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June 10, 2022

ADDENDUM NO. 1

Re: Greenburgh CSD Capital Improvement projects at Highview ES; Lee F Jackson ES; RJ Bailey ES; Woodlands MS HS; Early Childhood Program

SED #66-04-07-02-002-013 – Highview SED #66-04-07-02-006-011 – Lee F Jackson SED #66-04-07-02-005-012 – RJ Bailey SED #66-04-07-02-007-022 – Woodlands SED #66-04-07-02-011-018 – Early Childhood Program

BBS Project #21-288; 21-289; 21-290; 21-291; 21-292

This addendum contains changes to the requirements of the contract drawings and/or project manual. Such changes shall be incorporated into the contract documents and shall apply to the work with the same meaning and force as if they had been included in the original documents. Wherever this addendum modifies a portion of a paragraph of project manual or any portion of the drawing, the remainder of the paragraph or drawing affected shall remain in force.

The conditions of the basic project manual shall govern all work described in this addendum. Wherever the conditions of work and the quality or quantity of materials or workmanship are not fully described in this addendum, the conditions of work, etc. included in the basic project manual for similar items of work shall apply to the work described in this addendum.

The "Conditions of the Contract" apply to all work described in this addendum.

The following changes shall be and are hereby made:

SPECIFICATION MODIFICATIONS

- 1. Invitation to Bidders The following changes have been made to the Invitation to Bidders
 - a. Bid opening will be at Woodlands MS HS same address as listed in the Invitation to Bidders. Time and date has not changed.
 - b. Bid opening will be in person only. There will be no livestreaming option.

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- 2. Bid Proposal Form The Bid Proposal Form issued with the bid documents has been modified. The Bid Proposal Form Issued with the addendum dated June 8, 2022 shall hereby supersede and replace the Bid Proposal Form that was issued with he bid documents. Changes to the Bid Proposal are in Bold Italics.
- 3. Section 15903 Specification section 15903 has been modified. The revised specification section 15903 issued with this addendum shall hereby supersede and replace section 15903 issued with the bid package.

CONSTRUCTION DRAWING MODIFICATIONS

- 1. Sheet A3.01A Sheet A3.01A issued with the bid package construction documents has been amended.
 - a. The GC shall be responsible for all lead and asbestos abatement as noted on the drawings with the exception of electrical wiring. Electrical wiring abatement shall be handled by the EC.
 - b. The GC shall hire a NYS licensed abatement contractor to perform all hazardous material abatement work. The abatement contractor shall provide all asbestos handling and disposal paperwork with the closeout package.
 - c. Roof area C shall be bid as add alternate GC1-1. Notes referring roof area C as add alternate GC1-2 are incorrect.
- 2. Sheet A3.03A Detail 2 and 3 indicate the incorrect roof deck type. The roof deck type over roof area C is 2" insulated plank. Notation on details 2 and 3 referring to metal deck shall hereby be changed to 2" insulated plank.
- 3. Roof system The roof system over roof area C shall be the same as the SBS roof system over roof area A and B.
- 4. GC-1 contract The GC-1 contract is for roof removal and reconstruction and abatement only at Highview Elementary School. All other interior reconstruction work falls under GC-2 contract

June 8, 2022

Phase	1	Capital	Proj	ects	at	Highview	ES;	Lee	F	Jackson	n ES;	RJ
Bailey	E	S; Woodla	inds 3	Jr S:	r Hi	gh School;	Earl	Ly Ch	il	dhood P	rogram	

NAME OF BIDDER: _			
BUSINESS ADDRESS:			
TELEPHONE NUMBER:		DATE OF BID:	
The bidder mention	ned above declares and c	ertifies:	
First:		lawful age and the only one interes no one other than said bidder has	
Second:	agreement, or connect:	e without any previous understandi ion with any other person, firm, id for the same purpose, and is in out collusion or fraud.	or
Third:	csD, Town of Greenburger employee or person who part from the treasury or indirectly interest	Board of Education of the Greenburgh , New York, nor any officer se salary is payable as a whole or of said Board of Education is directed in this bid or in the supplimork, or services to which it relating profits thereof.	or in ctly es,
Fourth:	Bidders, schedules, as direction of the Board in this bid, furnish ar the time stated, all r	carefully examined the Instruction nd specifications prepared under of Education, and will, if success nd deliver at the prices bid and wit materials, supplies, apparatus, goo rvices, or labor for which this bid	the ful hin ds,
Fifth:	That the prices quoted and municipal sales and	l are exclusive of all federal, sta d excise taxes.	ıte,
Sixth:	The undersigned further examined the following	er declares that he has received addenda:	and
	Addendum No	Dated:	
		BID PROPOSAL FOR	≀M−1

FOR PROPOSAL FORM TO BE VALID, ALL PAGES OF THE PROPOSAL FORM MUST BE DULY EXECUTED.

Seventh:	The Bidder shal	L check	here			if the	bid has	been b	ased
	upon equivalen	s in	lieu	of	any	kind,	type,	brand,	or
	manufacturer o	mate:	rial	other	r th	nan the	ose nar	med in	the
	specifications.	If	checke	ed, t	the	Bidder	shall	submit	the
	Equivalency For	m in ac	ccorda	nce v	with	Instru	ctions	to Bidd	lers,
	Paragraph 7B.	This it	em in	no v	way]	prohibi	ts the	Bidder	${\tt from}$
	submitting equi	<i>r</i> alents	after	r the	awa	rd of c	contract		

Eighth: The undersigned further understands and agrees that he is to furnish all labor, materials, equipment, supplies, and other facilities and things necessary and required for the execution and completion of:

Phase 1 Capital Projects at
Highview ES; Lee F Jackson ES; RJ Bailey ES; Woodlands Jr Sr High
School; Early Childhood Program

in strict accordance with the contract documents:

BASE BID GC-1 - General Construction Highview ES Roof Reconstruction

The contractor shall state complete price to provide all labor, equipment and material as required to perform all work, including but not limited to, general construction roof replacement. Inclusive of asbestos abatement.

Base Bid Highview ES roof only	\$
Lump Sum Allowance for unforeseen Additional asbestos abatement:	\$ 10,000
Lump Sum Allowance for unforeseen conditions:	\$ 10,000
Subtotal:	\$

GREENBURGH CENTRAL SCHOOL DISTRICT BID PROPOSAL FORM June 8, 2022 TOTAL GENERAL CONSTRUCTION PRICE = \$ Inclusive of allowance Total GC-1 Bid price written in words ALTERNATE GC1-1 TO BASE BID GC-1 The Contractor shall state the complete price to be (added to) the base bid to provide all labor, material and equipment as required to remove existing roofing system and replace with new roof as specified over roof area C. Inclusive of asbestos abatement. ADD: \$ BASE BID GC-2 - General Construction All Schools The contractor shall state complete price to provide all labor, equipment and material as required to perform all work, including but not limited to, general construction. Inclusive of asbestos abatement. Base Bid Highview ES \$ N/A Base Bid Lee F Jackson ES Base Bid RJ Bailey ES Base Bid Woodlands MSHS Base Bid Early Childhood Program Lump Sum Allowance for unforeseen \$ 25,000 Additional asbestos abatement:

Lump Sum Allowance for

unforeseen conditions:

Subtotal:

Inclusive of allowance

TOTAL GENERAL CONSTRUCTION PRICE = \$

\$ 25,000

\$						
Total	GC-1	Bid	price	written	in	words

BASE BID EC-1 - Electrical Construction All

Schools		
The contractor shall state compl labor, equipment and material as work, including but not limited to	required to	perform all
Base Bid Highview ES	\$	N/A
Base Bid Lee F Jackson ES	\$	
Base Bid RJ Bailey ES	\$	
Base Bid Woodlands MSHS	\$	
Base Bid Early Childhood Program	\$	
Lump Sum Allowance for unforeseen conditions:	\$	12,000
Subtotal:	\$	
TOTAL ELECTRICAL CONSTRUCTION PRICTION	E =\$	
\$		
Total EC-1 Bid p	rice written in	words
DACE DID MC-1 - Machania	al Canataur	.+ian 711

BASE BID MC-1 - Mechanical Construction All Schools

The contractor shall state complete price to provide all labor, equipment and material as required to perform all work, including but not limited to, mechanical construction.

Base Bid Highview ES	\$
Base Bid Lee F Jackson ES	\$
Base Bid RJ Bailey ES	\$
Base Bid Woodlands MSHS	\$BID_PROPOSAL_FORM-4

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Base Bid Early Childhood Program	\$	
Lump Sum Allowance for unforeseen conditions:	\$	20,000
Subtotal:	\$	
TOTAL MECHANICAL CONSTRUCTION PRICE	E =\$	
\$Total MC-1 Bid p		
Total MC-1 Bid p	rice written	in words
BASE BID PC-1 - Plumbin	g Constru	action All
Schools		
The contractor shall state compl labor, equipment and material as work, including but not limited to,	required to	o perform all
Base Bid Highview ES	\$	N/A
Base Bid Lee F Jackson ES	\$	N/A
Base Bid RJ Bailey ES	\$	N/A
Base Bid Woodlands MSHS	\$	N/A
Base Bid Early Childhood Program	\$	
Lump Sum Allowance for unforeseen conditions:	\$	10,000
Subtotal:	\$	
TOTAL PLUMBING CONSTRUCTION PRICE = Inclusive of allowance	= \$	

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Total PC-1 Bid price written in words

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The Board of Education hereby reserves the right to accept or reject any item set forth individually in Paragraph Eight above. The Owner may determine the lowest bid by adding one base bid to other base bid(s) and/or by adding to or deducting from those base bid(s), additive or deduct alternates, unit prices, or substitutions, if any, which the Owner elects to accept after the opening of bids.

Ninth:	BID SECURITY
	Each bidder shall deposit with his bid a bid bond, bank draft, or certified check in the amount of not less than five percent (5%) of the Base Bid made payable to:
	Board of Education, Greenburgh Central School District in the
	amount:
	\$ ()
	AND agrees such surety shall be a measure of liquidated damages should he default in delivery of agreement.
Tenth:	COMPLETION (Contractor shall fill in number of days)
	It is intended that the work under this contract be completed substantially within consecutive calendar days after receipt of authorized letter of intent issued by the District.
Eleventh:	NON-COLLUSIVE BIDDING CERTIFICATION

General Municipal Law, Section 103-d (Submit with Bid Proposal Form)

- A. By submission of this bid, the bidder and each person signing on behalf of the bidder certifies, and if this is a joint bid each party hereto certifies as to its own organization, under penalty of perjury that to the best of the bidder's knowledge and belief:
 - The prices in this bid have been arrived at independently without collusion, consultation, communication, or agreement, for the purpose of restricting competition, as to any matter relating to such prices with any other bidder or with any competitor;
 - Unless otherwise required by law, the prices which have been quoted in this bid have not been BID PROPOSAL FORM-6 21-188; 21-189; 21-190; 21-191; 21-192 06/08/2022

June 8, 2022

knowingly disclosed by the bidder and will not knowingly be disclosed by the bidder prior to opening, directly or indirectly, to any other bidder or to any competitor; and

- 3. No attempt has been made or will be made by the bidder to induce any other person, partnership, or corporation to submit a bid for the purpose of restricting competition.
- B. A bid shall not be considered for award nor shall award be made where A-1, 2, and 3 above have not been complied with provided, however, that if in any case the bidder shall so state and shall furnish with a bid a signed statement which sets forth in detail the reasons therefore, where A-1, 2, and 3 above have not been complied with, the bid shall not be considered for award nor shall any award be made unless the head of the purchasing unit of the political subdivision, public department agency, or official thereof to which the bid is made, or his designee, determines that such disclosure was not made for the purpose of restricting competition.

The fact that the bidder: (a) has published price lists, rates, or tariffs covering items being procured, (b) has informed prospective customers of proposed or pending publication of new or revised price lists for such items, or (c) has sold the same items to other customers at the same prices being bid, does not constitute without more, a disclosure within the meaning of Paragraph A above.

C. If the bidder is a corporation, the corporation shall be deemed to have been authorized by the Board of Directors of the bidder to make the above certification and such authorization shall be deemed to include the signing and submission of the bid and the inclusion therein of the certificate as to non-collusion as the act and deed of the corporation.

(Seal	of	Corporation)				
			Corporate	or	Company	Name
		By:				
			Signature			Title
		Date:				

Twelfth:

On acceptance of this proposal for said work, the undersigned hereby binds himself or themselves to enter into written contract with the Board of BID PROPOSAL FORM-7

June 8, 2022

Education within ten (10) days of date of notice of award, and to comply in all respects with the provisions set forth in "Instructions for Bidders" and "General Conditions of Contract" in relation to security for the faithful performance of the terms of said contract.

IF A CORPORATION (Seal of corporation):

NAME		ADDRESS	
President	-		
Secretary			
Treasurer	-		
IF A FIRM:			
NAME OF MEMBERS		ADDRESS	

Automatic Temperature Control Systems

A. **GENERAL**

- 1. Furnish and install all temperature controls including all devices and accessories required for the installation of a complete control system.
- 2. All new controls shall be standalone DDC, with a BACnet MSTP card for future connection to a BMS system. All controllers shall be non-single source Johnson Controls Facility Explorer. All equipment shall be provided with setpoint adjustment capability at the wall sensor and at the AHU control panel.
- 3. Control systems shall be complete in all respects, including all labor, materials, equipment and service necessary.
- 4. Systems shall include, but not be limited to, all application specific controllers, transducers, transformers, cabinets, valves and operators, dampers and operators, relays, sensors, switches and terminals.
- 5. Systems shall be installed by competent mechanics regularly employed by a company whose primary business is the installation of automatic temperature control systems. The company must employ at least two control specialists who have successfully completed at least one Johnson factory-authorized 5-day training program on the controls specified for this project. The ATC contractor will be required to submit proof of such training in the form of a Johnson Controls Institute Certificate.
- 6. Installation shall include all control components, installation of all control wiring and pneumatic tubing. All wiring required for interlocking and interfacing controls with the equipment to be controlled, whether low voltage or line voltage; calibration and adjustment of all controls, dampers, linkages, etc is part of this contract.
- 7. All control wiring concealed in walls or run in open areas of machine rooms shall be in conduit. In other locations, plenum rated cable shall be used.
- 8. The ATC Contractor shall provide PDF submittal books showing how he proposes to complete the work specified herein. In this book, the ATC Contractor shall submit description of operation and schematic drawings, produced in AutoCAD, showing the wiring and pneumatic tubing of the entire control system to the District for review before starting any work. Bulletins describing each item of control equipment or component shall be included.
- 9. Upon completion of his work, the ATC Contractor shall provide PDF Operation & Maintenance Manuals showing exactly how each component of the system was installed, specifically noting any changes from the submittal book, and who authorized the change. Schematic drawings, sequences of operation and technical literature must be provided for all components of the system.
- 10. All automatic temperature control work completed under this Contract shall be covered under a one (1) year warranty and service contract effective on date of acceptance. Scheduled maintenance service shall be provided to attend to the normal maintenance required for proper system operation in the building.
- 11. It is the Contractor's responsibility to inspect the buildings, their existing systems and the project drawings to verify exact quantities of devices and controls required for the systems specified. No allowance will be made if the Contractor fails to make such an examination.
- 12. Provide nameplates on all devices, whether or not mounted on the face of the central and local control panels. In occupied areas, nameplates shall be concealed beneath covers of room type instruments, to describe functions.
- 13. All control panels shall include wire markers for each wire, with an identifying wiring diagram.

14. The Control Contractor shall provide a minimum of two (2) three-hour training classes on the system operation and maintenance. This is to include both classroom and on-site training to ensure that the District's custodial and maintenance personnel have adequate knowledge of the control system's features as well as operation and maintenance requirements. The Contractor will provide printed documentation to all persons attending the training sessions.

B. **CONTROLLERS**

1. Thermostat or sensor locations not shown on the drawings shall be subject to approval of the Architect. All thermostats or sensors sensing temperature within ductwork or at coils are to be provided with elements of sufficient length to measure average temperature across the duct cross section or coil face.

C. **VALVES**

- 1. All automatic control valves shall be fully proportioning unless otherwise specified, quiet in operation, and shall be arranged to fail-safe in either a normally open or normally closed position in the event of power failure. The open or closed position shall be as specified or as required to suit job conditions. Valves shall be capable of operating at varying rates of speed to correspond to the exact dictates of the controller and variable load requirements. Provisions shall be made for valves operating in sequence with other valves or damper operators to have adjustable operating ranges and starting points to provide flexibility of adjustment, sequencing and throttling range.
- 2. Valves shall be sized by the ATC Contractor and guaranteed to meet the heating or cooling requirements as specified, and as indicated on the drawings. Unless otherwise specified, control valves shall have 125 psig cast iron bodies with flanged connections on valves 2 1/2" or larger. Unless otherwise specified, valve bodies shall have the same pressure characteristics as the piping in which they are installed.
- 3. No single valve, except zone valves, shall be larger than 2" in size. Where the capacity of equipment to be controlled requires a valve larger than 2", two (2) valves shall be installed in parallel with the smaller valve sized for a maximum of 1/3 of the total capacity.

D. **AUTOMATIC DAMPERS**

- 1. Automatic dampers shall be supplied and sized by the ATC Contractor to properly control the flow of air using methods similar to control valve sizing. The Sheet Metal Subcontractor shall provide required safing to fit the damper into the duct work. The dampers shall be constructed with galvanized blades and frames. Blades shall not exceed 6" in width and shall be provided with special replaceable rubber seals on the blade edges and sides. Blades shall be formed from two spot-welded sheets for extra strength. Frames shall be channel shaped for strength, and to enclose linkage thus keeping linkage out of air stream.
- 2. The entire construction shall be such that leakage does not exceed 10 cfm per square foot with 2" of static pressure across the damper.
- 3. Dampers shall have opposed, or parallel blades as required by the application. The proper linkage shall be furnished to provide equal percentage or linear characteristics as required by the application.

E. SEQUENCES OF OPERATION:

1. New controls for existing AHU

- a. The existing AHU is controlled by a pneumatic/electric control panel. All the control functions of this panel are to be migrated to a standalone DDC panel in its entirety, including controls of the outside/return dampers, supply fans, supply fan dampers, heating coil, humidifier, zone dampers, associated exhaust fans, etc.
 - b. The ATC contractor will furnish and install Johnson Facility Explorer DDC controls for this unit, including the following as a minimum: Johnson CGM09/PCA2611 controllers with

expansion modules, Johnson NSB8TN240 adjustable wall temperature sensors with thermostat guards, modulating hot-deck/cold-deck zone dampers, TE-6315P-1 hot deck discharge air sensor, TE-6315P-1 (bypass) cold deck discharge air sensor, TE-6315P-1 mixed air sensor, spring-return economizer damper actuators, PCG control panel, LCD user interface, 7-day timeclock.

- c. A 7day/24hr timeclock will be provided in the BMS control panel, wired as a Binary Input to the PCG controller, to provide occupied/unoccupied scheduling to the BMS panel. A 4hr override timer will be provided on the face of the BMS control panel to allow for temporary occupancy override capability. A green LED will be provided on the face of the BMS panel to indicate the AHU is in occupied mode.
- d. The PCG controller will be provided with an LCD user interface to allow for setpoint adjustment and DDC point monitoring. The space setpoints will also be adjustable at the NSB8 wall temp sensors.
- e. The ATC contractor will provide and install a freeze-stat, wired to shut of the supply fans in all positions of the H-O-A switch. Manual reset of the freezestat is required. Manual reset of the freezestat is required. As an added feature, the DDC controller will use the discharge air sensor to detect a potential freezing condition. The set point will be 5° higher than the set point of the freeze-stat. If such a condition occurs, the outside air damper shall close, the fans will shut down, the heating valve shall open, and an alarm generated at the BMS panel with a red ALARM LED lighting on the face of the BMS control panel.
- f. The contractor will furnish and install a new globe-type heating control valve with a modulating, spring-return actuator for the existing heating coil.
- g. Occupied Cycle:
 - a. The supply fan isolation dampers will open and supply fans will start and indicate to the DDC controller via a current relay wired to a binary input of the controller that the fans are running.
 - b. Once either fan is proven running, the economizer dampers will be enabled and will move to at least their minimum open position and will modulate open beyond the minimum position to maintain the mixed air setpoint (adj). A mixed air low limit setpoint of 55°F (adj) will be maintained.
 - c. Whenever the space temperature in the Kindergarten is below the space set point of 70°F (adjustable), the AHU burner will be enabled/heating valve modulated to maintain the discharge AHU hot deck temperature at the discharge heating setpoint. The discharge air setpoint shall reset automatically between the discharge high limit of 110°F (adjustable) and low limit of 60°F (adjustable) reset based on deviation of the Kindergarten space temperature from the space heating setpoint. The controller's program will maintain a minimum discharge temperature of 60°F (adjustable) by modulating the outside air damper and heating valve, beyond the minimum position, in sequence without overlap.
 - d. The ATC contractor will verify the quantity and location of zone hotdeck/cold-deck dampers. The DDC controller will modulate each zone damper to maintain the respective zone setpoint (adj).
 - e. A Zone temperature/RH sensor NSB8BHN240-0 will be installed in Room 205. The AHU humidifier will be controlled to maintain the Room humidity setpoint (adj).
 - f. Exhaust Fans: A hand-off-auto switch will be provided on the face of the new BMS control panel. When in Auto mode, the exhaust fans will run continuously during the occupied mode. Exhaust Fan status will be

monitored at the BMS controller. Exhaust fan on/off status lights will be provided on the face of the new BMS panel to match the existing status lights on the existing panel.

- g. Unoccupied Cycle: During the unoccupied cycle, if any zone is on a call for heat at its unoccupied heating setpoint, the unit's supply fans shall be cycled on and heating enabled. The outside air dampers shall be closed. The exhaust fans will be off.
- h. Whenever the fan status is off the outside air damper will be closed.

(END OF SECTION)