



## **Radcliff Elementary**

### **Project Closeout Update**

August 7, 2017

#### **Exterior**

Bailey's Masonry has mobilized and the corrective plan of action is underway as review and approved by all parties. SCB has requested that regular photo documentation outlining findings and corrective action be provided by Bailey's Masonry. See Summary (as issued to Morel) below:

#### **Corrective Work Summary**

##### **Morel**

Per Wall Type "B" on Sheet A0.1 of the Radcliff MS Renovation – Phase One contract documents, the exterior side of CMU in exterior walls was to receive specified bituminous dampproofing. Additionally, General Partition Note P21 states "Concrete Masonry Units Installed at Exterior Walls Shall Receive Application of Specified Dampproofing On Cavity Face." This bituminous dampproofing was omitted by the mason. This omission has allowed the concrete masonry units (light weight units) that were used during Phase One construction to absorb moisture from the masonry wall cavity and become saturated resulting in failed paint systems on the exterior walls at Classrooms 147, 148, 213, and 214. SCB makes the following recommendation at those locations:

##### **Classrooms 147, 148, 213, and 214**

1. Remove existing brick at Type "B" walls (window infill)
2. Fill any gaps and or voids in CMU (once exposed) and install bituminous dampproofing as required by the contract documents.
3. Re-install brick at Type "B" walls (window infill) at Classrooms 147, 148, 213, and 214.
4. Re-stain new brick infill to match rear elevation
5. Remove and replace the perimeter sealant around the existing Type "C" Windows.
6. Remove existing paint at interior side of Type "B" walls and repaint to match adjacent finishes

Testing conducted by S&ME on behalf of Hardin County Schools has confirmed that other areas of window infill did not receive the specified application of dampproofing. However, presently there are no signs of water absorption at other areas of window infill (Type "B" walls) nor have failing paint systems been observed outside of the Classrooms identified above. It is SCB's opinion that Morel failed to meet their contractual obligation to Hardin County Schools. Other corrective work between the areas of infill at these Classrooms will be reviewed once exposed and repaired accordingly.

## Observations



Image 1

Existing CMU backup that was not impacted by previous renovation projects shows significant gaps and voids that do not reduce or limit the penetration of water within the cavity of the existing CMU wall. Bailey's Masonry will be filling all voids in the existing CMU wall prior to applying bituminous damp-proofing and reinstalling insulation and brick veneer.



**Image 2**

Another image of the existing CMU backup that was not impacted by previous renovation projects.





**Image 3**

Additional image of the existing CMU backup that was not impacted by previous renovation projects. SCB requested that the 6 ft (approx.) wide zones of original brick be removed so that any visual observations of obvious potential water infiltration areas could be addressed.



**Image 4**

CMU infill completed during the renovation of Radcliff Elementary did not have the bituminous damp-proofing installed at the new CMU as specified. Bailey's masonry has removed the brick and insulation to apply the bituminous damp-proofing at the CMU infill which was installed using light weight block that is more porous than the original CMU and therefore has the potential to wick moisture from the cavity unless the bituminous damp-proofing is present.