

ADDENDUM NO. 2

December 21, 2022

RE: Murray Hill Middle School Controls Upgrade (HCPSS Bid #053.23.B3)

FROM: Purchasing Office
Howard County Public Schools
10910 Clarksville Pike
Ellicott City, MD 21042
(410) 313-6723
(410) 313-6789 fax

TO: APPROVED PROSPECTIVE BIDDERS

This addendum forms a part of the Contract Documents and modifies the Original Bidding Documents as noted below. Acknowledge receipt of this Addendum in the space provided on the Form of Proposal. Failure to do so may subject the Bidder to disqualification. This Addendum consists of three (3) pages.

QUESTIONS:

1. The Electrical Room 241 has very little wall space for the new panel M2 and the two new VFDs. Can the VFDs be located in or on the existing RTU #2? **Response: The Electrical Engineer has completed another site survey and has determined that there is enough space in the Electric Room 241. Refer to revised Electric Room layout on attached Drawing E2.2.**
2. On Drawing M4.1, the detail labeled "Partial Power Riser Diagram" indicates a NEW 150 KW 480/277 V Generator. Is this equipment to be furnished, installed and commissioned as part of the project? **Response: The generator is existing to remain. Change to read as "EX. GENERATOR" in lieu of "NEW 150 KW 480Y/277V GENERATOR".**
3. On Drawing M4.1, the detail labeled "Partial Power Riser Diagram" indicates a Special Note #6 applying to existing 2000 A switchboard. However, the applicable Special Notes are numbered 1 through 5. Please advise what note #6 indicates on this detail? **Response: Delete the reference of 6 in the diamond.**
4. On Drawing E3.1, Note 2 states we need to have the breakers for L2B to have equal or greater AIC rating. So, we will need to know the AIC rating of the existing breakers. **Response: AIC shall be considered to be 14,000.**
5. How do we arrange for another site visit? **Response: Coordinate with Mark Turner (410-971-9855) or Frank Lankarani (443-255-7012) of HCPSS.**
6. Please advise if the test and balance contractor is to balance only air-side airflows or is water-side TAB to be included as well? **Response:**

RTU-1, RTU-2 and variable air volume terminal units associated with RTU-2 shall be tested, adjusted and balanced to within 10% of the design airflows by an independent AABC or NEBB certified contractor. All results shall be reported on AABC or NEBB standard forms. The design outdoor airflow, return airflow, and supply airflow for RTU-1 and RTU-2 are available on mechanical drawing 80.11 through the drawing link provided in Addendum No. 1.

Design maximum and minimum airflows for all variable air volume terminal units are provided on Drawing M3.1 of the contract drawings.

Heating water flow rates for all variable air terminal unit heating coils shall be tested, adjusted and balanced to within 10% of the design water flow rates by an independent AABC or NEBB certified contractor. The design heating water flow rates are also provided on Drawing M3.1 of the contract drawings.

The following testing, adjusting, and balancing shall be performed for RTU-1 and RTU-2:

1. Balance variable air volume systems (RTU-2) in accordance with AABC standards for Testing and Balancing Variable Volume Systems.
2. Replace all air filters prior to performing air balancing.
3. Measure and record the following for RTU-1 and RTU-2, as applicable:
 - a. Equipment designation.
 - b. Manufacturer's name, model number, and serial number.
 - c. Fan motor horsepower rating.
 - d. Fan brake horsepower.
 - e. Fan rpm.
 - f. Motor rpm.
 - g. Motor efficiency rating.
 - h. Nameplate and measured voltage, each phase.
 - i. Nameplate and measured amperage, each phase.
 - j. Static air pressure conditions across fans, coils and filters.
 - k. Total and external static pressures (design – actual).
 - l. Adjust outside air, return air, and relief air dampers for the design conditions.
 - m. Supply, outdoor, return, and relief airflows (design – actual).
 - n. Cooling coil entering and leaving dry bulb and wet bulb temperatures.

The following testing, adjusting, and balancing shall be performed for all variable air volume terminal units:

1. Measure and record the following for each variable air volume terminal unit and associated heating water coil:
 - a. Equipment designation.
 - b. Manufacturer's name, model number, and size.
 - c. Minimum and maximum primary airflows (design – actual).
 - d. Heating water flow rate (design – actual).

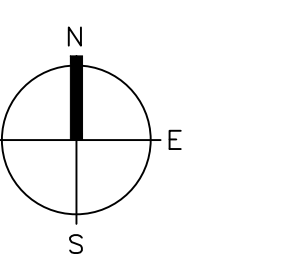
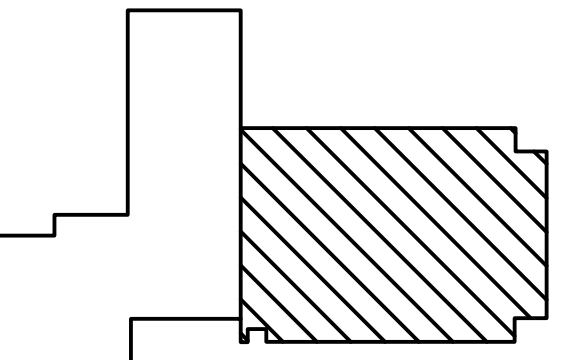
CHANGES TO THE DRAWINGS:

1. **E2.2:**
 - a. Revised locations of Panel PNL M2 and VFDs.
 - b. Revised Special Note 6.
 - c. Added Drawing Note A.

CHANGES TO THE SPECIFICATIONS:

1. None at this time.

END OF ADDENDUM NO. 2



NO.	DESCRIPTION	DATE
1	ADDENDUM #2	12/19/2022
2	100% CONSTRUCTION DOCUMENTS	11/01/2023

DRAWING

SECOND FLOOR PLAN - ELECTRICAL

DRAWN BY	PG
CHECKED BY	PG
PROJECT NO.	202201
SCALE	1/8"=1'-0"
SHEET	1

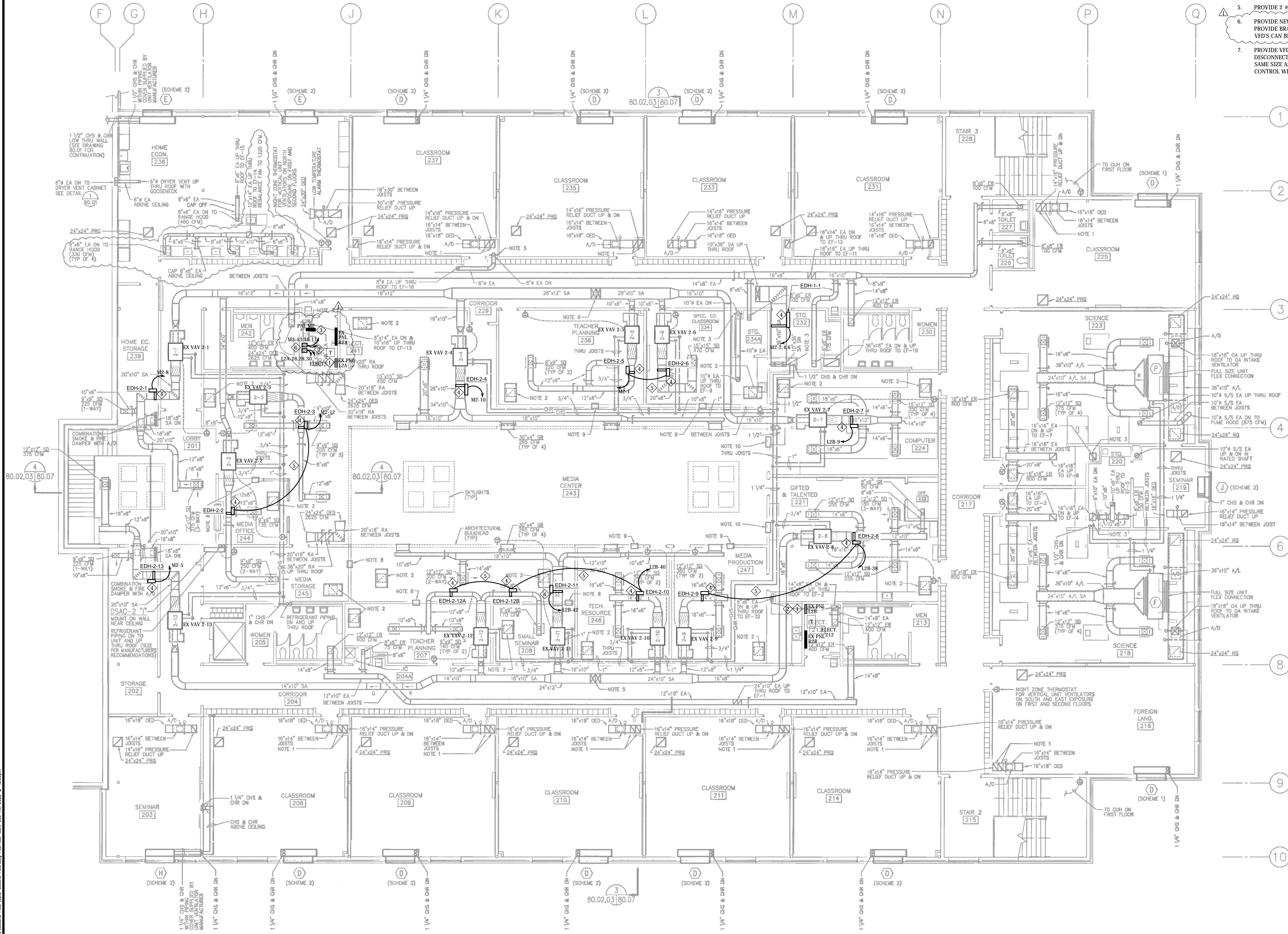
E2.2

DRAWING NOTES

- THE SPACE IN THE ELECTRICAL ROOM IS TIGHT. CONTRACTOR SHALL BE RESPONSIBLE TO MAKE SURE ALL THE NEW EQUIPMENT FIT IN THE EXISTING SPACE.

SPECIAL NOTES

- EX PANEL (AS DESIGNATED) SHALL REMAIN.
- FOR MORE WORK ON PANEL, REFER TO SCHEDULE ON DRAWING ES.1.
- PROVIDE NEW PANEL (AS DESIGNATED). REFER TO PARTIAL RISER DIAGRAM AND SCHEDULE.
- DISCONNECT SWITCH AS AN INTEGRAL PART OF DUCT HEATER. PROVIDE BRANCH CIRCUIT WIRING AND RACEWAY AS INDICATED.
- PROVIDE 2 #12 AWG AND 1 #12 GROUND WIRE - 3/4" RACEWAY.
- PROVIDE NEW VFD AND MOUNT ON WALL. REFER TO SCHEDULE. PROVIDE BRANCH CIRCUIT WIRING AND RACEWAY AS INDICATED. VFD'S CAN BE MOUNTED UNDER THE EXISTING STARTERS.
- PROVIDE VFD RATED CABLE WIRING IN RACEWAY TO ASSOCIATED DISCONNECT SWITCH FOR RTU MOTOR. WIRING SHALL BE OF THE SAME SIZE AS THAT OF BRANCH CIRCUIT WIRING. ALSO PROVIDE CONTROL WIRING TO ASSOCIATED DISCONNECT SWITCH.



SECOND FLOOR PLAN - ELECTRICAL
SCALE: 1/8" = 1' - 0"



FILE NAME: \\B\Building Dynamics\Com\Bibby\132-005 Murray Hill HS Second Floor Plan\222 Second Floor Plan\222 Second Floor Plan.dwg, Date: 05-20-2023, 12:20pm