



FIELD OBSERVATION REPORT

East Hardin Middle School, Hardin County Schools, Elizabethtown, KY 201752.01 -CA8

Date: 6/4/2020

Time: 12:15 PM ET

Weather: 80/cloudy

Observed by: Joseph Jones

Report No: 24

Est. Completion: 48%

Present on Site:

Doyle Gibson, Carpenters, Masons, Roofers, Framers, Electricians

John Stith was on site after the Job Progress Meeting at the Board Office.

1. Work in Progress

- a. Masons were laying block on the second floor classroom wing of Area B, laying block in Area B tying into the Cafeteria walls and completing the exterior wall for the Cafeteria. Brick was being laid around Area D.
- b. Carpenters were installing hollow metal doors ahead of the masons in Area B.
- c. Roofers were preparing to install cover board over metal deck in Area D.
- d. Framers were installing jamb angles ahead of masonry work.
- e. Electricians were installing conduits in block walls as they were being laid by masons.

2. General Observations

- a) The weather was cloudy with a threat of storms. The week was warmer and drier than in the past leaving the site and building dry. The weather next week is expected to be warming with rain and thunderstorms possible later in the week.

John Stith arrived and reviewed the work completed since his last visit.

Doyle reported that the slab had been poured over a classroom wing in Area A. The masons will move next from the classroom wing in Area B to this wing. Another masonry crew is laying block in Area C to complete the work at the Cafeteria and also at the intersection with Area B. Another crew is laying brick around Area D. The insulator had sprayed the walls with foam insulation around Area D and a portion of Area A ahead of the brickwork.

The Skudo system still needs to be reinstalled over the main corridor.

Doyle reported that the erectors had installed steel roof joist and metal roof decking over several rooms in Areas C and D. These are ready for roofing.

The general trades contractor was installing hollow metal door frames ahead of the blockwork in Area B.

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Electricians were installing conduits as block walls were laid.

- b) New work visible from the office trailer includes the new slab edges over the classroom wing in Area A, the temporary wood railings around Area A and the blockwork on the second floor of the classroom wing at Area B. Until the rain came as I was leaving the site, the site was dry making it possible to do some grading.



- c) From the rear of the site, the window openings on the second floor of Area B are now visible. The exit stair is visible at the end of the wing. The exterior block will be covered with brick.



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- d) As the rear of the classroom wing transitions to the rear main entrance, work is progressing to tie this area into Area C including the Cafeteria and the Kitchen.



- e) From the rear of Area B, the Cafeteria is visible. Masons were laying block in this area to tie Areas B into Area C.



- f) To the other side of the Cafeteria, is the Kitchen and loading dock. Beyond that is Area D containing the music rooms. The exterior walls of Area D are being covered with brick over the spray foam insulation. These areas are one story tall allowing the brick to be laid to the full height.



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- g) Masons were laying brick at the front of Area D for the music rooms. The large opening are windows. The blank wall is the exterior of the PE locker rooms and storage.



- h) The administrative offices are on the first floor of Area A and will be covered with brick. The exterior walls had been sprayed with foam insulation. Metal angles are installed at the window openings to attached the windows and terminate the insulation. The foam is removed to attached the window sill flashing and repaired after the flashing is in place.



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- i) At the main entrance looking down the main corridor, several of the Skudo protection board top sheets were displaced. In some areas the top sheet is completely displaced. The slab should still be protected by the bottom layer, but the full system is needed to insure protection of the slabs to be polished. Another reason to make corrections is the undulating nature of the top sheets once the system has been forced to move by construction traffic.



- j) Where brick had been laid up to the window sills at the end of Area D, the brick had not been cleaned but I observed that the brick was in plane and the joints were even.



- k) Upon closer examination of this wall, I observed that the 1-3/4" wide brick cavity was filled either with mortar or foam insulation. The cavity must be open to allow for drainage and drying of the inner parts of the exterior wall. Mortar bridging can force water the in the wall toward the insulation and perhaps find a weak point where it would then enter the building. Doyle and Jerry, the masonry foreman, said that spray foam insulation foreman did not watch his installer closely enough. Jerry said that he would take corrective measures to make sure that the cavity was open in all areas. Note that as the cavity turns the corner it is more open.



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- l) At the front of Area D, the cavity was more open even though it was not the full 1-3/4" in width. It is important that the insulation is on average 3". Some variance is expected due to the nature of the spray foam insulation expanding.



- m) As was the case at LTES, the foam insulation had to be removed to attach outriggers to block for string lines and story poles. The mason contractor reported that they will use the same insulation material and sprayer device to make repairs. These repairs need to completely fill the holes in the insulation.



- n) A membrane through wall flashing is required at all places in the brick wall where water can enter the system such as at a window sill. The flashing carries the water to the face of the brick through weep holes or vents. For the flashing to work properly, end dams must be installed at both sides of the flashing. These are pieces of the membrane turned up into the vertical brick joint. Jerry said they he fully understands this and will install end dams at every location required. Before the brick covers the flashing, 3" of spray foam insulation must be applied to provide continuous insulation and vapor barrier.



- o) With the planks over the classroom wings in Area A, there are several places where MEP trades can be installing rough ins.



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- p) The walls for the second floor classroom wing are being laid and include grouted steel reinforcement, hollow metal door frames, plumbing piping and electrical conduits. Openings for ductwork are formed as the block is laid.



- q) Block walls opposite of the classroom wing are being laid up to roof level. These walls tie into the walls at Area C around the Cafeteria.



- r) Ground faced block is being laid at the Gym/firewall. This is the location of the large open stair in the middle of the building.



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- s) The topping slab has been poured over the concrete planks for the classroom wing in Area A that is closest to Area B. The edge form consists of two 2X4's and 2 spacers totaling about 4" in depth. The slab is consistently about 1/2" below the top of the form. The slab is indicated to be 4" thick on the plans.



- t) The rest of the second floor topping slabs are scheduled to be poured over the next two weeks.



- u) Ductwork stored on the floor was covered and ends of ducts were sealed with plastic.



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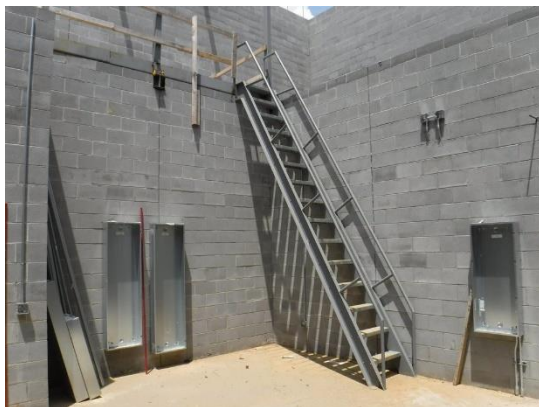
- v) Steel bar joists and metal roof decking has been installed over the Cafeteria.



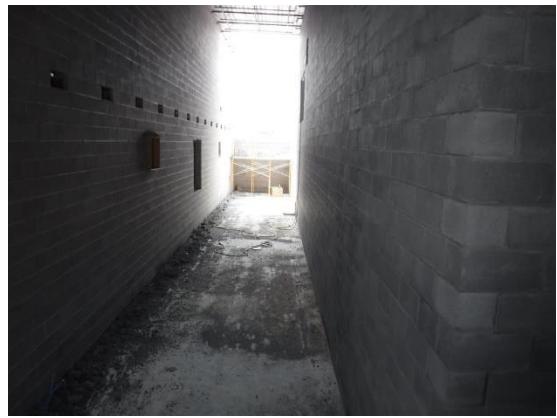
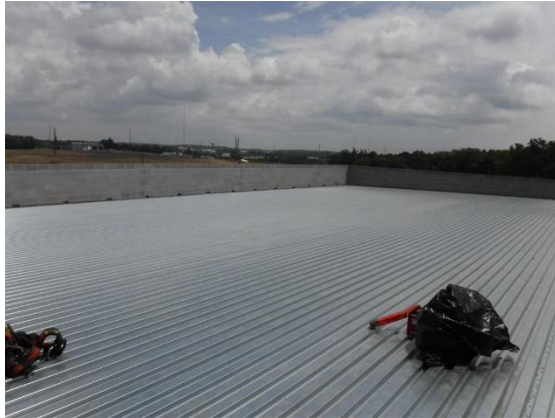
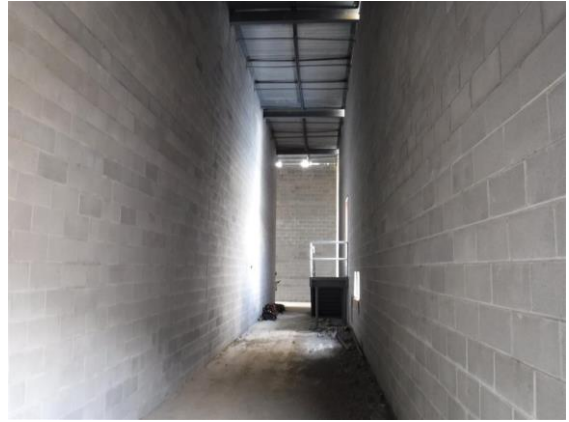
- w) Steel bar joists and metal roof decking has been installed over the Kitchen.



- x) The steel ships ladder has been installed in the Mechanical Room to provide access to the mechanical platform around the Gym and connecting to the platforms over the second floor areas in Areas A and B.



- y) The mechanical platform runs from the Mechanical Room into the space around the Gym. Stairs are located off of the platform to access low sloped roof areas over Area D. Roofers were preparing to start the low sloped roofing system installation.



- z) Roofing materials were stored on pallets in the Gym above the water covering the slab.



- aa) JRA is reviewing the detail for the block at the curtainwall window at the end of the stair in Area B.



- bb) STW is reviewing the routing of piping and the cable tray around the central stair beside the Gym.



3. Stored Material:

- a. Block, mortar and masonry materials.
- b. Hollow metal door and window frames.
- c. Plumbing piping and accessories.
- d. Conduits and electrical boxes and rough in materials.
- e. Reinforcing bars and wire.
- f. Storm sewer fittings.
- g. Mechanical and electrical equipment.
- h. Light gauge trusses, steel members and deck.

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4. Follow up items:

- a. Maintain the Skudo system so that it protects the corridor slabs.
- b. Clean mud off of steel, and reprime areas where the primer was scraped off of the steel.
- c. JRA is reviewing the wall detail at the curtainwall window at the stair in Area B.
- d. STW is reviewing the routing of piping and the cable tray in Area A near the stair at the Gym.

Follow up by:

☒ Architect, ☐ Owner, ☒ MEP Engineer, ☐ Structural Engineer, ☐ Civil Engineer
☒ Contractor, ☐ Other

Respectfully submitted,
Joseph Jones, AIA
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Cc: 201752.01, CA8