

**LONG BEACH CITY COLLEGE DISTRICT
CONTRACTS MANAGEMENT DEPARTMENT**

**4901 EAST CARSON STREET
LONG BEACH, CA 90808
Ph. (562) 938-4837**

**BID C2194 BUILDING MM CONSTRUCTION TRADES 1
MODERNIZATION PROJECT
AT THE
PACIFIC COAST CAMPUS**

ADDENDUM NO. 5

AUGUST 12, 2020

This Addendum forms a part of the Contract Documents and modifies the original Contract Documents. Acknowledge receipt of the Addendum on Section 1.2 of the Bid Proposal. Failure to do so may result in the bid being deemed non-responsive.

Note: It is the responsibility of all bidders to notify all subcontractors from whom they request bids and from whom they accept bids of all changes contained in this addendum.

CONTENTS

- I. CHANGES TO NOTICE CALLING FOR BIDS**
- II. PRE-BID INQUIRIES AND RESPONSES**
- III. SPECIFICATION REVISIONS**
- IV. ATTACHMENTS**

I. CHANGES TO NOTICE CALLING FOR BIDS

1. Revised Latest Time/Date for Electronic Submission of Bid Proposals from August 18, 2020, at 10:00 AM to August 20, 2020, at 10:00 AM.

II. PRE-BID INQUIRIES AND RESPONSES

1. Q: Wall Types “B”, “C” and “F” on Plan Sheet A9.60 indicate the use of 5/8” Impact Resistant Gypsum Board. Material and Color Schedule – Wall Finishes / Wall Panels, Plan Sheet A8.20, indicates Impact Resistant Gypsum Board at the Restrooms and Custodial Rooms. Room Finishes, Plan Sheet A8.20, does not indicate the use of Impact Resistant Gypsum Board at any location.

Please clarify what rooms, if any, are to receive Impact Resistant Gypsum Board. Also, if Impact Resistant Gypsum Board is to be used, please indicate how high the Impact Resistant Gypsum Board is to go. (I.E. 8' 0" a.f.f. Typical)

A: Provide full height Impact Resistant Type Gypsum Board at the furred walls on the interior room side of the wall in the Workshops (Rooms MM140, MM140A, MM147, MM149 MM159 &160) as per the plans A2.11, A2.12 & A2.13, the Wall Types on Sheet A9.60 and as per Specification Section 092900-2.3 A.: Impact Resistant Type to provide additional protection of the workshop inside walls.

In the Restrooms (Rooms MMMM164, MM165, MM166, MM167) all the inside walls are to be provided with Cementitious Backer Board (Water-Resistant Gypsum Backing Board, specification 092900) and per A9.60 Wall Types. As per the wall types notes on Sheet A9.60 and per the Specification Section 092900-2.3 B.: Cementitious Backer Board (water-resistant gypsum backing board, specification section 092900) is to receive the ceramic tiles. Note: Cementitious Backer Board (A9.60) or Water Resistant Gypsum Backing Board (092000) either product will be acceptable to use.

2. Q: Please provide the location of the existing MDF room that will be tied into the new Building MM IDF room. Sheet Reference: T5.1

A: Provide Multi Mode and Single Mode Fiber from Bld MM IDF to MDF/MPOE located in the south east corner of campus in the at the Central Plant (Bld YY). Copper will be spliced in an enclosure located in Communication MHI located on May Ave by Horticulture. Pairs count for splice provided during construction. This will require half-tap splice on the majority of the splice, contractor shall plan for this work scope.

3. Q: Please provide details for typical vertical & horizontal rebar in CMU walls, S5.1 does not indicate size & spacing for typical reinforcement. Reference S5.1

A: Typical CMU wall reinforcing is specified on the plan sheets (via a callout on plan or via a plan note). Refer to S2.1 (Note 13), S2.3 (Note 15), S2.5 (Note 11) and S2.6 (Note 9).

4. Q: Please advise required STC value of door MM163. Reference A8.30

A: MM163 does not require an STC rating.

5. Q: Per door subcontractor HM assembly cannot achieve higher STC ratings. Please provide specifications for sound control assembly to achieve STC 45 and 50. Reference A8.30.

A: Refer to attached revised Specification 08 11 13. Added manufacturer capable of meeting the STC ratings for doors as per sheet A8.30.

6. Q: Door schedule calls for majority of doors to be SC (Solid Core), however in the Construction column are called for HM (Hollow Metal). Please advise. Reference A8.30.

A: Use typical insulated polystyrene insulated core for the hollow metal (HM) doors. Refer to revised Specification 08 11 13, section 2.3.A.2.

7. Q: Spec section 081113 does not address INS HM (Insulated Hollow Metal), called in door schedule please provide specifications. Sheet Reference: A8.30 and Spec 08 11 13.

A: Refer to revised Specification 08 11 13, section 2.3.A.2.

III. SPECIFICATION REVISIONS:

1. 08 14 16 – Flush Wood Doors
 - Remove this specification section in its entirety.
2. 08 11 13 – Steel Doors and Frames
 - Revised this specification in select sections.

IV. ATTACHMENTS:

1. 08 11 13 – Steel Doors and Frames

*****END OF ADDENDUM NO. 5*****

LONG BEACH CITY COLLEGE DISTRICT

Alan Moloney

Alan Moloney
Deputy Director Purchasing & Contracts

SECTION 081113 - STEEL 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 1 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section Includes:
 - 1. Standard hollow metal doors and frames.
- B. Related Sections include the following:
 - 1. Division 8 Section "Door Hardware" for door hardware for hollow metal doors.
 - 2. Division 9 Section "Painting" for field painting hollow metal doors and frames.

1.3 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.

1.4 SUBMITTALS

- A. Product Data: For each type of product indicated. Include construction details, material descriptions, core descriptions, and finishes.
- B. Other Action Submittals:
 - 1. Schedule: Provide a schedule of hollow metal work prepared by or under the supervision of supplier, using same reference designation for details and openings as those on Drawings. Coordinate with door hardware schedule.
 - a. Indicate location, size, and hand of each door; elevation of each kind of door; construction details not covered in Product Data; location and extent of hardware blocking; and other pertinent data.
 - b. Indicated specific model number of door and frame.
 - c. Indicate steel sheet type (galvanized, non-galvanized, etc.)
 - d. Indicate door and frame type (A, A1, B, C, etc.)
 - e. Indicated hardware group.
 - f. Indicate dimensions and locations of mortises and holes for hardware.
 - g. Indicate dimensions and locations of cutouts.

1.5 QUALITY ASSURANCE

- A. Reference Standards:
 - 1. 2016 California Building Standards Administrative Code, Part 1, Title 24 CBSC.

2. 2016 California Building Code (CBC), Part 2, Title 24 CBSC. (2015 International Building Code of the International Code Council, with 2016 California Amendments).
3. 2016 California Electrical Code (CEC), Part 3, Title 24 CBSC (2014 National Electrical Code, with 2016 California Amendments).
4. 2016 California Mechanical Code (CMC), Part 4, Title 24 CBSC (2015 Uniform Mechanical Code, with 2016 California Amendments).
5. 2016 California Plumbing Code (CPC), Part 5, Title 24, CBSC (2015 Uniform Plumbing Code, with 2016 California Amendments).
6. 2016 California Energy Code, Part 6, Title 24 CBSC.
7. 2016 California Historical Code, Part 8, Title 24 CBSC.
8. 2016 California Fire Code, Part 9, Title 24 CBSC. (2015 International Fire Code, with 2016 California Amendments).
9. 2016 California Green Building Standards Code (CALGreen Code), Part 11, Title 24 CBSC.
10. 2016 California Referenced Standards Code, Part 12, Title 24, CBSC.
11. NFPA 13 - Automatic Sprinkler Systems (2016 California Amended), 2016 Edition.
12. NFPA 14 - Standpipe Systems (2016 California Amended), 2013 Edition.
13. NFPA 17 - Dry Chemical Extinguishing Systems, 2013 Edition.
14. NFPA 17A - Wet Chemical Extinguishing Systems, 2013 Edition.
15. NFPA 20 - Stationary Pumps, 2016 Edition.
16. NFPA 24 - Private Fire Service Mains (2016 California Amended), 2016 Edition.
17. NFPA 72 - National Fire Alarm and Signaling Code (2016 California Amended).
18. NFPA 80 - Fire Door and Other Opening Protectives, 2016 Edition.
19. NFPA 253 - Critical Radiant Flux of Floor Covering Systems, 2015 Edition.
20. NFPA 2001 - Clean Agent Fire Extinguishing Systems (2016 California Amended), 2015 Edition.
21. Americans with Disabilities Act (ADA), Title II.

- B. Source Limitations: Obtain hollow metal work from single source from single manufacturer.
- C. Preinstallation Conference: Conduct conference at Project site.

1.6 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.
1. Provide additional protection to prevent damage to finish of factory-finished units.
- 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.

1.7 PROJECT CONDITIONS

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

1.8 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.

1.9 WARRANTY

- A. Special Warranty: Manufacturer's standard form in which manufacturer agrees to repair or replace components of steel doors and frames that fails in materials or workmanship within specified warranty period.
 - 1. Failures include, but are not limited to, the following:
 - a. Deterioration of metals, metal finishes, and other materials beyond normal weathering.
 - 2. Warranty Period: 2 years.
- B. Installer's Warranty: 1 year.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Steel Doors and Frames: Subject to compliance with requirements, provide either the named product or an equal product by one of the other manufacturers specified.
 - 1. Steelcraft; an Ingersoll-Rand company. (Basis of Design).
 - 2. Ceco Door Products; an Assa Abloy Group company.
 - 3. Curries Company; an Assa Abloy Group company.
 - 4. **Republic STC Doors and Frames**
 - 5. Or equal.

2.2 MATERIALS

- A. Recycled Content of Steel Products: Provide products with average recycled content of steel products such that post-consumer recycled content plus one-half of pre-consumer recycled content is not less than 25 percent.
- B. Galvannealed (Metallic-Coated) Steel Sheet: ASTM A 653, Commercial Steel (CS), Type B; with minimum A60 metallic coating for exterior doors and frames.
- C. Frame Anchors: ASTM A 591, Commercial Steel (CS), 40Z coating designation; mill phosphatized.
 - 1. For anchors built into exterior walls, steel sheet complying with ASTM A 1008 or ASTM A 1011, hot-dip galvanized according to ASTM A 153, Class B.
- D. Inserts, Bolts, and Fasteners: Hot-dip galvanized according to ASTM A 153.
- 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.

2.3 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. Standard Core: Honeycomb, U-factor of 0.69, R-value of 1.45.
 3. Vertical Edges for Single-Acting Doors: Beveled edge.
 - a. Beveled Edge: 1/8 inch in 2 inches.
 4. Vertical Edges for Double-Acting Doors: Round vertical edges with 2-1/8-inch radius.
 5. Top and Bottom Edges: Closed with flush or inverted 0.042-inch-thick, end closures or channels of same material as face sheets.
 6. Tolerances: Comply with SDI 117, "Manufacturing Tolerances for Standard Steel Doors and Frames."
- B. Exterior Doors: Face sheets fabricated from galvanized (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:
1. Level 3 and Physical Performance Level A (Extra Heavy Duty), Model 1 (Full Flush):
 - a. Face thickness: 16 gage (0.053 inch).
 - 1) Product: Series L16 by Steelcraft.
- C. **STC Doors: Sound transmission control - Sound core infill, 1 3/4" thick. DE series (basis of design)**
1. Refer to door hardware for perimeter seals, gaskets, threshold and door bottoms.
 2. 16 gauge steel face sheets
- D. Hardware Reinforcement: Fabricate according to ANSI/SDI A250.6 with reinforcing plates from same material as door face sheets.

2.4 STANDARD HOLLOW METAL FRAMES

- A. General: Comply with ANSI/SDI A250.8 and with details indicated for type and profile.
- B. Frames: Fabricated from metallic-coated steel sheet.
1. Fabricate frames with mitered or coped corners.
 2. Fabricate frames as full profile welded unless otherwise indicated.
 3. Frame: 16 gage (0.053-inch) thick steel sheet.
 - a. Product: F16 Series by Steelcraft.
- C. **STC Frames: Sound transmission control.**
1. **STC ratings per drawings; welded.**
 2. **Acoustic filler by installer infilled.**
- D. Hardware Reinforcement: Fabricate according to ANSI/SDI A250.6 with reinforcement plates from same material as frames.

2.5 FRAME ANCHORS

- A. Jamb Anchors:

1. Stud-Wall Type: Designed to engage stud, welded to back of frames; not less than 0.042 inch thick.
 2. Postinstalled Expansion Type for In-Place Concrete or Masonry: Minimum 3/8-inch-diameter bolts with expansion shields or inserts. Provide pipe spacer from frame to wall, with throat reinforcement plate, welded to frame at each anchor location.
- B. Floor Anchors: Formed from same material as frames, not less than 0.042 inch thick, and as follows:
1. Monolithic Concrete Slabs: Clip-type anchors, with two holes to receive fasteners.
 2. Separate Topping Concrete Slabs: Adjustable-type anchors with extension clips, allowing not less than 2-inch height adjustment. Terminate bottom of frames at finish floor surface.

2.6 ACCESSORIES

- A. Mullions and Transom Bars: Join to adjacent members by welding or rigid mechanical anchors.
- B. Ceiling Struts: Minimum 1/4-inch-thick by 1-inch- wide steel.
- C. Provide Screw-In Top Cap for exterior doors.

2.7 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:
 1. Standard doors and frames: 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.
- 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 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.
 - b. Compression Type: Not less than two anchors in each jamb.
 - c. Postinstalled Expansion Type: Locate anchors not more than 6 inches from top and bottom of frame. Space anchors not more than 26 inches o.c.
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 door silencers.
 - b. Double-Door Frames: Drill stop in head jamb to receive two door silencers.
- 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 8 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.
- G. Air Infiltration: Maximum rate not more than indicated when tested according to AAMA/WDMA 101/I.S.2/NAFS, Air Infiltration Test.
 1. Maximum Rate: 0.3 cfm/sq. ft. of area at an inward test pressure of 1.57 lbf/sq. ft.
 2. Maximum Rate: 0.1 cfm/sq. ft. of area at an inward test pressure of 6.24 lbf/sq. ft.

2.8 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.
- B. Field-Applied Paint Finish: Comply with Division 9 Section "Painting".

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. 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.

3.2 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 to the following tolerances:
 - 1. Squareness: Plus or minus 1/16 inch, measured at door rabbet on a line 90 degrees from jamb perpendicular to frame head.
 - 2. Alignment: Plus or minus 1/16 inch, measured at jambs on a horizontal line parallel to plane of wall.
 - 3. Twist: Plus or minus 1/16 inch, measured at opposite face corners of jambs on parallel lines, and perpendicular to plane of wall.
 - 4. Plumbness: Plus or minus 1/16 inch, 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.

3.3 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.
 - 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. Where frames are fabricated in sections because of shipping or handling limitations, field splice at approved locations by welding face joint continuously; grind, fill, dress, and make splice smooth, flush, and invisible on exposed faces.
 - b. Remove temporary braces necessary for installation only after frames have been properly set and secured.
 - c. 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 post-installed expansion anchors.
 - a. Post-installed expansion anchors shall comply with IR 19-1.
 - b. Floor anchors may be set with powder-actuated fasteners instead of postinstalled expansion anchors if so indicated and approved on Shop Drawings.
 - 3. Metal-Stud Partitions: Solidly pack mineral-fiber insulation behind frames.
 - 4. In-Place Concrete or Masonry Construction: Secure frames in place with postinstalled expansion anchors. Countersink anchors, and fill and make smooth, flush, and invisible on exposed faces.
 - 5. In-Place Gypsum Board Partitions: Secure frames in place with postinstalled expansion anchors through floor anchors at each jamb. Countersink anchors, and fill and make smooth, flush, and invisible on exposed faces.
 - 6. Ceiling Struts: Extend struts vertically from top of frame at each jamb to overhead structural supports or substrates above frame unless frame is anchored to masonry or to other structural support at each jamb. Bend top of struts to provide flush contact for securing to supporting construction. Provide adjustable wedged or bolted anchorage to frame jamb members.

7. 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, measured at door rabbet on a line 90 degrees from jamb perpendicular to frame head.
 - b. Alignment: Plus or minus 1/16 inch, measured at jambs on a horizontal line parallel to plane of wall.
 - c. Twist: Plus or minus 1/16 inch, measured at opposite face corners of jambs on parallel lines, and perpendicular to plane of wall.
 - d. Plumbness: Plus or minus 1/16 inch, 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 plus or minus 1/16 inch.
 - b. Between Edges of Pairs of Doors: 1/8 inch plus or minus 1/16 inch.
 - c. Between Bottom of Door and Top of Threshold: Maximum 3/8 inch.
 - d. Between Bottom of Door and Top of Finish Floor (No Threshold): Maximum 3/4 inch.
- D. Install fire rated doors and frames as per their listing, NFPA #80 and manufacturer's recommendations.

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. 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