

November 30, 2023

Northwestern School Corporation – Maintenance Building 3431 County Rd N 400 W Kokomo, IN 46901

TO: ALL BIDDERS OF RECORD

This Addendum forms a part of and modifies the Bidding Requirements, Contract Forms, Contract Conditions, the Specifications, and the Drawings dated November 3, 2023, by Schmidt Associates. Acknowledge receipt of the Addendum in the space provided on the Bid Form. Failure to do so may subject the Bidder to disqualification.

This Addendum consists of Pages ADD 2-1 through ADD 2-2, and attached Schmidt Associates Addendum No. 2 dated November 30, 2023, consisting of 2 pages, Specification Section 233439 – High Volume, Low Speed Fans, and Drawing Sheets: 7-A-600, 7-P-601, and 7-P-901.

BID DUE DATE/BID OPENING DATE REMINDER

The Bid Due Date is **Thursday, December 7, 2023, at 2:00 PM (local time)** The Bid Opening will occur on **Thursday, December 7, 2023, 2023, at 2:00 PM (local time)**

The Bid Opening on **Thursday, December 7, 2023, at 2:00 PM** (local time) will be a Virtual Microsoft Teams Meeting <u>ONLY</u>.

Microsoft Teams meeting Join on your computer or mobile app <u>Click here to join the meeting</u> Meeting ID: 259 360 699 387 Passcode: ZhiwBv <u>Download Teams | Join on the web</u> **Or call in (audio only)** +1 317-762-3960,,854808436# United States, Indianapolis Phone Conference ID: 854 808 436# <u>Find a local number | Reset PIN</u>

A. <u>SECTION 00 10 00 INSTRUCTION TO BIDDERS</u>

See attached eBID Electronic Bid Submission Instructions. Bids can be submitted online through the Skillman Planroom (skillmanplanroom.com) via the eBID Electronic Bid Submission System.

Bids will also be accepted in person at:

Northwestern School Corporation 3075 N. Washington Street Kokomo, IN 46901

B. <u>SECTION 01 12 00 MULTIPLE CONTRACT SUMMARY</u>

1. Paragraph 3.03A Bid Categories

A. <u>Bid Category No. 15 – Maintenance Building</u>

Add the following Specification Section: Section 23 34 39 High-Volume, Low-Speed Fans

Add the following Clarifications:

- 2. Include a \$10,000 allowance for the Maintenance Building electrical service for primary conduits, secondary conduits and secondary conductors.
- 3. Include a \$15,000 allowance for the Maintenance Building well work to include inspection, evaluation, disinfection, and replacement of submersible pump if needed.
- 4. The steel fabricator does NOT need to be AISC certified. The steel fabricator must be a member of AISC and implement a quality program that is equal to or exceeds the requirements of the AISC certification program.

SECTION 00 10 00 - eBID INSTRUCTIONS

GO TO SKILLMANPLANROOM.COM - DO NOT WAIT UNTIL <u>2:00 PM EASTERN TIME</u> TO SUBMIT YOUR BID; WHEN THE COUNTDOWN CLOCK EXPIRES, EVEN IF YOU ARE IN THE MIDDLE OF THE BID SUBMISSION PROCESS, YOUR BID WILL NOT BE ACCEPTED BY THE eBID SYSTEM.

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- 1. SIGN IN
- 2. Click NORTHWESTERN SCHOOL CORPORATION MAINTENANCE BUILDING
- 3. Click SUBMIT BID and FOLLOW INSTRUCTIONS

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- SAVE YOUR BID FORM AND ALL REQUIRED ATTACHMENTS IN PDF FORMAT (ONE FILE PER BC)
- TITLE YOUR PDF BID FILE AS: NSC Maintenance_Bidders Name_BC No. 15
- UPLOAD PDF BID FILE TO THE *BID DOCUMENT AREA (Drag & Drop or Click Browse To Select File)
- CLICK SUBMIT BID

ADDENDUM NO. 2 NOVEMBER 30, 2023

PREPARED BY SCHMIDT ASSOCIATES FOR: MAINTENANCE BUILDING DESIGN NORTHWESTERN (HOWARD) SCHOOL CORPORATION

This Addendum consists of two Addendum page(s) and nine attachment pages totaling eleven pages.

Acknowledge receipt of this Addendum by inserting its number on the Bid Form. Failure to do so may subject the Bid to disqualification. This Addendum is part of the Contract Documents.

Bidder is encouraged to verify with reprographer of record all Addenda issued (do not rely exclusively on third party plan room services).

PART 1 - CHANGES TO PRIOR ADDENDA (NOT APPLICABLE)

PART 2 - CHANGES TO THE PROJECT MANUAL

Modifications described herein shall be incorporated in the Project Manual. All other Work shall remain unchanged.

2.1 DIVISION 23 - HEATING, VENTILATING, AND AIR-CONDITIONING(HVAC)

A. Section 233439 "HIGH-VOLUME, LOW-SPEED FANS"

1. ADD Section per the attached.

PART 3 - CHANGES TO THE DRAWINGS

Modifications described herein shall be incorporated in the Drawings. All other Work shall remain unchanged.

3.1	DRAWING SHEETS: ADDITIONS, DELETIONS AND REPLACEMENTS							
	DRAWING NO.	INDICATE ACTION: ADD (A), DELETE (D),						
		DELETE & REPLACE (R),						
A-SE	RIES DRAWINGS 7-A-600	DELETE AND REPLACE						
P-SE	RIES DRAWINGS							
	7-P-601 7-P-901	DELETE AND REPLACE						

END OF ADDENDUM 2

SECTION 233439 - HIGH-VOLUME, LOW-SPEED FANS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. Section includes high-volume, low-speed fans.

1.3 DEFINITIONS

A. HVLS - High volume, low speed.

1.4 ACTION SUBMITTALS

- A. Product Data: For each type of product.
 - 1. Include rated capacities, furnished specialties, and accessories for each fan.
 - 2. Certified fan performance curves with system operating conditions indicated.
 - 3. Certified fan sound-power ratings.
 - 4. Motor ratings and electrical characteristics, plus motor and electrical accessories.
 - 5. Material thickness and finishes, including color charts.
 - 6. Fan speed controllers.

1.5 CLOSEOUT SUBMITTALS

A. Operation and Maintenance Data: For HVLS fans to include in emergency, operation, and maintenance manuals.

1.6 DELIVERY, STORAGE, AND HANDLING

- A. Deliver and store products in a clean and dry place.
- B. Comply with manufacturer's written rigging and installation instructions for unloading and moving to final installed location.
- C. Handle products carefully to prevent damage, breaking, denting, and scoring. Do not install damaged products.
- D. Protect products from weather, dirt, dust, water, construction debris, and physical damage.

HIGH-VOLUME, LOW-SPEED FANS

- 1. Retain factory-applied coverings on equipment to protect finishes during construction and remove just prior to operating unit.
- 2. Cover unit openings before installation to prevent dirt and dust from entering inside of units. If required to remove coverings during unit installation, reapply coverings over openings after unit installation and remove just prior to operating unit.
- E. Replace installed products damaged during construction.

1.7 WARRANTY

- A. Warranty: Manufacturer and Installer agree to repair or replace components of fans that fail in materials or workmanship within specified warranty period.
 - 1. Warranty Period:
 - a. For Motor, Including Controls: Five year(s) from date of Substantial Completion.
 - b. For Parts, Including Blades and Hub: Five year(s) from date of Substantial Completion.

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

- A. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and application.
- B. UL Compliance: Listed and labeled to UL 507.
- C. Comply with NFPA 13 requirements for HVLS fans.
- D. AMCA Compliance:
 - 1. Test HVLS fans according to AMCA 230.
 - 2. Certify HVLS fan performance according to AMCA 211.
- E. Performance Data: Comply with ANSI 230 test procedure standard, based on five rating points: 20-, 40-, 60-, 80-, and 100-percent of maximum speed. Comply with AMCA 211 for publication of performance data.

2.2 MANUFACTURERS

- A. Provide products by one of the following:
 - 1. Greenheck
 - 2. Big Ass Fans
 - 3. Cook

- 4. EuroVent
- 5. Skyblade
- 6. Canarm
- B. Source Limitations: Obtain HVLS fans from single source from single manufacturer.

2.3 HIGH-VOLUME, LOW-SPEED FANS

- A. Description: Factory-assembled and -tested horizontal, non-ducted fan unit, consisting of largediameter blade set, direct-drive electric motor, with variable-speed motor controller.
 - 1. Provide fan designed to circulate large air volume, vertically, at low velocity.
 - 2. Maximum Operating Temperature: 140 deg F.
 - 3. Frame:
 - a. Material: Aluminum or Stainless steel.
 - 4. Diameter: 20 feet.
 - 5. Blades: Airfoil type.
 - a. Quantity: Minimum 3.
 - b. Material: Aluminum.
 - 1) Blade Finish: Anodized.
 - 6. Motor: integral to fan frame.
 - 7. Wiring and Controls Enclosure:
 - a. NEMA 250, Class 1.
 - b. Material: Aluminum.
 - c. Grounded.
 - 8. Controls: Provide wall-mounted keypad.
 - a. Provide variable speed motor controller speed control.
 - 9. Mounting Bracket: Miscellaneous steel or standard bracket as necessary. .
 - 10. Accessories:
 - a. Mounting extension tube. Refer to drawings and coordinate all trades.
 - b. Guy wires.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine conditions for compliance with requirements for installation tolerances and other conditions affecting HVLS fan performance, maintenance, and operations.
- B. Examine roughing-in for mounting location, anchor-bolt sizes, and locations, to verify actual locations for mounting connections before installation of fan.
- C. Examine areas for suitable conditions where fan will be installed.
- D. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 INSTALLATION OF HIGH-VOLUME LOW-SPEED FANS

- A. Install fan according to manufacturer's published instructions.
- B. Comply with NECA 1 and NFPA 70.
- C. Comply with NFPA 13 for installation of HVLS fans and maximum allowable fan diameter. Center HVLS fans between four adjacent sprinklers. Minimum vertical clearance from HVLS fan to sprinkler deflector is 3 feet.
- D. Comply with NFPA 72 and interlock HVLS fans to shut down upon receiving an alarm from fire alarm system.
- E. Equipment Mounting:
 - 1. Anchor fan to building structure with manufacturer's recommended mounting bracket for installed condition.
 - 2. Consult a licensed professional structural engineer for mounting methods and approval for mounting to the structure. Structure must be able to withstand the torque and forces generated by the fan.
 - 3. Comply with requirements for hangers and supports specified in Section 230529 "Hangers and Supports for HVAC Piping and Equipment."
- F. Install unit to permit access for maintenance.
- G. Install parts and accessories shipped loose.

3.3 ELECTRICAL CONNECTIONS

A. Connect wiring according to Section 260519 "Low-Voltage Electrical Power Conductors and Cables."

- B. Ground equipment according to Section 260526 "Grounding and Bonding for Electrical Systems."
- C. Install electrical devices furnished by manufacturer, but not factory mounted, according to NFPA 70 and NECA 1.
- D. Install nameplate for each electrical connection, indicating electrical equipment designation and circuit number feeding connection.
 - 1. Nameplate shall be laminated acrylic or melamine plastic signs, as specified in Section 260553 "Identification for Electrical Systems."
- E. Install power wiring to field-mounted electrical devices, furnished by fan manufacturer, but not factory mounted.

3.4 CONTROL CONNECTIONS

- A. Connect control wiring according to Section 260523 "Control-Voltage Electrical Power Cables."
- B. Connect control interlock wiring between HVLS fan and other equipment or devices to provide a complete and functioning system.
- C. Install control devices furnished by manufacturer, but not factory mounted.
- D. Install control wiring to field-mounted control devices, furnished by fan manufacturer, but not factory mounted.
- E. Protect installed units from damage caused by other work.

3.5 FIELD QUALITY CONTROL

- A. Perform the following tests and inspections with the assistance of a factory-authorized service representative:
 - 1. Fan Operational Test: After electrical circuitry has been energized, start units to confirm proper motor rotation and unit operation.
 - 2. Test and adjust controls and safeties. Replace damaged and malfunctioning controls and equipment.
- B. Fan or components will be considered defective if fan or components do not pass tests and inspections.

3.6 STARTUP SERVICE

A. Engage a factory-authorized service representative to perform startup service.

- 1. Complete installation and startup checks according to manufacturer's written instructions.
- 2. Verify that fan is secure on mountings and supporting devices and that connections to electrical systems are complete. Verify that proper thermal-overload protection is installed in motors, controllers and switches.
- 3. Verify proper motor rotation direction and free fan rotation.
- 4. Check bearing lubrication.
- 5. Verify proper fan rotation. Set rotation selector to blow vertically downward during heating season, and vertically upward during cooling season.

3.7 ADJUSTING

A. Comply with requirements in Section 230593 "Testing, Adjusting, and Balancing for HVAC" for air-handling system testing, adjusting, and balancing.

3.8 CLEANING

A. Clean equipment externally; remove coatings applied for protection during shipping and storage, foreign material, and oily residue according to manufacturer's written instructions. Following manufacturer's cleaning procedures, and clean with manufacturer-recommended cleaning products.

3.9 DEMONSTRATION

- A. Engage a factory-authorized service representative to train Owner's maintenance personnel to adjust, operate, and maintain HVLS fans.
- B. Video training sessions, and provide electronic copy of video to Owner.

END OF SECTION 233439





elevations, details and schedules.

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DOOR PANEL						FRAME						
			SIZE							HDWR		
Υ	MATL	GLAZ	Н	W	TH	MARK	MATL	GLAZ	LABEL	SET	NOTES	MARK
			71 01		01 4 0 / 4 1	50			1	04		
	HM		7' - 0"	3' - 0"	0' - 1 3/4"	FZ	НМ			01		A110.1
	ST		12' - 0"	10' - 0"	0' - 3"					08		A110.3
	ST		12' - 0"	10' - 0"	0' - 3"					08		A110.4
	HM		7' - 0"	3' - 0"	0' - 1 3/4"	F2	HM			03		A102
	HM		7' - 0"	3' - 0"	0' - 1 3/4"	F2	HM			03		A103
	WD	TG	7' - 0"	3' - 0"	0' - 1 3/4"	F2	TG			06		A101
	HM		7' - 0"	3' - 0"	0' - 1 3/4"	F2	HM			01		A110.2
	WD		7' - 0"	3' - 0"	0' - 1 3/4"	F2	HM			04		A105
	WD		7' - 0"	3' - 0"	0' - 1 3/4"	F2	HM			07		A107
	WD		7' - 0"	3' - 0"	0' - 1 3/4"	F2	HM			04		A106
	HM	IG-1	7' - 0"	6' - 0"	0' - 1 3/4"	F2	HM			09		A113
	HM		7' - 0"	3' - 0"	0' - 1 3/4"	F2	HM			05		A110.6
	ST		12' - 0"	10' - 0"	0' - 3"					08		A110.5
	нм		7' - 0"	3' - 0"	0' - 1 3/4"	F2	нм			02		A104

GENERAL NOTES

A. This Door Schedule(s) is furnished for whatever assistance it may afford the Contractor. Do not consider it as entirely inclusive. Carefully examine the Drawings (especially the Floor Plans) and the Specifications to determine the extent of door and frame quantities required (including interior borrowed lite or sidelite openings). Should any particular door, frame, or interior borrowed lite or sidelite shown on the Drawings be inadvertently omitted from this Schedule, supply same as required for similar openings.

B. The "QTY" column designates the number of leaves in the opening. The "Door Width" column designates the total width of all leaves. In multiple leaf conditions, the leaves shall equally divide the "Door Width" unless noted otherwise; however, the active leaf shall not be less than 3'-0" wide.

C. Door Type "X" denotes a frame with no door such as a borrowed lite, reference Frame Elevations.

D. An asterisk (*) in a dimension denotes a width that varies, reference plans,

E. Verify locksets with the Owner during submittals.

5.4.601 - DOOR AND FRAME LEGEND



 $\langle F2 \rangle$

5.4.603 - FRAME ELEVATIONS



ABBREVIATIONS

AL AI	uminum
HM	Hollow Metal
ST St	eel
WD	Wood
TGTe	empered Glazing
IG Ins	sulated Glazing
LGLa	minated Glazing
FGFr	osted Glazing
SPSp	bandrel Panel

DOOR & FRAME SCHEDULE NOTES See Door Schedule

as required.

- 1. Existing door and frame to remain. New hardware only. Field verify all existing door and frame information as required for installation of new hardware.
- 2. New door/frame in existing masonry wall. Tooth in new masonry into existing
- 3. Set door in frame to allow for 180° door swing.





5.4.603 - WINDOW ELEVATIONS











PLUMBING FIXTURE ROUGH-IN LEGEND						
	FIXTURE CONNECTION					
MARK	CW	HW	W	V		
EEW-1	1 1/4"	1/2"	1 1/2"	1 1/2"		
FD-1			2"			
FD-2			4"			
TD-1			4"			
L-1	1/2"	1/2"	1 1/2"	1 1/2"		
HB-1	3/4"					
HB-2	3/4"					
IMB-1	1/2"					
NFWH-1	3/4"					
FCO						
LT-1	1/2"	1/2"	1 1/2"	1 1/2"		
SK-1	1/2"	1/2"	1 1/2"	1 1/2"		
UR-1	3/4"		2"	1 1/2"		
WC-1	1"		4"	2"		
	1"		1"	2"		

