

ADDENDUM NO. 2

This Addendum shall become and form a part of the drawings and specifications for the project:

Career Tech Classroom Renovation

For

Kettering City School District
580 Lincoln Park Blvd.
Kettering, Ohio 45429

November 24, 2020

Prepared by:
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TO ALL BIDDERS:

This Addendum, including all corrections listed hereinafter, shall become a part of the original contract drawings and specifications and shall be taken into account in preparing the "Proposal" and shall become a part of the Contract.

The Architect requests that the Bidder bid the project in strict accordance with the drawings and specifications. Products which are not listed in the Specifications or in this Addendum as approved equals will not be accepted by the Architect. Products and manufacturers not listed in the Specifications or in this Addendum may be bid as Substitutions. The bidder is cautioned that Substitutions may be rejected, if upon later review, said Substitutions are found to be less than standard.

CHANGES TO THE PROJECT MANUAL:

ITEM 1: BID OPENING

- A. Bidders will be received at the Kettering City School Board of Education Office, 500 Lincoln Park, Suite 300 by 3:00 pm on December 1, 2020.
- B. The BID OPENING shall be at Fairmont High School in the Recital Hall (inside the building at the front entrance – Door 1) at approximately 3:15 pm on December 1, 2020.

ITEM 2: CONSTRUCTION SCHEDULE

- A. Construction on the project shall begin on or near December 14, 2020.
- B. Construction shall be 100% complete, including all inspections, punch-list, final cleaning, etc. by May 28, 2021.

ITEM 3: SECTION 09 21 16 – GYPSUM BOARD ASSEMBLIES

- A. Page 092116-4, Article 2.03 – GYPSUM PANELS, revise paragraph A. to read as follows:
 - A. Gypsum wallboard shall be 5/8" thick, Type "X" Impact-Resistant, unless otherwise indicated, with eased and tapered edges. Wall board shall be 48" wide. Gypsum wallboard shall conform to ASTM C1629 with the following performance requirements:
 1. Abrasion (ASTM D4977): 0.059 inch
 2. Indentation (ASTM D5420): 0.10 inch
 3. Hard Body Impact (Annex A1): 100 ft lbs
 4. Soft Body Impact (ASTM E695): 195 ft lbs

ITEM 4: SECTION 10 51 00 – LOCKERS

- A. Page 10 51 00 -1, Article 2.01 – MANUFACTURERS, paragraph A., add the following as an approved manufacturer:

Lightning Lockers; www.lightninglockers.com

ITEM 5: SECTION 27 41 19 – VIDEO DISPLAY EQUIPMENT

- A. Replace the entire section with the attached Section 27 41 19 – VIDEO DISPLAY EQUIPMENT.

CHANGES TO THE DRAWINGS:

ITEM 6: SHEET A1.1 – REVISED FLOOR PLAN

- A. Construction Note 2 – The infill of the existing window opening is 4 feet high.
B. Construction Note 17 – Rubber Base shall be 4” high rubber base.
C. The finish of the exposed existing concrete locker base in Girls Changing Room 516E shall remain as sealed concrete.

ITEM 7: SHEET T1.1 – TECHNOLOGY FLOOR PLAN

- A. All work shown on this sheet shall be included in the base bid amount.
B. Wall mounted short throw projector as specified in Section 27 41 19 – Video Display Equipment
C. Intercom speakers as specified in Section 27 51 23B, Article 2.3 – Equipment.
D. Wireless Network Access Point – Contractor shall provide junction box, conduit and wiring back to technology cabinet. Access Point device shall be installed by the Owner.

STATEMENT BY CONTRACTOR:

Each bidder shall sign the following acknowledgement and include it as an attachment to the proposal for the Career Tech Classroom Renovation

We acknowledge receipt of Addendum No. 2, dated November 24, 2020, comprising reference to the following:

- Item 1: Bid Opening
- Item 2: Construction Schedule
- Item 3: Section 09 21 16 – Gypsum Board Assemblies
- Item 4: Section 10 51 00 - Lockers
- Item 5: Section 27 41 19 – Video Display
- Item 6: Sheet A1.1 – Revised Floor Plan
- Item 7: Sheet T1.1 – Technology Floor Plan

Signed _____ Date: _____
(Contractor)

END OF ADDENDUM NO. 2

Attachments:

Section 27 41 19 – Video Display Equipment

PART 1 - GENERAL

1.1 Scope of Work

- A. The work described by this section includes the furnishing of all components, materials, equipment, installation and technical labor and the performance of all operations necessary for the complete installation of an audio/visual system in operating condition as indicated on the drawings and/or specified herein.
- B. Included in the Scope of this Section:
 - 1. Licenses, permits as may be applicable
 - 2. Provision of submittal information
 - 3. Installation in accordance with contract documents, manufacturers' recommendations and applicable codes
 - 4. Programming and configuration of control and signal processing software
 - 5. Testing and adjustments, including documentation thereof
 - 6. Provision of manuals
 - 7. Maintenance and warranty services
- C. Applicable References:
 - 1. National Electric Code (NEC)
 - 2. Underwriters Laboratories (UL)
 - 3. Infocomm International AV Installation Handbook –2nd Edition
 - 4. Telecommunications Distribution Methods Manual (TDMM)
- D. In general, the conduit and/or cable tray, junction boxes, electrical power circuits and outlets and terminal cabinets, as required for a complete operating system, shall be furnished and installed by the Electrical Contractor under a separate contract. The entire responsibility for the system, its installation, operation and function shall be that of the Systems Contractor.

1.2 Description of Work

- A. Work consists of new A/V Display Equipment including:
 - 1. Interactive Video Projectors complete with wall mounting hardware and connection to the network/broadband video distribution system and the local AV Distribution System as detailed on the drawings and as specified herein.
- B. All material and/or equipment necessary for proper operation of the system, not specified or described herein, shall be deemed part of these specifications.

1.3 Quality Assurance

- A. All system components shall be UL listed.
- B. Installation shall be in compliance with the National Electric Code and all other applicable codes.
- C. All equipment described herein or otherwise required to perform the specified system functions shall be a regular product line, produced by the system manufacturer.
- D. All materials furnished under this contract shall be new, of highest quality and shall be of a regularly manufactured line, currently in production at the time of installation.

1.4 Contractor Qualifications

- A. The A/V equipment package shall be furnished and installed by a contractor who meets all the requirements listed herein. It shall not be acceptable for the A/V contractor to utilize a Subcontractor for any portion of the work, unless the Subcontractor has been approved in writing by the Engineer based upon adherence to the qualifications listed herein.
- B. The Contractor shall maintain a fully equipped, factory certified service organization capable of providing full maintenance and service of the installed system within 24 hours. This facility shall be available for inspection by the Engineer.
- C. Equipment supplier shall have a service organization within 75 miles of the project site.
- D. The Contractor shall employ factory trained service personnel for the service and maintenance of the system.

1.5 Shop Drawings

- A. A complete and comprehensive list of materials with quantity, manufacturer, model and part number and reference to the Part 2 specification paragraph number for each item.
- B. Manufacturers Data Sheets of all products and cabling, specific to the project. Data sheets shall show the exact parts, with model numbers and options as required and clearly identified.
 - 1. Drawings shall include designations, dimensions, operating controls, electrical requirements, input/output configurations, operating controls, etc.
 - 2. Major components including all sub-assembly components (daughter cards, option cards, etc.) required to perform the specified functions.
 - 3. Any items of equipment which have features and/or functions that deviate from the specifications contained herein, shall have these deviations clearly called out by a separate attachment with the shop drawings specifically listing and detailing the deviation along with a justification. Deviations must be approved specifically in writing.
- C. Job specific diagrams.
- D. 30x42 floor plans at a scale of not less than 1/8 inches=1 foot-0 inches showing the location of all items of equipment. Drawings shall also indicate each location where electrical power is required, and the specific configuration of that power connection (voltage, plug type, mounting height, etc.)
- E. Proposed construction details for all custom fabricated items, including wall plates, interface panels, mounting hardware and systems, and rigging hardware. These details shall show labeling, dimensions and indicate finishes and color selection.
- F. Submittals that do not contain all the required information will be REJECTED unless prior approval for partial submittals has been approved.

PART 2 - PRODUCTS

2.1 Product Equivalency

- A. Where products are listed with multiple manufacturers, these manufacturers will be approved as equals **if all specified features are provided**. Any equipment not specifically approved in writing prior to the bid date will not be considered regardless of qualifications. Failure to provide the "precise functional equivalent" shall result in the removal of the alternate equipment at the Contractor's expense.

- B. Different manufacturers may require various options, accessories, converters, patch cables, etc. to perform the specified features and functions. Therefore, all material and/or equipment necessary for proper operation of the system shall be deemed part of these specifications.

2.2 Digital Video Projectors - Provide and install the following types of Projectors:

A. Classroom/Board Room/Conference Room – Ultra-Short Throw

1. Epson Brightlink 695 Wi.
2. Wireless Connectivity – Epson ELPAP10 wireless module.
3. Computer Interactivity Control – Include necessary software and drivers for USB control including USB extenders and RJ45 adaptors as specifically recommended by the manufacturer for complete operation.
4. LCD Projector shall be wall-mounted with security hardware. Include all mounting hardware necessary. Coordinate mounting height and location of projector to provide full video image on screen. Provide all required power, control, audio and video patch and extension cables required to operate the projector.

2.3 Projector Mounts/Lifts

A. Short-throw Wall Mount

1. Provide a short-throw wall mount for each projector where shown. The unit shall be capable of being mounted to either concrete block or metal stud wall and shall have a maximum weight limit of 25 lbs. It shall feature integral cable management and lateral shift adjustment. The telescoping projector mount extension shall be coordinated with the projector and lens to provide the necessary throw to hit the target screen or interactive whiteboard size.
2. Target size = 100 in. diagonal.

2.4 Wall Mounted Speaker - Classrooms

- A. Speaker Type “SR-A” – Provide Anchor Audio AN-1000X+ wall mounted powered speaker with mounting bracket. Connect to adjacent interactive projector.

- 2.5 Surge Suppressors (for all display devices): The surge suppressor shall be a compact mountable unit in a magnetic shielding steel enclosure. It shall operate from 120 volts AC and include a separate 3-foot, grounded, 3-wire #18 line cord. There shall be 2 grounded AC receptacles. Overall dimensions shall be 1.75 inches H x 5.31 inches W x 9.06 inches D. Weight shall be 3.4 pounds. It shall have a load rating of 8 amps @ 120 volts. It shall be listed to UL 1449-2 and certified to Federal Grade A, Class 1, Mode 1 Guidelines for powerline surge suppressors. The unit shall provide auto-resetting overvoltage shutdown. There shall be three limiter circuits: a series surge reactor current limiter, a cascaded auto-tracking dual-polarity voltage limiter, and a pulse inverter. The onset clamping voltage shall be 172 volts nominal, and the unit shall have an instant-reacting snubber to protect against fast-rising surges generated within the installation location. The surge suppressor shall have an unlimited Applied Surge Current rating (8 x 20 μ s) and shall withstand at least 1000 occurrences of Surge Pulse Voltages up to 6000 volts. Provide a Surge model SA82 Flatpak for each flat panel monitor and projector. No substitutes.

PART 3 - EXECUTION

3.1 General Installation

- A. Equipment shall be furnished and installed in accordance with manufacturer's recommendations in compliance with all local, city, state and national codes.

- B. Provide all hardware, framing members, etc. as required for mounting supports.
- C. All penetrations in smoke or firewalls shall be sealed with fire stop rated for this purpose.
- D. The installation of all work shall be neat and of professional quality. Cooperate with other trades in order to achieve well-coordinated progress and satisfactory final results. Execute without claim for extra payment minor moves or changes in equipment locations to accommodate equipment of other trades or the architectural symmetry of the facility.

3.2 Projector Installation

- A. Contractor shall field verify the location of projector, structural elements at the proposed mounting location, and the scree/lens combination to ensure proper installation prior to mounting equipment. Where field conditions will not provide the correct application for the proposed projector type/location/mounting method, the contractor shall notify the Engineer/Architect in writing. Notification shall include proposed alternatives for review.
- E. Projectors shall be mounted straight, level and true and shall provide the desired image size/orientation on the projection surface.
- F. Contractor shall custom configure the projector video/image/setting menus once source equipment and AV system is operational. Projector set-up shall be completed and the optimal settings stored for later recall.
- G. Programming of projectors and centralized projector control software including all network assignments, passwords, schedules, etc.

3.3 Programming

- A. AV Distribution System and wall controller shall be programmed as described herein and as required by owner.
- H. If necessary, access to the Owner's network for programming can be granted. Any request for this type of access should be submitted in writing no fewer than ten (10) business days prior to need.
- I. Controller shall be programmed as described herein.
- J. Programming - Controller shall be programmable as required to offer controls for A/V equipment connected to the system. Unit shall be programmed per the owner's requirements to provide the following controls at a minimum:
 - 1. Controls for system on/off, system volume and mute.
 - 2. Controls for source selection of all available sources.

3.4 Tests

- A. Upon completion of installation and satisfactory testing of system by Contractor in presence of the equipment supplier, the Contractor shall test the system in the presence of the Owner and the Engineer to demonstrate satisfactory performance.
- K. System shall be tested by and a certificate of inspection shall be furnished by a qualified manufacturer's representative or equipment vendor; Submit report indicating result to the Engineer.

3.5 Identification/Labeling

- A. Contractor shall identify all major items of equipment and tag all cables with permanent type markers to denote equipment served. Cables shall be tagged at both end and at each point where the cable is administered.
- L. The contractor shall be responsible for applying a permanent label to each cable to indicate source and destination.
- M. All labeling and recording shall be approved by the Owner and the Engineer prior to application.

3.6 Training

- A. Provide step-by-step user instructions identifying operator controls for normal use operations. This shall be included with the O&M manuals.
- N. The contractor shall arrange for a total of sixteen (16) hours for end user training on the various A/V Systems. This training shall be planned and scheduled with the Owner. Training plan shall be pre-approved by the Engineer/Architect and shall include a review of the proposed syllabus.
- O. Video record the training sessions and provide an electronic copy to the Owner.

3.7 O & M Manuals

- A. Copies of all approved shop drawings with the Engineer's stamp.
- P. Owner's manuals for every item of equipment when available from the manufacturer. These shall be the technical manuals provided by the manufacturer and shall not consist of generic sales brochures. Technical manuals shall provide complete specifications for the equipment as well as complete operating, maintenance, troubleshooting and product repair/replacement information. Where available only in electronic format, the contractor may provide a CD with electronic versions of Owner's manuals. CDs containing electronic versions of Owner's manuals must contain the proper software viewers for each document type.
- Q. Technology drawings updated with final as-built information. This shall be in the form of a complete set of Technology drawings with as-built information indicated in colored pen based upon actual field conditions.
- R. System schematic and block diagrams for every system updated with final as-built information. These drawings shall define the exact arrangement of each system including wiring configuration, device locations and cable types.
- S. Rack elevations for all systems with rack mounted equipment.
- T. System Operating Instructions: Provide a clear and concise description of operation which gives, in detail, the information required to properly operate the equipment and system.
- U. Provide statement of warranty with O&M Manuals.

3.8 Warranty

- A. Warrant all workmanship, equipment, material and software entering into this contract for a period of three (3) years from date of final acceptance or date of beneficial use, as agreed to between Contractor and Architect or Construction Manager. Any materials or equipment proving to be defective during the warranty period shall be made good without expense to the Owner. Provide a statement of this warranty with the O & M Manuals.

- V. During the warranty period, report to the site and repair or replace any defective materials or workmanship without cost to the Owner. Warranty service shall be rendered within 24 hours after request by the Owner. Equivalent replacement equipment shall be temporarily provided when immediate on-site repairs cannot be made.
- W. Where warranties on individual pieces of equipment exceed three (3) years, the guarantee period shall be extended to the warranty period of the particular items.
- X. After completion of the work, the Contractor shall submit a Certificate of Warranty, stating commence and expiration dates and conditions of the warranty, for signature of both participating parties. Incremental warranties for complete portions of the work may be negotiated at the discretion of the Owner, if delays occur beyond the control of the Contractor.

END OF SECTION