



Planning

Architecture

Interior design

Graphic Design

Project Management

ADDENDUM to CONTRACT DOCUMENTS

Date: August 8, 2013
To: All Bidders
From: Renee Richardson, BSA + A
Copies: Delaware Technical & Community College
Delaware Engineering & Design Corporation

Project Name: Delaware Technical & Community
College – Stanton Career Center
Renovations

Project Number: BSA+A # 12.028

Subject: **ADDENDUM 4**

NOTICE:

Attention is called to the following item(s), effective as of the date above, which shall be added to, deleted from, or changed in the contract documents dated **July 1, 2013** and any previously issued addenda, thereby incorporating these items into the contract documents.

Attach this Addendum to the project manual for this project. Work or materials not specifically mentioned herein are to be as described in the main body of the specifications and as shown on the drawings. Bidders shall acknowledge receipt of this Addendum in the space provided on the Bid Form. Failure to do so may subject the bidder to disqualification.

The following clarification, changes and/or additions shall by this reference be incorporated into the contract documents as though fully set forth therein.

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A. GENERAL

Item No.	Item
A-1	NONE

B. MODIFICATIONS TO PROJECT MANUAL

Item No.	Description:
B-1	SECTION 072100 – BUILDING INSULATION DELETE: Section 072100 – Building Insulation in its entirety
B-2	SECTION 05400 – COLD FORMED METAL FRAMING DELETE: Section 05400 – Cold Formed Metal Framing in its entirety
B-3	SECTION 079500 – EXPANSION CONTROL DELETE: Section 079500 – Expansion Control in its entirety
B-4	SECTION 104400 – FIRE PROTECTION SPECIALITIES DELETE: Section 104400 – Fire Protection Specialties in its entirety
B-5	SECTION 079200 – SEALANTS DELETE: Section 079200 – Sealants in its entirety INSERT NEW: Section 079200 – Sealants See Attached
B-6	SECTION 081113 – HOLLOW METAL DOORS AND FRAMES DELETE: Section 081113 – Hollow Metal Doors and Frames in its entirety INSERT NEW: Section 081113 – Hollow Metal Doors and Frames See Attachment
B-7	SECTION 087100 – DOOR HARDWARE DELETE: Section 087100 – Door Hardware in its entirety INSERT NEW: Section 087100 – Door Hardware See Attachment
B-8	SECTION 092900 – GYPSUM BOARD ASSEMBLIES. Page 09200 – 3 ADD: 2.6 SOUND ATTENUATION BATTS <ul style="list-style-type: none"> A. Type: Unfaced glass fiber acoustical insulation complying with ASTM C 665, Type 1 B. Size: 3 ½” thick, full width and eight of partition C. Surface burning characteristics: <ul style="list-style-type: none"> 1. Maximum flame spread: 10 2. Maximum smoke developed: 10 – When tested in accordance with ASTM E 84. D. Combustion characteristics: Passes ASTM E 136 E. Fire resistance ratings: Passes ASTM E 119 as part of a complete fire tested wall assembly.

C. BIDDER QUESTIONS & CLARIFICATIONS

Item No.	Question/Answer:
C-1	CONTRACTOR REQUESTS FOR INFORMATION LOG See Attached
C-2	Provide Stainless Steel pulls on interior side of each vertical slider window. (G1 & G2)

D. MODIFICATIONS TO DRAWINGS

Item No.	Description:
D-1	A002 Construction Facilities Plan: a. Revise extent of temporary partitions per reissued sheet A002.
D-2	A121 First Floor Reflected Ceiling Plan: a. Revise ceiling hatch in Records to eliminate accidental hatch per Architect's Supplemental Sketch ASK-003 . b. Revise ceiling configuration and lighting per Architect's Supplemental Sketch ASK-004. Provide (1) Type "D" down light at 8'-0" curved soffit, (3) Type "D" down lights at 8'-4" GWB ceiling, and combination illuminated exit sign/dual head emergency lighting battery unit at exit. Provide all switching, wiring, and conduit as necessary to add additional lighting and electrical devices for configuration provided in sketch ASK-004.
D-3	A131 First Floor Finish Plan: a. Revise Finish Plan per Architect's Supplemental Sketch ASK-005.
D-4	A401 Window Elevations, Glazing Notes & Types, Enlarged Plans: a. Delete reference to horizontal sliders in detail 5/A401.

E. ATTACHMENTS

Items	Date
Section 079200 – Sealants	August, 2013
Section 081113 – Hollow Metal Doors and Frames	August, 2013
Section 087100 – Door Hardware	August, 2013
A002	08-08-13
Contractor's RFI Answer Log	08-08-13
ASK-003	08-08-13
ASK-004	08-08-13
ASK-005	08-08-13

END OF ADDENDUM 4

SECTION 079200 - JOINT SEALANTS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

- A. This Section includes joint sealants for the applications indicated in the Joint-Sealant Schedule at the end of Part 3.
- B. This Section includes joint sealants for the following applications:
1. **Interior** joints in the following vertical surfaces and horizontal nontraffic surfaces:
 - a. Control and expansion joints on exposed interior surfaces of exterior walls.
 - b. Vertical joints on exposed surfaces of partitions.
 - c. Perimeter joints between interior wall surfaces and frames of new and replacement interior doors and windows.
 - d. Plastic laminate countertop and backsplashes to vertical surfaces.
 - e. Perimeter ceiling grid molding to vertical surfaces.
 - f. Where dissimilar material abut and no trim is indicated to conceal joint
 - g. Other joints as indicated.
- C. Related Sections include the following:
1. Division 8 Section "Glazing" for glazing sealants.
 2. Division 9 Section "Gypsum Board Assemblies" for sealing perimeter joints of gypsum board partitions to reduce sound transmission.
 3. Division 9 Section "Acoustical Panel Ceilings" and "Acoustical Tile Ceilings" for sealing edge moldings at perimeters of acoustical ceilings.

1.3 PERFORMANCE REQUIREMENTS

- A. Provide joint sealants for interior applications that establish and maintain airtight and water-resistant continuous joint seals without staining or deteriorating joint substrates.

1.4 SUBMITTALS

- A. Product Data: For each joint-sealant product indicated.

- B. Samples for Initial Selection: Manufacturer's color charts consisting of strips of cured sealants showing the full range of colors available for each product exposed to view.
- C. Product Certificates: For each type of joint sealant and accessory, signed by product manufacturer.
- D. SWRI Validation Certificate: For each elastomeric sealant specified to be validated by SWRI's Sealant Validation Program.
- E. Warranties: Special warranties specified in this Section.

1.5 QUALITY ASSURANCE

- A. Installer Qualifications: Manufacturer's authorized Installer who is approved or licensed for installation of exterior elastomeric sealants required for this Project.
- B. Source Limitations: Obtain each type of joint sealant through one source from a single manufacturer.

1.6 PROJECT CONDITIONS

- A. Do not proceed with installation of joint sealants under the following conditions:
 - 1. When ambient and substrate temperature conditions are outside limits permitted by joint-sealant manufacturer or are below 40 deg F (5 deg C).
 - 2. When joint substrates are wet.
 - 3. Where joint widths are less than those allowed by joint-sealant manufacturer for applications indicated.
 - 4. Contaminants capable of interfering with adhesion have not yet been removed from joint substrates.

1.7 WARRANTY

- A. Special Installer's Warranty: Installer's standard form in which Installer agrees to repair or replace elastomeric joint sealants that do not comply with performance and other requirements specified in this Section within specified warranty period.
 - 1. Warranty Period: Two years from date of Substantial Completion.
- B. Special Manufacturer's Warranty: Manufacturer's standard form in which elastomeric sealant manufacturer agrees to furnish elastomeric joint sealants to repair or replace those that do not comply with performance and other requirements specified in this Section within specified warranty period.
 - 1. Warranty Period: 2 years from date of Substantial Completion.
- C. Special warranties specified in this Article exclude deterioration or failure of elastomeric joint sealants from the following:

1. Movement of the structure resulting in stresses on the sealant exceeding sealant manufacturer's written specifications for sealant elongation and compression caused by structural settlement or errors attributable to design or construction.
2. Disintegration of joint substrates from natural causes exceeding design specifications.
3. Mechanical damage caused by individuals, tools, or other outside agents.
4. Changes in sealant appearance caused by accumulation of dirt or other atmospheric contaminants.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Products: Subject to compliance with requirements, provide one of the products listed in other Part 2 articles.

2.2 MATERIALS, GENERAL

- A. Compatibility: Provide joint sealants, backings, and other related materials that are compatible with one another and with joint substrates under conditions of service and application, as demonstrated by sealant manufacturer, based on testing and field experience.
- B. VOC Content of Interior Sealants: Provide interior sealants and sealant primers that comply with the following limits for VOC content when calculated according to 40 CFR 59, Subpart D (EPA Method 24):
 1. Sealants: 250 g/L.
 2. Sealant Primers for Nonporous Substrates: 250 g/L.
 3. Sealant Primers for Porous Substrates: 775 g/L.
- C. Colors of Exposed Joint Sealants: As selected by Architect from manufacturer's full range.

2.3 ELASTOMERIC JOINT SEALANTS

- A. Elastomeric Sealants: Comply with ASTM C 920 and other requirements indicated for each liquid-applied chemically curing sealant specified, including those referencing ASTM C 920 classifications for type, grade, class, and uses related to exposure and joint substrates.
- B. Stain-Test-Response Characteristics: Where elastomeric sealants are specified to be nonstaining to porous substrates, provide products that have undergone testing according to ASTM C 1248 and have not stained porous joint substrates indicated for Project.

2.4 MISCELLANEOUS MATERIALS

- A. Primer: Material recommended by joint-sealant manufacturer where required for adhesion of sealant to joint substrates indicated, as determined from preconstruction joint-sealant-substrate tests and field tests.
- B. Cleaners for Nonporous Surfaces: Chemical cleaners acceptable to manufacturers of sealants and sealant backing materials, free of oily residues or other substances capable of staining or harming joint substrates and adjacent nonporous surfaces in any way, and formulated to promote optimum adhesion of sealants to joint substrates.
- C. Masking Tape: Non-staining, nonabsorbent material compatible with joint sealants and surfaces adjacent to joints.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine joints indicated to receive joint sealants, with Installer present, for compliance with requirements for joint configuration, installation tolerances, and other conditions affecting joint-sealant performance.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

- A. Surface Cleaning of Joints: Clean out joints immediately before installing joint sealants to comply with joint-sealant manufacturer's written instructions and the following requirements:
 - 1. Remove all foreign material from joint substrates that could interfere with adhesion of joint sealant, including dust, paints (except for permanent, protective coatings tested and approved for sealant adhesion and compatibility by sealant manufacturer), old joint sealants, oil, grease, waterproofing, water repellents, water, surface dirt, and frost.
 - a. Clean porous joint substrate surfaces by brushing, grinding, blast cleaning, mechanical abrading, or a combination of these methods to produce a clean, sound substrate capable of developing optimum bond with joint sealants. Remove loose particles remaining after cleaning operations above by vacuuming or blowing out joints with oil-free compressed air.
 - 2. Remove laitance and form-release agents from concrete.
- B. Joint Priming: Prime joint substrates, where recommended in writing by joint-sealant manufacturer, based on preconstruction joint-sealant-substrate tests or prior experience. Apply primer to comply with joint-sealant manufacturer's written instructions. Confine primers to areas of joint-sealant bond; do not allow spillage or migration onto adjoining surfaces.

- C. Masking Tape: Use masking tape where required to prevent contact of sealant with adjoining surfaces that otherwise would be permanently stained or damaged by such contact or by cleaning methods required to remove sealant smears. Remove tape immediately after tooling without disturbing joint seal.

3.3 INSTALLATION OF JOINT SEALANTS

- A. General: Comply with joint-sealant manufacturer's written installation instructions for products and applications indicated, unless more stringent requirements apply.
- B. Sealant Installation Standard: Comply with recommendations in ASTM C 1193 for use of joint sealants as applicable to materials, applications, and conditions indicated.
- C. Install sealant backings of type indicated to support sealants during application and at position required to produce cross-sectional shapes and depths of installed sealants relative to joint widths that allow optimum sealant movement capability.
 - 1. Do not leave gaps between ends of sealant backings.
 - 2. Do not stretch, twist, puncture, or tear sealant backings.
 - 3. Remove absorbent sealant backings that have become wet before sealant application and replace them with dry materials.
- D. Install bond-breaker tape behind sealants where sealant backings are not used between sealants and backs of joints.
- E. Install sealants using proven techniques that comply with the following and at the same time backings are installed:
 - 1. Place sealants so they directly contact and fully wet joint substrates.
 - 2. Completely fill recesses in each joint configuration.
 - 3. Produce uniform, cross-sectional shapes and depths relative to joint widths that allow optimum sealant movement capability.
- F. Tooling of Nonsag Sealants: Immediately after sealant application and before skinning or curing begins, tool sealants according to requirements specified below to form smooth, uniform beads of configuration indicated; to eliminate air pockets; and to ensure contact and adhesion of sealant with sides of joint.
 - 1. Remove excess sealant from surfaces adjacent to joints.
 - 2. Use tooling agents that are approved in writing by sealant manufacturer and that do not discolor sealants or adjacent surfaces.
 - 3. Provide concave joint configuration per Figure 5A in ASTM C 1193, unless otherwise indicated.
- G. Installation of Preformed Tapes: Install according to manufacturer's written instructions.

3.4 CLEANING

- A. Clean off excess sealant or sealant smears adjacent to joints as the Work progresses by methods and with cleaning materials approved in writing by manufacturers of joint sealants and of products in which joints occur.

3.5 PROTECTION

- A. Protect joint sealants during and after curing period from contact with contaminating substances and from damage resulting from construction operations or other causes so sealants are without deterioration or damage at time of Substantial Completion. If, despite such protection, damage or deterioration occurs, cut out and remove damaged or deteriorated joint sealants immediately so installations with repaired areas are indistinguishable from original work.

3.6 JOINT-SEALANT SCHEDULE

- A. **Interior Joints in drywall and gypsum plaster** construction, including following locations:
 - 1. Perimeter joints between interior wall surfaces and frames of doors and windows.
 - 2. Vertical joints on exposed surfaces of partitions.
 - 3. Perimeter joints between interior wall surfaces and frames of new or replacement interior door frames and windows.
 - 4. Where backsplashes or counter surfaces of countertop without sinks, abut vertical surfaces.
 - 5. Perimeter ceiling grid molding to vertical surfaces.
 - 6. Where dissimilar material abut and no trim is indicated to conceal joint
 - 7. Other joints as indicated.
 - a. **Acrylic-Emulsion (Latex) Sealant:** Provide one of the following Acrylic-Emulsion (Latex) Sealant One-part, nonsag, Type 5, Grade NS Class 12.5 mildew-resistant, paintable, complying with ASTM C 834.
 - 1) Pecora Corporation; AC 20+.
 - 2) Tremco; Tremflex 834
 - 3) Approved equal.

END OF SECTION 079200

SECTION 081113 - HOLLOW METAL DOORS AND FRAMES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

- A. Section Includes:

- 1. Standard and custom hollow metal frames.
- 2. Steel vision panel frames.
- 3. Factory finishing hollow frames and factory machining for hardware.

- B. Related Sections:

- 1. Division 08 Sections "Flush Wood Doors" for wood doors in hollow metal frames.
- 2. Division 08 Section "Glazing" for glass view panels in hollow metal doors.
- 3. Division 08 Sections "Door Hardware" for door hardware for hollow metal doors and frames.

- C. Codes and References: Comply with the version year adopted by the Authority Having Jurisdiction.

- 1. ANSI/SDI A250.8 - Recommended Specifications for Standard Steel Doors and Frames.
- 2. ANSI/SDI A250.4 - Test Procedure and Acceptance Criteria for Physical Endurance for Steel Doors, Frames, Frames Anchors and Hardware Reinforcing.
- 3. ANSI/SDI A250.6 - Recommended Practice for Hardware Reinforcing on Standard Steel Doors and Frames.
- 4. ANSI/SDI A250.10 - Test Procedure and Acceptance Criteria for Prime Painted Steel Surfaces for Steel Doors and Frames.
- 5. ANSI/SDI A250.11 - Recommended Erection Instructions for Steel Frames.
- 6. ANSI/BHMA A156.15 - Hardware Preparation in Steel Doors and Frames.
- 7. ANSI/SDI 122 - Installation and Troubleshooting Guide for Standard Steel Doors and Frames.

1.3 SUBMITTALS

- A. Product Data: For each type of product indicated. Include construction details, material descriptions, core descriptions, hardware reinforcements, profiles, anchors, fire-resistance rating, and finishes.

- B. Door hardware supplier is to furnish templates, template reference number and/or physical hardware to the steel door and frame supplier in order to prepare the doors and frames to receive the finish hardware items.
- C. Shop Drawings: Include the following:
 - 1. Frame details for each frame type, including dimensioned profiles and metal thicknesses.
 - 2. Locations of reinforcement and preparations for hardware.
 - 3. Details of anchorages, joints, field splices, and connections.
 - 4. Details of accessories.

1.4 QUALITY ASSURANCE

- A. Source Limitations: Obtain hollow metal doors and frames through one source from a single manufacturer wherever possible.
- B. Quality Standard: In addition to requirements specified, comply with ANSI/SDI A250.8, latest edition, "Recommended Specifications for Standard Steel Doors and Frames".

1.5 DELIVERY, STORAGE, AND HANDLING

- A. Deliver hollow metal work palletized, wrapped, or crated to provide protection during transit and Project site storage. Do not use non-vented plastic.
- B. Deliver welded frames with two removable spreader bars across bottom of frames, tack welded to jambs and mullions.
- C. Store hollow metal work under cover at Project site. Place in stacks of five units maximum in a vertical position with heads up, spaced by blocking, on minimum 4-inch high wood blocking. Do not store in a manner that traps excess humidity.
 - 1. Provide minimum 1/4-inch space between each stacked door to permit air circulation. Door and frames to be stacked in a vertical upright position.

1.6 PROJECT CONDITIONS

- A. Field Measurements: Verify actual dimensions of openings by field measurements before fabrication.

1.7 COORDINATION

- A. Coordinate installation of anchorages for hollow metal frames. Furnish setting drawings, templates, and directions for installing anchorages, including sleeves, concrete inserts, anchor bolts, and items with integral anchors. Deliver such items to Project site in time for installation.

1.8 WARRANTY

- A. Special Warranty: Manufacturer's standard form in which manufacturer agrees to repair or replace doors that fail in materials or workmanship within specified warranty period.
- B. Warranty includes installation and finishing that may be required due to repair or replacement of defective doors.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - 1. CECO Door Products.
 - 2. Curries Company.
 - 3. Steelcraft.

2.2 MATERIALS

- A. Cold-Rolled Steel Sheet: ASTM A 1008/A 1008M, Commercial Steel (CS), Type B; suitable for exposed applications.
- B. Frame Anchors: ASTM A 653/A 653M, Commercial Steel (CS), Commercial Steel (CS), Type B; with minimum G60 (Z180) or A60 (ZF180) metallic coating.

2.3 STANDARD HOLLOW METAL FRAMES

- A. General: Comply with ANSI/SDI A250.8 and with details indicated for type and profile.
- B. Interior Frames: Fabricated from cold-rolled steel sheet that complies with ASTM A 1008/A 1008M.
 - 1. Fabricate frames with mitered or coped corners.
 - 2. Fabricate frames with "closed and tight" miter seams continuously welded on face, finished smooth with no visible seam unless otherwise indicated.
 - 3. Frames for Wood Doors: Minimum 16 gauge (0.053-inch-1.3-mm-) thick steel sheet.
- C. Hardware Reinforcement: Fabricate according to ANSI/SDI A250.6 Table 4 with reinforcement plates from same material as frames.

2.4 FRAME ANCHORS

- A. Jamb Anchors: Stud Wall Type: Designed to engage stud and not less than 0.042 inch thick.

- B. Floor Anchors: Floor anchors to be provided at each jamb, formed from A60 metallic coated material, not less than 0.042 inches thick.

2.5 FABRICATION

- A. Fabricate hollow metal work to be rigid and free of defects, warp, or buckle. Accurately form metal to required sizes and profiles, with minimum radius for thickness of metal. Where practical, fit and assemble units in manufacturer's plant. When shipping limitations so dictate, frames for large openings are to be fabricated in sections for splicing or splining in the field by others.
- B. Tolerances: Fabricate hollow metal work to tolerances indicated in ANSI/SDI A250.8.
- C. Hollow Metal Frames:
 - 1. Shipping Limitations: Where frames are fabricated in sections due to shipping or handling limitations, provide alignment plates or angles at each joint, fabricated of same thickness metal as frames.
 - 2. Welded Frames: Weld flush face joints continuously; grind, fill, dress, and make smooth, flush, and invisible.
 - a. Welded frames are to be provided with two steel spreaders temporarily attached to the bottom of both jambs to serve as a brace during shipping and handling. Spreader bars are for bracing only and are not to be used to size the frame opening.
 - 3. Provide countersunk, flat- or oval-head exposed screws and bolts for exposed fasteners unless otherwise indicated for removable stops, provide security screws at exterior locations.
 - 4. Floor Anchors: Weld anchors to bottom of jambs and mullions with at least four spot welds per anchor.
 - 5. Jamb Anchors: Provide number and spacing of anchors as follows:
 - a. Stud Wall Type: Locate anchors not more than 18 inches from top and bottom of frame. Space anchors not more than 32 inches o.c. and as follows:
 - 1) Three anchors per jamb up to 60 inches high.
 - 2) Four anchors per jamb from 60 to 90 inches high.
 - 3) Five anchors per jamb from 90 to 96 inches high.
 - 4) Five anchors per jamb plus 1 additional anchor per jamb for each 24 inches or fraction thereof above 96 inches high.
 - 5) Two anchors per head for frames above 42 inches wide and mounted in metal stud partitions.
 - 6. Door Silencers: Except on weatherstripped or gasketed doors, drill stops to receive door silencers. Silencers to be supplied by frame manufacturer regardless if specified in Division 08 Section "Door Hardware".
- D. Hardware Preparation: Factory prepare hollow metal work to receive template mortised hardware; include cutouts, reinforcement, mortising, drilling, and tapping according to the Door

Hardware Schedule and templates furnished as specified in Division 08 Section "Door Hardware."

1. Locate hardware as indicated, or if not indicated, according to ANSI/SDI A250.8.
2. Reinforce frames to receive non-template, mortised and surface mounted door hardware.
3. Comply with applicable requirements in ANSI/SDI A250.6 and ANSI/DHI A115 Series specifications for preparation of hollow metal work for hardware.

2.6 STEEL FINISHES

1. Factory Pre-Finishes: Prime

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine substrates, areas, and conditions, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance of the Work.
- B. General Contractor to verify the accuracy of dimensions given to the steel door and frame manufacturer for existing openings or existing frames (strike height, hinge spacing, hinge back set, etc.).
- C. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

- A. Remove welded in shipping spreaders installed at factory. Restore exposed finish by grinding, filling, and dressing, as required to make repaired area smooth, flush, and invisible on exposed faces.
- B. Prior to installation, adjust and securely brace welded hollow metal frames for squareness, alignment, twist, and plumbness.
- C. Tolerances shall comply with SDI-117 "Manufacturing Tolerances Standard Steel Doors and Frames."
- D. Drill and tap doors and frames to receive non-template, mortised, and surface-mounted door hardware.

3.3 INSTALLATION

- A. General: Install hollow metal work plumb, rigid, properly aligned, and securely fastened in place; comply with Drawings and manufacturer's written instructions.
- B. Hollow Metal Frames: Install hollow metal frames of size and profile indicated. Comply with ANSI/SDI A250.11 and NFPA 80 at fire rated openings.

1. Set frames accurately in position, plumbed, aligned, and braced securely until permanent anchors are set. After wall construction is complete and frames properly set and secured, remove temporary braces, leaving surfaces smooth and undamaged. Shim as necessary to comply with installation tolerances.
2. Floor Anchors: Provide floor anchors for each jamb and mullion that extends to floor, and secure with post-installed expansion anchors.

3.4 ADJUSTING AND CLEANING

- A. Final Adjustments: Check and readjust operating hardware items immediately before final inspection. Leave work in complete and proper operating condition. Remove and replace defective work, including hollow metal work that is warped, bowed, or otherwise unacceptable.
- B. Remove grout and other bonding material from hollow metal work immediately after installation.
- C. Painted Finish Touchup: Immediately after erection, sand smooth rusted or damaged areas of prime coat, or painted finishes, and apply touchup of compatible air drying, rust-inhibitive primer, zinc rich primer (exterior and galvanized openings) or finish paint.

END OF SECTION 081113

SECTION 087100 – DOOR HARDWARE

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section includes commercial door hardware for the following:
 - 1. Swinging doors.
 - 2. Other doors to the extent indicated.
- B. Door hardware includes, but is not necessarily limited to, the following:
 - 1. Mechanical door hardware.
 - 2. Cylinders specified for doors in other sections.
- C. Related Sections:
 - 1. Section 08 06 71 – Door Hardware Schedule.
 - 2. Section 08 14 16 – Flush Wood Doors.
- D. Codes and References: Comply with the version year adopted by the Authority Having Jurisdiction.
 - 1. ANSI A117.1 - Accessible and Usable Buildings and Facilities.
 - 2. ICC/IBC - International Building Code.
 - 3. NFPA 101 - Life Safety Code.
 - 4. State Building Codes, Local Amendments.
- E. Standards: All hardware specified herein shall comply with the following industry standards:
 - 1. ANSI/BHMA Certified Product Standards - A156 Series

1.2 SUBMITTALS

- A. Product Data: Manufacturer's product data sheets including installation details, material descriptions, dimensions of individual components and profiles, operational descriptions and finishes.
- B. Door Hardware Schedule: Prepared by or under the supervision of supplier, detailing fabrication and assembly of door hardware, as well as procedures and diagrams. Coordinate the final Door Hardware Schedule with doors, frames, and related work to ensure proper size, thickness, hand, function, and finish of door hardware.
 - 1. Format: Comply with scheduling sequence and vertical format in DHI's "Sequence and Format for the Hardware Schedule."

2. **Organization:** Organize the Door Hardware Schedule into door hardware sets indicating complete designations of every item required for each door or opening. Organize door hardware sets in same order as in the Door Hardware Sets at the end of Part 3. Submittals that do not follow the same format and order as the Door Hardware Sets will be rejected and subject to resubmission.
 3. **Content:** Include the following information:
 - a. Type, style, function, size, label, hand, and finish of each door hardware item.
 - b. Manufacturer of each item.
 - c. Fastenings and other pertinent information.
 - d. Location of door hardware set, cross-referenced to Drawings, both on floor plans and in door and frame schedule.
 - e. Explanation of abbreviations, symbols, and codes contained in schedule.
 - f. Mounting locations for door hardware.
 - g. Door and frame sizes and materials.
 4. **Submittal Sequence:** Submit the final Door Hardware Schedule at earliest possible date, particularly where approval of the Door Hardware Schedule must precede fabrication of other work that is critical in the Project construction schedule. Include Product Data, Samples, Shop Drawings of other work affected by door hardware, and other information essential to the coordinated review of the Door Hardware Schedule.
- C. **Keying Schedule:** Prepared under the supervision of the Owner, separate schedule detailing final keying instructions for locksets and cylinders in writing. Include keying system explanation, door numbers, key set symbols, hardware set numbers and special instructions. Owner to approve submitted keying schedule prior to the ordering of permanent cylinders.
- D. **Operating and Maintenance Manuals:** Provide manufacturers operating and maintenance manuals for each item comprising the complete door hardware installation in quantity as required in Division 01, Closeout Submittals. The manual to include the name, address, and contact information of the manufacturers providing the hardware and their nearest service representatives. The final copies delivered after completion of the installation test to include "as built" modifications made during installation, checkout, and acceptance.
- E. **Warranties and Maintenance:** Special warranties and maintenance agreements specified in this Section.
- 1.3 **QUALITY ASSURANCE**
- A. **Manufacturers Qualifications:** Engage qualified manufacturers with a minimum 5 years of documented experience in producing hardware and equipment similar to that indicated for this Project and that have a proven record of successful in-service performance.
 - B. **Installer Qualifications:** Installers, trained by the primary product manufacturers, with a minimum 3 years documented experience installing both standard and electrified builders hardware similar in material, design, and extent to that indicated for this Project and whose work has resulted in construction with a record of successful in-service performance.

- C. Door Hardware Supplier Qualifications: Experienced commercial door hardware distributors with a minimum 5 years documented experience supplying both mechanical and electromechanical hardware installations comparable in material, design, and extent to that indicated for this Project. Supplier recognized as a factory direct distributor in good standing by the manufacturers of the primary materials with a warehousing facility in Project's vicinity. Supplier to have on staff a certified Architectural Hardware Consultant (AHC) available during the course of the Work to consult with Contractor, Architect, and Owner concerning both standard and electromechanical door hardware and keying.
1. Scheduling Responsibility: Preparation of door hardware and keying schedules.
- D. Where indicated to comply with accessibility requirements, comply with Americans with Disabilities Act (ADA), "Accessibility Guidelines for Buildings and Facilities (ADAAG)," ANSI A117.1 as follows:
- a. Handles, Pulls, Latches, Locks, and other Operating Devices: Shape that is easy to grasp with one hand and does not require tight grasping, tight pinching, or twisting of the wrist.
 - b. Door Closers: Comply with the following maximum opening-force requirements indicated:
 - 1) Interior Hinged Doors: 5 lbf applied perpendicular to door.
 - 2) Fire Doors: Minimum opening force allowable by authorities having jurisdiction.
 - c. Thresholds: Not more than 1/2 inch high. Bevel raised thresholds with a slope of not more than 1:2.
2. NFPA 101: Comply with the following for means of egress doors:
 - a. Latches, Locks, and Exit Devices: Not more than 15 lbf to release the latch. Locks shall not require the use of a key, tool, or special knowledge for operation.
 - b. Thresholds: Not more than 1/2 inch high.
- E. Each unit to bear third party permanent label demonstrating compliance with the referenced standards.
- F. Keying Conference: Conduct conference to comply with requirements in Division 01 Section "Project Meetings." Keying conference to incorporate the following criteria into the final keying schedule document:
1. Function of building, purpose of each area and degree of security required.
 2. Plans for existing and future key system expansion.
 3. Requirements for key control storage and software.
 4. Installation of permanent keys, cylinder cores and software.
 5. Address and requirements for delivery of keys.
- G. Pre-Submittal Conference: Conduct coordination conference in compliance with requirements in Division 01 Section "Project Meetings" with attendance by representatives of Supplier(s),

Installer(s), and Contractor(s) to review proper methods and the procedures for receiving, handling, and installing door hardware.

1. Prior to installation of door hardware, arrange for manufacturers' representatives to hold a project specific training meeting to instruct the installing contractors' personnel on the proper installation and adjustment of their respective products. Product training to be attended by installers of door hardware (including electromechanical hardware) for aluminum, hollow metal and wood doors. Training will include the use of installation manuals, hardware schedules, templates and physical product samples as required.
2. Inspect and discuss electrical roughing-in, power supply connections, and other preparatory work performed by other trades.
3. Review sequence of operation narratives for each unique access controlled opening.
4. Review and finalize construction schedule and verify availability of materials.
5. Review the required inspecting, testing, commissioning, and demonstration procedures

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

1.4 DELIVERY, STORAGE, AND HANDLING

- A. Inventory door hardware on receipt and provide secure lock-up and shelving for door hardware delivered to Project site. Do not store electronic access control hardware, software or accessories at Project site without prior authorization.
- B. Tag each item or package separately with identification related to the final Door Hardware Schedule, and include basic installation instructions with each item or package.
- C. Deliver, as applicable, permanent keys, cylinders, cores, access control credentials, software and related accessories directly to Owner via registered mail or overnight package service. Instructions for delivery to the Owner shall be established at the "Keying Conference".

1.5 COORDINATION

- A. Templates: Obtain and distribute to the parties involved templates for doors, frames, and other work specified to be factory prepared for installing standard and electrified hardware. Check Shop Drawings of other work to confirm that adequate provisions are made for locating and installing hardware to comply with indicated requirements.
- B. Door and Frame Preparation: Related Division 08 Sections (Steel, Aluminum and Wood) doors and corresponding frames are to be prepared, reinforced and pre-wired (if applicable) to receive the installation of the specified electrified, monitoring, signaling and access control system hardware without additional in-field modifications.

1.6 WARRANTY

- A. General Warranty: Reference Division 01, General Requirements. Special warranties specified in this Article shall not deprive Owner of other rights Owner may have under other provisions

of the Contract Documents and shall be in addition to, and run concurrent with, other warranties made by Contractor under requirements of the Contract Documents.

- B. Warranty Period: Written warranty, executed by manufacturer(s), agreeing to repair or replace components of standard and electrified door hardware that fails in materials or workmanship within specified warranty period after final acceptance by the Owner. Failures include, but are not limited to, the following:
 - 1. Structural failures including excessive deflection, cracking, or breakage.
 - 2. Faulty operation of the hardware.
 - 3. Deterioration of metals, metal finishes, and other materials beyond normal weathering.
- C. Standard Warranty Period: One year from date of Substantial Completion, unless otherwise indicated.
- D. Special Warranty Periods:
 - 1. Ten years for mortise locks and latches.
 - 2. Five years for exit hardware.
 - 3. Twenty five years for manual door closers.

1.7 MAINTENANCE SERVICE

- A. Maintenance Tools and Instructions: Furnish a complete set of specialized tools and maintenance instructions as needed for Owner's continued adjustment, maintenance, and removal and replacement of door hardware.
- B. Continuing Service: Beginning at Substantial Completion, and running concurrent with the specified warranty period, provide continuous (6) months full maintenance including repair and replacement of worn or defective components, lubrication, cleaning, and adjusting as required for proper door opening operation. Provide parts and supplies as used in the manufacture and installation of original products.

PART 2 - PRODUCTS

2.1 HANGING DEVICES

- A. Hinges: ANSI/BHMA A156.1 certified butt hinges with number of hinge knuckles as specified in the Door Hardware Sets.
 - 1. Quantity: Provide the following hinge quantity, unless otherwise indicated:
 - a. Two Hinges: For doors with heights up to 60 inches.
 - b. Three Hinges: For doors with heights 61 to 90 inches.
 - c. Four Hinges: For doors with heights 91 to 120 inches.
 - d. For doors with heights more than 120 inches, provide 4 hinges, plus 1 hinge for every 30 inches of door height greater than 120 inches.

2. Acceptable Manufacturers:
 - a. Hager Companies (HA).
 - b. McKinney Products (MK).
 - c.

2.2 DOOR OPERATING TRIM

- A. Flush Bolts and Surface Bolts: ANSI/BHMA A156.3 and A156.16, Grade 1, certified automatic, self-latching, and manual flush bolts and surface bolts. Manual flush bolts to be furnished with top rod of sufficient length to allow bolt location approximately six feet from the floor. Furnish dust proof strikes for bottom bolts. Surface bolts to be minimum 8" in length and U.L. listed for labeled fire doors and U.L. listed for windstorm components where applicable. Provide related accessories (mounting brackets, strikes, coordinators, etc.) as required for appropriate installation and operation.

1. Acceptable Manufacturers:
 - a. Burns Manufacturing (BU).
 - b. Rockwood Manufacturing (RO).
 - c. Trimco (TC).

- B. Coordinators: ANSI/BHMA A156.3 certified door coordinators consisting of active-leaf, hold-open lever and inactive-leaf release trigger. Coordinators fabricated from steel with nylon-coated strike plates and built-in adjustable safety release.

1. Acceptable Manufacturers:
 - a. Burns Manufacturing (BU).
 - b. Rockwood Manufacturing (RO).
 - c. Trimco (TC).

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

1. Push/Pull Plates: Minimum .050 inch thick, 4-inches wide by 16-inches high, with square corners and beveled edges, secured with exposed screws unless otherwise indicated.
2. Straight Pull Design: Minimum 1-inch round diameter stainless steel bar or tube stock pulls with 2 1/2-inch projection from face of door unless otherwise indicated.
3. Offset Pull Design: Minimum 1-inch round diameter stainless steel bar or tube stock pulls with 2 1/2-inch projection and offset of 90 degrees unless otherwise indicated.
4. Push Bars: Minimum 1-inch round diameter horizontal push bars with minimum clearance of 2 1/2-inch projection from face of door unless otherwise indicated.
5. Fasteners: Provide manufacturer's designated fastener type as indicated in Hardware Sets.
 - a. Acceptable Manufacturers:
 - 1) Burns Manufacturing (BU).

- 2) Rockwood Manufacturing (RO).
- 3) Trimco (TC).

2.3 CYLINDERS AND KEYING

- A. General: Cylinder manufacturer to have minimum (10) years experience designing secured master key systems and have on record a published security keying system policy.
- B. Source Limitations: Obtain each type of keyed cylinder and keys from the same source manufacturer as locksets and exit devices, unless otherwise indicated.
 1. Acceptable Manufacturers:
 - a. Corbin Russwin Hardware (RU).
- C. Cylinders: Original manufacturer cylinders complying with the following:
 1. Mortise Type: Threaded cylinders with rings and straight- or clover-type cam.
 2. Rim Type: Cylinders with back plate, flat-type vertical or horizontal tailpiece, and raised trim ring.
 3. Mortise and rim cylinder collars to be solid and recessed to allow the cylinder face to be flush and be free spinning with matching finishes.
- D. Keying System: Each type of lock and cylinders to be factory keyed. Conduct specified "Keying Conference" to define and document keying system instructions and requirements. Furnish factory cut, nickel-silver large bow permanently inscribed with a visual key control number as directed by Owner. Incorporate decisions made in keying conference, and as follows:
 1. Existing System: Master key or grand master key locks to Owner's existing system.
- E. Key Quantity: Provide the following minimum number of keys:
 1. Top Master Key: One (1)
 2. Change Keys per Cylinder: Two (2)
 3. Master Keys (per Master Key Group): Two (2)
 4. Grand Master Keys (per Grand Master Key Group): Two (2)

2.4 MECHANICAL LOCKS AND LATCHING DEVICES

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

- a. Corbin Russwin Hardware (RU) – ML2000 Series.

- B. Lock Trim Design: As specified in Hardware Sets.

2.5 LOCK AND LATCH STRIKES

- A. Strikes: Provide manufacturer's standard strike with strike box for each latch or lock bolt, with curved lip extended to protect frame, finished to match door hardware set, unless otherwise indicated, and as follows:

2.6 DOOR CLOSERS

- A. All door closers specified herein shall meet or exceed the following criteria:
 - 1. General: Door closers to be from one manufacturer, matching in design and style, with the same type door preparations and templates regardless of application or spring size. Closers to be non-handed with full sized covers including installation and adjusting information on inside of cover.
 - 2. Standards: Closers to comply with UL-10C and UBC 7-2 for Positive Pressure Fire Test and be U.L. listed for use of fire rated doors.
 - 3. Size of Units: Comply with manufacturer's written recommendations for sizing of door closers depending on size of door, exposure to weather, and anticipated frequency of use. Where closers are indicated for doors required to be accessible to the physically handicapped, provide units complying with ANSI ICC/A117.1.
 - 4. Closer Arms: Provide heavy duty, forged steel closer arms unless otherwise indicated in Hardware Sets.
 - a. Where closers are indicated to have mechanical dead-stop, provide heavy duty arms and brackets with an integral positive stop.
 - b. Where closers are indicated to have mechanical hold open, provide heavy duty units with an additional built-in mechanical holder assembly designed to hold open against normal wind and traffic conditions. Holder to be manually selectable to on-off position.
 - c. Where closers are indicated to have a cushion-type stop, provide heavy duty arms and brackets with spring stop mechanism to cushion door when opened to maximum degree.
 - d. Closers shall not be installed on exterior or corridor side of doors; where possible install closers on door for optimum aesthetics. Provide drop plates or other accessories as required for proper mounting.
 - 5. Closer Accessories: Provide door closer accessories including custom templates, special mounting brackets, spacers and drop plates, and through-bolt or security type fasteners as specified in the door Hardware Sets.

- B. Door Closers, Surface Mounted (Heavy Duty): ANSI/BHMA A156.4, Grade 1 surface mounted, heavy duty door closers with complete spring power adjustment, sizes 1 thru 6; and fully operational adjustable according to door size, frequency of use, and opening force. Closers to be rack and pinion type, one piece cast iron or aluminum alloy body construction, with adjustable backcheck and separate non-critical valves for closing sweep and latch speed control. Provide non-handed units and high impact, non-corrosive plastic covers standard.

1. Acceptable Manufacturers:
 - a. Corbin Russwin Hardware (RU) - DC8000 Series.
 - b. LCN Closers (LC) - 4040XP Series.
 - c. Sargent Manufacturing (SA) - 351 Series.
 - d. Norton Door Controls (NO) - 7500 Series.

2.7 ARCHITECTURAL TRIM

A. Door Protective Trim

1. General: Door protective trim units to be of type and design as specified below or in the Hardware Sets.
2. Size: Fabricate protection plates (kick, armor, or mop) not more than 2" less than door width (LDW) on stop side and not more than 1" less than door width on pull side. Coordinate and provide proper width and height as required where conflicting hardware dictates. Height to be as specified in the Hardware Sets.
3. Fasteners: Provide manufacturer's designated fastener type as specified in the Hardware Sets.
4. Acceptable Manufacturers:
 - a. Burns Manufacturing (BU).
 - b. Rockwood Manufacturing (RO).
 - c. Trimco (TC).

2.8 DOOR STOPS AND HOLDERS

- A. General: Door stops and holders to be of type and design as specified below or in the Hardware Sets.
- B. Door Stops and Bumpers: ANSI/BHMA A156.16, Grade 1 certified door stops and wall bumpers. Provide wall bumpers, either convex or concave types with anchorage as indicated, unless floor or other types of door stops are specified in Hardware Sets. Do not mount floor stops where they will impede traffic. Where floor or wall bumpers are not appropriate, provide overhead type stops and holders.
1. Acceptable Manufacturers:

- a. Burns Manufacturing (BU).
- b. Rockwood Manufacturing (RO).
- c. Trimco (TC).

2.9 FABRICATION

- A. Fasteners: Provide door hardware manufactured to comply with published templates generally prepared for machine, wood, and sheet metal screws. Provide screws according to manufacturers recognized installation standards for application intended.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine scheduled openings, with Installer present, for compliance with requirements for installation tolerances, labeled fire door assembly construction, wall and floor construction, and other conditions affecting performance.
- B. Notify architect of any discrepancies or conflicts between the door schedule, door types, drawings and scheduled hardware. Proceed only after such discrepancies or conflicts have been resolved in writing.

3.2 PREPARATION

- A. Wood Doors: Comply with ANSI/DHI A115-W series.

3.3 INSTALLATION

- A. Install each item of mechanical and electromechanical hardware and access control equipment to comply with manufacturer's written instructions and according to specifications.
 1. Installers are to be trained and certified by the manufacturer on the proper installation and adjustment of fire, life safety, and security products including: hanging devices; locking devices; closing devices; and seals.
- B. Mounting Heights: Mount door hardware units at heights indicated in following applicable publications, unless specifically indicated or required to comply with governing regulations:
 1. Wood Doors: DHI WDHS.3, "Recommended Locations for Architectural Hardware for Wood Flush Doors."
 2. ANSI A117.1 "Accessibility Guidelines for Buildings and Facilities."
 3. Provide blocking in drywall partitions where wall stops or other wall mounted hardware is located.
- C. Storage: Provide a secure lock up for hardware delivered to the project but not yet installed. Control the handling and installation of hardware items so that the completion of the work will not be delayed by hardware losses before and after installation.

3.4 FIELD QUALITY CONTROL

- A. Field Inspection: Supplier will perform a final inspection of installed door hardware and state in report whether work complies with or deviates from requirements, including whether door hardware is properly installed, operating and adjusted.

3.5 ADJUSTING

- A. Initial Adjustment: Adjust and check each operating item of door hardware and each door to ensure proper operation or function of every unit. Replace units that cannot be adjusted to operate as intended. Adjust door control devices to compensate for final operation of heating and ventilating equipment and to comply with referenced accessibility requirements.

3.6 CLEANING AND PROTECTION

- A. Protect all hardware stored on construction site in a covered and dry place. Protect exposed hardware installed on doors during the construction phase. Install any and all hardware at the latest possible time frame.
- B. Clean adjacent surfaces soiled by door hardware installation.
- C. Clean operating items as necessary to restore proper finish. and provide final protection and maintain conditions that ensure door hardware is without damage or deterioration at time of owner occupancy.

3.7 DOOR HARDWARE SCHEDULE

- A. The hardware sets represent the design intent and direction of the owner and architect. They are a guideline only and should not be considered a detailed hardware schedule. Discrepancies, conflicting hardware and missing items should be brought to the attention of the architect with corrections made prior to the bidding process. Omitted items not included in a hardware set should be scheduled with the appropriate additional hardware required for proper application and functionality.
- B. Refer to Section 080671, Door Hardware Schedule, for hardware sets.

END OF SECTION 087100

No.	Description	Date
1	100% CD'S / ISSUED FOR BID	07-01-13
△	ADDENDUM #2	08-01-13
△	ADDENDUM #4	08-08-13

KEYPLAN

OWNER:
**DELAWARE TECHNICAL
 COMMUNITY COLLEGE**
 400 STANTON CHRISTIANA ROAD
 NEWARK, DE 19713
 302.454.3900

MECH./ELEC. ENGINEER:
**DELAWARE ENGINEERING
 & DESIGN CORP.**
 315 S. CHAPEL STREET
 NEWARK, DE 19711
 302-738-7172
 Fax 302-738-7175

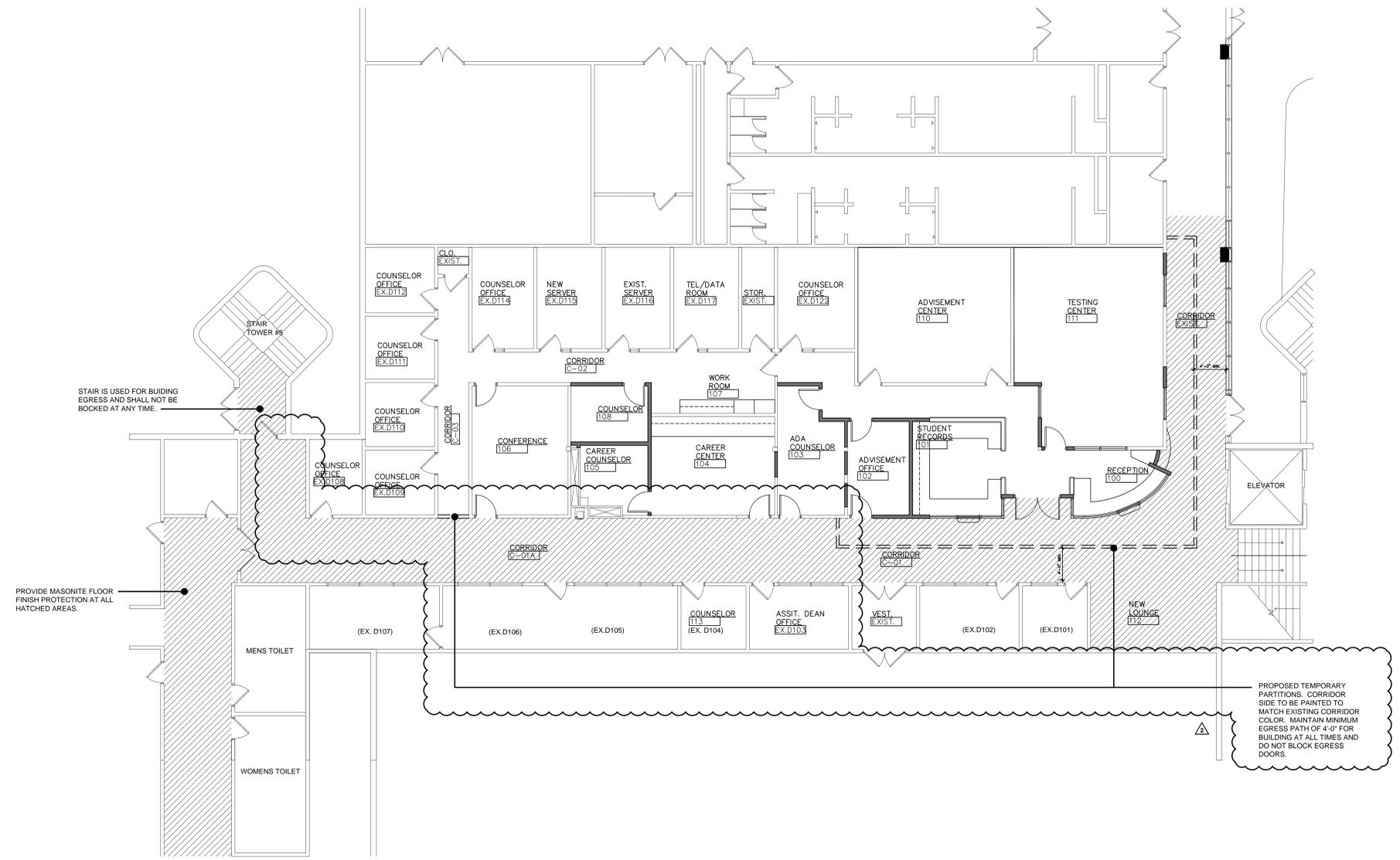
B S A + A
 Buck Simpers Architect
 + Associates, Inc.
 715 North Orange St.
 Wilmington, DE 19801
 302 658-9300
 Fax 658-1125

JOB NO. 12.028
 DELAWARE TECHNICAL AND
 COMMUNITY COLLEGE
 STANTON CAMPUS
 CAREER CENTER,
 ADMISSIONS &
 ADVISEMENT IMPROVEMENTS
 400 STANTON CHRISTIANA ROAD
 NEWARK, DE 19713

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 PLAN
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Aug 07, 2013 - 3:11pm

A002 △





Contractor Requests For Information

ITEM	Q & A	DATE	ISSUED
Q1	2/A111 – Legend shows hatched walls as existing walls to remain, while clear walls are new stud walls. However, cross referencing demo plan (A101), clear walls on A111 appear to be existing walls to remain, while hatched walls should be new stud walls. Please clarify.	07.30.13 Whiting Turner	
A1	You are correct. New Walls are hatched on A111 and existing are shown unhatched. See revised Legend 2/A111 per ADDM #3. ASK-002.	8-7-13 BSA+A	ADDM #3
Q2	The specifications state that there are liquidated damages due to the Owner for failure to complete the project within time specified, however the time and dollar amounts are left blank. Please advise the time number of days and dollar amount for liquidated damages.	07.30.13 Whiting Turner	
A2	Refer to Item No. A-1, ADDM #2. There are no Liquidated Damages that apply to this project.	8-1-13	ADDM #2
Q3	The drawings indicate that there are new CMU walls/infills (see 2/A111 Legend). However, all wall types shown on 4/A111, and hatching as shown on 1/A111 indicates metal studs and drywall only. If new masonry walls are required, please clarify.	07.30.13 Whiting Turner	
A3	Refer to Wall types listed under Partition Types 4/A111. See revised Legend 2/A111 per ADDM #3. ASK-002.	8-7-13 BSA+A	ADDM #3
Q4	The drawings and specs call for an anti-freeze fire sprinkler system. Please be advised there are currently no anti-freeze solutions listed for use in sprinkler systems. Please pass on to project engineer ask if we should include using a dry pipe system instead.	8-1-13 Bancroft	
A4	<i>ALL SPRINKLER HEADS IN ACCESSIBLE CEILING ROOMS SHALL BE PENDANT, QUICK RESPONSE TYPE, SIMILAR TO VIKING MODEL 'M' WITH WHITE FINISH. EACH HEAD SHALL BE PROPERLY SELECTED FOR THE TEMPERATURE FOR THE SPACE REQUIRED BY NFPA 13. NON-FREEZE SPRINKLER HEADS ARE NOT REQUIRED. MATCH EXISTING HEADS AS INDICATED IN FIRE PROTECTION NOTES ON DRAWING FP-001.</i>	8-7-13 DEDC	ADDM #3



Contractor Requests For Information

Q5	What is the Floor to Structure height?	8-6-13 Bancroft	
A5	Approximately 12'-8" from Finish Floor to B.O. Deck - V.I.F.	8-7-13 BSA+A	ADDM #3
Q6	Is there any expansion control in the job? I see the spec section 079500 but no reference to it in the drawings.	8-6-13 Bancroft	
A6	Not to our knowledge however, should the removal of any finishes expose an area that requires one and has not been sufficiently installed this spec section was provide for direction to do so.	8-7-13 BSA+A	ADDM #3
Q7	NEED SPEC AND CATALOG NUMBER ON THE NEW 2X2, 2X4 AND THE DOWN LIGHTS.	8-6-13 Ventresca	
A7	2x4 Fixture – Columbia #ST824-317G-FSA12-EU or equal 2X2 Fixture – Columbia #ST822-317G-FSA12-EU or equal Down Light – Prescolite #CF632HEB-STF602HWT-B24-LP32T30K or equal	8-8-13 DEDC	ADDM #4
Q8	NEED SPEC ON FLOOR BOX SHOWN ON DRAWING E 112 IN ROOM 106.	8-6-13 Ventresca	
A8	Floor Box –Infloor (2) Compartment Box with (1) Duplex Receptacle and (1) Telecom Outlet. Wiremold #RFB2-OG (Floor Box), #RFB2DP (For type ‘A” receptacle), #RFB2RT (For Telecom)	8-8-13 DEDC	ADDM #4
Q9	NEED CIRCUIT NUMBERS FOR ALL NEW OUTLETS SHOWN ON DRAWING E 106.	8-6-13 Ventresca	
A9	There is no drawing E-106, think you mean drawing E-112	8-8-13 DEDC	ADDM #4
Q10	Drawings E-102 & E112 show a number of electrical devices shown as existing to remain. For example, in rooms Advertisement 110 & Testing Center 111. However Drawing A101 & A111 call for several of these wall finishes to be removed & replaced (see note 8 on A101 & note 9 on	8-7-13 Badger	



Contractor Requests For Information

	A111). This does not coordinate well with the electrical devices to remain. Should the electrical devices be replaced with new utilizing existing branch circuitry & boxes?	Electric	
A10	Contractor to remove the cover and wiring device to allow for the installation of the new wall finish. Then reinstall device and cover and a device extension if required in the existing outlet.	8-8-13 DEDC	ADDM #4
Q11	Drawing E112 shows new electrical devices, but does not show any circuitry for any new devices. Please clarify.	8-7-13 Badger Electric	
A11	All new circuits in will come from existing circuits made free during demolition. The contractor shall show these circuits on his as built drawings. The maximum number of circuits on a circuit should not exceed eight.	8-8-13 DEDC	ADDM #4
Q12	Can a either a manufacturer and model number or allowance be provided for the 2x4 & 2x2 light fixtures we are supposed to match to existing?	8-7-13 Badger Electric	
A12	2x4 Fixture – Columbia #ST824-317G-FSA12-EU or equal 2X2 Fixture – Columbia #ST822-317G-FSA12-EU or equal	8-8-13 DEDC	ADDM #4
Q13	The Bid Bond for the above asks for a Contract No. Is this something you would have?	8-6-13 EDIS	
A13	Use Contract number 12.028	8-7-13 BSA+A	ADDM #3
Q14	Drawing E-102 & E-112 shows a number of existing electrical devices to remain. Drawing A-101 & A-111 call out for several of the walls with existing electrical outlets to remain to receive new insulation and drywall. This does not coordinate well with electrical devices to remain. Should the electrical devices be replaced with new utilizing existing branch circuitry and boxes?	8-7-13 EDIS	
A14	Contractor to remove the cover and wiring device to allow for the installation of the new wall finish. Then reinstall device and cover and a device extension if required in the existing outlet.	8-8-13 DEDC	ADDM #4
Q15	Drawing E-112 shows new electrical devices, but does not show any circuitry of any new devices. Please clarify.	8-7-13	



Contractor Requests For Information

			EDIS	
A15	All new circuits in will come from existing circuits made free during demolition. The contractor shall show these circuits on his as built drawings. The maximum number of circuits on a circuit should not exceed eight.		8-8-13 DEDC	ADDM #4
Q16	Please provide manufacturer and model number or allowance be provided for the 2x4 and 2x2 light fixtures we are supposed to match to existing.		8-7-13 EDIS	
A16	All new circuits in will come from existing circuits made free during demolition. The contractor shall show these circuits on his as built drawings. The maximum number of circuits on a circuit should not exceed eight.		8-8-13 DEDC	ADDM #4
Q17	Please provide expanded detail and manufacturer of the sliding window assembly for G1 and G2 on A-401.		8-7-13 EDIS	
A17	No manufacturer is specified. Provide a friction controlled vertical slider per detail 8/A111, 8/A461 (G1) & 9/A461 (G2).		8-8-13 BSA+A	ADDM #4
Q18	Please clarify sliding window type, detail 5 on A-401 compared to detail 8 on A-461 (horizontal or vertical).		8-7-13 EDIS	
A18	All sliders are vertical sliders. Per details provided for G1 & G2. Delete reference to horizontal sliders in detail 5/A401.		8-8-13 BSA+A	ADDM #4
Q19	A001, A111 – General note #11 on A111 states that the water cooler is to be replaced per code only if necessary. Note 1 on A001 says to provide accessible & standing drinking fountains. There is currently only one (accessible) drinking fountain. a. Please advise if we are to provide a new water cooler. b. Please advise if standing fountain is a requirement.		8-7-13 Whiting Turner	



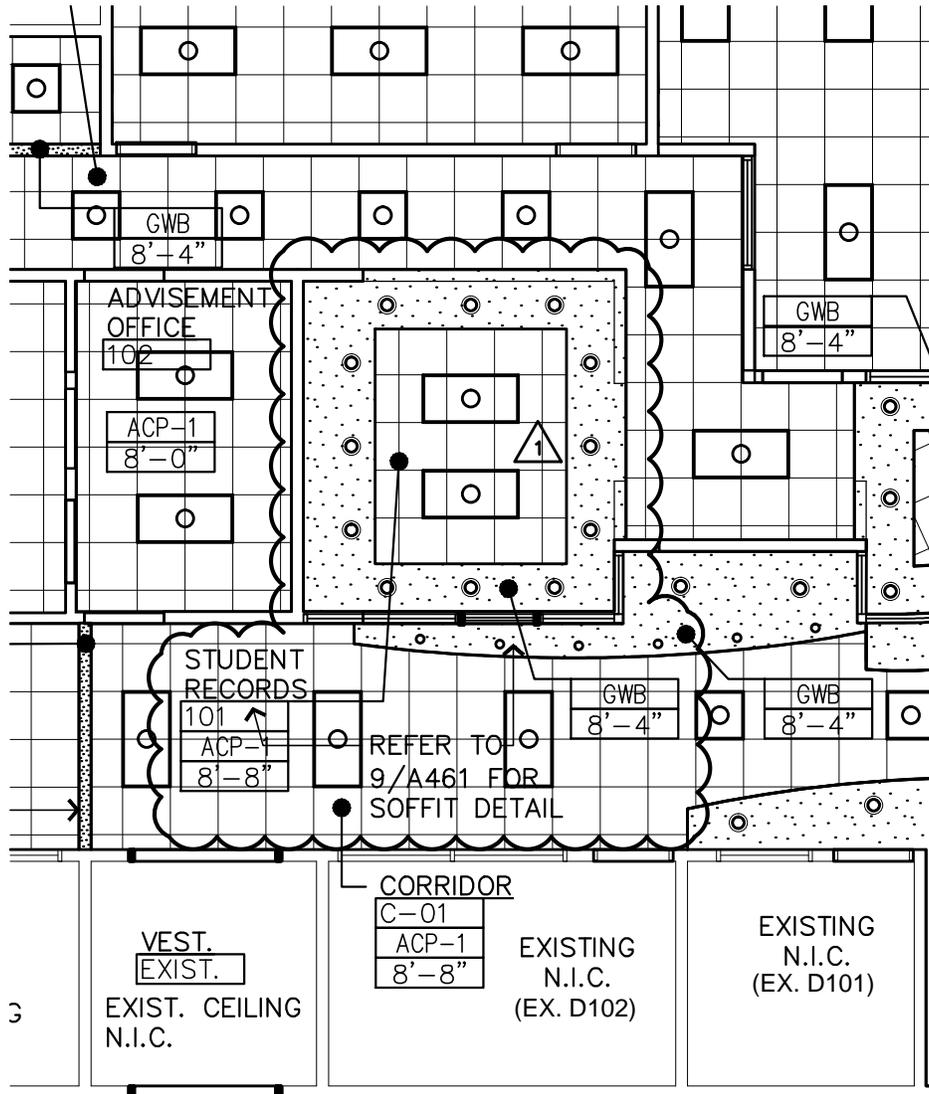
Contractor Requests For Information

	i. If yes, please provide specification.		
A19	A Standing Fountain is not a requirement and a new water cooler is not necessary.	8-8-13 BSA+A	ADDM #4
Q20	On previous projects for DTCC, the Fire Protection contractor has been limited to Simplex Grinnell. Please advise if this is the case for this project.	8-7-13 Whiting Turner	
A20	Simplex Grinnell	8-8-13 DEDC	ADDM #4
Q21	The contract documents note that we must use an Owner approved Fire Alarm contractor. Please advise who is an acceptable contractor.	8-7-13 Whiting Turner	
A21	Simplex Grinnell	8-8-13 DEDC	ADDM #4
Q22	1/A121 RCP – In room 101 Student Records there are eight (8) tiles which are hatched as both ACP and GWB (around center tile). Please clarify.	8-7-13 Whiting Turner	
A22	Refer to attached ASK-003 issued per ADDM #4. Entire center is to be ACP & border is to be GWB.	8-8-13 BSA+A	ADDM #4
Q23	Are all existing door frames to be painted throughout the space? If yes, does this include both the corridor side and office/room sides at rooms labeled N.I.C?	8-7-13 Whiting Turner	
A23	Yes. All existing door frames will be painted on both sides, including, N.I.C. sides.	8-8-13 BSA+A	ADDM #4
Q24	A002 – Temporary partition is shown in space to receive new flooring and ceilings, and would need to be removed prior to ceiling work beginning.	8-7-13 Whiting Turner	



Contractor Requests For Information

A24	Correct. Date of removal of temporary wall will be discussed and confirmed in contractor's schedule.	8-8-13 BSA+A	ADDM #4
Q25	Who is responsible for Builder's Risk?	8-7-13 Whiting Turner	
A25	Contractor is not required to provide builder's risk.	8-8-13 BSA+A	ADDM #4
Q26	Drawings E-102 & E112 show a number of electrical devices shown as existing to remain. For example, in rooms Advertisement 110 & Testing Center 111. However Drawing A101 & A111 call for several of these wall finishes to be removed & replaced (see note 8 on A101 & note 9 on A111). This does not coordinate well with the electrical devices to remain. Should the electrical devices be replaced with new utilizing existing branch circuitry & boxes?	8-7-13 Whiting Turner	
A26	Contractor to remove the cover and wiring device to allow for the installation of the new wall finish. Then reinstall device and cover and a device extension if required in the existing outlet.	8-8-13 DEDC	ADDM #4
Q27	Drawing E112 shows new electrical devices, but does not show any circuitry for any new devices. Please clarify.	8-7-13 Whiting Turner	
A27	All new circuits in will come from existing circuits made free during demolition. The contractor shall show these circuits on his as built drawings. The maximum number of circuits on a circuit should not exceed eight.	8-8-13 DEDC	ADDM #4
Q28	Can a either a manufacturer and model number or allowance be provided for the 2x4 & 2x2 light fixtures we are supposed to match to existing?	8-7-13 Whiting Turner	
A28	2x4 Fixture – Columbia #ST824-317G-FSA12-EU or equal 2X2 Fixture – Columbia #ST822-317G-FSA12-EU or equal	8-8-13 DEDC	ADDM #4



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 302 658-9300
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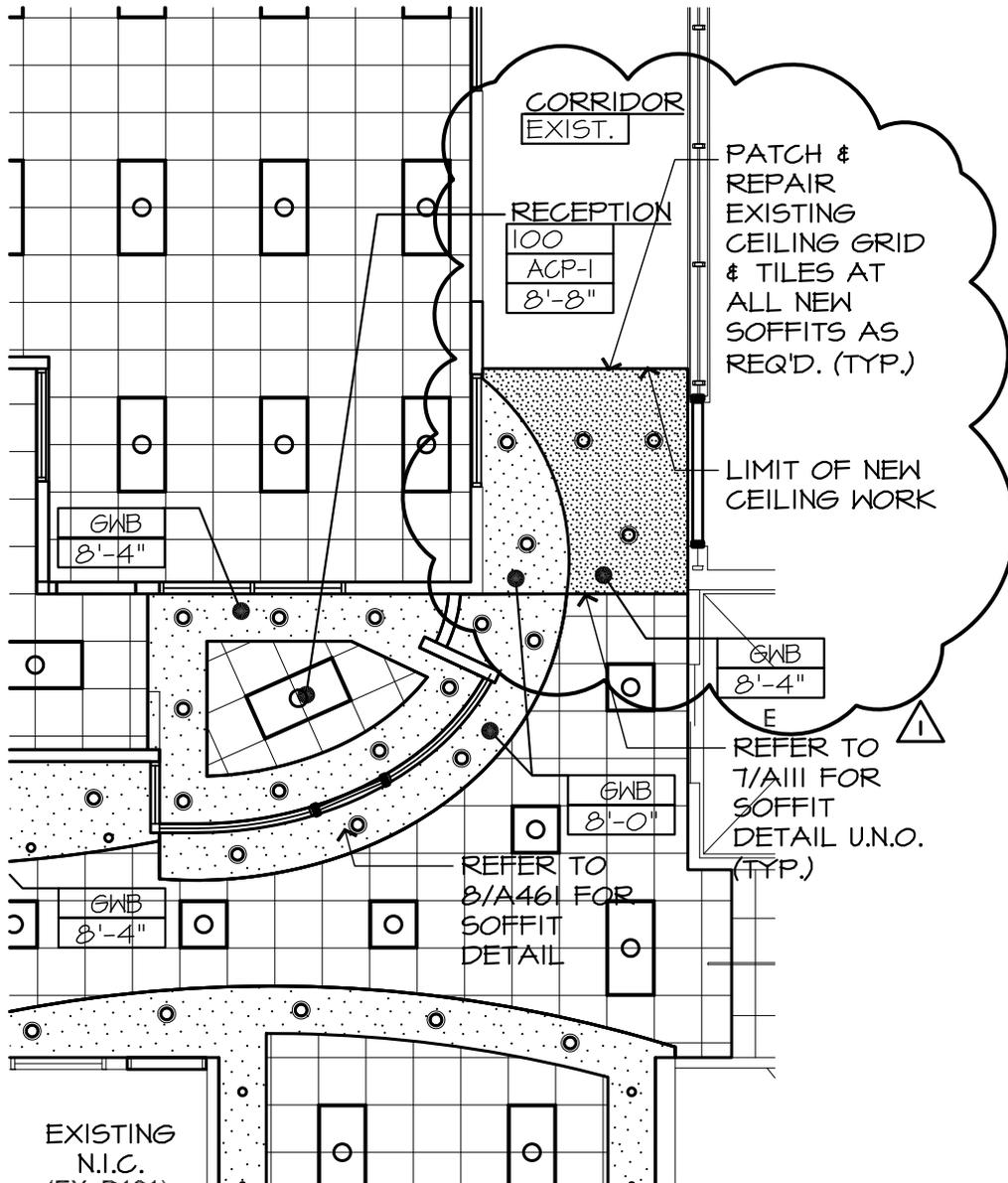
**DELAWARE TECHNICAL
 & COMMUNITY COLLEGE
 CAREER CENTER RENOVATIONS**

400 STANTON CHRISTIANA RD.
 NEWARK, DE 19713

Drawn By: RHR
 Date Issued: 8-8-13
 Scale: 1/8" = 1'-0"
 Project No.: 12.028

**ADDENDUM #4
 FIRST FLOOR REFLECTED
 CEILING PLAN**

Reference: 1/A121 Drawing: ASK - 003



Buck Simperts Architect
 + Associates, Inc.
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 302 658-9300
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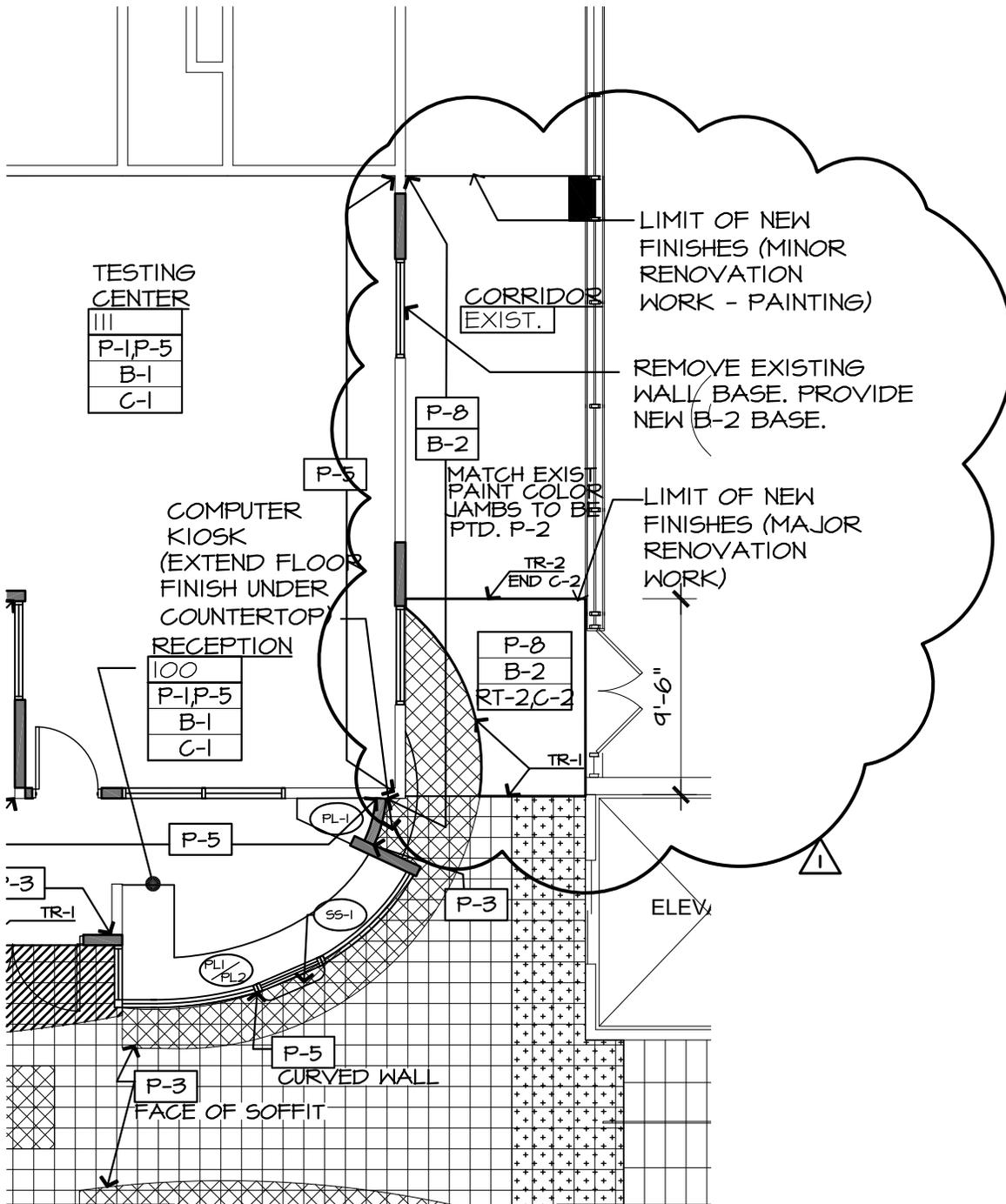
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**ADDENDUM #4
 FIRST FLOOR REFLECTED
 CEILING PLAN**

Reference:	1/A121	Drawing:	ASK - 004
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**ADDENDUM #4
 FIRST FLOOR FINISH PLAN**

Reference: 1/A131 Drawing: ASK - 005