

City of East Ridge Department of East Ridge Fire Rescue Division of Building/Codes

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Hamilton County Schools 3074 Hickory Valley Rd Chattanooga, TN. 37421

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We received a call from a citizen concerned about the East Ridge High School Concrete Stadium. We had followed up with an inspection of the facility and are reporting on our findings. We have attached pictures to this letter to document our concerns with the possible structural issues and life safety aspects with the stadium. We are requiring a structural engineer to review the conditions of the stadium for the present dead and anticipated live loads imposed on the stadium structure. We are requiring the structural engineer documentation and any testing reports to be submitted to our office.

Structural concerns are as follows:

- The stadium seating area concrete block supporting columns show cracking through the blocks and continuing down the face of the columns.
- There is differential settlement throughout the stadium that may be normal with the age
 of the structure, but some repairs completed on the precast joint areas have also settled
 breaking the repair.
- Some large cracks exist in the walls below the seating areas; these are the exterior walls of the team locker room and coach's office.
- The precast seating areas have degraded areas throughout the stadium, the precast thickness is approximately 1 3/4 " thick. The degraded areas show the welded wire mesh which has rusted away.
- There are some cracks in the precast seating concrete, thus possibly leaving only the welded wire mesh as the structural element keeping these areas from failure.
- The welded wire mesh throughout the precast elements of the stadium may be degraded in the encapsulated concrete due to the absence of a concrete sealing product installed.
- The structural steel column assemblies do have rusted areas possibly compromising the integrity of the designed load capabilities.

The Life Safety items include

- Concrete steps degraded and spalling, previous repairs are spalling and crumbling making walking surfaces uneven and unsafe for occupant use
- Chain link fencing at top of stadium seating area- the lower portion of the fencing is loose and is easily pushed away from the structure creating a serious fall hazard.
- The chain link fence post is attached to the "Press Box" block wall with a masonry anchor. The anchor is loose, not secured and close to pulling out. This is on the left side of the structure as looking at it from the field.
- Some of the metal plates installed over existing holes in precast concrete seating area are not secured and can be removed or displaced during use.
- The lower "cheerleader area" railings are insufficient to protect against a fall. This area has been built up with lumber causing the front edge barrier to only be 22" high.
- The "Upper Press Box" is accessed by a ship ladder assembly with partially open railings, and unprotected sides. The ships ladders are loose from the structure.
 Additionally the deck areas outside of the "Upper Press Box" railings are insufficient to protect against a fall. The deck areas have rotten wood visible at the rail connection areas.
- The "Upper Press Box" walls have sheathing that has rotted away from the studs in some areas. We believe the wall to be compromised due to the rotten wood.

In conclusion, we believe the stadium to have possible structural and present life safety issues that need to be addressed and corrected to maintain the safe operation. As noted we are requiring a Structural Engineer to report on the structure, and the Life Safety items to be corrected before use of the stadium. We want nothing more than the continued success of the schools throughout our area and the safety of our community.

Please let us know if you have any questions, we would be glad to help with anything possible.

Thank You,

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