

ADDENDUM NO.: 1

DATE OF ADDENDUM: December 5, 2014

**North Campus Residence Hall Bathroom Renovations at  
Southern Connecticut State University  
New Haven, CT  
BI – RS – 308**

Original Bid Due Date / Time:

December 17, 2014

1:00pm

**TO: Prospective Bid Proposers:**

This Addendum forms part of the "Contract Documents" and modifies or clarifies the original "Contract Documents" for this Project dated 10/2/13. Prospective Bid Proposers shall acknowledge receipt of the total number the Addenda issued for this Project on the space provided on Section 00 41 00 Bid Proposal Form. Failure to do may subject Bid Proposers to disqualification.

The following clarifications are applicable to drawings and specifications for the project referenced above.

**Item 1**

Pre Bid Attendance List (See Attached)

**Item 2**

Written Question Deadline December 9, 2014 at 12:00pm

**Item 3**

Construction Phasing See G1.1 for project phasing plan, only the work noted in Phase 1 Summer 2015 should be included in the bids due on December 17<sup>th</sup>. All the floor plans indicate which phase they should be included in. Phase 2 & 3 wings of the building will be fully occupied during the construction period.

**Item 4**

Storage / Staging Area General Contractor is to provide a secured fenced in storage / staging area, (see attached) plan for proposed location. Area noted is approximately 7 parking spaces wide. General Contractor is to protect the existing asphalt surface and will be responsible for repairing any damages.

**Item 5**

Existing Finishes General Contractor is to protect all existing finishes not in contract scope of work from damage by work noted in contract documents. General Contractor will be responsible for repairing any and all damages to the existing finishes

**Item 6**

Hallway Lobby Protection General Contractor is to provide a temporary construction entrance door on all 6 floors of the building at the elevator lobby end of the Phase 1 hallway. At the completion of the project the General Contractor is to remove the construction entrance door and patch / repair the adjacent finishes to match existing. Phase 2 & 3 wings of the building will be fully occupied during the construction period.



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**Item 11**

22 00 10 Plumbing – Section 2.11 – Acceptable Manufacturers

(Delete) Section 2.11 L in its entirety

**Item 12**

Question: The drawings show work in the kitchens, at the walk through there was no mention of the kitchens. Please clarify if we are to include the kitchens in our bid.

Response: Kitchen work is part of Phase 3 Summer 2017, they should not be included in the bids due on December 17<sup>th</sup>

**Item 13**

08 71 00 Door Hardware – Section 2.11 – Acceptable Manufacturers

(Delete) Spec Section in its entirety

(Add) Spec Section 08 71 00 Door Hardware (See Attached)

**Item 14**

Question: Would you explain the procedure if the demolition of the bathrooms does not stay ahead of new construction? Who will determine if the demo is complete?

Response: Demolition has been scheduled to be completed prior to the G.C. having access to install bathroom upgrades. The Owners Representatives will determine completion of demolition work.

All questions must be in writing (by fax or email, not by phone) and must be forwarded to Quisenberry Arcari Architects, Attn: Andrew Tarpill, [andrew@qa-architects.com](mailto:andrew@qa-architects.com), 860-677-8534 fax with copies sent to the CT DCS Project Manager Thomas Surprenant, [Thomas.surprenant@ct.gov](mailto:Thomas.surprenant@ct.gov), 860-713-7270 fax and Construction Manager Doug Goulet, [dgoulet@go-sbs.com](mailto:dgoulet@go-sbs.com), 203-779-5661 fax

End of Addendum #1



Philip St. Amand, Purchasing Assistant  
Department of Administrative Services  
On Behalf of the Division of Construction Services

CTDCS Project No.: BI-RS-308  
 Date: December 3, 2014  
 Meeting Start Time: 10:00am  
 Meeting Location: 615 Fitch Street Hamden CT  
 Meeting Purpose:  Pre-Bid Meeting  
 Post Bid Review Meeting  
 Other:

|                                   |                                  |
|-----------------------------------|----------------------------------|
| Name: Tom Surprenant              | Title: Project Manager           |
| Company/Department: DCS           | E-mail: Thomas.surprenant@ct.gov |
| Street: 165 Capitol Ave.          | Phone: 860-713-5932              |
| City/State/Zip Hartford, CT 06106 | FAX: 860-713-7270                |

|   |  |
|---|--|
| Name: JASON JOSLIN                      | Title: Project Mgr                     |
| Company/Department: BANTON CONSTRUCTION | E-mail: jjoslin@bantonconstruction.com |
| Street: 337 WASHINGTON AVE              | Phone: 203-234-2353                    |
| City/State/Zip NORTH HAVEN, CT 06473    | FAX: 203-234-6010                      |

|  |                                   |
|--|-----------------------------------|
| Name: Luis Brennan                       | Title: Project Manager            |
| Company/Department: Richards Corporation | E-mail: lbrennan@richardscorp.com |
| Street: 72 N. Harwinton Ave.             | Phone: 860-583-9229               |
| City/State/Zip Terryville CT 04780       | FAX: 860-582-5303                 |

|                                   |                                    |
|-----------------------------------|------------------------------------|
| Name: LOUIS HOLZNER               | Title: Pres                        |
| Company/Department: HOLZNER ELEC. | E-mail: J.VENCHIO@HOLZNER.ELEC.COM |
| Street: 596 TOTTU ST              | Phone: 203-335-4204                |
| City/State/Zip BPT., CT. 06604    | FAX: 203-368-2425                  |

|  |                               |
|--|-------------------------------|
| Name: Jim Smethurst                                  | Title: Project manager        |
| Company/Department: Scholar Printing and Restoration | E-mail: ScholarPrinting@gmail |
| Street: Klard's Village PK #145                      | Phone: 203-906-8650           |
| City/State/Zip Seymour CT, 0648                      | FAX: 877-477-4874             |

|   |  |
|---|--|
| Name: Mark Setaro                       | Title: Superintendent                  |
| Company/Department: Carlin Construction | E-mail: msetaro@carlinconstruction.com |
| Street: 5 Shaws Cove                    | Phone: 860-444-2567                    |
| City/State/Zip New London, Ct 06320     | FAX: 860-447-8705                      |

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 Date: December 3, 2014  
 Meeting Start Time: 10:00am  
 Meeting Location: 615 Fitch Street Hamden CT

|  |                                     |
|--|-------------------------------------|
| Name: DAN PINO                           | Title: V.P.                         |
| Company/Department: OLYMPUS CONSTRUCTION | E-mail: DAN@OLYMPUSCONSTRUCTION.COM |
| Street: 77 CHERRY ST                     | Phone: 203-878-1544                 |
| City/State/Zip: MILFORD, CT 06460        | FAX: 203-878-6430                   |

|  |                                   |
|--|-----------------------------------|
| Name: NOLAN INDUSTRIES Inc North Nescod  | Title: VP                         |
| Company/Department: NOLAN INDUSTRIES Inc | E-mail: MATT@NOLAN-INDUSTRIES.COM |
| Street: 21 Meadow RD                     | Phone: 860 669 5883               |
| City/State/Zip: Clinton, CT, 06013       | Phone: 860 664 0539               |
|  | FAX: 860 836 0234                 |

|  |                         |
|--|-------------------------|
| Name: Pete Cappellano                      | Title: Estimator        |
| Company/Department: J.A. Nosa Construction | E-mail: pete@jarosa.com |
| Street: 15 TOWN LINE RD                    | Phone: 203 879 3445     |
| City/State/Zip: Wolcott CT 06716           | FAX: 203 879 0760       |

|  |                                     |
|--|-------------------------------------|
| Name: Dave Secandino                         | Title: VP                           |
| Company/Department: A. Secandino and Son LLC | E-mail: dave@asecondinobrandson.com |
| Street: 21 Ocean Rd                          | Phone: 203-481-3496                 |
| City/State/Zip: Branford CT 06405            | FAX: 203-483-8804                   |

|  |                                    |
|--|------------------------------------|
| Name: Tom Mauri                        | Title: Mechanical Division         |
| Company/Department: A. Secandino + Son | E-mail: TMAUR@ASECONDINOANDSON.COM |
| Street: 21 Ocean Rd                    | Phone: 203-481-3496                |
| City/State/Zip: Branford, CT 06405     | FAX: 203-483-8804                  |

|  |                                  |
|--|----------------------------------|
| Name: Lisa Garstka                       | Title: Assist. Estimator         |
| Company/Department: The Nutmeg Companies | E-mail: bids@nutmegcompanies.com |
| Street: 1 Ohio Ave                       | Phone: 860-823-1780              |
| City/State/Zip: Norwich CT 06360         | FAX: 860-885-1421                |

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 Meeting Start Time: 10:00am  
 Meeting Location: 615 Fitch Street Hamden CT

|                     |                            |         |                     |
|---------------------|----------------------------|---------|---------------------|
| Name:               | A Dynamic Construction LLC | Title:  | OWNER               |
| Company/Department: | 77 Abhawk Drive            | E-mail: | CAWLAN@Cubymail.com |
| Street:             | W. HILL CT                 | Phone:  | 260 983 4846        |
| City/State/Zip:     |                            | FAX:    |                     |

|                     |                           |         |                     |
|---------------------|---------------------------|---------|---------------------|
| Name:               | Robina Alexander & Wilson | Title:  | Representative      |
| Company/Department: | 92 WINDYBROOK RD          | E-mail: | CAWLAN@Cubymail.com |
| Street:             | HARTFORD CT               | Phone:  | 860-983-4146        |
| City/State/Zip:     |                           | FAX:    |                     |

|                     |                |         |                     |
|---------------------|----------------|---------|---------------------|
| Name:               | DOUGLAS GOULET | Title:  | CIVIL ENR           |
| Company/Department: | 583            | E-mail: | DGOULET@GOALSBS.COM |
| Street:             | 155 NEW ROAD   | Phone:  | 860-375-0055        |
| City/State/Zip:     | MIDDLETOWN, CT | FAX:    |                     |

|                     |                       |         |                                  |
|---------------------|-----------------------|---------|----------------------------------|
| Name:               | CHRIS ROSSIGNOL       | Title:  | ESTIMATOR                        |
| Company/Department: | SCOPE CONSTRUCTION    | E-mail: | CROSSIGNOL@SCOPECONSTRUCTION.COM |
| Street:             | 416 SLATER RD.        | Phone:  | 860.832.8335                     |
| City/State/Zip:     | NEW BRITAIN, CT 06053 | FAX:    | 860.832.8388                     |

|                     |                               |         |                          |
|---------------------|-------------------------------|---------|--------------------------|
| Name:               | ANDREW TARPILL                | Title:  | PROJECT MANAGER          |
| Company/Department: | QUISENBERRY AGENCY ARCHITECTS | E-mail: | andrew@qa-architects.com |
| Street:             | 318 MAIN STREET               | Phone:  | 860 677 4594 x13         |
| City/State/Zip:     | FARMINGTON, CT 06032          | FAX:    | 860 677 8534             |

|                     |                               |         |                         |
|---------------------|-------------------------------|---------|-------------------------|
| Name:               | DAVID QUISENBERRY             | Title:  | PRINCIPAL ARCHITECT     |
| Company/Department: | QUISENBERRY AGENCY ARCHITECTS | E-mail: | DAVID@QA-ARCHITECTS.COM |
| Street:             | 318 MAIN ST.                  | Phone:  | 860 677 4594 x11        |
| City/State/Zip:     | FARMINGTON CT 06032           | FAX:    | 860 677 8534            |

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 Date: December 3, 2014  
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|---------------------|----------------------------|---------|-----------------------|
| Name:               | ALAN MCILVEEN              | Title:  | MECHANICAL/ELECTRICAL |
| Company/Department: | WALTER MCILVEEN ASSOC INC. | E-mail: | APM@MCILVEEN.COM      |
| Street:             | 195 WESTMAIN ST            | Phone:  | 360 678 0230          |
| City/State/Zip:     | AVON CT 06001              | FAX:    | 860 676 9955          |

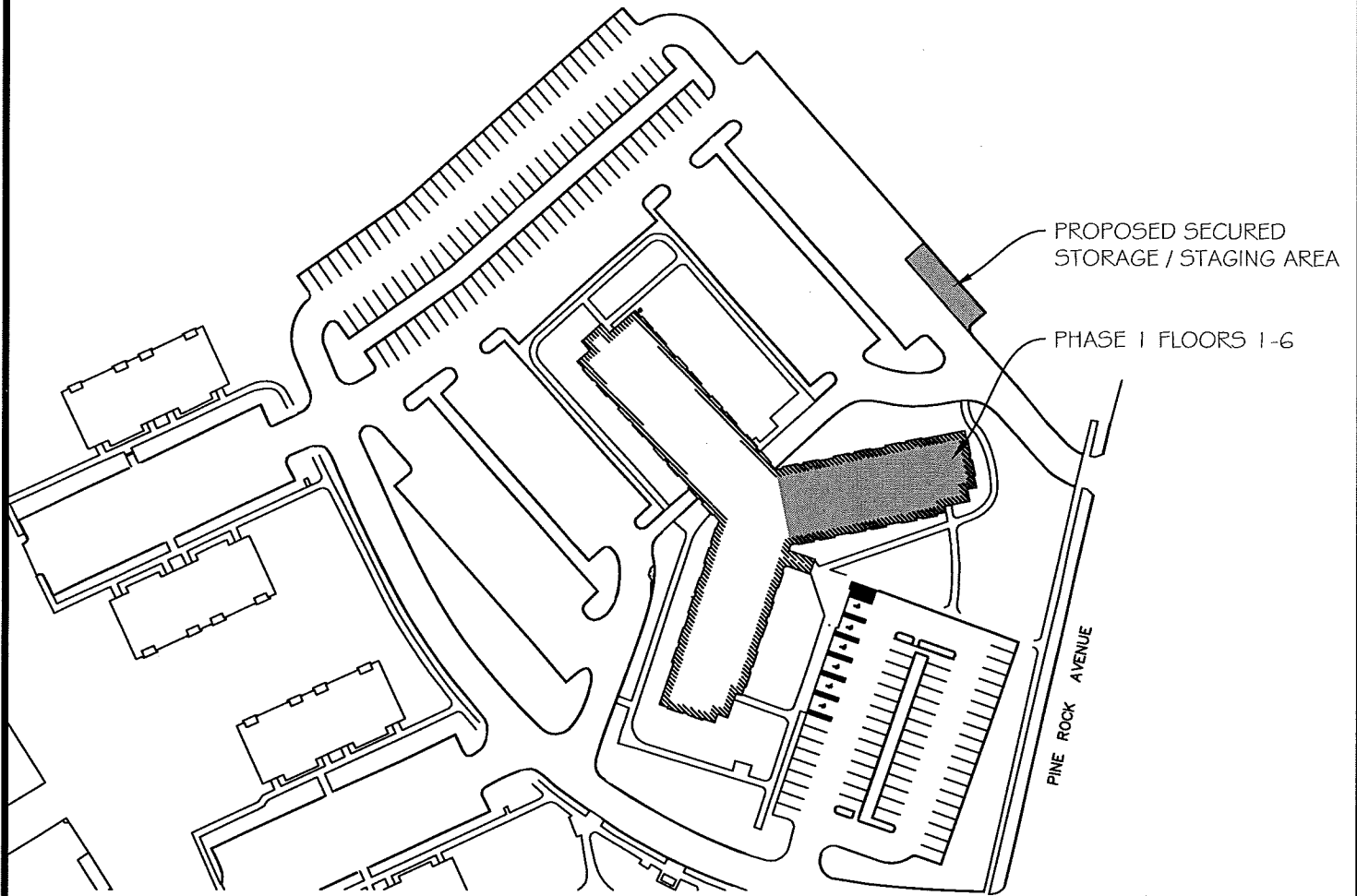
|                     |                |         |                            |
|---------------------|----------------|---------|----------------------------|
| Name:               | ERIC LESSNER   | Title:  | Assoc. Dir. of PM<br>& Eng |
| Company/Department: | BOR/SCSU       | E-mail: | lessner@ct.edu             |
| Street:             | 61 Woodland ST | Phone:  | (860) 982-8364             |
| City/State/Zip:     | WATERBURY, CT  | FAX:    |                            |

|                     |                            |         |                               |
|---------------------|----------------------------|---------|-------------------------------|
| Name:               | Nosal Builders Roetkegaspi | Title:  | Estimator                     |
| Company/Department: | Nosal Builders             | E-mail: | Roetkegaspi@nosalbuilders.com |
| Street:             | 51 OZICK Drive Purham CT   | Phone:  | 860 349 5674                  |
| City/State/Zip:     | CT 06422                   | FAX:    | 860 349 5675                  |

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|---------------------|--|---------|--|
| Name:               |  | Title:  |  |
| Company/Department: |  | E-mail: |  |
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| City/State/Zip:     |  | FAX:    |  |

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| Name:               |  | Title:  |  |
| Company/Department: |  | E-mail: |  |
| Street:             |  | Phone:  |  |
| City/State/Zip:     |  | FAX:    |  |



# STAGING PLAN

Scale: N.T.S.

**QUISENBERRY ARCARI  
ARCHITECTS, LLC**

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318 Main Street

Farmington, CT 06032

**NORTH CAMPUS RESIDENCE HALL  
BATHROOMS RENOVATIONS AT  
SOUTHERN CONNECTICUT STATE  
UNIVERSITY**

**PROJECT NO: BI-RS-308**

**182 PINE ROCK AVE, NEW HAVEN, CT**

Issue Date:

**DECEMBER 5, 2014**

Sheet #:

**SKA-01**

Project #:

**QA 1328**

Drawn By:

**AMT**



## PART 1 GENERAL

### 1.1 SUMMARY

#### A. Section Includes:

1. Finish hardware for doors as specified and as listed in "Hardware Groups" and required by actual conditions.
2. Include screws, special screws, bolts, special bolts, expansion shields, and other devices for proper application of hardware. Installation of hardware with proper factory supplied fasteners is mandatory.
3. Sample door hardware matrix and door numbering criteria

#### B. Related Sections:

1. Section 01 60 00 - Product Requirements.
2. Section 06 10 53 -Miscellaneous Rough Carpentry.
3. Section 06 40 23 – Interior Architectural Woodwork
4. Section 08 11 13 - Hollow Metal Doors and Frames.
5. Section 08 14 16 - Flush Wood Doors.
6. Section 08 71 00 - Door Hardware.
7. Division 26: Electrical

### 1.2 GENERAL REQUIREMENTS

- #### A.
- Provide items, articles, materials, operations and methods listed, mentioned or scheduled herein or on drawings, in quantities as required to complete project. Provide hardware that functions properly. Prior to furnishing hardware, advise Architect of items that will not operate properly, are improper for conditions, or will not remain permanently anchored.

### 1.3 SUBMITTALS

- #### A.
- Hardware Schedule: Submit six (6) copies of hardware schedule in vertical format as illustrated by the Sequence of Format for the Hardware Schedule as published by the Door and Hardware Institute. Schedules, which do not comply, will be returned for correction before checking. Hardware schedule shall clearly indicate architect's hardware group and manufacturer of each item proposed. The schedule shall be reviewed prior to submission by a certified Architectural Hardware Consultant (AHC).
1. Provide illustrations from manufacturers catalogs and data in brochure form for all products, including model, function, design, finishes, and options.
  2. Check specified hardware for suitability and adaptability to details and surrounding conditions. Indicate unsuitable or incompatible items and proposed substitutions in hardware schedule.
  3. Provide listing of manufacturer's template numbers for each item of hardware in hardware schedule.
  4. Furnish other Contractors and Subcontractors concerned with copies of final approved hardware schedule. Submit necessary templates and schedules as soon as possible to hollow metal, wood door, and aluminum door fabricators in accordance with schedule they

require for fabrication.

5. Samples: Lever design or finish sample: Provide 3 samples if requested by architect.
- B. Riser and Wiring Diagrams: Provide complete and detailed system operation and elevation diagrams specially developed for each opening requiring electrified hardware, except openings where only magnetic hold-opens or door position switches are specified. Provide these diagrams with hardware schedule submittal for approval. Provide detailed wiring diagrams with hardware delivery to jobsite.
- C. Installation Instructions: Provide manufacturer's written installation and adjustment instructions for finish hardware. Send installation instructions to site with hardware.
- D. Templates: Submit templates and final approved hardware schedule to door and frame supplier and others as applicable to enable proper and accurate sizing and locations of cutouts and reinforcing.
- E. Closeout Submittals: Comply with Section 01 78 00 including specific requirements indicated.
  1. Operating and maintenance manuals: Submit 3 sets containing the following:
    - a. Complete information in care, maintenance, and adjustment, and data on repair and replacement parts, and information on preservation of finishes.
    - b. Catalog pages for each product.
    - c. Name, address, and phone number of local representative for each manufacturer.
    - d. Parts list for each product.
  2. Copy of final approved hardware schedule, edited to reflect "As installed".
  3. Copy of final keying schedule.
  4. As installed "Wiring Diagrams" for each opening connected to power, both low voltage and 110 volts.
  5. One complete set of special tools required for maintenance and adjustment of hardware, including changing of cylinders.
  6. Copy of all warranties taken from manufacturer's catalog pages. Non-cataloged letters of warranty are not acceptable without written authorization from owner. Including all appropriate reference numbers for manufacturers to identify the project.

#### 1.4 QUALITY ASSURANCE

- A. Manufacturer: Obtain each type of hardware (i.e. latch and locksets, hinges, closers) from single manufacturer, although several may be indicated as offering products complying with requirements. Locksets and exit device trim shall have aesthetic design compatibility.
- B. All hardware shall be considered stock material by manufacturer and not require machining, special order, or standard factory lead times for replacement, allowing for the prompt repair and maintenance of hardware as required. Only manufacturer's fasteners can be used on locksets, fire rated exit devices, and door closers. No altering of cylindrical keyways.
- C. Where doors are scheduled to be prepared for the future application of electronic hardware, furnish mechanical hardware that will require no additional door preparation when future conversion to electrical function takes place.
- D. Where free-wheeling lockset or exit device trim is specified, "shear pin" or "break away" style trims shall not be used.

- E. Supplier: Recognized architectural finish hardware supplier, with warehousing facilities, who has been providing hardware for period of not less than 3 years. The supplier shall be, or employ, a certified Architectural Hardware Consultant (AHC), who is registered in the continuing education program as administered by the Door and Hardware Institute. The hardware schedule shall be prepared and signed by a certified AHC.
- F. Installer: Firm with 3 years experience in installation of similar hardware to that required for this project, including specific requirements indicated. Installation must be of high quality. Such practices as grinding strike plates will not be tolerated.
- G. Regulatory Label Requirements: Provide nationally recognized testing agency label or stamp on hardware for labeled openings. Where UL requirements conflict with drawings or specifications, hardware conforming to UL requirements shall be provided. Conflicts and proposed substitutions shall be clearly indicated in hardware schedule.
- H. Handicap Requirements: Doors to stairs (other than exit stairs), loading platforms, boiler rooms, stages and doors serving other hazardous locations shall have knurled or other similar approved marking of door lever handles or cross bars in accordance with local building codes.
- I. Pre-Installation Conference: Prior to the installation of hardware, manufacturer's representatives for locksets, closers, and exit devices shall arrange and hold a jobsite meeting to instruct the installing contractor's personnel on the proper installation of their respective products. A letter of compliance, indicating when this meeting is held and who is in attendance, shall be sent to the Architect and Owner.

#### 1.5 DELIVERY, STORAGE AND HANDLING

- A. Deliver hardware to jobsite in manufacturer's original packaging, marked to correspond with approved hardware schedule. Do not deliver hardware until suitable locked storage space is available. Check hardware against reviewed hardware schedule. Store hardware to protect against loss, theft or damage.
- B. Deliver hardware required to be installed during fabrication of hollow metal, aluminum, wood, or stainless steel doors prepaid to manufacturer.

#### 1.6 WARRANTY

- A. Guarantee workmanship and material provided against defective manufacture. Repair or replace defective workmanship and material appearing within period of one year after Substantial Completion.
- B. Provide ten year factory warranty on door closer body against defects in material and workmanship from date of occupancy of project.
- C. Provide five year factory warranty on exit devices against defects in material and workmanship from date of occupancy of project. Provide two year factory warranty on electrified exit devices against defects in material and workmanship from date of occupancy of project.
- D. Cylindrical grade one through-bolted locksets supplied as equivalent to Sargent 10 Line shall have a five year factory warranty. Mortise locksets shall have a five year factory warranty from date of occupancy. All warranties shall be against defects in material or workmanship from date of occupancy of project.
- E. All power supplies and electronic hardware shall be by the same manufacturer to insure compatibility, proper function and warranty compliance. Field manufactured power supplies are not acceptable.
- F. All products furnished equivalent to HES electric strike model 1003 and 9600 shall have a 10 year warranty against defects in material or workmanship, compliant with "E" above.

- G. All products furnished as equivalent to Securitron products shall have a warranty similar to Securitron's MAGNACARE Lifetime Replacement Warranty. Securitron Magnalock Corporation warrants that it will replace at customer's request, at any time for any reason, products manufactured and branded by Securitron. Refer to Securitron's warranty to insure compliance.
- H. Replace shortages and incorrect items with correct material at no additional cost to Owner.
- I. At completion of project, a qualified factory representative shall inspect hardware installation and door closer adjustments. After this inspection, letter shall be sent to Architect reporting on conditions, verifying that hardware and closers have been properly installed and adjusted.

## PART 2 PRODUCTS

### 2.1 MANUFACTURERS

- A. Manufacturers listed have been chosen to establish a standard of quality, design, and function.
- B. Manufacturers have been approved only for the category or item listed. **The first manufacturer listed is the preferred manufacturer for each product**, and the submittal of any of manufacturer, even the 1<sup>st</sup> and 2<sup>nd</sup> equal, or a manufacturer not listed for any product, is not necessarily acceptable for use and must follow the submittal procedures as outlined in Specification Section 01631 – Equals and Substitutions.
- C. Product descriptions in subsequent Sections 2.2 to 2.35 take 1<sup>st</sup> precedent over listing order of manufacturers in 2.1, but only those manufacturers listed may be used. Actual hardware groups in Section 4.2 take next precedent over listing order of the manufacturers in 2.1
- D. Manufacturer information:
  - 1. The following is an alphabetical list of approved manufacturers, address, and website (if available). This information is being supplied for reference only and in no way implies product acceptance. Only the products listed in the respective category are considered to be acceptable for this project.

|                    |                      |  |
|--------------------|----------------------|--|
| 1) ABH             | Elk Grove, IL        | <a href="http://www.abhmfg.com">www.abhmfg.com</a>                         |
| 2) Dor-o-matic     | Harwood Heights, IL  | <a href="http://www.doromatic.com">www.doromatic.com</a>                   |
| 3) Folger Adam     | Lemont, IL           | <a href="http://www.folgeradamsecurity.com">www.folgeradamsecurity.com</a> |
| 4) Glynn-Johnson   | Indianapolis, IN     | <a href="http://www.glynnjohnson.com">www.glynnjohnson.com</a>             |
| 5) Hager           | St. Louis, MI        | <a href="http://www.hagerhinge.com">www.hagerhinge.com</a>                 |
| 6) HES             | Phoenix, AZ          | <a href="http://www.hesinnovations.com">www.hesinnovations.com</a>         |
| 7) Key Control     | Katy, TX             | <a href="http://www.key-control-inc.com">www.key-control-inc.com</a>       |
| 8) LCN             | Princeton, IL        | <a href="http://www.lcnclosers.com">www.lcnclosers.com</a>                 |
| 9) Lund            | Bath, OH             | <a href="http://www.lundkeycab.com">www.lundkeycab.com</a>                 |
| 10) McKinney       | Scranton, PA         | <a href="http://www.mckinneyhinge.com">www.mckinneyhinge.com</a>           |
| 11) National Guard | Memphis, TN          | <a href="http://www.ngpinc.com">www.ngpinc.com</a>                         |
| 12) Norton         | Monroe, NC           | <a href="http://www.yalesecurity.com">www.yalesecurity.com</a>             |
| 13) Pemko          | Memphis, TN          | <a href="http://www.pemko.com">www.pemko.com</a>                           |
| 14) Precision      | Romulus, MI          | <a href="http://www.precisionhardware.com">www.precisionhardware.com</a>   |
| 15) Quality        | Los Angeles, CA      | <a href="http://www.trimcobbw.com">www.trimcobbw.com</a>                   |
| 16) Reese          | Rosemont, MN         | <a href="http://www.reeseusa.com">www.reeseusa.com</a>                     |
| 17) Rixson         | Monroe, NC           | <a href="http://www.yalesecurity.com">www.yalesecurity.com</a>             |
| 18) Rockwood       | Rockwood, PA         | <a href="http://www.rockwoodmfg.com">www.rockwoodmfg.com</a>               |
| 19) Roton          | St. Louis, MI        | <a href="http://www.hagerhinge.com">www.hagerhinge.com</a>                 |
| 20) Sargent        | New Haven, CT        | <a href="http://www.sargentlock.com">www.sargentlock.com</a>               |
| 21) Schlage        | Colorado Springs, CO | <a href="http://www.schlage.com">www.schlage.com</a>                       |
| 22) Securitron     | Sparks, NV           | <a href="http://www.securitron.com">www.securitron.com</a>                 |
| 23) Sentrol        | Tualatin, OR         | <a href="http://www.sentrol.com">www.sentrol.com</a>                       |
| 24) Stanley        | New Britain, CT      | <a href="http://www.stanleyworks.com">www.stanleyworks.com</a>             |

- |                |                  |                   |
|----------------|------------------|-------------------|
| 25) Telkee     | Dover, DE        | www.telkee.com    |
| 26) Von Duprin | Indianapolis, IN | www.vonduprin.com |
| 27) Locknetics |                  |                   |

2.2 BUTTS AND HINGES

A. Acceptable Manufacturers and Products:

| Manufacturer | Equal Mfg. 1 | Equal Mfg. 2 |
|--------------|--------------|--------------|
| McKinney     | Hager        | Stanley      |
| TA2714       | BB1279       | FBB179       |
| T4A3786      | BB1168       | FBB168       |

- B. Drill 5/32 inch hole and use No. 12, 1-1/4 inch steel threaded to the head wood screws for hinges on wood doors.

2.3 ELECTRIC HINGES

A. Acceptable Manufacturers and Products:

| Manufacturer | Equal Mfg. 1 | Equal Mfg. 2 |
|--------------|--------------|--------------|
| McKinney     | Hager        | Stanley      |
| QC           | QC Equal     | QC Equal     |

- B. Transfer hinges shall be provided with molex standardized plug connectors to accommodate up to twelve (12) wires. Plug connectors shall plug directly into molex through-door wiring harness for connection to electric locking devices and power supplies. Provide sufficient number of concealed wires to accommodate electric function of specified hardware. Provide a mortar guard for each transfer hinge specified.
- C. Electric hinges to be located at second hinge from bottom. Where electric hinges are used in conjunction with exit devices, locate hinge nearest to exit device.
- D. Provide mortar guard similar to McKinney MG-16 for each electric hinge specified.

2.4 CONTINUOUS HINGES

A. Acceptable Manufacturers and Products:

| Manufacturer | Equal Mfg. 1 | Equal Mfg. 2 |
|--------------|--------------|--------------|
| Pemko        | Roton        | Stanley      |
| CFM SLF HD1  | 780-112HD    | 501          |
| CFM HD1      | 780-224HD    | 521          |

- B. Provide one of the above two models of continuous hinges as appropriate for the type, inset, and thickness of door where specified. Coordinate hinge types with the door supplier.
- C. Provide eight (8) adjusta-screws per hinge to assist in alignment of door in frame.

2.5 TRANSFER CONTINUOUS HINGES

A. Acceptable Manufacturers and Products:

| Manufacturer | Equal Mfg. 1 |
|--------------|--------------|
| McKinney     | Pemko        |
| SER          | SER          |

- B. Electric continuous hinges shall be provided with molex standardized plug connectors to accommodate up to twelve (12) wires. Plug connectors shall plug directly into molex through-door wiring harnesses for connection to electric locking devices and power supplies. Provide sufficient number of concealed wires to accommodate electric function of specified hardware.
- C. Provide 96" lead with standardized molex connector on one end for attaching to the frame leaf with exposed wire end for attaching to power supply. Also provide 48" lead with standardized molex connectors on both end for attaching to the door leaf and the electrified hardware item.

2.6 POWER SUPPLIES

- A. Acceptable Manufacturers and Products:

| Manufacturer | Equal Mfg. 1 | Equal Mfg. 2 |
|--------------|--------------|--------------|
| Securitron   | Sargent      | Von Duprin   |

- B. Provide a power supply, necessary for the operation of the electronic component, for each electric lock, electric exit devices, electromagnetic locks, electric strike, and other components requiring a power supply.
- C. The power supply shall furnish regulated and filtered 24 VDC (or as required) and shall be UL class 2 listed. Provide 1, 4, or 8 separate output circuit breakers to divide load. LED's shall monitor zone status (voltage no voltage) and slide switches shall be provided to connect or disconnect the load from power. The power supply shall have the internal capability of charging optional sealed lead acid backup batteries (24 VDC or as required) in addition to operating the DC load. The power supply shall be supplied complete requiring only 120VAC to the fused input and shall be supplied in an enclosure. The power supply shall be supplied with emergency release terminals that allow the release of all devices upon activation of the fire alarm system.

2.7 FLUSH BOLTS AND DUSTPROOF STRIKES

- A. Acceptable Manufacturers and Products:

| Manufacturer | Equal Mfg. 1 |
|--------------|--------------|
| Rockwood     | Hager        |
| 555          | 282D         |
| 570          | 570          |

- B. Non-labeled Openings: Provide 2 flush bolts 555 for inactive leaf of pairs of locked and latched doors. Locate centerline of top bolt not more than 78 inches from finished floor. Provide dustproof strike 570 for bottom bolt.

2.8 CYLINDRICAL LOCKS (NO SUBSTITUTION)

- A. Acceptable Manufacturers and Products:

| Manufacturer |
|--------------|
| Sargent      |
| 11 LINE      |

2.9 MORTISE LOCKS (NO SUBSTITUTION)

- A. Acceptable Manufacturers and Products:

| Manufacturer |
|--------------|
| Sargent      |

**8200 SERIES**

- B. Provide lock series and functions as specified in Hardware Groups, with the provisions below. Sargent product numbers are referenced in the Hardware Groups.
1. Cylinders: Refer to keying requirements
  2. Backsets: 2-3/4 inches.
  3. Strikes: Provide wrought boxes and curved lip strikes with proper lip length to protect trim but not to project more than 1/8 inch beyond trim, frame or inactive leaf. Where required, provide open back strike and protected to allow practical and secure operation.

2.10 KEYING

- A. Provide Sargent factory masterkeyed cylinders keyed to existing Sargent Restricted Masterkey System. Key system is on file at Sargent factory. NO SUBSTITUTIONS will be allowed.
- B. Provide manufacturers standard cylinders (non removable core type – removable core cylinders will not be accepted and will be replaced at supplier's cost if furnished).
- C. Factory key all cylinders with manufacturer retaining permanent keying records.
- D. Submit proposed keying schedule to Architect. Meet with Owner and Architect to review schedule.
- E. All cylinders, unless noted otherwise, shall be operated by one of a series of Existing Grand Master Keys
- OR
- F. All cylinders, unless noted otherwise, shall be operated by one of a series of New Master Keys, under the existing system, as noted by their respective key set number herein, to be established for this project. Allow for twenty (20) Master Keys under each of the above Grand Master Keys. (Do not use the letter "I" or "O" in any of the master key sets.)
- G. All cylinders shall be keyed in alike or different sets as noted by their respective key set number. Allow for fifty (50) change keys under each of the above master keys.
- H. All keys are to be cut on Restricted key blanks in accordance with existing Sargent Restricted Masterkey System. Provide keys as follows:
1. Do not issue Grand Master Keys
  2. Ten (10) Master Keys (each set)
  3. Five (5) Change Keys (each cylinder)
  4. Five (5) Construction Master Keys
- I. Visual key control:
1. All keys shall be stamped with their respective key set number and stamped "DO NOT DUPLICATE".
  2. Master keys shall be stamped with their respective key set letters.
  3. Do not stamp any cylinders with key set on face (front) of cylinder.
- J. All keyblanks, master and grandmaster keys shall be shipped directly from the factory to the University via registered mail, confidential, or, per the University's instructions, delivered directly to the University by the hardware supplier who shall obtain a receipt for delivery of same. All change keys shall ship with locksets or exit devices for the purpose of installation. Upon completion of installation, change keys shall be tagged, registered, and placed accordingly within key control cabinet for final delivery to the University. Meet with University prior to the initiation

of hardware installation to coordinate how change keys are to be tagged, registered, and placed within key cabinet.

There is to be NO construction keying for all buildings. The locks will be keyed at the factory according to a keying system layout that is to be determined at the keying meeting. The GC will be given an agreed number of master keys that the GC will use to lock & unlock doors in the building during construction.

At the end of construction, ALL master keys that were given to the GC must be returned and accounted for. If any of the master keys are lost by the GC, the GC will be responsible for re-keying the entire building.

## 2.11 DOOR TRIM

### A. Acceptable Manufacturers and Products:

| Manufacturer | Equal Mfg. 1 |
|--------------|--------------|
| Rockwood     | Hager        |

## 2.12 DOOR CLOSERS

### A. Acceptable Manufacturers and Products:

| Manufacturer | Equal Mfg. 1 |
|--------------|--------------|
| Sargent      | LCN          |
| 281-CPS      | 4111S-CUSH   |
| 281-CPSH     | 4111H-CUSH   |
| 281-O        | 4011         |
| 281-P10      | 4111EDA      |

- B. Provide all closers on exterior openings with a stop arm, unless noted otherwise.
- C. No P-9 arms shall be allowed on exterior parallel arm closers
- D. Provide all closers on interior openings with a parallel arm, unless noted otherwise.
- E. Provide non-sized closers, adjustable to meet maximum opening force requirements of ADA.
- F. Provide drop plates, brackets, or adapters for arms as required to suit details.
- G. Mount closers on room side of corridor doors, inside of exterior doors, and stair side of stairway doors. Closers shall not be visible in corridors, lobbies and other public spaces unless necessary.
- H. Provide back-check for closers.
- I. Provide hold-open arms where indicated.
- J. Provide delayed action where indicated.
- K. Provide closers for doors as noted in Hardware Groups and, in addition, provide closers for labeled doors whether or not specifically noted in group.
- L. Provide closers meeting the requirements of UBC 7-2 and UL 10C positive pressure tests.
- M. Provide sex bolt attachments or blocking for mineral core door application as directed by Architect and/or door specifications.



2.13 **AUTOMATIC OPERATORS**

- N. Acceptable Manufacturers and Products:
1. The criteria listed below are performance requirements and specifications for an automatic door operator. Also see Section 01361 – Equals and Substitutions.
- O. Meets requirements of disabled in accordance with Federal Regulation ANSI 117.
- P. All automatic equipment to comply with ANSI 156.19
- Q. Gyro Tech equipment as manufactured by NABCO Entrances, Inc. has been specified and shall be quoted as the base bid. Other systems can be quoted along with information specifically detailing the differences from the following specification. Distributed by Automatic Door Systems, Inc., telephone number 800-358-6143.
- R. Gyro Tech System: Automatic swing door system for physically challenged as indicated on door schedule and details.
- S. Mode of operation: Spring-close operator shall open door by energizing motor and shall stop by stalling motor against mechanical stop. Door shall close slowly by means of spring energy, closing force shall be controlled by and adjustable hydraulic closer independent of the motor and electric control. Complete automatic door cycle—8 to 20 seconds. Closing speed shall be fully adjustable. Manual door operation shall require less than 12 pounds of force applied to door stile. System shall also operate as manual door in the event of power failure. Hold open time shall be adjustable from 0-60 seconds.
- T. Operator housing shall be of aluminum extrusion with finished end caps and shall be prepared for mounting to new or existing door frames. Housing cover shall be removable to provide service access. No plastic covers shall be acceptable. Operator housing shall be 5 ¾ deep, by 6" high, by 36" long.
- U. Finish: Aluminum shall have a standard finish of AA-M12-C22-A41(204R1 Clear) or AA-M12-C22-A42(313 Dark Bronze). Black and special finishes available on request.
- V. "GEMINI" Power Operator completely assembled unit shall include silent bevel gear and roller chain transmission. Gears and chain coated with special dry lubricant for extreme temperature conditions. Closer to be an adjustable self contained, LCN4021, sealed, spring/hydraulic unit. Attached to the transmission system shall be a DC permanent magnet motor. Motor shall operate from electronic control and require less than 3 amps at full power stall. Complete unit shall be mounted with provisions for easy replacement without removing door from pivots or frame.
- W. Electrical control: Self-contained computerized unit with all electrical components for proper operation and switching of "GEMINI" Power Operator. Control shall include time delay, Push-N-Go circuitry. Control shall also include sequential mode and shall have variable opening speed adjustment.
- X. Connecting Hardware: Connect Conversion Unit (CUGT-400) drive arm to inswing door with a urethane covered roller, which shall ride in a track fabricated of 6061-T6 aluminum alloy attached to the door rail where required for pull-type operation. Outswing doors shall be connected to the operator by a two piece drive arm with self aligning rod ends and connecting door bracket for push type operation.
- Y. Provide wall-mounted actuator switches by the same manufacturer as the operator. Actuators shall be weather-resistant type at exterior applications, flush or surface mounted, engraved with handicap insignia. Field verify locations of wall switches with the Architect.
- Z. Automatic door equipment shall be installed by factory-trained installers in compliance with manufacturer's recommendations.

- AA. Electrical installer shall furnish and install all conduit and electrical wiring for activating and door operation. A minimum of 5 amperes, 115-volt, A/C, 1-phase circuit shall be furnished for each door operator, terminate and connect to operator control panel in operator housing.

2.14 OVERHEAD STOPS

- A. Acceptable Manufacturers and Products:

| Manufacturer | Equal Mfg. 1 | Equal Mfg. 2 |
|--------------|--------------|--------------|
| Rixson       | ABH          | Rixson       |

- B. Provide 1540 Series overhead stops for doors equipped with regular arm surface type closer that swing more than 140 degrees before striking wall, and for doors that open against equipment, casework, sidelights, other objects that would make wall stops inappropriate.
- C. Provide sex bolt attachments or blocking for mineral core door application as directed by Architect and/or door specifications.

2.15 STOPS AND HOLDERS

- A. Acceptable Manufacturers and Products:

| Manufacturer | Equal Mfg. 1 |
|--------------|--------------|
| Rockwood     | Hager        |

- B. Provide Rockwood #406 wall stop at mortise locksets and #409 wall stop at cylindrical locksets for each door leaf except where floor stops are scheduled in Hardware Groups. Where conditions do not allow a wall stop or a floor stop presents a tripping hazard, then provide an overhead stop.
- C. Provide 1540 Series overhead stops for doors that swing more than 140 degrees before striking a wall.
- D. Floor or base stops shall be used only where definitely specified or absolutely unavoidable.

2.16 THRESHOLDS

- A. Acceptable Manufacturers and Products:

| Manufacturer | Equal Mfg. 1 | Equal Mfg. 2   |
|--------------|--------------|----------------|
| Pemko        | Reese        | National Guard |

- B. Provide all thresholds as specified.
1. Refer to drawings for special details. Provide accessories, shims and fasteners.
  2. Where thresholds occur at openings with one or more mullions, they shall be cut for the mullions and extended continuously for the entire opening.

2.17 SILENCERS

- A. Acceptable Manufacturers and Products:

| Manufacturer | Equal Mfg. 1 |
|--------------|--------------|
| Rockwood     | Hager        |
| 608          | 307D         |

- B. Where weatherstripping or gasketing is not used provide the appropriate silencer for each

frame.

## 2.18 FASTENERS

- A. Including, but not limited to, wood or machine screws, bolts, nuts, anchors, etc. of proper type, material, and finish required for installation of hardware.
- B. Use phillips head for exposed screws. Do not use aluminum screws to attach hardware.
- C. Provide self-tapping (TEC) screws for attachment of sweeps and stop-applied weatherstripping.
- D. Install all hardware with only fasteners provided by the Manufacturer for use with the specific product and according to the Manufacturers written instructions.

## 2.19 FINISHES

### TYPICAL FINISHES AND MATERIALS

- A. Finishes, unless otherwise specified:
  - 1. Butts: Exterior Doors
    - a. 32D (BHMA 630) on Stainless Steel
  - 2. Butts: Interior Doors
    - a. 26D (BHMA 652) on Steel
  - 3. Continuous Hinges:
    - a. US28 (BHMA 628) on Aluminum
  - 4. Flush Bolts:
    - a. 26D (BHMA 626) on Brass or Bronze
  - 5. Exit Devices:
    - a. 32D (BHMA 630) on Stainless Steel
  - 6. Locks and Latches:
    - a. 32D (BHMA 630) on Stainless Steel
  - 7. Push Plates, Pulls and Push Bars:
    - a. 32D (BHMA 630) on Stainless Steel
  - 8. Kick Plates, Armor Plates, and Edge Guards:
    - a. 32D (BHMA 630) on Stainless Steel
  - 9. Overhead Stops and Holders:
    - a. 26D (BHMA 626) on Brass or Bronze
  - 10. Closers: Surface mounted.
    - a. Sprayed Aluminum Lacquer.
  - 11. Miscellaneous Hardware:
    - a. 26D (BHMA 626) on Brass or Bronze

## PART 3 EXECUTION

### 3.2 EXAMINATION

- A. Examine doors, frames, and related items for conditions that would prevent the proper application of finish hardware. Do not proceed until defects are corrected.

### 3.3 INSTALLATION

- A. Install finish hardware in accordance with reviewed hardware schedule and manufacturer's printed instructions. Prefit hardware before finish is applied, remove and reinstall after finish is completed. Install hardware so that parts operate smoothly, close tightly and do not rattle.
- B. Installation of hardware shall comply with NFPA 80 and NFPA 101 requirements.
- C. Set units level, plumb and true to line and location. Adjust and reinforce attachment to substrate as necessary for proper installation and operation.
- D. Drill and countersink units that are not factory-prepared for anchorage fasteners. Space fasteners and anchors in accordance with industry standards.
- E. Electronic hardware shall be furnished and installed by qualified tradespersons. All wiring shall be installed and tested by contractor and hardware installer. Door hardware installer shall be present to complete final adjustments to door hardware. After installation and testing has been completed, the University's security company (AST) shall tap into the system with a relay and connections to the campus wide security system.

### 3.4 FIELD QUALITY CONTROL

- A. After installation has been completed, a qualified person from the hardware supplier is to check the Project to determine proper application of finish hardware according to schedule. Also check operation and adjustment of all hardware items.
- B. Installer shall deliver to owner, upon completion, one set of installation and maintenance instructions and specialty tools for all hardware items.
- C. Upon owner's request, hardware consultant shall inspect application, installation and adjustment of hardware for proper installation.

### 3.5 ADJUSTING AND CLEANING

- A. At completion, hardware shall be left clean and free from disfigurement. Make adjustment to door closers and other items of hardware. Where hardware is found defective repair or replace or otherwise correct as directed.
- B. Adjust door closers to meet opening force requirements of Uniform Federal Accessibility Standards.
- C. Adjust door control devices to compensate for final operation of heating and ventilating equipment.
- D. Adjustment: Wherever hardware installation is made more than one month prior to acceptance or occupancy of space or area, return to work during week prior to acceptance or occupancy, and make/ check adjustments of hardware items in such space or area. Clean operating items as necessary to restore proper function and finish of hardware and doors.
- E. Final Adjustment: Installer shall return six months after substantial completion to make final adjustments of all hardware items.
- F. Installer shall instruct Owner's personnel in proper adjustment and maintenance of door hardware and hardware finishes.
- G. Clean adjacent surfaces soiled by hardware installation.

3.6 PROTECTION

- A. Provide for proper protection of items of hardware until Owner accepts Project as complete.

3.7 HARDWARE GROUPS AND SUFFIXES

- A. The following schedule of hardware groups shall be considered a guide only, and the supplier is cautioned to refer to general conditions, special conditions, and the preamble to this section. It shall be the hardware supplier's responsibility to furnish all required hardware.
- B. Refer to the door schedule for special hardware notes, applications, and/or requirements.

3.8 MANUFACTURERS ABBREVIATIONS

1. MK - McKinney
2. RO - Rockwood
3. SA - Sargent
4. RF - Rixson
5. PE - Pemko
6. NB - Nabco
7. HS - HES

3.9 HARDWARE SETS

**Set: 1.0**

Description: ADA Public Bathroom

|                              |                        |       |    |
|------------------------------|------------------------|-------|----|
| 3 Hinge                      | TA2714 4-1/2" x 4-1/2" | US26D | MK |
| 1 Cylindrical Lock (privacy) | 28 11U65 LL            | US26D | SA |
| 1 Surface Closer             | 281 O                  | EN    | SA |
| 2 Kick Plate                 | K1050 8" 4BE CSK       | US32D | RO |
| 1 Wall Stop                  | 401/404                | US26D | RO |
| 1 Threshold                  | 271A FHSL14            |       | PE |
| 3 Silencer                   | 608/609                |       | RO |

**Set: 2.0**

Description: ADA Bedroom

|                              |                        |       |    |
|------------------------------|------------------------|-------|----|
| 3 Hinge                      | TA2714 4-1/2" x 4-1/2" | US26D | MK |
| 1 Cylindrical Lock (privacy) | 28 11U65 LL            | US26D | SA |
| 1 Surface Overhead Stop      | 10-X36                 | 652   | RF |
| 2 Kick Plate                 | K1050 8" 4BE CSK       | US32D | RO |
| 1 Threshold                  | 271A FHSL14            |       | PE |
| 3 Silencer                   | 608/609                |       | RO |

**Set: 3.0**

Description: ADA Bathroom

|                              |                        |       |    |
|------------------------------|------------------------|-------|----|
| 3 Hinge                      | TA2714 4-1/2" x 4-1/2" | US26D | MK |
| 1 Cylindrical Lock (privacy) | 28 11U65 LL            | US26D | SA |
| 1 Surface Overhead Stop      | 10-X36                 | 652   | RF |
| 2 Kick Plate                 | K1050 8" 4BE CSK       | US32D | RO |
| 1 Threshold                  | 271A FHSL14            |       | PE |
| 3 Silencer                   | 608/609                |       | RO |

**Set: 4.0**

Description: Standard Private Bathroom

|                              |                        |       |    |
|------------------------------|------------------------|-------|----|
| 3 Hinge                      | TA2714 4-1/2" x 4-1/2" | US26D | MK |
| 1 Cylindrical Lock (privacy) | 28 11U65 LL            | US26D | SA |
| 1 Surface Overhead Stop      | 10-X36                 | 652   | RF |
| 1 Threshold                  | 271A FHSL14            |       | PE |
| 3 Silencer                   | 608/609                |       | RO |

**Set: 5.0**

Description: Kitchen Entry

|                                |                        |       |    |
|--------------------------------|------------------------|-------|----|
| 1 Cylindrical lock (storeroom) | 8204 LNL x Restricted  | US26D | SA |
| 1 Electric Strike              | 1006                   | 630   | HS |
| 1 Door Operator                | GT710 x RF x 2 Remotes | AL    | NB |
| 2 Kick Plate                   | K1050 8" 4BE CSK       | US32D | RO |
| 1 Balance of Hardware          | Reuse Existing         |       |    |

**END OF SECTION**