



Hardin County Early College and Career Center

Project Closeout Update

October 7, 2015

Entry Sign

Construction of the new entry sign is underway. Masonry work is nearing completion. Morel Construction is awaiting delivery of the stone sign.

Warranty Issues Follow-Up

The following list is a compilation of warranty issues noted by EC3 staff and Hardin County Schools.

11/12/14 Warranty Issues from Staff

11. Automotive Suite Fan Control Touch Pad (Room 214)

Morel to Review

Alternative Electric reviewed and was supposed to have replaced the switch. Morel to verify.

27. Additional Venting at Gas Storage (Rooms 240A and 240B)

Vents to be added to Doors E240A and E204B upon verification from gas supplier

SCB has contacted Mike Bell with Atlas and asked for pricing to provide an 18"x18" operable louver at each of the welding gas storage rooms.

Dan Robbins List

1. Door E240B was damaged by Knights Mechanical during change order work.

SCB/Morel reviewed following meeting. Piano hinge is sprung. Must be replaced.

Morel will to remove hinge, straighten, and rehang door. Morel to verify completion.

3. Shop Roll-up doors (Rooms 214 and 240) – Buttons do not work properly (must be held in)

Morel to review.

Overhead Doors was contacted by Morel and was supposed to have addressed. Morel to verify.



7. Air Compressor (Room 214B) – runs constantly

STW to follow-up with Knights Mechanical. Air compressor and lines to be checked for leaks.

Knights Mechanical has been on site and corrected wiring. Air compressor manufacturer has performed service call.

13. Drainage Corrections at Retaining Wall

Drainage corrections have been made with exception of punchlist that was forwarded by AEI to the subcontractor for some corrections/cleanup. Swale to be cut in to direct surface water to inlet.

Subcontractor hired by AEI to correct drainage is complete. Surface water has been resolved. However, groundwater seeping up through the pavement has been reported.

Roof Leaks

Please see the attached letter from Sherman Carter Barnhart regarding our observations and recommendations to correct the recurring, ongoing roof leaks. SCB is awaiting a response from Morel Construction.



October 6, 2015

Mr. Rick Clauson
Morel Construction
627 W. Main St.
Louisville, Kentucky 40202

Re: Hardin County Early College and Career Center
SCB Project No. 1309

Dear Mr. Clauson:

As you are aware, roof leaks have been an ongoing issue at the Hardin County Early College and Career Center since the building was completed in July 2014. Since that time, Morel Construction has made several attempts to address the roof leaks. However, after repeated attempts to identify the source(s), the roof leaks remain.

Sherman Carter Barnhart has made repeated inspections of the suspect high wall to low roof conditions and has made the following observations:

1. The parapet coping does not fit the parapet thickness. A sizable gap is present at the brick side of the parapet wall that is large enough for wind driven rain that collects at the bottom of the drip edge to be driven up and under the parapet coping and into the cavity. Per Detail B/A1.5, this coping was to be installed on a galvanized metal cleat at each face of the parapet. It is unclear if the parapet cap was installed according to the detail (on metal cleat at each face). **See attached Photo A.**
2. The installation of the cavity vents by the mason is poor and does not reflect basic industry standards. Large gaps exist around the cavity vents that allow wind driven rain to enter the cavity wall. At many locations, the cavity vents are doubled up while at other places, the cavity vents are not present at all. **See attached Photos B, C, and D.**
3. Refer to Detail E/A4.2. Self-adhered thru wall flashing with weeps at 16" o.c. was detailed at this condition. During construction, the detailed thru wall flashing was omitted by the contractor. Subsequently, a request was made to install a reglet flashing at this location. At that time Sherman Carter Barnhart cautioned Morel Construction that the reglet flashing was not equal to the detailed thru wall flashing and all responsibility for maintaining a water tight condition was the responsibility of the Contractor.

The installed reglet flashing was cut into the 4" cmu below the membrane flashing. Approximately 1" of the cmu remains exposed to the weather without any protection. This exposed masonry contributes to the introduction of the water to the wall cavity by essentially acting as a sponge that collects water from the face of the wall and allows it to enter the cavity below the flashing. **See attached Photo E.**

Repeated efforts to remedy the incorrectly placed reglet flashing with caulk have resulted in areas in which the membrane flashing that extends through the wall is caulked shut and the water is trapped within the cavity with nowhere to go until it overwhelms the flashing and enters the building below. At some of these locations, the cotton rope weeps are no longer present.

Given the wide spread issues associated with high wall to low roof condition, Sherman Carter Barnhart makes the following recommendations to resolve the recurring leaks.

Option 1

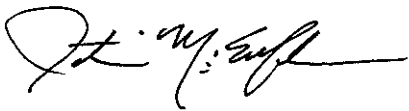
- a. Remove the existing parapet cap and install a parapet cap that conforms to the wall thickness on a continuous galvanized metal cleat as detailed.
- b. Remove the existing reglet flashing and install thru wall metal flashing as detailed. The flashing shall extend a minimum of 4" up the face of the ICF and shall be lapped per SMACNA standards.
- c. Remove cavity vents (high and low) and re-install in wall and tuckpoint around each location to eliminate all gaps.

Option 2

- a. Remove the existing parapet cap and install a parapet cap that conforms to the wall thickness on a continuous galvanized metal cleat as detailed.
- b. Remove existing cavity vents and weeps. Tuck point all voids in masonry wall.
- c. Provide membrane flashing as recommended by Tremco full height of masonry wall at all high wall to low roof conditions to maintain the roof warranty. Provide manufacturer's standard lap detail at membrane flashing below and extend new membrane flashing up and over full width of parapet under parapet coping.

Sherman Carter Barnhart recommends an immediate meeting with Morel Construction and all affected subcontractors on site to review the existing conditions and develop a plan of action. As you know, time is of the essence as winter weather will soon be upon us. Please advise as to when Morel Construction is available.

Sincerely,

A handwritten signature in black ink, appearing to read "J. McElfresh", with a stylized flourish at the end.

Justin McElfresh AIA, CID, LEED® AP
Project Architect

c: Nannette Johnston, Gary Milby, David Wyatt, Kenny Stanfield

PHOTO A



PHOTO B



PHOTO C



PHOTO D



PHOTO E

