

Kaleidoscope Campus Structural Review - Original French Academy

<http://www.dps61.org/cms/lib/IL50010903/Centricity/Domain/4/Kaleidoscope%20FINAL%20Evaluation%20Observation%20and%20>

FROM: Klinger & Associates, P.C.

TO: Dr. Mike Curry, COO @ 400 E Cerro Gordo, CC Kent Metzger

Introduction:

"We were informed that there were recent concerns with the structural integrity of the original building's exterior walls and parapets. The focus of our inspection and evaluation was limited to the exterior walls and parapets of the Kaleidoscope School building." (*Building originally called "New Wood Street School". Renamed French Elementary School in 1970s/80s*)

Later notes: "the possibility exists of areas of structural deficiencies that were covered up or were not identifiable during our visual inspection."

Final Recommendation:

"restrict access to the east portions" of original 3-story building and adjacent 2-story building.

"The Klingner recommendations above are assuming the Kaleidoscope building is going to be repaired and stabilized for continued use as an elementary school building in the future." (*note: The recommendations referred to are BELOW in the notes here, but ABOVE in KA's document*)

Findings, Exterior Walls:

1. "No signs of settlement cracking in the exterior walls or exposed portion of foundation of the 3-story building was observed. The only signs of brick or mortar joint cracking observed were near deteriorated window lintel bearings or near the tops of the 3-story walls at the corners or wall bump-outs."
 - "most of the third-floor window lintels have signs of pack-rusting and deterioration"
 - exterior walls of original building are loadbearing brick walls
 - "The portions of brick that have not been tuckpointed have mortar joints that are deteriorated."
 - **Recommendation:** Repair or replace "all pack-rusting deteriorated window lintels and tuckpointing all deteriorated brick mortar joints."
2. East & West walls "showed signs of bowing and leaning out" "near the 3rd floor ceiling elevation going up."
 - "There is more wall bowing and leaning on the east wall than the west wall."
 - **Recommendation:** "partial demolition and rebuild of the top of the east wall and parapet." Use "tie-back anchors to secure the east exterior wall back to adequately braced and blocked roof framing." For West wall, no demolition, and use "tie-back anchors to secure the west exterior wall back to adequately braced and blocked roof framing."
3. "we also observed a few locations of exterior wall deterioration on the 2-story east building addition"
 - "mortar joint cracking that stair steps near the wall corners and lintels bearings"
 - Lintels with "pack-rusting deterioration that had cracked the brick veneer at each end of the lintel bearing"
 - **Recommendation:** Repair or replace "all pack-rusting deteriorated door opening lintels in the east addition exterior walls and roof top screen wall and tuckpointing all deteriorated brick and cmu mortar joints." Recommends "galvanized steel lintels" to prevent future "pack-rusting deterioration."
4. Parapet damage & water damage
 - "The inside face of parapet appears to have been coated and painted to attempt to prevent moisture infiltration of the parapet"
 - "The coating and paint on the inside portion of parapet is deteriorated and missing in numerous locations and appears to be allowing moisture to penetrate the parapet walls"
 - "Moisture damage to the drywall near the top of wall or ceiling tiles near the exterior wall in multiple third floor classrooms was observed."
 - Worst moisture damage near "the roof drain scuppers on the north parapet."
 - "Cracks were observed on the interior side of the north-east and north-west parapet corners."
 - "The parapets are leaning outward and bowing outward in multiple locations"
 - **Recommendation:** See #2 above "partial demolition and rebuild of the top of the east wall and parapet." And use "tie-back anchors on both the east exterior wall and west exterior wall to tie the walls back to adequately braced and blocked roof framing."

Attic Space

1. "The roof decking and framing was observed to not be attached or tied to the east and west walls or parapets"
 - 3.5 inch gap "near the middle of the east wall" between the interior face of the wall and the roof framing & wood decking.
 - Wood deck & roof framing has "signs of water deterioration"
 - "A few locations of pocketed roof framing on the south end were observed to have steel straps or shims added in an attempt to prevent the wood framing from pulling out of the pocket."
 - "Previous attempts to sister some of the water deteriorated roof joists was observed near the north wall bearing."
 - **Recommendation:** See #2 & #4 above. And secure "the pocketed connections of the north and south wall roof framing with straps or brackets to prevent future pull-out of the pockets." Replace or repair "water deteriorated portions of roof framing." Replace "waterproofing on the interior side of the roof parapets."