

November 16, 2023

Mr. Eric Augst, Special Projects Designer
City of Key West
1300 White Street
Key West, Fl. 33040

Re: Martin Luther King Pool-Structural Shoring Inspection 11/16/2023
304 Catherine Street

Dear Mr. Augst,

On November 16, 2023 we conducted a follow-up monthly re-inspection of the concrete shoring system and the spalling concrete. The purpose of the inspection was to inspect the shoring, ensure that the shoring is secure and snug to the wood blocking, and to continue monitoring the spalling concrete.

As noted in the prior inspection on 10/19/2023, the music room was again flooded due to heave rains the day before.



Flooded music equipment room.



Music Room

Location of music room beam crack. Crack width no change from last inspection at 0.185"

Pole shores were snug and no adjustment was needed.



Music Equipment Room Header

The initial crack measurement on 9/28/2023 was 0.25".

During the 11/16/2023 inspection the crack measurement was slightly wider at 0.255"

Music Room



Front Entrance Roof



Front Entrance Roof

Front Entrance Roof

Concrete is beginning to delaminate from underneath the exterior front entrance roof slab.

The crack width was measured at 0.06"

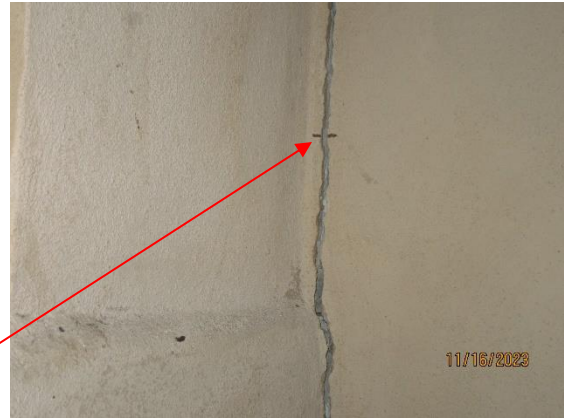
This area of delaminating spalling concrete appears to be a progressing new development and should be repaired as soon as possible, or access restricted.



Spalling concrete at front of stairway is literally about to fall off the wall and should be removed immediately.



Left side wall at pool entrance. Spalling concrete is delaminating from the wall.



Concrete block wall in large enclosure at entrance to Men's room that butts up to exterior wall. An initial measurement of the crack was made this inspection which was 0.27". Slight adjustment needed for pole shores in this room.

The crack at the Women's room entrance ceiling was measured again and remained at 0.085"

The pole shores in the Women's room were checked and were snug.

The crack in the Women's dressing room ceiling was measured again and remained at 0.07"

A new development is the delamination of spalling concrete above the Women's room water closet stalls and shower area. This area should be repaired immediately or access restricted. The dressing area is currently access restricted.



Ceiling above Women's room water closet stalls



Spalling concrete at entrance to men's room is progressing. Loose concrete was removed during the inspection. **This area should be repaired immediately or access restricted.**

Men's Room Entrance Ceiling



Men's Dressing Room Ceiling



Spalling concrete is delaminating from the ceiling in the Men's dressing room. This area should be repaired immediately or access restricted. The area above the water closets and showers does not exhibit delaminating concrete at this time.



Spalling concrete delaminating from wall in Life Guard room. **This area should be repaired immediately or access restricted.**

Life Guard Room



Crack on back wall tie beam of life guard room is progressing.

Life Guard Room

During the 9/28/2023 inspection it was observed that the concrete spalling of the slab above the Women's room entrance and dressing room had deteriorated further since the structural assessment report was completed on 3/31/2023 and the installation of the shoring on 8/31/2023. Concrete was further delaminating from the reinforcing steel and it was determined that the spalling concrete presented a hazard to the public and access to the women's room dressing room was immediately restricted. See email recommendation from Reynolds Engineering to the City of Key West on 9/28/2023. On 10/19/2023 it was confirmed that access to the area is restricted at this time and until repairs can be made.

Mr. Eric Augst
November 16, 2023

During this inspection additional delamination was observed above the Women's Room water closet stalls, Women's room shower area, and Men's room entrance and dressing room. These areas should be repaired immediately or access restricted.

As stated in a prior report, the shoring in place is a temporary measure that has stabilized the structure to allow the building to be safely occupied until concrete repairs can be made. The shoring is not a long-term solution to allow the building to remain occupied. This opinion of safety relates only to the structure and does not imply there are no other conditions at the building that affect the health and safety of the public and employees such as peeling paint, and moisture and possible presence of mold and mildew. The roof leaks, moisture and rain migrate through the numerous cracks and openings in the walls, and heavy rain runoff floods the 1st floor. These issues are further discussed in the Structural Report dated 2/21/2023.

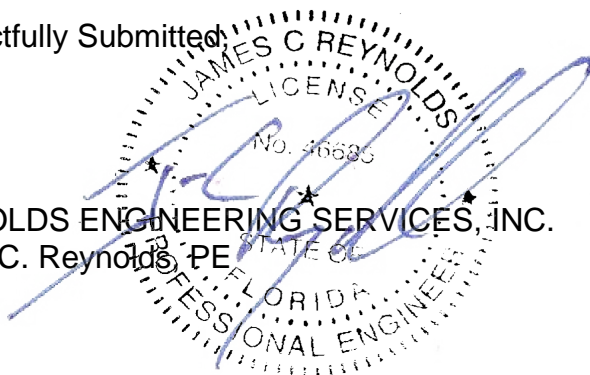
Structural hazards that continue to develop include the ongoing spalling and delamination of loose concrete throughout the building that will fall off walls and ceilings that could injure someone. As noted above, the loose concrete in the Lifeguard room should be removed immediately and the area beneath should be cordoned off to prevent access.

If repairs to the Women's dressing room concrete ceiling cannot begin by the end of December, 2023, plans should be made to add additional shoring, and now that the women's dressing room is closed to the public, the existing shoring could be re-oriented to more efficiently and effectively support the ceiling slab. Partition walls with lockable doors should also be installed to more securely prevent access to the Women's dressing room. Further, if a commitment by the city cannot be made by the end of April 2024 to repair the concrete, plans should be made to secure the entire facility and completely shut it down to public access.

The next monitoring inspection will be scheduled for the week of November 13th.

Respectfully Submitted,

REYNOLDS ENGINEERING SERVICES, INC.
James C. Reynolds, PE



Cc: Perez Engineering