

M/E/P FIELD REPORT

Date of Visit: 12/7/2023
Date Submitted: 12/11/2023
Project Name: Central Hardin High School
Project No.: 20009
Location: Hardin County, Ky
Time In/Out: 9:30am- 3:30pm
To: Inga Hardman
From: Michael Warren
Copy: Joe Jones; Brandon Cecil; David Epperson; Ethan Kelly

Comments:

STW attended the progress meeting on this date and reviewed the site for progress and quality of installation.

Items Observed and Discussed – Action Items are indicated with Bold text:

1. Light fixtures have been installed in the lower level of Area B, including the ROTC Classroom B006, ROTC Office B004, Corridor B000, F&CS Classroom B007 and F&CS Food Lab B008.
2. Conduits are being installed on the Mezzanine and conductors are being terminated at the panels where conduit runs are completed.
3. Ceiling mounted devices are being installed as the ceiling grid has been installed. Low voltage cabling is being ran to the devices as they are being set in place.
4. Data and other low voltage cables are being pulled in Area B. In the lower level of Area B, several of the FSR boxes have data cable routed to them already.
5. Electricians have begun underslab rough-in in the Media Center. Floor boxes are being laid out. There are over 50 floor boxes in this space: coordination is critical.

6. Nearly all the ductwork that has been installed in Area B has been insulated from the mezzanine down into the Classrooms on the 1st and 2nd floor. Insulation has not started in the Classrooms because the spaces haven't been dried-in.
7. Roof leaders are being set in the Café/Commons Area while on site today.
8. Plumbing, Sheet metal, and fire protection are nearly caught up in Area B. Insulation can't be installed in Areas where it will be exposed to the weather. Ductwork can be installed and covered with plastic, but it cannot be insulated or sealed until the areas are dried-in.
9. Throughout the project, there is significant equipment and material that has not been covered with plastic for protection from dust, dirt, and debris. It is important that all these items are cleaned, and then covered with plastic. Please see photos in this report for examples of what was observed during this site visit.
 - a. **Clean all components of equipment and material that have become dirty because of not being properly covered with plastic. Equipment and material must be covered for protection. This includes but is not limited to: Ductwork openings (both duct that has been hung, and duct that is being staged), open ends of VAV boxes, openings to Heat pumps (both coils and squirrel cages) and ERUs, electric trap primers.**
10. A discussion was held during the meeting regarding the flushing of the Hydronic lines in Area B. These lines are to be flushed as a separate loop from Area A, to prevent cross-contamination, and the introduction of air into Area A loop.
11. Following the meeting, the Owner expressed concern regarding the possibility of the butterfly valves on the hydronic mains in Area B getting bumped and accidentally opened which could create leaks downstream and significant water damage. The solution is the removal of the handles of the butterfly valves while in the closed position.
 - a. **Remove handles of the butterfly valves for the hydronic mains in Area B to prevent accidental opening and leaks downstream of the valves.**

Action Items From Previous Reports – Items struck-through are complete:

1. There are (2) fire dampers for exhaust duct in the Main Gym that are missing fire dampers. As noted in Addendum 2, these ducts are to have fire dampers installed in the 2 hour-rated Gym wall.

- a. **Install fire dampers in (2) Exhaust Ducts penetrating the Main Gym 2 hour-rated gym wall.**
2. Electricians are pulling conductors to the heat pumps serving Area B lower level. Currently, the lower level of Area B is getting temporary heat from propane. The goal is to have the heat pumps serving the lower level running by January 2024.
 - a. **The hydronic lines must be flushed prior turning on the units.**
 - b. **All heat pump Return Air intakes must be covered with filter media prior energizing the units.**
3. There are several heat pumps on the mezzanine that the filters cannot be removed due to obstructions from the handrail. These filters need to be accessible for change out.
 - a. **Make the required adjustments so that all filters can be removed and changed by the Owner.**



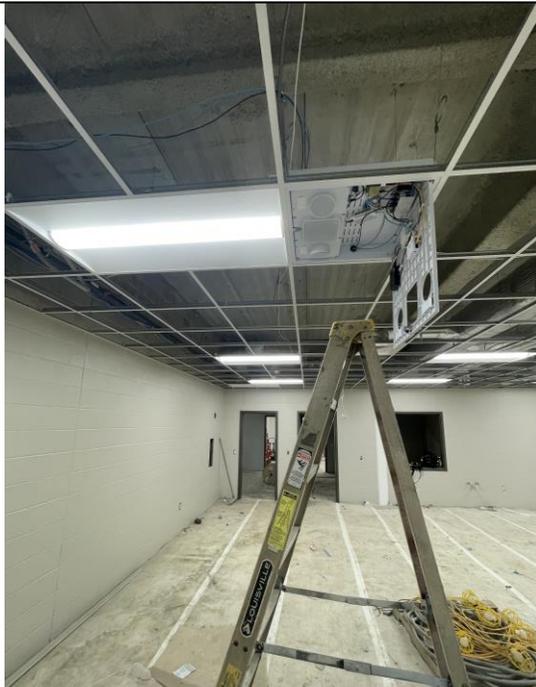
Duct penetrations have been flashed at through-wall penetrations. This is to be done at all duct penetrations through-wall.



Installation of light fixtures has begun in the lower level of Area B. The fixtures will need to be cleaned prior to being turned over to the Owner.



Faceplates are being installed in the F&CS Food Lab in Area B lower level. There are a few on the Plan East wall that will require touch up.



Low voltage cabling is being pulled to ceiling mounted devices as they are installed in Area B lower level.



Data and HDMI cables are being pulled to the FSR boxes in the lower level of Area B.



Return air registers will need to be covered with filter media prior to running any heat pumps.



Roof leaders are being installed in the Café/Commons area.



The duct from the mezzanine has been insulated to the classrooms. Ductwork in the classrooms has not been insulated.



Installation of ductwork, plumbing, and sprinkler lines, is caught up to Areas that haven't been dried-in.



Installation of conduit and conductors is ongoing at the mezzanine.



Duct fittings that have not been covered on the first floor of Area B.

***All equipment will need to be cleaned prior to being covered from dust and debris**



Conductors are being pulled to the panels on the mezzanine.



Several heat pumps are not covered from protection from the elements. These units need to be covered and not used as a working surface. Also, the coils haven't been covered, see next photo.

***All equipment will need to be cleaned prior to being covered from dust and debris**



Heat pump coils that haven't been covered.

***All equipment will need to be cleaned prior to being covered from dust and debris**



It was observed that a contractor is using the ductwork (which has been insulated) as a platform for scaffolding. Any damage to duct or insulation will need to be addressed by the responsible party.



Underslab conduits are being laid in the Media Center. There are over 50 floor boxes in this space: coordination is critical.



Group of VAVs that haven't been covered on the mezzanine.

***All equipment will need to be cleaned prior to being covered from dust and debris**



Heat pump coil and squirrel cage that has not been covered.

***All equipment will need to be cleaned prior to being covered from dust and debris**



Heat pump squirrel cage that has not been covered.

***All equipment will need to be cleaned prior to being covered from dust and debris**

END OF REPORT