Heritage Engineering, PLLC

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11 May 2026

Re: Foundation and Anchorage Evaluation for Classroom Modular Unit
Cornerstone Montessori Christian Academy
4910 Springhill Rd. Bryant, AR
HE Project Number: 2026-0059

To Whom It May Concern:

Based on our review of the existing support system for the classroom modular/mobile unit located at the above-referenced project site, the current gravity foundation system is not considered a permanent foundation system as defined by the 2021 Arkansas Fire Prevention Code, which is based on the 2021 International Building Code (IBC). The existing support system consists of non-grouted CMU block piers bearing on plastic pans (See Pictures 1 and 2)



Picture 1



Picture 2

Per the intent of the 2021 IBC, a permanent foundation system is generally understood to be a foundation constructed of durable materials intended to permanently transfer gravity, lateral, and uplift loads safely to the supporting soil. Permanent foundation systems are typically required to extend below the applicable frost depth and consist of reinforced concrete, grouted masonry, or other approved permanent structural systems securely anchored to the structure and supporting soils. The existing support system does not meet this definition due to the use of non-grouted CMU block piers and the absence of frost depth foundations.

However, engineering analysis was performed on the existing gravity support system. Based on our review, the existing support system is considered adequate to support the applicable code required dead and live loads for the modular classroom structure, provided that additional CMU block piers are installed beneath the concentrated post load locations in a manner consistent with the existing construction, as indicated in Repair Plan S1.

At the time of our evaluation, no signs of significant settlement, instability, excessive movement, or loss of vertical load carrying capacity were observed. From a gravity loading and life safety standpoint, the existing support system, together with the recommended additional piers, does not present a life safety concern for continued occupancy of the modular classroom under the applicable code-required dead and live loads.

While the existing gravity support system is considered adequate for vertical loading, the current anchorage system is inadequate to safely resist the code required wind loads acting on the structure. In order to provide the required uplift and lateral resistance during a design wind event, new screw down ground anchors and associated tie down connections should be installed in accordance with the recommendations provided the Repair Plan S1.

Provided that the recommended anchorage improvements and additional support piers are installed, the modular classroom structure should be considered safe for occupancy. Although the support system would still not qualify as a permanent foundation system under the 2021 IBC, the recommended improvements adequately address the identified life safety concerns associated with gravity and wind loading.

This evaluation is limited to the observations and information available at the time of review and does not constitute certification of a permanent foundation system.

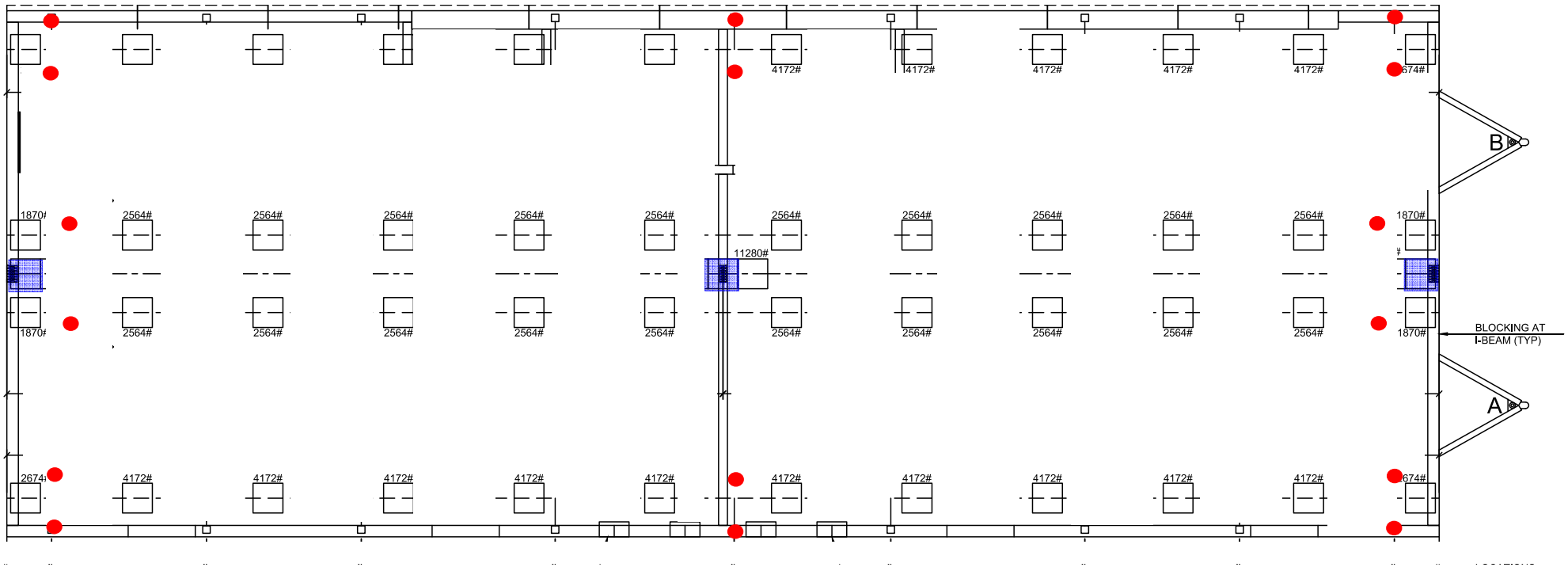
Please contact our office if you have any questions or require additional information or assistance.

Respectfully submitted,



Eric Warford, PE
Structural Engineer
Heritage Engineering, PLLC

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LEGEND:

- NEW CMU Stacked Piers_Match Existing Style of Construction (3 LOCATIONS)
- NEW TIE DOWN SCREW ANCHRS_TENSION CAPACITY = 2200 LBS (16 TOTAL)

Recommended New Piers and Tie Down Anchor PLAN

05-11-2026

S1