DOCUMENT 00 91 00 – ADDENDUM NO.

Issued to All Bid Document Holders of Record

Date: August 17, 2020

Project Name: Specialty Pharmacy

Contract No.: CP-202191

This Addendum forms a part of the Contract described above. The original Contract Documents and any prior Addenda remain in full force and effect except as modified by the following which shall take precedence over any contrary provisions in the prior documents.

ADDENDUM NO. 1.

Pre-Bid Meeting Notes clarifications:
A. OFCI Equipment Startup: Will be performed by contractor with vendor assistance
B. OFCI Generator Diesel Fuel – Initial fill of fuel will be by Owner (MUHC).
C. OFCI Equipment Training – Will be provided by Vendor per the specifications.
D. Will demolition need to be performed off-hours? Likely no, should be regular business hours and accommodate schedule with occupants.
E. Modular Casework in the in the open office will be constructed by MUHC.
F. Security systems: Owner will provide security devices. Contractor to pull wiring and provide power to all devices. Owner to terminate all wiring and commission security systems.
G. Test& Balance will be led by MU as commissioning agent per the Division 23 specifications.
H. HVAC controls are by MU – wiring and terminations by contractor.

SECTION 1.A BID FOR LUMP SUM CONTRACT
A. Paragraph 4.a PROJECT COMPLETION: Revised form, Project Schedule modified to 105-days.

SPECIFICATIONS:
A. Add Specification SECTION 081113 - HOLLOW METAL DOORS AND FRAMES.

CONTRACT DRAWINGS:
A. The Following Drawings are issued with revisions:
   a. A-101, Rev 1, 8/17/2020
   b. FP-101, Rev 1, 8/17/2020

B. Drawing #A101- Revised Door Schedule for Door #1003A & #1004B
   a. Door #1003A – Glazing size to be 30x33 in lieu of 3x33.
   b. Door #1004B – Glazing size to be 3x33 in lieu of 30x33.

C. Updated Finish Schedule
   a. CPT1 -will be provided by Owner. Contractor shall salvage any materials removed by demolition as is feasible: (All Rooms scheduled as C1 shall be CPT1)
      i. Bentley
         1. Arcade Legend 8ALT40220T
2. Ultra Cruiser 800604
3. 24x24
   b. Backsplash – Tile and Grout, Contractor Furnished and Installed:
      i. American Olean
         1. Color Appeal
            a. C102 Silver Cloud
            b. 4x12 Tiles
      ii. TEC Grout
         a. 908 Dove Gray

D. Fire Protection
   a. FP-101: Contractor is responsible to provide a secure keybox for fire department access to the building. Locate on the building exterior near the fire water entrance at an approved location. The location shall be noted on the sprinkler drawings and be submitted for approval by the AHJ.

Each Bidder shall acknowledge receipt of this Addendum by affixing his signature below, by noting this Addendum on his Bid Form, and by attaching this Addendum to his Bid.

Curators of the University of Missouri
c/o Assistant Vice Chancellor – Facilities
Room L100, General Services Building
University of Missouri – Columbia
Columbia, MO 65211

ACKNOWLEDGEMENT

The undersigned acknowledges receipt of this Addendum and the Bid submitted is in accordance with information, instructions and stipulations set forth herein.

Bidder: ____________________________

By: ________________________________

Date: ______________________________

END OF SECTION 00 91 00
SECTION 1.A

BID FOR LUMP SUM CONTRACT

Date:____________________________

BID OF (hereinafter called "Bidder") a corporation* organized and existing under laws of the State of ________________
a partnership* consisting of ________________________________
an individual* trading as ________________________________
a joint venture* consisting of ________________________________

*Insert Corporation(s), partnership or individual, as applicable.

TO: Curators of the University of Missouri
    c/o Assistant Vice Chancellor – Facilities
    Room L100, General Services Building
    University of Missouri – Columbia
    Columbia, MO 65211

1. Bidder, in compliance with invitation for bids for construction work in accordance with Drawings and Specifications prepared by Burns & McDonnell Engineering, entitled "MU HEALTH CARE SPECIALTY PHARMACY", project number CP202191 dated AUG 4, 2020 having examined Contract Documents and site of proposed work, and being familiar with all conditions pertaining to construction of proposed project, including availability of materials and labor, hereby proposes to furnish all labor, materials and supplies to construct project in accordance with Contract Documents, within time set forth herein at prices stated below. Prices shall cover all expenses, including taxes not covered by the University of Missouri’s tax exemption status, incurred in performing work required under Contract documents, of which this Bid is a part.

Bidder acknowledges receipt of following addenda:

Addendum No. ___________________________ Dated ________________
Addendum No. ___________________________ Dated ________________
Addendum No. ___________________________ Dated ________________
Addendum No. ___________________________ Dated ________________

2. In following Bid(s), amount(s) shall be written in both words and figures. In case of discrepancy between words and figures, words shall govern.

3. BID PRICING
   a. Base Bid:
      The Bidder agrees to furnish all labor, materials, tools, and equipment required to construct the new Pharmacy Processing and Shipping/Receiving facilities with electrical generator including all architectural, electrical, HVAC, plumbing, and fire protection modifications to the existing warehouse building; all as indicated on the Drawings and described in these Specifications for sum of:

      ___________________________ DOLLARS ($ ________________________).
b. CASH ALLOWANCES:
All specific cash allowances as listed below are included in the Lump Sum Bid Price set forth above.

1. ____________________ (DOLLARS) for modifications to the existing dock leveler support structure as required to interface with the new dock leveler as indicated on the Architectural Drawings.

4. PROJECT COMPLETION

a. Contract Period - Contract period begins on the day the Contractor receives unsigned Contract, Performance Bond, Payment Bond, and "Instructions for Execution of Contract, Bonds, and Insurance Certificates." Bidder agrees to complete project within One-Hundred-Five (105) calendar days from receipt of aforementioned documents. Fifteen (15) calendar days have been allocated in construction schedule for receiving aforementioned documents from Bidder.

b. Commencement - Contractor agrees to commence work on this project after the "Notice to Proceed" is issued by the Owner. "Notice to Proceed" will be issued within seven (7) calendar days after Owner receives properly prepared and executed Contract documents listed in paragraph 4.a. above.

c. Special scheduling requirements: NA

5. SUBCONTRACTOR LIST:

Bidder hereby certifies that the following subcontractors will be used in performance of Work:

NOTE: Failure to list subcontractors for each category of work identified on this form or listing more than one subcontractor for any category of work without designating the portion of work performed by each shall be grounds for rejection of bid. List name, city, and state of designated subcontractor, for each category of work listed in Bid For Lump Sum Contract. If work within a category will be performed by more than one subcontractor, Bidder shall provide name, city, and state of each subcontractor and specify exact portion of work to be performed by each. If acceptance/non-acceptance of Alternates will affect designation of a subcontractor, Bidder shall provide information, for each affected category, with this bid form. If Bidder intends to perform any designated subcontract work by using Bidder's own employees, then Bidder shall list their own name, city, and state. The bidder may petition the Owner to change a listed subcontractor only within 48 hours of the bid opening. See Information For Bidders Section 16 List of Subcontractors for requirements.

<table>
<thead>
<tr>
<th>Work to be performed</th>
<th>Subcontractor Name, City, State</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mechanical/Plumbing</td>
<td></td>
</tr>
<tr>
<td>Electrical</td>
<td></td>
</tr>
<tr>
<td>Carpentry</td>
<td></td>
</tr>
<tr>
<td>Fire Protection</td>
<td></td>
</tr>
</tbody>
</table>
6. SUPPLIER DIVERSITY PARTICIPATION GOALS

SUPPLIER DIVERSITY PARTICIPATION GOALS

a. The Contractor shall have a goal subcontracting with Minority Business Enterprise (MBE) of TEN PERCENT (10%); Women Business Enterprise (WBE), Disadvantage Business Enterprise (DBE), and/or Veteran Owned Business of TEN PERCENT (10%); and with Service Disabled Veteran Owned Business (SDVE) of THREE PERCENT (3%) of awarded contract price for work to be performed.

b. Requests for waiver of this goal shall be submitted on the attached Application For Waiver form. A determination by the Director of Facilities Planning & Development, UM, that a good faith effort has not been made by Contractor to achieve above stated goal may result in rejection of bid.

c. The Undersigned proposes to perform work with following Supplier Diversity participation level:

<table>
<thead>
<tr>
<th>MBE PERCENTAGE PARTICIPATION:</th>
<th>_________________________________ percent (________ %)</th>
</tr>
</thead>
<tbody>
<tr>
<td>WBE, DBE, and/or VETERAN PERCENTAGE PARTICIPATION:</td>
<td>_________________________________ percent (________ %)</td>
</tr>
<tr>
<td>SDVE PERCENTAGE PARTICIPATION:</td>
<td>_________________________________ percent (________ %)</td>
</tr>
</tbody>
</table>

d. A Supplier Diversity Compliance Evaluation form shall be submitted with this bid for each diverse subcontractor to be used on this project.

7. BIDDER'S ACKNOWLEDGMENTS

a. Bidder declares that he has had an opportunity to examine the site of the work and he has examined Contract Documents therefore; that he has carefully prepared his bid upon the basis thereof; that he has carefully examined and checked bid, materials, equipment and labor required thereunder, cost thereof, and his figures therefore. Bidder hereby states that amount, or amounts, set forth in bid is, or are, correct and that no mistake or error has occurred in bid or in Bidder's computations upon which this bid is based. Bidder agrees that he will make no claim for reformation, modifications, revisions or correction of bid after scheduled closing time for receipt of bids.

b. Bidder agrees that bid shall not be withdrawn for a period of sixty (60) days after scheduled closing time for receipt of bids.

c. Bidder understands that Owner reserves right to reject any or all bids and to waive any informalities in bidding.

d. Accompanying the bid is a bid bond, or a certified check, or an irrevocable letter of credit, or a cashier's check payable without condition to "The Curators of the University of Missouri" which is an amount at least equal to five percent (5%) of amount of largest possible total bid herein submitted, including consideration of Alternates.

e. Accompanying the bid is a Bidder's Statement of Qualifications. Failure of Bidder to submit the Bidder's Statement of Qualifications with the bid may cause the bid to be rejected. Owner does not maintain Bidder's Statements of Qualifications on file.

f. It is understood and agreed that bid security of two (2) lowest and responsive Bidders will be
retained until Contract has been executed and an acceptable Performance Bond and Payment Bond has been furnished. It is understood and agreed that if the bid is accepted and the undersigned fails to execute the Contract and furnish acceptable Performance/Payment Bond as required by Contract Documents, accompanying bid security will be realized upon or retained by Owner. Otherwise, the bid security will be returned to the undersigned.

8. BIDDER'S CERTIFICATE

Bidder hereby certifies:

a. His bid is genuine and is not made in interest of or on behalf of any undisclosed person, firm or corporation, and is not submitted in conformity with any agreement or rules of any group, association or corporation.

b. He has not directly or indirectly induced or solicited any other bidder to put in a false or sham bid.

c. He has not solicited or induced any person, firm or corporation to refrain from bidding.

d. He has not sought by collusion or otherwise to obtain for himself any advantage over any other Bidder or over Owner.

e. He will not discriminate against any employee or applicant for employment because of race, color, religion, sex or national origin in connection with performance of work.

f. By virtue of policy of the Board of Curators, and by virtue of statutory authority, a preference will be given to materials, products, supplies, provisions and all other articles produced, manufactured, mined or grown within the State of Missouri. By virtue of policy of the Board of Curators, preference will also be given to all Missouri firms, corporations, or individuals, all as more fully set forth in "Information For Bidders."
9. BIDDER'S SIGNATURE

Note: All signatures shall be original; not copies, photocopies, stamped, etc.

<table>
<thead>
<tr>
<th>Authorized Signature</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Printed Name</td>
<td>Title</td>
</tr>
<tr>
<td>Company Name</td>
<td></td>
</tr>
<tr>
<td>Mailing Address</td>
<td></td>
</tr>
<tr>
<td>City, State, Zip</td>
<td></td>
</tr>
<tr>
<td>Phone No.</td>
<td>Federal Employer ID No.</td>
</tr>
<tr>
<td>Fax No.</td>
<td>E-Mail Address</td>
</tr>
</tbody>
</table>

Circle one: Individual Partnership Corporation Joint Venture

If a corporation, incorporated under the laws of the State of

Licensed to do business in the State of Missouri? yes no

(Each Bidder shall complete bid form by manually signing on the proper signature line above and supplying required information called for in connection with the signature. Information is necessary for proper preparation of the Contract, Performance Bond and Payment Bond. Each Bidder shall supply information called for in accompanying "Bidder's Statement of Qualifications.")

END OF SECTION
Addendum Item 1:

SECTION 081113 - HOLLOW METAL DOORS AND FRAMES

PART 1 - GENERAL

1.01 RELATED DOCUMENTS:
A. Drawings and general provisions of the Contract, including General and Supplementary
Conditions and DIVISION 01 Specification Sections, apply to this Section.

1.02 SUMMARY:
A. Section Includes:
1. Standard hollow metal doors and frames.
B. Related Sections:
1. DIVISION 08 Section "Door Hardware (Scheduled by Describing Products)" for door
hardware for hollow metal doors.
2. DIVISION 09 Sections "Protective Coatings" for field painting hollow metal doors and
frames.
3. DIVISION 26 Sections for electrical connections including conduit and wiring for door
controls and operators.

1.03 REFERENCES:
A. ASTM International:
1. ASTM A153 - Specification for Zinc Coating (Hot-Dip) on Iron and Steel Hardware.
2. ASTM A653 - Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron
Alloy-Coated (Galvannealed) by the Hot-Dip Process.
3. ASTM A879 - Specification for Steel Sheet, Zinc Coated by the Electrolytic Process for
Applications Requiring Designation of the Coating Mass on Each Surface.
4. ASTM A1008 - Specification for Steel, Sheet, Cold-Rolled, Carbon, Structural, High-
Strength Low-Alloy, High-Strength Low-Alloy with Improved Formability, Solution
Hardened, and Bake Hardenable.
5. ASTM A1011 - Specification for Steel, Sheet and Strip, Hot Rolled, Carbon, Structural,
High-Strength Low-Alloy, High-Strength Low-Alloy with Improved Formability, and
Ultra-High Strength.
6. ASTM C1363 - Test Method for the Thermal Performance of Building Materials and
Envelope Assemblies by Means of a Hot Box Apparatus.
7. ASTM E136 - Test Method for Behavior of Materials in a Vertical Tube Furnace at 750
Degree C.
B. Builders Hardware Manufacturers Association:
1. BHMA A156.115 - Hardware Preparation in Steel Doors and Steel Frames (ANSI).
C. Hollow Metal Manufacturers Association; Division of National Association of Architectural
Metal Manufacturers:
1. NAAMM-HMMA 803 - Hollow Metal Manual - Steel Tables.
2. NAAMM-HMMA 840 - Installation and Storage of Hollow Metal Doors and Frames.
3. NAAMM-HMMA 860 - Guide Specifications for Hollow Metal Doors and Frames
(ANSI).
4. NAAMM-HMMA 861 - Guide Specifications for Commercial Hollow Metal Doors and
Frames (ANSI).
D. NFPA:
1. NFPA 80 - Fire Doors and Other Opening Protectives (ANSI).
2. NFPA 252 - Fire Tests of Door Assemblies (ANSI).
3. NFPA 257 - Fire Tests for Window and Glass Block Assemblies (ANSI).
E. Steel Door Institute:
   1. SDI A250.3 - Test Procedure and Acceptance Criteria for Factory Applied Finish Painted Steel Surfaces for Steel Doors and Frames (ANSI).
   2. SDI A250.4 - Test Procedure and Acceptance Criteria for Physical Endurance for Steel Doors and Hardware Reinforcings (ANSI).
   3. SDI A250.6 - Recommended Practice for Hardware Reinforcing on Standard Steel Doors and Frames (ANSI).
   4. SDI A250.8 - Recommended Specifications for Standard Steel Doors and Frames (ANSI).
   5. SDI A250.10 - Test Procedure and Acceptance Criteria for Prime Painted Steel Surfaces for Steel Doors and Frames (ANSI).
   6. SDI A250.11 - Recommended Erection Instructions for Steel Frames (ANSI).

F. Underwriters Laboratories Inc.:
   1. UL 9 - Fire Tests of Window Assemblies.
   2. UL 10C - Positive Pressure Fire Tests of Door Assemblies.
   3. UL 1784 - Air Leakage Tests for Door Assemblies.

1.04 DEFINITIONS:
   A. Minimum Thickness: Minimum thickness of base metal without coatings.
   B. Standard Hollow Metal Work: Hollow metal work fabricated according to ANSI/SDI A250.8.

1.05 ACTION SUBMITTALS:
   A. Product Data: For each type of product indicated. Include construction details, material descriptions, core descriptions, fire-resistance rating, and finishes.
   B. Shop Drawings: Include the following:
      1. Elevations of each door design.
      2. Details of doors, including vertical and horizontal edge details and metal thicknesses.
      3. Frame details for each frame type, including dimensioned profiles and metal thicknesses.
      4. Locations of reinforcement and preparations for hardware.
      5. Details of each different wall opening condition.
      6. Details of anchorages, joints, field splices, and connections.
      7. Details of accessories.
      8. Details of moldings, removable stops, and glazing.
      9. Details of conduit and preparations for power, signal, and control systems.
   C. Other Action Submittals:
      1. Schedule: Provide a schedule of hollow metal work prepared by or under the supervision of supplier, using same reference numbers for details and openings as those on Drawings. Coordinate with door hardware schedule.

1.06 QUALITY ASSURANCE:
   A. Source Limitations: Obtain hollow metal work from single source from single manufacturer.
   B. Fire-Rated Door Assemblies: Assemblies complying with NFPA 80 that are listed and labeled by a qualified testing agency, for fire-protection ratings indicated, based on testing at positive pressure.
   C. Preinstallation Conference: Conduct conference at Project site.

1.07 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 nonvented 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- (102-mm-) high wood blocking. Do not store in a manner that traps excess humidity.
   1. Provide minimum 1/4-inch (6-mm) space between each stacked door to permit air circulation.

1.08 **PROJECT CONDITIONS:**
A. Field Measurements: Verify actual dimensions of openings by field measurements before fabrication.

1.09 **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.

PART 2 - PRODUCTS

2.01 **MANUFACTURERS:**
A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
   1. Ceco Door Products; an Assa Abloy Group company.
   2. Curries Company; an Assa Abloy Group company.
   4. Mesker Door Inc.
   5. Pioneer Industries, Inc.
   6. Steelcraft; an Ingersoll-Rand company.
   7. Windsor Republic Doors.

2.02 **MATERIALS:**
A. Cold-Rolled Steel Sheet: ASTM A1008/A1008M, Commercial Steel (CS), Type B; suitable for exposed applications.
B. Metallic-Coated Steel Sheet: ASTM A653/A653M, Commercial Steel (CS), Type B; with minimum A40 (ZF120) metallic coating.
C. Frame Anchors: ASTM A591/A591M, Commercial Steel (CS), 40Z (12G) coating designation; mill phosphatized.
   1. For anchors built into exterior walls, steel sheet complying with ASTM A1008/A1008M or ASTM A1011/A1011M, hot-dip galvanized according to ASTM A153/A153M, Class B.
D. Inserts, Bolts, and Fasteners: Hot-dip galvanized according to ASTM A153/A153M.
E. Powder-Actuated Fasteners in Concrete: Fastener system of type suitable for application indicated, fabricated from corrosion-resistant materials, with clips or other accessory devices for attaching hollow metal frames of type indicated.
F. Mineral-Fiber Insulation: ASTM C665, Type I (blankets without membrane facing); consisting of fibers manufactured from slag or rock wool with 6- to 12-lb/cu. ft. (96- to 192-kg/cu. m) density; with maximum flame-spread and smoke-development indexes of 25 and 50, respectively; passing ASTM E136 for combustion characteristics.
G. Glazing: Comply with requirements in DIVISION 08 Section "Glazing."
H. Bituminous Coating: Cold-applied asphalt mastic, SSPC-Paint 12, compounded for 15-mil (0.4-mm) dry film thickness per coat. Provide inert-type noncorrosive compound free of asbestos fibers, sulfur components, and other deleterious impurities.
2.03 STANDARD HOLLOW METAL DOORS:
   A. General: Provide doors of design indicated, not less than thickness indicated; fabricated with smooth surfaces, without visible joints or seams on exposed faces unless otherwise indicated. Comply with ANSI/SDI A250.8.
      1. Design: Flush panel.
      2. Core Construction: Manufacturer's standard kraft-paper honeycomb, polystyrene, polyurethane, polyisocyanurate, mineral-board, or vertical steel-stiffener core.
         a. Fire Door Core: As required to provide fire-protection ratings indicated.
         b. Thermal-Rated (Insulated) Doors: Where indicated, provide doors fabricated with thermal-resistance value (R-value) of not less than 4.0°F x h x sq. ft./Btu (0.704 K x sq. m/W R-6 min. when tested according to ASTM C1363.
            (1) Locations: Exterior doors and interior doors where indicated.
         a. Beveled Edge: 1/8 inch in 2 inches (3 mm in 50 mm).
      4. Top and Bottom Edges: Closed with flush or inverted 0.042-inch- (1.0-mm-) thick, end closures or channels of same material as face sheets.
   B. Exterior Doors: Face sheets fabricated from metallic-coated steel sheet. Provide doors complying with requirements indicated below by referencing ANSI/SDI A250.8 for level and model and ANSI/SDI A250.4 for physical performance level.
   C. Interior Doors: Face sheets fabricated from cold-rolled steel sheet. Provide doors complying with requirements indicated below by referencing ANSI/SDI A250.8 for level and model and ANSI/SDI A250.4 for physical performance level.
   D. Hardware Reinforcement: Fabricate according to ANSI/SDI A250.6 with reinforcing plates from same material as door face sheets.
   E. Fabricate concealed stiffeners and hardware reinforcement from either cold- or hot-rolled steel sheet.

2.04 STANDARD HOLLOW METAL FRAMES:
   A. General: Comply with ANSI/SDI A250.8 and with details indicated for type and profile.
      1. Fabricate frames with mitered or coped corners.
      2. Fabricate frames as face welded unless otherwise indicated.
      3. Frames for Level 3 Steel Doors: 0.053-inch- (1.3-mm-) thick steel sheet.
   C. Interior Frames: Fabricated from cold-rolled steel sheet unless metallic-coated sheet is indicated.
      1. Fabricate frames with mitered or coped corners.
      2. Fabricate frames as face welded unless otherwise indicated.
      3. Frames for Level 3 Steel Doors: 0.053-inch- (1.3-mm-) thick steel sheet.
      4. Frames for Borrowed Lights: 0.053-inch- (1.3-mm-) thick steel sheet.
   D. Hardware Reinforcement: Fabricate according to ANSI/SDI A250.6 with reinforcement plates from same material as frames.

2.05 FRAME ANCHORS:
   A. Jamb Anchors:
      1. Stud-Wall Type: Designed to engage stud, welded to back of frames; not less than 0.042 inch (1.0 mm) thick.
   B. Floor Anchors: Formed from same material as frames, not less than 0.042 inch (1.0 mm) thick, and as follows:
      1. Monolithic Concrete Slabs: Clip-type anchors, with two holes to receive fasteners.
2.06 **STOPS AND MOLDINGS:**

A. Moldings for Glazed Lites in Doors: Minimum 0.032 inch (0.8 mm) thick, fabricated from same material as door face sheet in which they are installed.

B. Fixed Frame Moldings: Formed integral with hollow metal frames, a minimum of 5/8 inch (16 mm) high unless otherwise indicated.

C. Loose Stops for Glazed Lites in Frames: Minimum 0.032 inch (0.8 mm) thick, fabricated from same material as frames in which they are installed.

D. Terminated Stops: Where indicated on interior door frames, terminate stops 6 inches (152 mm) above finish floor with a 45-degree angle cut, and close open end of stop with steel sheet closure. Cover opening in extension of frame with welded-steel filler plate, with welds ground smooth and flush with frame.

1. Provide terminated stops at all interior door locations.

2.07 **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. To ensure proper assembly at Project site, clearly identify work that cannot be permanently factory assembled before shipment.

B. Tolerances: Fabricate hollow metal work to tolerances indicated in SDI 117.

C. Hollow Metal Doors:

1. Exterior Doors: Provide weep-hole openings in bottom of exterior doors to permit moisture to escape. Seal joints in top edges of doors against water penetration.

2. Glazed Lites: Factory cut openings in doors.

D. Hollow Metal Frames: 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.

1. Welded Frames: Weld flush face joints continuously; grind, fill, dress, and make smooth, flush, and invisible.

2. Provide countersunk, flat- or oval-head exposed screws and bolts for exposed fasteners unless otherwise indicated.

3. Floor Anchors: Weld anchors to bottom of jambs and mullions with at least four spot welds per anchor.

4. Jamb Anchors: Provide number and spacing of anchors as follows:
   a. Stud-Wall Type: Locate anchors not more than 18 inches (457 mm) from top and bottom of frame. Space anchors not more than 32 inches (813 mm) o.c. and as follows:
      (1) Three anchors per jamb up to 60 inches (1524 mm) high.
      (2) Four anchors per jamb from 60 to 90 inches (1524 to 2286 mm) high.
      (3) Two anchors per head for frames above 42 inches (1066 mm) wide and mounted in metal-stud partitions.

5. Door Silencers: Except on weather-stripped doors, drill stops to receive door silencers as follows. Keep holes clear during construction.
   a. Single-Door Frames: Drill stop in strike jamb to receive three doorsilencers.
   b. Double-Door Frames: Drill stop in head jamb to receive two doorsilencers.

E. Fabricate concealed stiffeners, edge channels, and hardware reinforcement from either cold- or hot-rolled steel sheet.

F. Hardware Preparation: Factory prepare hollow metal work to receive templated 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 doors and frames to receive nontemplated, 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.
4. Coordinate locations of conduit and wiring boxes for electrical connections with DIVISION 26 Sections.

G. Stops and Moldings: Provide stops and moldings around glazed lites where indicated. Form corners of stops and moldings with butted or mitered hairline joints.
   1. Single Glazed Lites: Provide fixed stops and moldings welded on secure side of hollow metal work.
   2. Provide fixed frame moldings on outside of exterior and on secure side of interior doors and frames.
   3. Provide loose stops and moldings on inside of hollow metal work.
   4. Coordinate rabbet width between fixed and removable stops with type of glazing and type of installation indicated.

2.08 STEEL FINISHES:
   A. Prime Finish: Apply manufacturer's standard primer immediately after cleaning and pretreating.
      1. Shop Primer: Manufacturer's standard, fast-curing, lead- and chromate-free primer complying with ANSI/SDI A250.10 acceptance criteria; recommended by primer manufacturer for substrate; compatible with substrate and field-applied coatings despite prolonged exposure.

PART 3 - EXECUTION

3.01 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. Examine roughing-in for embedded and built-in anchors to verify actual locations before frame installation.
   C. For the record, prepare written report, endorsed by Installer, listing conditions detrimental to performance of the Work.
   D. Proceed with installation only after unsatisfactory conditions have been corrected.

3.02 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 to the following tolerances:
      1. Squareness: Plus or minus 1/16 inch (1.6 mm), measured at door rabbet on a line 90 degrees from jamb perpendicular to frame head.
      2. Alignment: Plus or minus 1/16 inch (1.6 mm), measured at jambs on a horizontal line parallel to plane of wall.
      3. Twist: Plus or minus 1/16 inch (1.6 mm), measured at opposite face corners of jambs on parallel lines, and perpendicular to plane of wall.
      4. Plumbness: Plus or minus 1/16 inch (1.6 mm), measured at jambs on a perpendicular line from head to floor.
C. Drill and tap doors and frames to receive nontemplated, mortised, and surface-mounted door hardware.

3.03 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 HMMA 840.
   1. Set frames accurately in position, plumbed, aligned, and braced securely until permanent anchors are set. After wall construction is complete, remove temporary braces, leaving surfaces smooth and undamaged.
      a. At fire-protection-rated openings, install frames according to NFPA 80.
      b. Install frames with removable glazing stops located on secure side of opening.
      c. Remove temporary braces necessary for installation only after frames have been properly set and secured.
      d. Check plumbness, squareness, and twist of frames as walls are constructed. 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 postinstalled expansion anchors.
      a. Floor anchors may be set with powder-actuated fasteners instead of postinstalled expansion anchors if so indicated and approved on Shop Drawings.
   4. Installation Tolerances: Adjust hollow metal door frames for squareness, alignment, twist, and plumb to the following tolerances:
      a. Squareness: Plus or minus 1/16 inch (1.6 mm), measured at door rabbet on a line 90 degrees from jamb perpendicular to frame head.
      b. Alignment: Plus or minus 1/16 inch (1.6 mm), measured at jambs on a horizontal line parallel to plane of wall.
      c. Twist: Plus or minus 1/16 inch (1.6 mm), measured at opposite face corners of jambs on parallel lines, and perpendicular to plane of wall.
      d. Plumbness: Plus or minus 1/16 inch (1.6 mm), measured at jambs at floor.
C. Hollow Metal Doors: Fit hollow metal doors accurately in frames, within clearances specified below. Shim as necessary.
   1. Non-Fire-Rated Standard Steel Doors:
      a. Jambs and Head: 1/8 inch (3 mm) plus or minus 1/16 inch (1.6 mm).
      b. Between Edges of Pairs of Doors: 1/8 inch (3 mm) plus or minus 1/16 inch (1.6 mm).
      c. Between Bottom of Door and Top of Threshold: Maximum 3/8 inch (9.5 mm).
      d. Between Bottom of Door and Top of Finish Floor (No Threshold): Maximum 3/4 inch (19 mm).
   2. Fire-Rated Doors: Install doors with clearances according to NFPA 80.
D. Glazing: Comply with installation requirements in DIVISION 08 Section "Glazing" and with hollow metal manufacturer's written instructions.
   1. Secure stops with countersunk flat- or oval-head machine screws spaced uniformly not more than 9 inches (230 mm) o.c. and not more than 2 inches (50 mm) o.c. from each corner.

3.04 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. Prime-Coat Touchup: Immediately after erection, sand smooth rusted or damaged areas of prime coat and apply touchup of compatible air-drying, rust-inhibitive primer.

D. Metallic-Coated Surfaces: Clean abraded areas and repair with galvanizing repair paint according to manufacturer's written instructions.

END OF SECTION 081113

Addendum Item 2:

Drawing #A101- Revised Door Schedule for Door #1003A & #1004B

- Door #1003A – Glazing size to be 30x33 in lieu of 3x33.
- Door #1004B – Glazing size to be 3x33 in lieu of 30x33.