Commission expires _____. NOTARY PUBLIC _____.

THIS PAGE MUST BE SIGNED AND NOTARIZED FOR YOUR BID TO BE CONSIDERED.

BWCI HOUSING UNITS 3 & 4 BATHROOM RENOVATIONS
CONTRACT #MC3804000078

BID FORM

**AFFIDAVIT
OF
EMPLOYEE DRUG TESTING PROGRAM**

4104 Regulations for the Drug Testing of Contractor and Subcontractor Employees Working on Large Public Works Projects requires that Contractors and Subcontractors implement a program of mandatory drug testing for Employees who work on Large Public Works Contracts funded all or in part with public funds.

We hereby certify that we have in place or will implement during the entire term of the contract a Mandatory Drug Testing Program for our employees on the jobsite that complies with this regulation:

Contractor/Subcontractor Name: _____

Contractor/Subcontractor Address: _____

Authorized Representative (typed or printed): _____

Authorized Representative (signature): _____

Title: _____

Sworn to and Subscribed before me this _____ day of _____ 20____.

My Commission expires _____ . NOTARY PUBLIC _____ .

THIS PAGE MUST BE SIGNED AND NOTARIZED FOR YOUR BID TO BE CONSIDERED.

SECTION 08 71 10 – 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 the following:
 - 1. Commercial door hardware for the following:
 - a. Swinging doors.
- B. Related Sections include the following:
 - 1. Division 8 Section "Steel Doors and Frames"

1.3 SUBMITTALS

- A. Product Data: Include installation details, material descriptions, dimensions of individual components and profiles, 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.
 - a. Organize door hardware sets in same order as in the Door Hardware Schedule at the end of Part 3.
 - 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 each door hardware set, cross-referenced to Drawings, both on floor plans and in door and frame schedule.
 - e. Explanation of abbreviations, symbols, and codes contained in schedule.
 - f. Mounting locations for door hardware.
 - g. Door and frame sizes and materials.
 - h. Description of each electrified door hardware function, including location, sequence of operation, and interface with other building control systems.

- 1) Sequence of Operation: Include description of component functions that occur in the following situations: authorized person wants to enter; authorized person wants to exit; unauthorized person wants to enter; unauthorized person wants to exit.
 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.
 5. Submittal Sequence: Submit initial draft of final schedule along with essential Product Data to facilitate the fabrication of other work that is critical in the Project construction schedule. Submit the final Door Hardware Schedule after Samples, Product Data, coordination with Shop Drawings of other work, delivery schedules, and similar information has been completed and accepted.
- C. Keying Schedule: Prepared by or under the supervision of supplier, detailing Owner's final keying instructions for locks. Include schematic keying diagram and index each key set to unique door designations.
- D. Product Certificates: Signed by manufacturers of electrified door hardware certifying that products furnished comply with requirements.
1. Certify that door hardware approved for use on types and sizes of labeled fire doors complies with listed fire door assemblies.
- E. Qualification Data: For firms and persons specified in "Quality Assurance" Article.
1. Include lists of completed projects with project names and addresses of architects and owners, and other information specified.
- F. Product Test Reports: Based on evaluation of comprehensive tests performed by manufacturer and witnessed by a qualified testing agency, indicating current products comply with requirements.
- G. Maintenance Data: For each type of door hardware to include in maintenance manuals specified in Division 1.
- H. Warranties: Standard manufacturer's warrant apply.
- 1.4 QUALITY ASSURANCE
- A. Installer Qualifications: An experienced installer who has completed door hardware similar in material, design, and extent to that indicated for this Project and whose work has resulted in construction with a record of successful in-service performance.
 - B. Supplier Qualifications: Door hardware supplier with warehousing facilities in Project's vicinity and who is or employs a qualified Architectural Hardware Consultant, available during the course of the Work to consult with Contractor, Architect, and Owner about door hardware and keying.

- a. Engineering Responsibility: Prepare data for electrified door hardware, including Shop Drawings, based on testing and engineering analysis of manufacturer's standard units in assemblies similar to those indicated for this Project.
2. Scheduling Responsibility: Preparation of door hardware and keying schedules.
- C. Architectural Hardware Consultant Qualifications: A person who is currently certified by the Door and Hardware Institute as an Architectural Hardware Consultant and who is experienced in providing consulting services for door hardware installations that are comparable in material, design, and extent to that indicated for this Project.
- D. Source Limitations: Obtain each type and variety of door hardware from a single manufacturer, unless otherwise indicated.
1. Provide electrified door hardware from same manufacturer as mechanical door hardware, unless otherwise indicated. Manufacturers that are listed to perform electrical modifications, by a testing and inspecting agency acceptable to authorities having jurisdiction, are acceptable.
- E. Regulatory Requirements: Comply with provisions of the following:
1. Where indicated to comply with accessibility requirements, comply with Americans with Disabilities Act (ADA), "Accessibility Guidelines for Buildings and Facilities (ADAAG)," ANSI A117.1, FED-STD-795, "Uniform Federal Accessibility Standards," 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 plied perpendicular to door.
 - 2) Fire Doors: Minimum opening force allowable by authorities having jurisdiction.
 2. 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. Door Closers: Not more than 30 lbf to set door in motion and not more than 15 lbf to open door to minimum required width.
- F. 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.
1. Test Pressure: Test at atmospheric pressure.

- G. Keying Conference: Conduct conference at Project site to comply with requirements in Division 1 Section "Project Meetings." Incorporate keying conference decisions into final keying schedule after reviewing door hardware keying system including, but not limited to, the following:
1. Function of building, flow of traffic, purpose of each area, degree of security required, and plans for future expansion.
 2. Preliminary key system schematic diagram.
 3. Requirements for key control system.
 4. Address for delivery of keys.
- H. Preinstallation Conference: Conduct conference at Project site to comply with requirements in Division 1 Section "Project Meetings."

1.5 DELIVERY, STORAGE, AND HANDLING

- A. Inventory door hardware on receipt and provide secure lock-up for door hardware delivered to Project site.
- B. Tag each item with Door Number related to the final Approved Door Hardware Schedule, and include basic installation instructions with each item or package.
- C. Deliver keys to Owner by registered mail or overnight package service.

1.6 COORDINATION

- A. Coordinate layout and installation of recessed pivots and closers with floor construction. Cast anchoring inserts into concrete. Concrete, reinforcement, and formwork requirements are specified in Division 3 Section "Cast-in-Place Concrete."
- B. Templates: Obtain and distribute to the parties involved templates for doors, frames, and other work specified to be factory prepared for installing door hardware. Check Shop Drawings of other work to confirm that adequate provisions are made for locating and installing door hardware to comply with indicated requirements.

1.7 WARRANTY

- A. General Warranty: 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. Special Warranty: Written warranty, executed by manufacturer agreeing to repair or replace components of door hardware that fail in materials or workmanship within specified warranty period. Failures include, but are not limited to, the following:
1. Structural failures including excessive deflection, cracking, or breakage.
 2. Faulty operation of operators and door hardware.
 3. Deterioration of metals, metal finishes, and other materials beyond normal weathering.

- C. Warranty Period for Locksets: Three, (3) years from date of Substantial Completion, unless otherwise indicated.
- D. Warranty Period for Manual Closers: Ten, (10) years from date of Substantial Completion, unless otherwise indicated.

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. Maintenance Service: Beginning at Substantial Completion, provide six months' full maintenance by skilled employees of door hardware Installer. Include quarterly preventive maintenance, repair or replacement of worn or defective components, lubrication, cleaning, and adjusting as required for proper door hardware operation. Provide parts and supplies as used in the manufacture and installation of original products.
- C. Engage a factory authorized service representative to train Owner's maintenance personnel to adjust, operate, and maintain door hardware and door hardware finishes.

PART 2 - PRODUCTS

2.1 SCHEDULED DOOR HARDWARE

- A. General: Provide door hardware for each door to comply with requirements in this Section, door hardware sets indicated in door and frame schedule, and the Door Hardware Schedule at the end of Part 3.
 - 1. Door Hardware Sets: Provide quantity, item, size, finish or color indicated, and named manufacturer's products.
- B. Designations: Requirements for design, grade, function, finish, size, and other distinctive qualities of each type of door hardware are indicated in the Door Hardware Schedule at the end of Part 3. Products are identified by using door hardware designations, as follows:
 - 1. Named Manufacturer's Products: Product designation and manufacturer are listed for each door hardware type required for the purpose of establishing minimum requirements. Manufacturers' names are abbreviated in the Door Hardware Schedule.
 - 2. References to BHMA Standards: Provide products complying with these standards and requirements for description, quality, and function.

2.2 HINGES

- A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - 1. Butt Hinges:
 - a. Stanley Commercial Hardware
 - 1) FBB 179 series

- B. Standards: Comply with the following:
 - 1. Hinges ANSI/BHMA Standard A156.1 Grade 1
 - 2. Continuous Hinges ANSI/BHMA Standard A156.26 Grade 1
- C. Template Requirements: Except for hinges and pivots to be installed entirely (both leaves) into wood doors and frames, provide only template-produced units.
- D. Concealed bearings are made from engineered polymer material with PTFE and Aramid fiber; bearing is maintenance free, no oil, no grease.
- E. Butt hinges equipped with easily seated, non-rising pin. Hole in bottom of pin enables quick pin removal for ease of installation.
- F. All hinges to carry Warnock Hersey Int. or UL for fire rated doors and frames up to 3 hours
- G. Hinge Weight: Unless otherwise indicated, provide the following:
 - 1. Supports weights up to 600lbs.
- H. Hinge Base Metal: Unless otherwise indicated, provide the following:
 - 1. Interior Butt Hinges: Stainless Steel
- I. Hinge Options: Comply with the following where indicated in the Door Hardware Schedule or on Drawings:
 - 1. Nonremovable 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:
 - a. As indicated in Hardware Sets
 - 2. **Hospital Tip: Provide all hinges with Hospital Tips (HT) option.**
- J. Fasteners: Comply with the following:
 - 1. Machine Screws: For metal doors and frames. Install into drilled and tapped holes.
 - 2. Screws: Provide Security Type, pinned torx

2.3 LOCKS AND LATCHES

- A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - 1. Mechanical Locks and Latches:
 - a. Best Lock Corporation, 45H Series, No Substitution, Owner's Standard
- B. Standards: Comply with the following:
 - 1. Mortise Locks and Latches: BHMA A156.13.
- C. Mortise Locks: Stamped steel case with steel or brass parts; ANSI A156.13, Series 1000, BHMA Grade 1 Operational and Grade 2 Security and be UL Listed.
- D. Certified Products: Provide door hardware listed in the following BHMA directories:
 - 1. Mechanical Locks and Latches: BHMA's "Directory of Certified Locks & Latches."
 - 2. Electromagnetic Locks: BHMA's "Directory of Certified Electromagnetic & Delayed Egress Locks."

- E. Lock Trim: Comply with the following:
 - 1. Lever: Mortise Locks & Latches, stainless steel construction
- F. Lock Functions: Function numbers and descriptions indicated in the Door Hardware Sets comply with the following:
 - 1. Mortise Locks: BHMA A156.13.
- G. Lock Throw: Comply with testing requirements for length of bolts to comply with labeled fire door requirements, and as follows:
 - 1. Mortise Locks: Minimum 3/4-inch latch bolt throw.
- H. Backset: 2-3/4 inches, unless otherwise indicated.
- I. Mortise Locks & Latches shall have an anti-friction, 3/4-inch throw latch bolt with anti-friction piece made of self-lubricated stainless steel. Latch bolt with plastic insert and three-piece latch bolt are unacceptable on this project.
- J. Mortise Locks & Latches shall have levers to be operated with a roller bearing spindle hub mechanism.

2.4 CYLINDERS AND KEYING

- A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - 1. Cylinders:
 - a. KABA Peaks Preferred, No Substitution, Owner's Standard
 - b. All cylinders shall be Peaks Preferred, 7-pin interchangeable cores.
 - c. All locks to be supplied with cylinders.
 - d. **Furnish locks with Best construction core ACC-7 Green**
- B. Standards: Comply with the following:
 - 1. Cylinders: BHMA A156.5.
- C. Cylinder Grade: BHMA Grade 1, Cylinders: Manufacturer's standard tumbler type, constructed from brass or bronze, stainless steel, or nickel silver, and complying with the following:
 - 1. Number of Pins: Seven.
 - 2. Mortise Type: Threaded cylinders with rings and straight- or clover-type cam.
- D. Permanent Cores: Manufacturer's standard; finish face to match lockset; complying with the following:
 - 1. Removable Cores: Core insert, removable by use of a special key, and for use with only the core manufacturer's locksets.
- E. Construction Keying: Comply with the following:
 - 1. Construction Cores: Provide Brass construction cores in all locksets and cylinders that are replaceable by permanent cores.

- a. Replace Brass construction cores with permanent cores, as indicated in keying schedule
- F. Keying System: Unless otherwise indicated, provide a factory-registered keying system complying with the following requirements:
1. Existing System: Master key or grand master key locks to Owner's existing system.
 2. Keyed Alike: Key all cylinders to the same change key.
- G. Keys: Provide nickel-silver keys complying with the following:
1. Stamping: Permanently inscribe each key with a visual key control number and include the following notation:
 - a. Notation: **"DO NOT DUPLICATE."**
 2. Quantity: In addition to one extra blank key for each lock, provide the following:
 - a. Cylinder Change Keys: Three.
 - b. Master Keys: Five.
 - c. Control Keys: Five
 - d. Construction Master Keys: Ten
 - e. Construction Core Control Keys: Five

2.5 STRIKES

- A. Standards: Comply with the following:
1. Strikes for Mortise Locks and Latches: BHMA A156.13.
 2. Dustproof Strikes: BHMA A156.16.
- B. 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 latch bolts, 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.
- C. Dustproof Strikes: BHMA Grade 1

2.6 CLOSERS

- A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
1. Surface-Mounted Closers:
 - a. Stanley Commercial Hardware
 - b. Equals Reviewed & Approved 21-Days Prior to Bid
- B. Standards: Comply with the following:
1. Closers: BHMA A156.4.

- C. Surface Closers: BHMA Grade 1
- D. Certified Products: Provide door closers listed in BHMA's "Directory of Certified Door Closers."
- E. Size of Units: Unless otherwise indicated, comply with manufacturer's written recommendations for size of door closers depending on size of door, exposure to weather, and anticipated frequency of use. Provide factory-sized closers, adjustable to meet field conditions and requirements for opening force.

2.7 PROTECTIVE TRIM UNITS

- A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - 1. Metal Protective Trim Units:
 - a. Burns Manufacturing Company, Inc.
 - b. Trimco, Inc.
- B. Standard: Comply with BHMA A156.6.
- C. Materials: Fabricate protection plates from the following:
 - 1. Stainless Steel: 0.050 inch thick; beveled 4 sides **and CSK counter sunk for fasteners.**
- D. Fasteners: Provide manufacturer's security type fasteners for door trim units consisting of either machine or self-tapping screws.
- E. Furnish protection plates sized 2" less than door width on push side and 1" less than door width on pull side, by height specified in Door Hardware Schedule.

2.8 STOPS AND HOLDERS

- A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - 1. Architectural Builders Hardware Mfg., Inc.
 - 2. Trimco, Inc.
- B. Standards: Comply with the following:
 - 1. Stops and Bumpers: BHMA A156.16.
 - 2. Mechanical Door Holders: BHMA A156.16.
 - 3. Combination Overhead Holders and Stops: BHMA A156.8.
 - 4. Door Silencers: BHMA A156.16.
- C. Stops and Bumpers: BHMA Grade 1 with Security Type Fasteners.
- D. Combination Overhead Stops and Holders: BHMA Grade 1 **Heavy Duty Model 9000** with Security Type Fasteners.
- E. Silencers for Metal Door Frames: BHMA Grade 1; neoprene or rubber, minimum diameter 1/2 inch; fabricated for drilled-in application to frame.

2.9 FABRICATION

- A. Manufacturer's Nameplate: Do not provide manufacturers' products that have manufacturer's name or trade name displayed in a visible location (omit removable nameplates) except in conjunction with required fire-rated labels and as otherwise approved by Architect.
 - 1. Manufacturer's identification will be permitted on rim of lock cylinders only.
- B. Base Metals: Produce door hardware units of base metal, fabricated by forming method indicated, using manufacturer's standard metal alloy, composition, temper, and hardness. Furnish metals of a quality equal to or greater than that of specified door hardware units and BHMA A156.18 for finishes. Do not furnish manufacturer's standard materials or forming methods if different from specified standard.
- C. Fasteners: Provide door hardware manufactured to comply with published templates generally prepared for machine, wood, and sheet metal screws. Provide screws according to commercially recognized industry standards for application intended. Provide Security type screws with finished heads to match surface of door hardware, unless otherwise indicated.
 - 1. Security Type Pinned Torx Fasteners required

2.10 FINISHES

- A. Standard: Comply with BHMA A156.18.
- B. Protect mechanical finishes on exposed surfaces from damage by applying a strippable, temporary protective covering before shipping.
- C. Appearance of Finished Work: Variations in appearance of abutting or adjacent pieces are acceptable if they are within one-half of the range of approved Samples. Noticeable variations in the same piece are not acceptable. Variations in appearance of other components are acceptable if they are within the range of approved Samples and are assembled or installed to minimize contrast.
- D. BHMA Designations: Comply with base material and finish requirements indicated by the following:
 - 1. BHMA 626: Satin chromium plated over nickel, over brass or bronze base metal.
 - 2. BHMA 630: Satin stainless steel, over stainless steel base metal.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine doors and frames, 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. Examine roughing-in for electrical power systems to verify actual locations of wiring connections before electrified door hardware installation.
- C. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

- A. Steel Doors and Frames: Comply with DHI A115 series.
 - 1. Surface-Applied Door Hardware: Drill and tap doors and frames according to SDI 107.
- B. Wood Doors: Comply with DHI A115-W series.

3.3 INSTALLATION

- A. 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. Custom Steel Doors and Frames: DHI's "Recommended Locations for Builders' Hardware for Custom Steel Doors and Frames."
 - 3. Wood Doors: DHI WDHS.3, "Recommended Locations for Architectural Hardware for Wood Flush Doors."
- B. Install each door hardware item to comply with manufacturer's 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.
 - 1. Set units level, plumb, and true to line and location. Adjust and reinforce attachment substrates as necessary for proper installation and operation.
 - 2. Drill and countersink units that are not factory prepared for anchorage fasteners. Space fasteners and anchors according to industry standards.
- C. Key Control System: Place keys on markers and hooks in key control system cabinet, as determined by final keying schedule. Supply key cabinet with 25% expansion. Factory install keys in cabinet or in field with owner's representative. Key cabinet to be supplied with a "Complete System" equal to the Telkee System.
- D. Boxed Power Supplies: Locate power supplies as indicated or, if not indicated, above accessible ceilings, in equipment room. Verify location with Architect.
 - 1. Configuration: Provide one power supply for each door opening.
 - 2. Configuration: Provide the least number of power supplies required to adequately serve doors with electrified door hardware.
- E. Thresholds: Set thresholds for exterior and acoustical doors in full bed of sealant complying with requirements specified in Division 7 Section "Joint Sealants."

3.4 FIELD QUALITY CONTROL

- A. Independent Architectural Hardware Consultant: Owner or Architect will engage a qualified independent Architectural Hardware Consultant to perform inspections and to prepare inspection reports.
 - 1. Independent Architectural Hardware Consultant will inspect door hardware and state in each report whether installed work complies with or deviates from requirements, including whether door hardware is properly installed 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.
 - 1. Spring Hinges: Adjust to achieve positive latching when door is allowed to close freely from an open position of 30 degrees.
 - 2. Electric Strikes: Adjust horizontal and vertical alignment of keeper to properly engage lock bolt.
 - 3. Door Closers: Adjust sweep period so that, from an open position of 70 degrees, the door will take at least 3 seconds to move to a point 3 inches from the latch, measured to the leading edge of the door.
- B. Six-Month Adjustment: Approximately six months after date of Substantial Completion, Installer shall perform the following:
 - 1. Examine and readjust each item of door hardware as necessary to ensure function of doors, door hardware, and electrified door hardware.
 - 2. Consult with and instruct Owner's personnel on recommended maintenance procedures.
 - 3. Replace door hardware items that have deteriorated or failed due to faulty design, materials, or installation of door hardware units.

3.6 CLEANING AND PROTECTION

- A. Clean adjacent surfaces soiled by door hardware installation.
- B. Clean operating items as necessary to restore proper function and finish.
- C. Provide final protection and maintain conditions that ensure door hardware is without damage or deterioration at time of Substantial Completion.

3.7 DEMONSTRATION

- A. Engage a factory-authorized service representative to train Owner's maintenance personnel to adjust, operate, and maintain door hardware and door hardware finishes.

3.8 DOOR HARDWARE SCHEDULE

Hardware Set 1

Doors: 8108, 8113, 8114, 8130, 8134, 9108, 9113, 9114, 9130, 9134

3	Hinges	FBB191 4.5x4.5 pin torx		630	STN
	Classroom				
1	Lockset	45H7R14M LC pin torx		630	BST
1	Core	Peaks		626	KBA
1	Kickplate	KO050 10" CSK pin torx	B4E	630	TRM
1	Mop Plate	KM050 10" CSK pin torx	B4E	630	TRM
1	OH Stop	9000 series pin torx		630	ABH
3	Silencers	1229A		Gray	TRM

Hardware Set 2

Doors: 8109, 8112b, 8131, 8135, 9109, 9112b, 9131, 9135

3	Hinges	FBB191 4.5x4.5 pin torx		630	STN
	Classroom				
1	Lockset	45H7R14M LC pin torx		630	BST
1	Core	Peaks		626	KBA
1	Kickplate	KO050 10" CSK pin torx	B4E	630	TRM
1	Mop Plate	KM050 10" CSK pin torx	B4E	630	TRM
1	Wall Stop	1270CXPV pin torx		626	TRM
3	Silencers	1229A		Gray	TRM

Hardware Set 3

Doors: 8110, 9110

3	Hinges	FBB191 4.5x4.5 pin torx		630	STN
	Dormitory				
1	Lockset	45H7T14M LC VIN pin torx		630	BST
1	Core	Peaks		626	KBA
1	Kickplate	KO050 10" CSK pin torx	B4E	630	TRM
1	Mop Plate	KM050 10" CSK pin torx	B4E	630	TRM
1	Wall Stop	1270CXPV pin torx		626	TRM
3	Silencers	1229A		Gray	TRM

Hardware Set 4

Doors: 8111, 8132, 9111, 9132

3	Hinges	FBB191 4.5x4.5 NRP	pin torx		630	STN
	Storeroom					
1	Lockset	45H7D14M LC	pin torx		630	BST
1	Core	Peaks			626	KBA
1	Kickplate	KO050 10"	CSK pin torx	B4E	630	TRM
1	Mop Plate	KM050 10'	CSK pin torx	B4E	630	TRM
1	Wall Stop	1270CXPV	pin torx		630	ABH
3	Silencers	1229A			Gray	TRM

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