



State of Rhode Island  
Department of Administration / Division of Purchases  
One Capitol Hill, Providence, Rhode Island 02908-5855  
Tel: (401) 574-8100 Fax: (401) 574-8387

**ADDENDUM # 2**

7/9/15

Solicitation RFQ #7549666

*Title: Demolition of existing Nursing Lab with installation of new  
Simulation Lab - CCRI*

**Submission Deadline: July 21, 2015 @ 10:00 am**

**Per the issuance of ADDENDUM #2 the following are noted:**

**Addendum #2 (attached)**

*Interested Parties should monitor this website on a regular basis, for any additional information that may be posted.*

**Gary P. Mosca,  
Senior Buyer**

**SECTION 00 9111**  
**ADDENDUM 2**

**PART 1 - GENERAL**

This Addendum forms a part of the Contract Documents and modifies the Bidding Documents dated **May 8<sup>th</sup>, 2015**. Acknowledge receipt of this Addendum in the space provided in the Bid Form. Failure to do so may disqualify the Bidder.

This Addendum consists of **2** pages plus the following:

1. Pre-Bid Meeting Minutes dated 7/2/15, 2 pages.
2. Revised Bid Form, 4 pages.
3. Specifications Section 11 3100 – Appliances, dated 7/9/15, 2 pages.
4. Specification Section 01 1000 – Summary of Work, dated 7/9/15, 4 pages.
5. Specification Section 08 7100 – Door Hardware, dated 7/9/15, 15 pages.
6. SKA-1 (dated 7/9/15), Typical Roof Penetration Detail, 1 page.

**1.01 CHANGES TO PROJECT MANUAL**

- A. Add Specification Section 11 3100 – Appliances, dated 7/9/15, 2 pages, provided in this addendum.
- B. Replace Specification Section 01 1000 – Summary of Work, with section dated 7/9/15, 4 pages, provided in this addendum.
- C. Replace Specification Section 08 7100 – Door Hardware, dated 7/9/15. 15 pages, provided in this addendum.
- D. Replace Specification Section 08 1416, Flush Wood Doors, Part 2, Section 2.01 in its entirety with the following:
  - 2.01 MANUFACTURERS
    - A. Wood Veneer Faced Doors:
      1. Lambton Doors, no substitutions.
- E. Add the following to Specification Section 01 2000 – Price and Payment Procedures, Part 1, Section 1.6 Change Procedures:

“N. Change order work being done exclusively by the General Contractor may be marked up by a maximum of 5%. Work being performed by a subcontractor may be markup by that subcontractor a maximum of 10%. The General Contractor may mark-up that subcontractor’s work by a maximum of 5%.”

**1.02 CHANGES TO DRAWINGS**

- A. Drawing E1.1, Existing Power and Systems Floor Plan: Add (1) data outlet to be demolished on Eastern wall, right-hand side.
- B. Drawing A1.1, Detail 9: Delete “J-CHANNEL TRIM BOTH SIDES”. Replace with “FULL

METAL WALL CAP”.

- C. SKA-1 (dated 7/9/15), Typical Roof Penetration Detail.
- D. Drawing A1.1, Finish Schedule: Eliminate Mechanical Room 110 from the finish schedule, in its entirety. Change room # 111 to #110.
- E. Drawings A5.1, Detail 15: Eliminate exterior storefront painting scope.
- F. Drawings A5.2, Detail 2 & 6: Eliminate exterior storefront painting scope.

### **1.03 QUESTIONS AND ANSWERS**

- Q. Finish Schedule indicates Room 110 Mechanical Room to receive new flooring, ceiling, and paint. Floor Plan does not locate Room 110.
  - A. Mechanical Room 110 has been eliminated from the project scope.
- Q. Does the structure, piping, etc. above the Wood Baffle Ceiling require painting?
  - A. Yes. Paint all above wood baffle ceiling P-5, per note on 2/A5.1.
- Q. A5.1 Elevation 15 indicates painting of window trim. Do the windows require painting?
  - A. No, existing exterior storefront does not need to be painted.

### **1.04 ADDITIONAL INFORMATION**

- A. N/A.

**END OF SECTION**

**CCRI Simulation Laboratory  
Lincoln Campus**

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Date: July 2, 2015  
Prepared by: Christine Medeiros  
Distribution: Addendum #2

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A mandatory pre-bid meeting was held to review the Bid Documents and have a walk-through of the existing conditions. The following comments were noted:

**GENERAL**

1. Documents are available on the State Purchasing website.
2. Questions to be directed to the Division of Purchases. Addendum #1 will modify the question deadline to Wednesday, July 8<sup>th</sup>, 2015 at 5:00PM.
3. GM stressed MBE requirements be submitted before award to the successful bidder to expedite the Purchase Order process.
4. Bid Bond is required.
5. Bid opening is scheduled for July 21, 2015 at 10:00 am.

**SCOPE OF WORK**

1. The scope of work includes the demolition of the existing nursing lab space and construction of new design on the second floor of the Lincoln Campus including MPE, removal of obsolete wiring, new millwork, and installation/coordination of equipment.
2. Asbestos abatement plan is included as part of the bid documents.
3. Existing fire alarm and sprinkler systems are currently under warranty. The contractor is required to use Calson for fire alarm and Delta for sprinkler work.
4. Video camera installation will be by Shanix Technology Inc.
5. BCI checks to be within 1 month of start of work for EVERY person (contractor and subcontractors) on site at any time. BCI's to be submitted to Mark Libutti.
6. Contractor/Subcontractors to sign in at security before start of work each night/day.
7. Work to be done on third shift only. First and second shift work will be up to the discretion of the Owner and can be shutdown at any time. Construction must not disrupt work during business hours and class schedules. Fulltime maintenance and security personnel are on staff at CCRI during night and weekend hours.
8. Weekend work is permitted only if coordinated with CCRI prior.
9. The contractor may create a field office within the renovation space as construction allows. Space will be secured when not in use.
10. A Conex box is allowed for storage on site. Location to be determined.
11. Alternate will be design-build washer/sink/casework installation at room 2163 adjacent.
12. Salvaged items will be the modular metal panels that form the classroom walls.
13. The contractor will be responsible for coordinating with the College's IT personnel to ensure all work is installed to their standards.
14. A full list of subcontractors to be provided as part of the submittal package.
15. This project requires a fulltime super intendant.

**SCHEDULE**

1. Scheduled for Fall 2015 with a 6 month construction schedule.
2. Work to begin within 7 days of the receipt of the PO.
3. Bi-weekly site meetings will be required.
4. Liquidated damaged will be increased to \$1,500/day.
5. All substitutions must be made and approved of during the bid period. We will not accept substitutions once we move into contract and construction.
6. Work to be continuous. Contractor is not permitted to stop the flow of work throughout the construction schedule.
7. No work is to begin until all submittals have been **approved**. The contractor has 1 month from the receipt of the PO to provide all submittals to the Architect. Liquidated damages will incur if this schedule is not met.

**END OF MEETING**

*If any of the above is inconsistent with your understanding, or this meeting memo fails to document any items discussed, please contact our office immediately.*

**Solicitation #:7549666**

**Solicitation Title: Demo of existing Nursing Lab with Installation of a new Simulation Lab.**

**BID FORM**

To: The Department of Administration, Division of Purchases  
One Capitol Hill, Providence, RI 02908

Project: CCRI Simulation Lab  
Community College of Rhode Island  
Flanagan Campus

Bidder:

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Legal name of entity

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Address

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Contact name Contact email

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Contact telephone Contact fax

**1. BASE BID PRICE**

The Bidder submits this bid proposal to perform all of the work (including labor and materials) as described in the solicitation for this Base Bid Price, (including the costs for all Allowances, Bonds, and Addenda):

\$

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(Base Bid Price *in figures* printed electronically, typed, or handwritten legibly in ink)

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(Base Bid Price *in words* electronically, typed, or handwritten legibly in ink)

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- **ALLOWANCES**

The Base Bid Price ***includes*** the costs for the following Allowances:

1. <b>Concealed Existing Conditions Repair Allowance</b>	<b><u>\$10,000.00</u></b>
<b>Total Allowances:</b>	<b><u>\$10,000.00</u></b>

- **BONDS**

The Base Bid Price ***includes*** the costs for all Bid and Payment and Performance Bonds required by the solicitation.

- **ADDENDA**

The Bidder has examined the entire solicitation ( including the following Addenda), and the Base Bid Price ***includes*** the costs of any modifications required by the Addenda.

All Addenda must be acknowledged.

- Addendum No. \_\_\_\_\_, dated \_\_\_\_\_

**2. ALTERNATES (Additions to Base Bid Price)**

The Bidder offers to: (i) perform the work described in these Alternates as selected by the State in the order of priority specified below, based on the availability of funds and the best interest of the State; and (ii) increase the Base Bid Price by the amount set forth below for each Alternate selected.

Alternate #1: Washer, sink and casework in Room 2163.

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Add/Deduct \_\_\_\_\_ (\$ \_\_\_\_\_)

**3. UNIT PRICES**

The Bidder submits these predetermined Unit Prices as the Basis for any change orders approved in advance by the State. These Unit Prices include **all** costs, including labor, materials, services, regulatory compliance, overhead, and profit.

N/A

**4. CONTRACT TIME**

The Bidder offers to perform the work in accordance with the timeline specified below:

- Start of Submittals .....5 calendar days after receipt of CCRI PO
- Start of Construction..... September 2015
- Substantial Completion ..... January 2016
- Final Completion .....February 2016
- Work Prohibited.....Commencement

**5. LIQUIDATED DAMAGES**

The successful bidder awarded a contract pursuant to this solicitation shall be liable for and pay the State, as liquidated damages and not as a penalty, the following amount for **each** calendar day of delay beyond the date for substantial completion, as determined in the sole discretion of the State:

**Fifteen Hundred Dollars (\$1500) per day.**

**BID FORM SIGNATURE(S)**

**This bid proposal is irrevocable for 60 days from the bid proposal submission deadline.**

**If the Bidder is determined to be the successful bidder pursuant to this solicitation, the bidder will promptly: (i) comply with each of the requirements of the Tentative Letter of**

**Solicitation #:7549666**

**Solicitation Title: Demo of existing Nursing Lab with Installation of a new Simulation Lab.**

**Award; and (ii) commence and diligently pursue the work upon issuance and receipt of the purchase order from the State and authorization from the user agency.**

**The person signing below certifies that he or she has been duly authorized to execute and submit this bid proposal on behalf of the Bidder.**

**Date:** \_\_\_\_\_

**BIDDER**

\_\_\_\_\_  
Name of Bidder

\_\_\_\_\_  
Signature in ink

\_\_\_\_\_  
Printed name and title of person signing on behalf of Bidder

#

\_\_\_\_\_  
Bidder's Contractor Registration Number

**SECTION 11 3100  
APPLIANCES**

**PART 1 GENERAL**

**1.01 SECTION INCLUDES**

- A. Flat screen TVs.

**1.02 RELATED REQUIREMENTS**

- A. Section 26 2717 - Equipment Wiring: Electrical connections for appliances.

**1.03 REFERENCE STANDARDS**

- A. UL (EAUED) - Electrical Appliance and Utilization Equipment Directory; Underwriters Laboratories Inc.; current edition.

**1.04 SUBMITTALS**

- A. See Section 01 3000 - Administrative Requirements, for submittal procedures.
- B. Product Data: Manufacturer's data indicating dimensions, capacity, and operating features of each piece of residential equipment specified.
- C. Copies of Warranties: Submit manufacturer warranty and ensure that forms have been completed in Owner's name and registered with manufacturer.

**1.05 QUALITY ASSURANCE**

- A. Manufacturer Qualifications: Company specializing in manufacturing products specified in this section, with not less than three years of documented experience.
- B. Electric Appliances: Listed and labeled by UL and complying with NEMA standards.
- C. Warranty on TVs: 3 years parts and labor including backlight.

**1.06 WARRANTY**

- A. See Section 01 7800 - Closeout Submittals, for additional warranty requirements.
- B. Provide three (3) year manufacturer warranty to include parts and labor.

**PART 2 PRODUCTS**

**2.01 FLAT SCREEN TVs**

- A. All Equipment: Energy Star Rated.
- B. Large flat screens for Debriefing Rooms:
  - 1. 65" High Performance LED Backlit Commercial Grade Display
  - 2. Model: V652, 1080p resolution, built-in 10W speakers
  - 3. Manufacturer: NEC
  - 4. Accessories: Wall mount package, remotes control, batteries.
- C. Small flat screens for Simulation Rooms:
  - 1. 32" LED Backlit Display with Integrated Tuner
  - 2. Model: E325
  - 3. Manufacturer: NEC
  - 4. Accessories: Wall mount package, remotes control, batteries.
- D. Substitutions: See Section 01 6000 - Product Requirements.

## **PART 3 EXECUTION**

### **3.01 EXAMINATION**

- A. Verify utility rough-ins are present and correctly located.

### **3.02 INSTALLATION**

- A. Install in accordance with manufacturer's instructions, including software when applicable.
- B. Anchor built-in/wall-hung equipment in place.

### **3.03 ADJUSTING**

- A. Adjust operating equipment to efficient operation.

### **3.04 CLEANING**

- A. Remove packing materials from equipment.

**END OF SECTION**

**SECTION 01 1000**  
**SUMMARY OF WORK**

**PART 1 - GENERAL**

**1.1 DESCRIPTION OF WORK**

- A. Overview: Vendor to supply all labor, materials and equipment required to renovate the CCRI Nursing Labs in accordance with the Simulation Laboratory Contract Documents, including the specifications and/or drawings listed in the Project Manual. Work shall include, but is not limited to, the following renovations to the Nursing Labs at the CCRI Flanagan Campus:
1. Architectural work shall include:
    - a. Demolition of the existing Nursing laboratory as indicated on the drawings. Protect adjacent areas and existing construction to remain. Salvage items listed for salvage. Provide asbestos abatement as required by the abatement plan in this specification.
    - b. Installation of simulation laboratories to include, partitions, doors, window walls, one-way mirror windows, millwork, white boards, ceilings, finishes.
    - c. Provide and install medical/laboratory equipment not noted to be provided by Owner, furniture, shelving, window treatments and signage.
  2. M/E/P/FP/FA work shall include:
    - a. Demolition of the existing Nursing laboratory VAV boxes, ductwork and diffusers, existing sink and piping, lighting, power and data.
    - b. Installation of new VAV boxes, ductwork and controls, split A/C system at Control Room 102 and associated work as indicated on drawings. Roof work to accommodate rooftop equipment and penetrations.
    - c. Piping and fixtures for sinks and oxygen. Connection to existing plumbing and existing air compressor in the dental suite on the first floor of the building.
    - d. Modifications to the existing sprinkler system as indicated.
    - e. Power, lighting and data upgrades. Provide AV, IT and Telephone not indicated to be provided by the Owner's separate vendors.
- B. General Requirements:
1. Contractor shall perform the Work of the Contract under a stipulated sum Contract with the Owner in accordance with the Conditions of Contract.
  2. Vendor is responsible for obtaining and paying for any required Local and State licenses, Permits and inspections.
  3. Contractor to include all Bond costs in their Bid.
  5. Before starting work, all Contractor workers and Subs are required to obtain and submit a current BCI and State-approved picture ID. CCRI reserves the right to deny Campus access to any worker based on information provided on the submitted BCI. All BCI's to be current within one calendar month.
  6. All onsite workers are to be OSHA 10 certified. Copies of this certification along with driver licenses are required on the first day of work.
  7. The Contractor is responsible for providing their workers with all personal protection equipment. At a minimum, this includes hard hats, reflective vests, eye protection, harnesses and ear protection.

8. All completed work must be inspected and approved by the College and the Architect.
9. There will be mandatory bi-weekly progress meetings onsite with four week look a-head schedules to be furnished to the Architect and College.
10. Vendor and/or its subcontractors are to be licensed as required by RI Department of Labor.
11. All contractors and subcontractors to sign in each employee at the CCRI Security Office located on the lower level at the start of each shift.
12. The contractor is responsible for coordinating all electrical and telecommunication installations and connections with IT personnel.
13. A full time super intendant is required for the extent of construction.
14. A full list of subcontractors to be provided as part of the submittal package.
15. Scheduled for Fall 2015 with a 6 month construction schedule.
16. Work to begin within 7 days of the receipt of the PO.
17. Work to be continuous. Contractor is not permitted to stop the flow of work throughout the construction schedule.
18. No work is to begin until all submittals have been **approved**. The contractor has 1 month from the receipt of the PO to provide all submittals to the Architect. Liquidated damages will incur if this schedule is not met.
19. Liquidated damaged will be increased to \$1,500/day.

## 1.2 ALTERNATES

- A. Alternate No. 1 – Washer, sink and casework in Room 2163.
  1. Alternative Item: Provide all materials and labor necessary for the installation of plumbing and electrical hook ups for a residential style washing machine, sink, base cabinet and laminate countertop. Contractor is to provide design build services for utilities. Provide sink and millwork to match Clean Room 105.

## 1.3 CONTRACTOR'S USE OF SITE AND PREMISES

- A. Owner intends to fully occupy the facility during the period of construction.
- B. Construction Operations: All work is to be third shift work. Limited to areas within the building as agreed with the College. Coordinate with Owner to insure delivery and completion per the schedule. Include all costs of this coordination, including all premium time wages that may be required to meet these requirements, in the Base bid. Fulltime maintenance and security personnel are on staff at CCRI during night and weekend hours. Weekend hours may be permitted if previously coordinated with CCRI.
- C. Provide access to and from site as required by law and by Owner:
  1. Emergency Building Exits During Construction: Keep all exits required by code open during construction period; provide temporary exit signs if exit routes are temporarily altered.
  2. Do not obstruct roadways, sidewalks, or other public ways without permission from the Owner.
- D. Utility Outages and Shutdown:
  1. Do not disrupt or shut down life safety systems, including but not limited to fire alarm system, without 7 days notice to Owner and authorities having jurisdiction.
  2. Prevent accidental disruption of utility services to other facilities. Any and all shutdowns to occur during third shift.

3. Do not disrupt building control wiring or fire alarm wiring passing through the area of work.
- E. Protect all existing surfaces from damages. Any damages to the existing surfaces requiring replacement and or repair will be at this vendor's expense.
- J. At all times and at the completion of the Project, construction areas are to be kept in a clean, safe and acceptable condition on a daily basis.
- K. Vendor is responsible for removing all project debris off site daily including all costs associated with waste containers and proper disposal of waste. The College will provide an exterior location for the temporary placement of a waste container.
- L. Vendor is to have all equipment necessary to perform the installation and service including, tools, staging, lift truck, etc. No CCRI equipment or tools will be available.
- M. A Conex box is allowed for storage on site. Location to be determined.

#### **1.4 ITEMS PROVIDED BY OWNER INSTALLED BY CONTRACTOR**

- A. Washroom Accessories to include soap dispensers, and paper towel holders.
- B. SimView simulation system microphones and cameras.
- C. Wall mounted telephones.

#### **1.5 WORK BY OWNER**

- A. Items noted NIC (Not in Contract) will be supplied and installed by Owner before Substantial Completion. Some items include:
  1. SimView simulation system computers and software.
  2. Computer pedestal and workstations.
  3. Medical furniture and medication dispensing machines.

#### **1.6 OWNER REQUIRED SUBCONTRACTORS**

- A. The existing sprinkler and fire alarm system was recently installed and is still under warranty. In order to maintain this warranty the following subcontractors must be used.
  - i. SPRINKLER – Delta Mechanical Contractors, LLC
  - ii. FIRE ALARM – Calson Corp.
- B. Video camera installation: Shanix Technology Inc.
- C. This work is to be provided as part of the base bid. These subcontractors are to provide services at the direction of the GC and must follow the contract documents.
- D. Existing roof is still under warranty by Firestone Building Products. Inspection and sign-off approval is required for the completion of this project. CCRI's current rep is Mark Puleo.

#### **1.7 ITEMS TO BE SALVAGED**

- A. Modular metal panels that form classroom walls. Include all panels, doors and hardware.

#### **1.8 HAZARDOUS MATERIALS**

- A. See test reports included in this Project Specifications for hazardous materials information. Remove asbestos-bearing materials as recommended the abatement plan.

**PART 2 PRODUCTS - NOT USED**

**PART 3 EXECUTION - NOT USED**

**END OF SECTION**

**SECTION 08 7100  
DOOR HARDWARE**

**PART 1 - GENERAL**

1.01 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.02 SUMMARY

A. Section Includes

- 1. Furnishing and installation of all mechanical and electrical finish hardware necessary for all doors, and hardware as specified herein and as enumerated in hardware sets and as indicated and required by actual conditions at the building. The hardware shall include the furnishing of all necessary screws, bolts, expansion shields, drop plates, and all other devices necessary for the proper application of the hardware. Installation shall include field modification and preparation of existing doors and/or frames for new hardware being installed. Provide necessary fillers, Dutchmen, reinforcements, and fasteners for mounting new hardware and to cover existing door/frame preps.

B. Related Sections

- 1. Division 6 Section - Finish Carpentry
- 2. Division 8 Section - Hollow Metal Doors and Frames
- 3. Division 8 Section - Wood Doors
- 4. Division 8 Section - Aluminum Framed Storefronts
- 5. Division 8 Section - Glass and Glazing
- 6. Division 26 Section - Electrical
- 7. Division 27 Section - Communications
- 8. Division 28 Section - Electronic Security and Safety

C. Specific Omissions: Hardware for the following is specified or indicated elsewhere, unless specifically listed in the hardware sets:

- 1. Windows
- 2. Cabinets of all kinds, including open wall shelving and locks.
- 3. Signage, except as noted.

4. Complete toilet accessories including coat hooks, unless note otherwise.
5. Overhead doors, unless noted otherwise.

### 1.03 REFERENCES

A. Applicable state and local building codes and standards.

#### B. FIRE/LIFE SAFETY

1. NFPA - National Fire Protection Association
  - a. NFPA 70 – National Electric Code
  - b. NFPA 80 - Standard for Fire Doors and Fire Windows
  - c. NFPA 101 - Life Safety Code
  - d. NFPA 105 - Smoke and Draft Control Door Assemblies

#### C. UL - Underwriters Laboratories

1. UL 10B - Fire Test of Door Assemblies
2. UL 10C - Positive Pressure Test of Fire Door Assemblies
3. UL 1784 - Air Leakage Tests of Door Assemblies
4. UL 305 - Panic Hardware

#### D. Accessibility

1. ADA - Americans with Disabilities Act
2. Rhode Island Accessibility Code – SBC-14, 15, 16

#### E. DHI - Door and Hardware Institute

1. Sequence and Format for the Hardware Schedule
2. Recommended Locations for Builders Hardware

#### F. ANSI - American National Standards Institute

1. ANSI/BHMA A156.1 - A156.29, and ANSI A156.31 - Standards for Hardware and Specialties

### 1.04 SUBMITTALS

A. General: Submit the following in accordance with Conditions of Contract and Division 1 requirements. Prior to submittal field verify existing doors and/or frames receiving new hardware and/or existing conditions receiving new openings. Verify new hardware is compatible with the existing door/frame preparation and/or existing conditions. Advise architect within the submittal package of incompatibility or issues.

- B. Catalog Cuts: Product data including manufacturers' technical product data for each item of door hardware, installation instructions, maintenance of operating parts and finish, and other information necessary to show compliance with requirements.
- C. Final Hardware Schedule Content: Submit schedule with hardware sets in vertical format as illustrated by the Sequence of Format for the Hardware Schedule as published by the Door and Hardware Institute. Indicate complete designations of each item required for each door or opening, Include the following information:
1. Door Index; include door number, heading number, and Architects hardware set number.
  2. Opening Lock Function Spreadsheet; list locking device and function for each opening.
  3. Type, style, function, size, and finish of each hardware item.
  4. Name and manufacturer of each item.
  5. Fastenings and other pertinent information.
  6. Location of each hardware set cross-referenced to indications on Drawings.
  7. Explanation of all abbreviations, symbols, and codes contained in schedule.
  8. Mounting locations for hardware.
  9. Door and frame sizes and materials.
  10. Name and phone number for the local manufacturer's representative for each product.
  11. Operational Description of openings with any electrified hardware (locks, exits, electromagnetic locks, electric strikes, automatic operators, door position switches, magnetic holders or closer/holder units, and/or access control components). Operational description should include how the door will operate on egress, ingress, and/or fire/smoke alarm connection.
- D. Key Schedule: After a keying meeting between representatives of the Owner, Architect, hardware supplier, and, if requested, the representative for the lock manufacturer, provide a keying schedule, listing the levels of keying, as well as an explanation of the key system's function, the key symbols used, and the door numbers controlled. Utilize ANSI A156.28 "Recommended Practices for Keying Systems" as a guideline for nomenclature, definitions, and approach for selecting the optimal keying system.
- E. Samples: If requested by the Architect, submit production sample or sample installations as requested of each type of exposed hardware unit in the finish indicated, and tagged with a full description for coordination with the schedule.

1. Samples will be returned to the supplier in like-new condition. Units that are acceptable to the Architect may, after final check of operations, be incorporated into the Work, within limitations of key coordination requirements.
- F. Templates: After final approval of the hardware schedule, provide templates for doors, frames, and other work specified to be factory prepared for the installation of door hardware.
- G. Riser and Wiring Diagrams: After final approval of the hardware schedule, submit riser and wiring diagrams as required for the proper installation of complete electrical, electromechanical, and electromagnetic products.
- H. Operations and Maintenance Data: Provide in accordance with Division 1 and include the following:
  1. Complete information on care, maintenance, and adjustment; data on repair and replacement parts, and information on preservation of finishes.
  2. Catalog pages for each product.
  3. Name, address, and phone number of local representative for each manufacturer.
  4. Parts list for each product.
  5. Copy of final approved hardware schedule, edited to reflect "As installed."
  6. Copy of final keying schedule.
  7. As installed "Wiring Diagrams" for each opening connected to power, both low voltage and 110 volts.
  8. One (1) complete set of special tools required for maintenance and adjustment of hardware, including changing of cylinders.
  9. Copy of warranties including appropriate reference numbers for manufacturers to identify the project.
- I. Certificates of Compliance: Upon request of Architect or Authority Having Jurisdiction certificates of compliance for fire-rated hardware and installation instructions shall be made available.

#### 1.05 QUALITY ASSURANCE

- A. Substitutions: Products are to be those specified to ensure a uniform basis of acceptable materials. Requests for substitutions must be made in accordance with Division 1 requirements. If proposing a substitute product, submit product data for the proposed item with product data for the specified item and indicate basis for substitution and savings to be made. Provide sample if requested. Certain products have been selected for their unique characteristics and particular project suitability.
  1. Items specified as "no substitute" shall be provided exactly as listed.

2. Items listed with no substitute manufacturers listed have been requested by the Owner or Architect to match existing for continuity and/or future performance and maintenance standards or because there is no known equal product.
  3. If no other products are listed in a category, then "no substitute" is implied.
- B. Supplier Qualifications: A recognized architectural hardware supplier, with warehousing facilities in the Project's vicinity, that has a record of successful in-service performance for supplying door hardware similar in quantity, type, and quality to that indicated for this Project and that provides a certified Architectural Hardware Consultant (AHC) available to the Owner, Architect, and Contractor, at reasonable times during the course of the Work for consultation.
- C. Single Source Responsibility: Obtain each type of hardware (latch and locksets, hinges, exit devices, closers, etc.) from a single manufacturer.
- D. Fire-Rated Openings: Provide door hardware for fire-rated openings that complies with NFPA Standard No. 80 and requirements of authorities having jurisdiction. Provide only items of door hardware that are listed and are identical to products tested by Underwrites Laboratories, Intertek Testing Services, or other testing and inspecting organizations acceptable to the authorities having jurisdiction for use on types and sizes of doors indicated in compliance with requirements of fire-rated door and door frame labels.
- E. Electronic Security Hardware: When electrified hardware is included in the hardware specification, the hardware supplier must employ an individual knowledgeable in electrified components and systems, who is capable of producing wiring diagrams and consulting as needed. Coordinate installation of the electronic security hardware with the Architect and electrical engineers and provide installation and technical data to the Architect and other related subcontractors. Upon completion of electronic security hardware installation, inspect and verify that all components are working properly.

#### 1.06 DELIVERY, STORAGE, AND HANDLING

- A. Tag each item or package separately with identification related to the final hardware schedule, and include installation instructions with each item or package.
- B. Each article of hardware shall be individually packaged in manufacturer's original packaging.
- C. Contractor will provide secure lock-up for door hardware delivered to the Project, but not yet installed. Control handling and installation of hardware items so that completion of Work will not be delayed by hardware losses both before and after installation.
- D. Items damaged in shipment shall be replaced promptly and with proper material and paid for by whomever did the damage or caused the damage to occur.
- E. Hardware shall be handled in a manner to avoid damage, marring, or scratching. Irregularities that occur to the hardware after it has been delivered to the Project shall be corrected, replaced, or repaired by the Contractor. Hardware shall be protected against malfunction due to paint, solvent, cleanser, or any chemical agent.

- F. No direct shipments will be allowed unless approved by the Contractor.

#### 1.07 WARRANTY

- A. Provide manufacturer's warranties as specified in Division 1 and as follows:
  - 1. Closers: 30 years, except electronic closers, 2 years.
  - 2. Locksets: 3 years, except electrified locksets, 1 year.
  - 3. Other hardware: 1 year.
- B. No liability is to be assumed where damage or faulty operation is due to improper installation, improper use, or abuse.
- C. Products judged to be defective during the warranty period shall be replaced or repaired in accordance with the manufacturer's warranty, at no additional cost to the Owner.

#### 1.08 MAINTENANCE

- 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.

### **PART 2 - PRODUCTS**

#### 2.01 MANUFACTURERS

- A. The Awarding Authority has determined that certain products should be selected for their unique characteristics and particular project suitability to insure continuity of existing and future performance and maintenance standards. After investigating available product offerings the Awarding Authority has elected to prepare proprietary specifications. These products are specified with the notation: "No Substitute" (NO OTHER PRODUCTS WILL BE CONSIDERED FOR THOSE LISTED IN PROJECTS DOCUMENTS.)
- B. Approval of manufacturers other than those listed shall be in accordance with paragraph 1.05.A.
- C. Note that even though an acceptable substitute manufacturer may be listed, the product must provide all the functions and features of the specified product or it will not be approved.

Item	Scheduled Manufacturer	Acceptable Substitute
Hinges	Ives (IVE)	Hager, Stanley
Locksets	Schlage (SCH)	No Substitute
Wireless Locksets	Schlage Electronics (SCE)	No Substitute
Door Closers	LCN (LCN)	Sargent, Stanley
Protection Plates	Ives (IVE)	Burns, Rockwood
Stops & Holders	Ives (IVE)	Burns, Rockwood
Silencers	Ives (IVE)	Burns, Rockwood

Cylinders & Keying	Schlage (SCH)	No Substitute
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- D. Hand of Door: Drawings show direction of slide, swing, or hand of each door leaf. Furnish each item of hardware for proper installation and operation of door movement as shown.
- E. Where the hardware specified is not adaptable to the finished shape or size of the members requiring hardware, furnish suitable types having the same operation and quality as the type specified, subject to the Architect's approval.
- F. All coordination for the AD lock and the Keri Access Control system to be with Schneider Electric.

## 2.02 MATERIALS

### A. Fasteners

- 1. Provide hardware manufactured to conform to published templates, generally prepared for machine screw installation.
- 2. Furnish screws for installation with each hardware item. Finish exposed (exposed under any condition) screws to match hardware finish, or, if exposed in surfaces of other work, to match finish of this other work as closely as possible including "prepared for paint" surfaces to receive painted finish.
- 3. Provide concealed fasteners for hardware units that are exposed when door is closed except to the extent that no standard units of type specified are available with concealed fasteners. Do not use thru-bolts for installation where bolt head or nut on opposite face is exposed in other work unless their use is the only means of reinforcing the work adequately to fasten the hardware securely. Review door specification and advise Architect if thru-bolts are required.
- 4. Hardware shall be installed with the fasteners provided by the hardware manufacturer.

### B. Hinges

- 1. Provide five-knuckle, ball bearing hinges of type, material, and height as outlined in the following guide for this specification:
  - a. 1-3/4 inch thick doors, up to and including 36 inches wide:  
Exterior: standard weight, bronze/stainless steel, 4-1/2 inches high  
Interior: standard weight, steel, 4-1/2 inches high
  - b. 1-3/4 inch thick doors over 36 inches wide:  
Exterior: heavy weight, bronze/stainless steel, 5 inches high  
Interior: heavy weight, steel, 5 inches high
  - c. 2 inches or thicker doors:  
Exterior: heavy weight, bronze/stainless steel, 5 inches high  
Interior: heavy weight, steel, 5 inches high

2. Provide three hinges per door leaf for doors 90 inches or less in height, and one additional hinge for each 30 inches of additional door height.
3. Where new hinges are specified for existing doors and/or existing frames, the new hinge size must be identical to hinge preparation present in the existing door and/or existing frame.
4. Hinge Pins: Except as otherwise indicated, provide hinge pins as follows:
  - a. Steel Hinges: Steel pins
  - b. Non-Ferrous Hinges: Stainless steel pins
  - c. Out-Swinging Exterior Doors: Non-removable pins
  - d. Out-Swinging Interior Lockable Doors: Non-removable pins
  - e. Interior Non-lockable Doors: Non-rising pins
5. The width of hinges shall be 4-1/2 inches at 1-3/4 inch thick doors, and 5 inches at 2 inches or thicker doors. Adjust hinge width as required for door, frame, and/or wall conditions to allow proper degree of opening.
6. Provide mortar guard for each electrified hinge specified, unless specified in hollow metal frame specification.
7. Acceptable manufacturers and/or products: Ives 5BB series, Hager BB series, Stanley FBB Series.

#### C. Mortise Locks

1. Provide mortise locks certified as ANSI A156.13, Grade 1 Operational, Grade 1 Security, and manufactured from heavy gauge steel, containing components of steel with a zinc dichromate plating for corrosion resistance. Lock case shall be multi-function and field reversible for handing without opening the case. Cylinders: Refer to 2.04 KEYING.
2. Provide locks with a standard 2-3/4 inches backset with a full 3/4 inch throw stainless steel mechanical anti-friction latchbolt. Deadbolt shall be a full 1 inch throw, constructed of stainless steel.
3. Provide standard ASA strikes unless extended lip strikes are necessary to protect trim.
4. Lever trim shall be solid brass, bronze, or stainless steel, cast or forged in the design specified, with wrought roses and external lever spring cages. Levers shall be thru-bolted to assure proper alignment, and shall have a 2-piece spindle.
  - a. Lever design shall be Schlage 06A.
  - b. Lever trim on the secure side of doors serving rooms considered by the authority having jurisdiction to be hazardous shall have a tactile warning.
5. Acceptable manufacturers and/or products: Schlage L9000 series, No Substitute.

#### D. Door Closers

1. Provide door closers certified to ANSI/BHMA A156.4 Grade 1 requirements by a BHMA certified independent testing laboratory. Closers shall be ISO 9000 certified. Units shall be stamped with date of manufacture code.
2. Door closers shall have fully hydraulic, full rack and pinion action with a high strength cast iron cylinder, and shall utilize full complement bearings at shaft. Cylinder body shall be 1-1/2 inch diameter, and double heat-treated pinion shall be 11/16 inch diameter.
3. Provide hydraulic fluid requiring no seasonal closer adjustment for temperatures ranging from 120 degrees F to -30 degrees F. Fluid shall be fireproof and shall pass the requirements of the UL10C "positive pressure" fire test.
4. Spring power shall be continuously adjustable over the full range of closer sizes, and allow for reduced opening force as required by accessibility codes and standards. Hydraulic regulation shall be by tamper-proof, non-critical valves. Closers shall have separate adjustment for latch speed, general speed, and backcheck.
5. Provide closers with a solid forged steel main arms and factory assembled heavy-duty forged forearms for parallel arm closers.
6. Closers shall not incorporate Pressure Relief Valve (PRV) technology.
7. Closer cylinders, arms, adapter plates, and metal covers shall have a powder coating finish which has been certified to exceed 100 hours salt spray testing as described in ANSI Standard A156.4 and ASTM B117, or shall have special rust inhibitor (SRI).
8. Provide special templates, drop plates, mounting brackets, or adapters for arms as required for details, overhead stops, and other finish hardware items interfering with closer mounting.
9. Mount closers on room side of corridor doors, inside of exterior doors, and stair side of stairway doors from corridors. Closers shall not be visible in corridors, lobbies and other public spaces unless approved by Architect.
10. Door closers meeting this specification: LCN 4010/4110 series, Sargent 281/281P10 series factory assembled (without PRV), Stanley QDC100 series.

E. Protection Plates

1. Provide kick plates, mop plates, and armor plates minimum of 0.050 inch thick as scheduled. Furnish with machine or wood screws, finished to match plates. Sizes of plates shall be as follows:
  - a. Kick Plates – 8 inches high x 2 inches less width of door on single doors, 1 inch less width of door on pairs
2. Acceptable manufacturers and/or products: Ives, Burns, Rockwood.

F. Overhead Stops and Overhead Stop/holders

1. Provide heavy or medium duty and concealed or surface mounted overhead stop or overhead stop/holder for interior doors as specified. Provide medium duty surface mounted overhead stop for interior doors and at any door that swings more than 140 degrees before striking a wall, open against equipment, casework, sidelights, and/or where conditions do not allow a wall stop or a floor stop presents a tripping hazard.
2. Where overhead holders are specified provide friction type at doors without a closer and positive type at doors with a closer.
3. Acceptable manufacturers and/or products: Glynn-Johnson, Rixson, Sargent.

G. Door Stops and Holders

1. Provide door stops for all doors in accordance with the following requirements:
  - a. Provide wall stops wherever possible. Provide convex type where mortise type locks are used and concave type where cylindrical type locks are used.
  - b. Where wall stops cannot be used, provide dome type floor stops of the proper height.
  - c. At any opening where a wall or floor stop cannot be used, a medium duty surface mounted overhead stop shall be used.
2. Acceptable manufacturers and/or products: Ives, Burns, Rockwood.

H. Silencers

1. Provide "Push-in" type silencers for each hollow metal or wood frame. Provide three for each single frame and two for each pair frame. Omit where gasketing is specified or required by code.
2. Acceptable manufacturers and/or products: Ives, Burns, Rockwood.

2.03 FINISHES

A. Finish of all hardware shall be US26D (BHMA 626/652) with the exceptions as follows:

1. Protection Plates: US32D (BHMA 630).
2. Door Closers: Powder Coat to Match.

2.04 KEYING

A. Provide cores and cylinders for the Owner's Existing Schlage Everest 29T key system conforming to the following requirements:

1. Provide removable core cylinders at all locksets. Provide construction cores with construction master keying for use during construction. The hardware supplier, accompanied by the Owner or Owner's security agent, shall install permanent

- keyed cores upon completion of the project. The temporary construction cores are to be returned to the hardware supplier.
2. Provide permanent cores and cylinders keyed by the manufacturer or authorized distributor into the existing key system as directed by the Owner. Provide owner with a copy of the bitting list, return receipt requested.
  3. The hardware supplier, accompanied by a qualified factory representative for the manufacturer of the cores and cylinders, shall meet with Owner and Architect to review keying requirements and lock functions prior to ordering finish hardware. Submit a keying schedule to Architect for approval.
  4. Provide keys as follows
    - a. Ten master keys for each set.
    - b. Three keys per core and/or cylinder.
    - c. Two construction core control keys
    - d. Two permanent core control keys
    - e. Six construction master keys for each type (Contractor is to provide one set of construction keys to Architect)
  5. Visual key control:
    - a. Keys shall be stamped with their respective key set number and stamped "DO NOT DUPLICATE".
    - b. All keys shall be stamped with their respective key set letters.
    - c. Do not stamp any keys with the factory key change number.
    - d. Do not stamp any cores with key set on face (front) of Core. Stamp on back or side of cores so not to be visible when core is in cylinder.
  6. Deliver all keys and/or key blanks from the factory or authorized distributor directly to the Owner in sealed containers, return receipt requested. Failure to comply with these requirements may be cause to require replacement of all or any part of the keying system that was compromised at no additional cost to the Owner.
  7. Approved products: Schlage Everest 29T Restricted FSIC (GGM and Grand A – Structure #KS2941, Facility Code #E11411), No Substitute.

### **PART 3 - EXECUTION**

#### **3.01 EXAMINATION**

- A. Prior to installation of any hardware, examine all doors, frames, walls and related items for conditions that would prevent proper installation of finish hardware. Correct all defects prior to proceeding with installation.

#### **3.02 INSTALLATION**

- A. Coordination:

1. Prior to installation of hardware, schedule and hold a meeting for the purpose of instructing installers on proper installation and adjustment of finish hardware. Representatives of locks, exit devices, closers, automatic operators, and electrified hardware shall conduct training; provide at least 10 days notice to representatives. After training a letter of compliance, indicating when the training was held and who was in attendance, shall be sent to the Architect.
- B. Hardware will be installed by qualified tradesmen, skilled in the application of commercial grade hardware. For technical assistance if necessary, installers may contact the manufacturer's rep for the item in question, as listed in the hardware schedule.
- C. Mount hardware units at heights indicated in "Recommended Locations for Builders Hardware for Standard Steel Doors and Frames" by the Door and Hardware Institute.
- D. Install each hardware item in compliance with the manufacturer's instructions and recommendations, using only the fasteners provided by the manufacturer.
- E. Do not install surface mounted items until finishes have been completed on the substrate. Protect all installed hardware during painting.
- F. Set units level, plumb and true to line and location. Adjust and reinforce the attachment substrate as necessary for proper installation and operation.
- G. Operating parts shall move freely and smoothly without binding, sticking, or excessive clearance.
- H. Existing Doors and/or Frames: Remove existing hardware being replaced, tag, and store according to contract documents. Field modify and prepare existing door and/or frame for new hardware being installed. Provide necessary fillers, Dutchmen, reinforcements, and fasteners for mounting new hardware and to cover existing door/frame preps.
- I. Wire (including low voltage), conduit, junction boxes, and pulling of wire is by Division 26, Electrical. Electrical Contractor shall connect wire to door position switches and run wire to central room or area as directed by the Architect. Wires shall be tested and labeled with the Architects opening number. Connections to/from power supplies to electrified hardware and any connection to fire/smoke alarm system, and/or smoke evacuation system where specified is by Division 26 Electrical.

### 3.03 ADJUSTING, CLEANING, AND DEMONSTRATING

- A. Adjust and check each operating item of hardware and each door, to insure proper operation or function of every unit. Replace units which cannot be adjusted to operate freely and smoothly.
- B. Where door hardware is installed more than one month prior to acceptance or occupancy of a space or area, return to the installation during the week prior to acceptance or occupancy and make a final check and adjustment of all hardware items in such space or area. Clean operating items as necessary to restore proper function

and finish of hardware and doors. Adjust door control devices to compensate for final operation of heating and ventilating equipment.

- C. Clean adjacent surfaces soiled by hardware installation.
- D. Instruct Owner's personnel in the proper adjustment, lubrication, and maintenance of door hardware and hardware finishes.

### 3.04 FIELD QUALITY CONTROL

- A. Prior to Substantial Completion, the installer, accompanied by representatives of the manufacturers of locks, exit devices, closer, and any electrified hardware, shall perform the following work:
  - 1. Examine and re-adjust each item of door hardware as necessary to restore function of doors and hardware to comply with specified requirements.
  - 2. Consult with and instruct Owner's personnel in recommended additions to the maintenance procedures.
  - 3. Replace hardware items that have deteriorated or failed due to faulty design, materials, or installation of hardware units.
  - 4. Prepare a written report of current and predictable problems of substantial nature in the performance of the hardware.
  - 5. At completion of project, a qualified factory representative for the manufacturers of locksets, closer, exit devices, and access control products shall arrange and hold a training session to instruct the Owner's personnel on the proper maintenance, adjustment, and/or operation of their respective products. After training a letter of compliance, indicating when the training was held and who was in attendance, shall be sent to the Architect.

### 3.05 PROTECTION

- A. Provide for the proper protection of complete items of hardware until the Owner accepts the project as complete. Damaged or disfigured hardware shall be replaced or repaired by the responsible party.

### 3.06 HARDWARE SCHEDULE

- A. Provide hardware for each door to comply with requirements of Section "Finish Hardware," hardware set numbers indicated in door schedule, and in the following schedule of hardware sets.
- B. It is intended that the following schedule includes complete items of finish hardware necessary to complete the work. If a discrepancy is found in the schedule, such as a missing item, improper hardware for a frame, door or fire codes, the preamble will be the deciding document.

C. Locksets, exit devices, and other hardware items are referenced in the Hardware Sets for series, type, and function. Refer to the preamble for special features, options, cylinders/keying, and other requirements.

D. Hardware Sets

HEADING # 01 - (SINGLE WITH WIRELESS OFFICE LOCKSET)

PROVIDE EACH SGL DOOR(S) WITH THE FOLLOWING:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 SERIES AS SPECIFIED	652	IVE
1	EA	ELEC OFFICE LOCK	AD-400-MS-50-MT-RHO	626	SCE
1	EA	STOP	WS407/FS436 AS SPECIFIED	626	IVE
3	EA	SILENCER	SR64	GRY	IVE

HEADING # 02 - (SINGLE WITH WIRELESS CLASSROOM LOCKSET)

PROVIDE EACH SGL DOOR(S) WITH THE FOLLOWING:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 SERIES AS SPECIFIED	652	IVE
1	EA	ELEC CLASSROOM LOCK	AD-400-MS-70-MT-RHO	626	SCE
1	EA	STOP	WS407/FS436 AS SPECIFIED	626	IVE
3	EA	SILENCER	SR64	GRY	IVE

HEADING # 03 - (PAIR WITH WIRELESS CLASSROOM LOCKSET X FLUSH BOLTS)

PROVIDE EACH PR DOOR(S) WITH THE FOLLOWING:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
6	EA	HINGE	5BB1 SERIES AS SPECIFIED	652	IVE
2	EA	MANUAL FLUSH BOLT	FB458	626	IVE
1	EA	DUST PROOF STRIKE	DP1/DP2 AS REQUIRED	626	IVE
1	EA	ELEC CLASSROOM LOCK	AD-400-MS-70-MT-RHO	626	SCE
1	EA	STOP	WS407/FS436 AS SPECIFIED	626	IVE
2	EA	SILENCER	SR64	GRY	IVE

HEADING # 04 - (PAIR WITH WIRELESS CLASSROOM LOCKSET X FLUSH BOLTS X CLOSER AT ACTIVE LEAF)

PROVIDE EACH PR DOOR(S) WITH THE FOLLOWING:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
6	EA	HINGE	5BB1 SERIES AS SPECIFIED	652	IVE

2	EA	MANUAL FLUSH BOLT	FB458	626	IVE
1	EA	DUST PROOF STRIKE	DP1/DP2 AS REQUIRED	626	IVE
1	EA	ELEC CLASSROOM LOCK	AD-400-MS-70-MT-RHO	626	SCE
1	EA	SURFACE CLOSER	4111 EDA	689	LCN
2	EA	KICK PLATE	8400 8" X 1" LDW	630	IVE
1	EA	STOP	WS407/FS436 AS SPECIFIED	626	IVE
2	EA	SILENCER	SR64	GRY	IVE

HEADING # 05 - (EXISTING DOORS)

PROVIDE EACH SGL DOOR(S) WITH THE FOLLOWING:

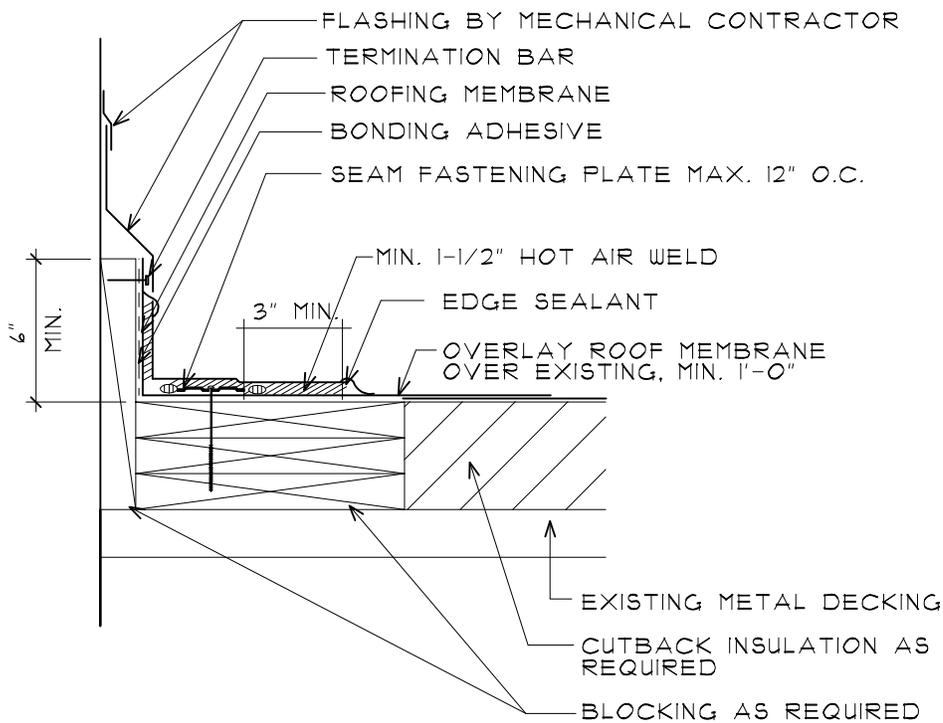
QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
1	EA	ALL HARDWARE	EXISTING TO REMAIN		

HEADING # 06 - (MISCELLANEOUS)

PROVIDE EACH SGL DOOR(S) WITH THE FOLLOWING:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
1	EA	PANEL INTERFACE MODULE	PIM-400-485		SCE

**END OF SECTION**



TYP. ROOF PENETRATION DETAIL

1- 1/2" = 1'-0"

NOTE: ALL ROOF WORK MUST COMPLY WITH MANUFACTURERS REQUIREMENTS.



ARCHITECTS  
 150 Chestnut Street  
 Providence, RI  
 02903  
 Tel: 401.861.1600  
 Fax: 401.861.5588

ROOF PENETRATIONS

DATE: 07/09/15 SCALE: AS NOTED

CCRI  
 SIMULATION LABORATORY

1762 LOUISQUISSET AVENUE, LINCOLN, RI

SKA  
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1 OF 1