ADDENDUM

Public Building Commission of Chicago | Richard J. Daley Center | 50 West Washington Street, Room 200 | Chicago, Illinois 60602 | (312) 744-3090 | pbcchicago.com

ADDENDUM NO.: **01**

PROJECT NAME: **Kenwood Academy High School Link and Mechanical Project**

PROJECT NO.: **05326**

CONTRACT NO.: **C1602**

DATE OF ISSUE: **October 6, 2022**

NOTICE OF CHANGES, MODIFICATIONS, OR CLARIFICATIONS TO CONTRACT DOCUMENTS

The following changes, modifications, or clarifications are hereby incorporated and made an integral part of the Contract Documents. Unless clearly expressed otherwise by this Addendum, all terms and conditions defined in the original Contract Documents shall continue in full force and effect and shall have the same meaning in this Addendum. Issued Addenda represent responses/clarifications to various inquiries. Contractors shall be responsible for including all associated labor/material costs in its bid. Drawings/specifications corresponding to inquiry responses will be issued with the Issue for Construction Documents, upon issuance of building permit.

ITEM NO. 1: **CHANGE TO KEY DATES**

Change 1 The **Pre-Bid/Technical Review Meeting Date and Time** has been **RESCHEDULED** to Thursday, October 13, 2022 at 10:00a.m.

ITEM NO. 2: **REVISIONS TO BOOK 1 – PBC INSTRUCTIONS TO BIDDERS**

None.

ITEM NO. 3: **REVISIONS TO BOOK 2 – PBC STANDARD TERMS AND CONDITIONS**

None.

ITEM NO. 4: **REVISIONS TO BOOK 3 – TECHNICAL SPECIFICATIONS**

Change 1 **Book 3 – Kenwood Link – REVISED** Specification Section 00 01 02 Table of Contents.
Change 2 **Book 3 – Kenwood Link – ADDED** Specification Section 08 16 13 Fiberglass Doors.
Change 3 **Book 3 – Kenwood Link – ADDED** Specification Section 08 43 13 – Aluminum-Framed Storefronts.

ITEM NO. 5: **REVISIONS TO DRAWINGS**

None.

ITEM NO. 6: **REQUESTS FOR INFORMATION**

RFI-1.
Question: **Door schedule sheet A600 Door type #B is detailed as stile/rail aluminum door. There is no specification for aluminum doors other than FRP.**
Response: Specification Section 08 43 13 ALUMINUM- FRAMED STOREFRONTS and Specification Section 08 16 13 FIBERGLASS DOORS have been added and are included in this Addendum No. 1.

RFI-2.
Question: **There is a spec for Manual Window Shades, but they are never shown in the drawings. Please provide more information regarding the Window Shades.**
Response: Manual Window Shades are not required. Specification Section 12 24 00 has been deleted.

This Addendum includes the following attached Specifications and/or Documents:

1. Specification Section 00 01 02 - Table of Contents - for BOOK 3 – KENWOOD LINK
2. Specification Section 08 43 13 – Aluminum Framed Storefronts
3. Specification Section 08 16 13 – Fiberglass Doors

This Addendum includes the following attached Drawings:

None.

END OF ADDENDUM NO. 01

SECTION 00 01 02

TABLE OF CONTENTS

DIVISION 03 - CONCRETE

DIVISION 04 - MASONRY

DIVISION 05 - METALS

DIVISION 06 - WOOD, PLASTICS, AND COMPOSITES

DIVISION 07 - THERMAL AND MOISTURE PROTECTION

DIVISION 08 - OPENINGS

END OF SECTION

SECTION 08 43 13
ALUMINUM-FRAMED STOREFRONTS

PART 1 - GENERAL

1.01 SECTION INCLUDES

A. Aluminum framed entrance doors with vision glass.

B. Weatherstripping.

1.02 REFERENCE STANDARDS

A. AAMA CW-10 - Care and Handling of Architectural Aluminum from Shop to Site; 2015.

B. AAMA 609 & 610 - Cleaning and Maintenance Guide for Architecturally Finished Aluminum (Combined Document); 2015.

C. AAMA 611 - Voluntary Specification for Anodized Architectural Aluminum; 2014 (2015 Errata).

D. AAMA 1503 - Voluntary Test Method for Thermal Transmittance and Condensation Resistance of Windows, Doors and Glazed Wall Sections; 2009.

E. AAMA 2605 - Voluntary Specification, Performance Requirements and Test Procedures for Superior Performing Organic Coatings on Aluminum Extrusions and Panels (with Coil Coating Appendix); 2017a.

F. ASTM B221 - Standard Specification for Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Profiles, and Tubes; 2014.

G. ASTM B221M - Standard Specification for Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Profiles, and Tubes (Metric); 2013.

H. ASTM E283 - Standard Test Method for Determining the Rate of Air Leakage Through Exterior Windows, Curtain Walls, and Doors Under Specified Pressure Differences Across the Specimen; 2004 (Reapproved 2012).

I. ASTM E330/E330M - Standard Test Method for Structural Performance of Exterior Windows, Doors, Skylights and Curtain Walls by Uniform Static Air Pressure Difference; 2014.

J. ASTM E331 - Standard Test Method for Water Penetration of Exterior Windows, Skylights, Doors, and Curtain Walls by Uniform Static Air Pressure Difference; 2000 (Reapproved 2016).

1.03 ADMINISTRATIVE REQUIREMENTS

A. Coordinate with installation of other components that comprise the exterior enclosure.

B. Pre-installation Meeting: Conduct a pre-installation meeting one week before starting work of this section.
   1. Ensure required submittals have been provided with sufficient time for review prior to scheduling the Pre-installation Meeting.
   2. Review the detailed requirements for the work of this section and to review the drawings and specifications for this work
   3. Require attendance by all affected installers including but not limited to

a. Contractor's Superintendent
b. Installer
c. Manufacturer/Fabricator Representative
d. Other affected Subcontractors
e. Architect/Engineer of Record
f. Board's Representative

4. Record minutes and distribute copies within 5 days after meeting to participants as well as Architect/Engineer of Record, Board and those affected by decisions made.

1.04 SUBMITTALS

A. See Section 01 30 00 - Administrative Requirements, for submittal procedures.

B. Product Data: Provide component dimensions, describe components within assembly, anchorage and fasteners, glass and infill, internal drainage details.

C. Shop Drawings: Indicate system dimensions, framed opening requirements and tolerances, affected related work, expansion and contraction joint location and details, and field welding required.
1. Include State of Illinois licensed Structural Engineer's stamp or seal on shop drawings for attachments and anchors.

D. Samples: Submit two samples on a minimum of 4 inches long illustrating extremes of color in finished aluminum surface.
1. The right is reserved to require samples of typical fabricated sections, showing joints, exposed fastenings (if any), quality of workmanship, hardware and accessory items, before fabrication of the Work proceeds.

E. Manufacturer's Certificate: Certify that the products supplied meet or exceed the specified requirements.

F. Design Data: Provide framing member structural and physical characteristics, engineering calculations signed and sealed by an Illinois licensed Structural Engineer, and dimensional limitations.

1.05 QUALITY ASSURANCE

A. Designer Qualifications: Design structural support framing components under direct supervision of a Structural Engineer experienced in design of this Work and licensed in Illinois.

B. Installer Qualifications: Company specializing in performing work of type specified and with at least three years of documented experience.

1.06 DELIVERY, STORAGE, AND HANDLING

A. Handle products of this section in accordance with AAMA CW-10.

B. Protect finished aluminum surfaces with wrapping. Do not use adhesive papers or sprayed coatings that bond to aluminum when exposed to sunlight or weather.

1.07 FIELD CONDITIONS

A. Do not install sealants when ambient temperature is less than 40 degrees F. Maintain this minimum temperature during and 48 hours after installation.

PART 2 - PRODUCTS

2.01 MANUFACTURERS

A. Aluminum-Framed Storefront and Doors:
1. C.R. Laurence Company, Inc; U.S. Aluminum: www.crl-arch.com/#sle.
2. EFCO Corporation: www.efcocorp.com/#sle.
3. Kawneer North America: www.kawneer.com/#sle.
4. Oldcastle BuildingEnvelope: www.oldcastlebe.com/#sle.
5. Pittco Architectural Metals Inc: www.pittcometals.com/#sle.
6. Tubelite, Inc: www.tubeliteinc.com/#sle.
7. Wausau Window and Wall Systems: www.wausauwindow.com.

2.02 STOREFRONT COMPONENTS

A. Aluminum Framing Members: Tubular aluminum sections, thermally broken with interior section insulated from exterior, drainage holes and internal weep drainage system.
1. Glazing Stops: Applied.

B. Glazing: As specified in Section 08 80 00.

C. Swing Doors: Glazed aluminum.
1. Thickness: 1-3/4 inches.
2. Top Rail: 4 inches wide.
3. Vertical Stiles: 4-1/2 inches wide.
4. Bottom Rail: 10 inches wide.
5. Glazing Stops: Square.
6. Finish: Same as storefront.

2.03 MATERIALS

A. Extruded Aluminum: ASTM B221 (ASTM B221M).

B. Fasteners: Stainless steel.

C. Exposed Flashings: Aluminum sheet, 20 gage, 0.032 inch minimum thickness; finish to match framing members.

D. Concealed Flashings: Stainless steel, 26 gage, 0.0187 inch minimum thickness.

E. Sill Flashing Sealant: Elastomeric, silicone or polyurethane, compatible with flashing material.

F. Sealant for Setting Thresholds: Non-curing butyl type.

G. Glazing Gaskets: Type to suit application to achieve weather, moisture, and air infiltration requirements.

H. Glazing Accessories: As specified in Section 08 80 00.

2.04 FINISHES

A. Superior Performing Organic Coatings: AAMA 2605 multiple coat, thermally cured polyvinylidene fluoride (PVDF) system.

1. Polyvinylidene fluoride (PVDF) multi-coat thermoplastic fluoropolymer coating system, including minimum 70 percent PVDF color topcoat and minimum total dry film thickness of 0.9 mil; color and gloss as indicated on drawings.

B. Color: Clear coat silver or as selected by Architect of Record from manufacturer's standard range.

2.05 HARDWARE

A. Other Door Hardware: As specified in Section 08 71 00.

B. Weatherstripping: Provide weatherstripping as required to meet performance requirements.

C. Sill Sweep Strips: ADA-accessible, resilient seal type, retracting, of neoprene; provide on all doors.

PART 3 - EXECUTION

3.01 EXAMINATION

A. Verify dimensions, tolerances, and method of attachment with other work.

B. Verify that wall openings and adjoining air and vapor seal materials are ready to receive work of this section.

C. Proceed only after unsatisfactory conditions have been corrected. Commencement of work in this section will be an indication of the acceptance of substrate conditions and the Contractor will be held responsible for the satisfactory execution and results of the finished work

3.02 INSTALLATION

A. Attach to structure to permit sufficient adjustment to accommodate construction tolerances and other irregularities.

B. Provide alignment attachments and shims to permanently fasten system to building structure.

C. Align assembly plumb and level, free of warp or twist. Maintain assembly dimensional tolerances, aligning with adjacent work.

D. Provide thermal isolation where components penetrate or disrupt building insulation.

E. Install sill flashings. Turn up ends and edges; seal to adjacent work to form water tight dam.

F. Where fasteners penetrate sill flashings, make watertight by seating and sealing fastener heads to sill flashing.

G. Pack fibrous insulation in shim spaces at perimeter of assembly to maintain continuity of thermal barrier.

H. Set thresholds in bed of sealant and secure them.

I. Install glass in accordance with Section 08 80 00, using glazing method required to achieve performance criteria.

J. Touch-up minor damage to factory applied finish; replace components that cannot be satisfactorily repaired.

3.03 TOLERANCES

A. Maximum Variation from Plumb: 0.06 inch per 3 feet non-cumulative or 0.06 inch per 10 feet, whichever is less.

B. Maximum Misalignment of Two Adjoining Members Abutting in Plane: 1/32 inch.

3.04 ADJUSTING

A. Adjust operating hardware and sash for smooth operation.

3.05 CLEANING

A. Remove protective material from pre-finished aluminum surfaces.

B. Wash down surfaces with a solution of mild detergent in warm water, applied with soft, clean wiping cloths, and take care to remove dirt from corners and to wipe surfaces clean.

C. Upon completion of installation, thoroughly clean aluminum surfaces in accordance with AAMA 609 & 610.

3.06 PROTECTION

A. Protect installed products from damage until Date of Preliminary Acceptance.

END OF SECTION 08 43 13

SECTION 08 16 13

FIBERGLASS DOORS

PART 1 - GENERAL

1.01 SECTION INCLUDES

A. Fiberglass/aluminum hybrid doors. (FRP)

B. Accessories as required for a complete installation.

1.02 REFERENCE STANDARDS

A. AAMA 1304 - Voluntary Specification for Forced Entry Resistance of Side-Hinged Door Systems; 2002.

B. AAMA 1503 - Voluntary Test Method for Thermal Transmittance and Condensation Resistance of Windows, Doors and Glazed Wall Sections; 2009.

C. ASTM D1308 - Standard Test Method for Effect of Household Chemicals on Clear and Pigmented Organic Finishes; 2002 (Reapproved 2013).

D. ASTM D256 - Standard Test Methods for Determining the Izod Pendulum Impact Resistance of Plastics; 2010, with Editorial Revision (2015).

E. ASTM D543 - Standard Practices for Evaluating the Resistance of Plastics to Chemical Reagents; 2014.

F. ASTM D570 - Standard Test Method for Water Absorption of Plastics; 1998 (Reapproved 2010).

G. ASTM D635 - Standard Test Method for Rate of Burning and/or Extent and Time of Burning of Plastics in a Horizontal Position; 2014.

H. ASTM D638 - Standard Test Method for Tensile Properties of Plastics; 2014.

I. ASTM D790 - Standard Test Methods for Flexural Properties of Unreinforced and Reinforced Plastics and Electrical Insulating Materials; 2016.

J. ASTM D2583 - Standard Test Method for Indentation Hardness of Rigid Plastics by Means of Barcol Impressor; 2013a.

K. ASTM E84 - Standard Test Method for Surface Burning Characteristics of Building Materials; 2017.

L. ASTM E283 - Standard Test Method for Determining the Rate of Air Leakage Through Exterior Windows, Curtain Walls, and Doors Under Specified Pressure Differences Across the Specimen; 2004 (Reapproved 2012).

M. ASTM E330/E330M - Standard Test Method for Structural Performance of Exterior Windows, Doors, Skylights and Curtain Walls by Uniform Static Air Pressure Difference; 2014.

N. ASTM E331 - Standard Test Method for Water Penetration of Exterior Windows, Skylights, Doors, and Curtain Walls by Uniform Static Air Pressure Difference; 2000 (Reapproved 2016).

O. ASTM E2112 - Standard Practice for Installation of Exterior Windows, Doors and Skylights; 2007 (Reapproved 2016).

P. NAAMM HMMA 861 - Guide Specifications for Commercial Hollow Metal Doors and Frames; 2014.

Q. SDI 117 - Manufacturing Tolerances for Standard Steel Doors and Frames; 2013.

1.03 ADMINISTRATIVE REQUIREMENTS

A. Coordination: Obtain hardware templates from hardware manufacturer prior to starting fabrication.
1. Include coordination for automatic door control and remote door monitoring/access control system.

1.04 SUBMITTALS

A. See Section 01 30 00 - Administrative Requirements, for submittal procedures.

B. Product Data: Provide manufacturer's standard details, installation instructions, hardware and anchoring recommendations.

C. Shop Drawings: Indicate layout and profiles; include assembly methods.
1. Indicate product components, including hardware reinforcement locations and preparations, accessories, finish colors, patterns, and textures.
2. Indicate wall conditions, door and frame elevations, sections, materials, gages, finishes, location of door hardware by dimension, and details of openings; use same reference numbers indicated on drawings to identify details and openings.

D. Selection Samples: Submit two complete sets of color chips, illustrating manufacturer's complete line of finishes, colors, and textures.

E. Verification Samples: Submit door surface samples for each finish specified, 10 inch by 10 inch in size, illustrating finishes, colors, and textures.

F. Door Corner Sample: Submit corner cross sections, 10 inch by 10 inch in size, illustrating construction, finish, color, and texture.

G. Test Reports: Submit certified test reports from qualified independent testing agency indicating doors comply with specified performance requirements.

H. Manufacturer's Qualification Statement.

1.05 QUALITY ASSURANCE

A. Manufacturer Qualifications: Company specializing in manufacturing products of the type specified in this section, with not less than ten years of documented experience.

1.06 COORDINATION

A. Coordinate hardware template with framing.

B. Coordinate with requirements for electrically operated doors and hardware.

1.07 DELIVERY, STORAGE, AND HANDLING

A. Deliver materials in manufacturer's original, unopened, undamaged containers with identification labels intact.

B. Deliver pre-assembled doors and frames with braces, spreaders, and packaging as required to prevent damage.

C. Store materials in original packaging, under cover, protected from exposure to harmful weather conditions and from direct contact with water.
   1. Store at temperature and humidity conditions recommended by manufacturer.
   2. Do not use non-vented plastic or canvas shelters.
   3. Immediately remove wet wrappers.

D. Store in position recommended by manufacturer, elevated minimum 4 inch above grade, with minimum 1/4 inch space between doors.

1.08 FIELD CONDITIONS

A. Do not install doors until structure is enclosed.

B. Maintain temperature and humidity at manufacturer's recommended levels during and after installation of doors.

PART 2 - PRODUCTS

2.01 MANUFACTURERS

A. Fiberglass/Aluminum Composite Doors:
   1. Special-Lite, Inc; SL-17 with SpecLite 3 face sheets.

2.02 DOOR ASSEMBLIES

A. Door Assemblies: Factory-fabricated, prepared and machined for hardware.
   1. Screw-Holding Capacity: Tested to 890 lbs, minimum.
   2. Surface Burning Characteristics: Flame spread index (FSI) of 0 to 25, Class A, and smoke developed index (SDI) of 450 or less, when tested in accordance with ASTM E84.
   3. Flammability: Self-extinguishing when tested in accordance with ASTM D635.
   4. Sizes: As indicated on drawings.
   5. Clearance between Door and Frame: 1/8 inch, maximum.
   6. Clearance between Bottom of Door and Finished Floor: 3/4 inch, maximum; not less than 1/4 inch clearance to threshold.

2.03 COMPONENTS

A. Doors: Fiberglass construction with reinforced core.
   1. Thickness: 1-3/4 inch, nominal.
   2. Core Material: Urethane foam.
   3. Face Sheet Texture: Smooth.
   4. Subframe and Reinforcements: Provide manufacturer's standard aluminum subframe with 3/8" diameter full-width tie rods through extruded splines top and bottom as standard shaped stiles and rails reinforced to accept hardware as specified.
   5. Waterproof Integrity: Provide factory fabricated edges, cut-outs, and hardware preparations of fiberglass reinforced plastic (FRP); provide cut-outs with joints sealed independently of glazing, louver inserts, or trim.

6. Hardware Preparations: Factory reinforce, machine, and prepare for door hardware including field installed items; provide solid blocking for each item; field cutting, drilling or tapping is not permitted; obtain manufacturer's hardware templates for preparation as necessary.
7.

B. Hollow Metal Frames: Refer to Section 08 11 13 - Hollow Metal Doors and Frames.

C. Transom and Opaque Side Panels: Same construction as doors.

2.04 PERFORMANCE REQUIREMENTS

A. Provide door assemblies that have been designed and fabricated in compliance with specified performance requirements.

B. Forced Entry Resistance: Pass in accordance with AAMA 1304 test method, 300 pound load applied.

C. Water Leakage: No uncontrolled leakage on interior face when tested in accordance with ASTM E331 at differential pressure of 7.5 psf.

D. Air Leakage: Maximum of 0.1 cu ft/min/sq ft at 6.27 psf differential pressure, when tested in accordance with ASTM E283.

E. Structural Performance: Withstand positive and negative wind loads equal to 1.5 times design wind loads specified by local code without damage or permanent set, when tested in accordance with ASTM E330/E330M, using 10 second duration of maximum load.

F. Thermal Transmittance, Exterior Doors: AAMA 1503, U-value of 0.29, maximum, measured on exterior door in size required for this project.

G. Condensation Resistance, Exterior Doors: AAMA 1503, CRF of not less than 45.

H. Fiberglass Reinforced Plastic (FRP) Face Sheet Properties:
1. Izod Impact Resistance: ASTM D256, 15 ft lbf/inch of width, minimum, with notched izod.
2. Tensile Strength at Break: ASTM D638, 13,250 psi, minimum.
3. Water Absorption: ASTM D570, 0.16 percent, maximum, after 24 hours at 74 degrees F.
4. Flexural Strength: ASTM D790, 27,000 psi, minimum.
5. Barcol Hardness: ASTM D2583, minimum of 40 units.

I. Stain Resistance, ASTM D1308: Face sheet unaffected after exposure to red cabbage, tea, and tomato acid. Stain removed easily with mild abrasive or FRP cleaner when exposed to crayon and crankcase oil.

J. Chemical Resistance, ASTM D543. Excellent rating.
1. Acetic acid, Concentrated.
2. Ammonium Hydroxide, Concentrated.
3. Citric Acid, 10%.
4. Formaldehyde.
5. Hydrochloric Acid, 10%
6. Sodium hypochlorite, 4 to 6 percent solution.

2.05 FRP FINISHES

A. Abuse resistant engineered surface with protective coating and through-molded color.

1. Panel Texture: Pebble grain.
2. Color: As selected by Architect of Record from manufacturer's full line of colors.

2.06 ACCESSORIES

A. Stops for Glazing: Fiberglass, unless otherwise indicated or required by fire rating; provided by door manufacturer to fit factory made openings, with color and texture to match door; fasteners shall maintain waterproof integrity.
   1. Exterior Doors: Provide non-removable stops on exterior side with continuous compression gasket weatherseal.
   2. Glazed Openings: Provide removable stops on interior side.
   3. Opening Sizes and Shapes: As indicated on drawings.

B. Glazing: As specified in Section 08 80 00.

C. Door Hardware: As specified in Section 08 71 00.

PART 3 - EXECUTION

3.01 EXAMINATION

A. Verify actual dimensions of openings by field measurements before door fabrication; show recorded measurements on shop drawings.

B. Do not begin installation until substrates have been properly prepared.

C. Verify all require electrical and fire alarm work is completed and ready for installation of door frames.

D. If substrate preparation is the responsibility of another installer, notify Architect/Engineer of Record of unsatisfactory preparation before proceeding.

E. Proceed only after unsatisfactory conditions have been corrected. Commencement of work in this section will be an indication of the acceptance of substrate conditions and the Contractor will be held responsible for the satisfactory execution and results of the finished work.

3.02 PREPARATION

A. Remove existing doors and frames, and dispose of all removed materials in accordance with local authorities having jurisdiction.

B. Prepare surfaces using the methods recommended by the fiberglass door manufacturer for achieving the best result for the substrate under the project conditions.

C. Clean and prepare substrate in accordance with manufacturer's directions.

D. Protect adjacent work and finish surfaces from damage during installation.

3.03 INSTALLATION

A. Install in accordance with manufacturer's instructions; do not penetrate frames with anchors.

B. Install exterior doors in accordance with ASTM E2112.

C. Install door hardware as specified in Section 08 71 00. Coordinate with electrically operated hardware as required.

D. Set units plumb, level, and true-to-line, without warping or racking doors, and with specified clearances; anchor in place.

E. Set thresholds in continuous bed of sealant.

F. Separate surfaces from sources of corrosion of electrolytic action at points of contact with other materials with bituminous coatings or another means approved by Architect/Engineer of Record.

G. Repair or replace damaged installed products.

3.04 TOLERANCES

A. Clearances Between Door and Frame: Comply with related requirements of specified frame standards or custom guidelines indicated in accordance with SDI 117 or NAAMM HMMA 861

B. Maximum Diagonal Distortion: 1/16 in measured with straight edge, corner to corner.

3.05 ADJUSTING

A. Lubricate, test, and adjust doors to operate easily, free from warp, twist or distortion, and to fit watertight for entire perimeter.

B. Adjust hardware for smooth and quiet operation.

C. Adjust doors to fit snugly and close without sticking or binding.

D. Adjust closers for full closure within force parameter requirements of ADA/IAC and MOPD

3.06 CLEANING

A. Clean installed products in accordance with manufacturer’s instructions prior to Board’s acceptance.

3.07 PROTECTION

A. Protect installed products from damage until Date of Substantial Completion.

END OF SECTION 08 16 13