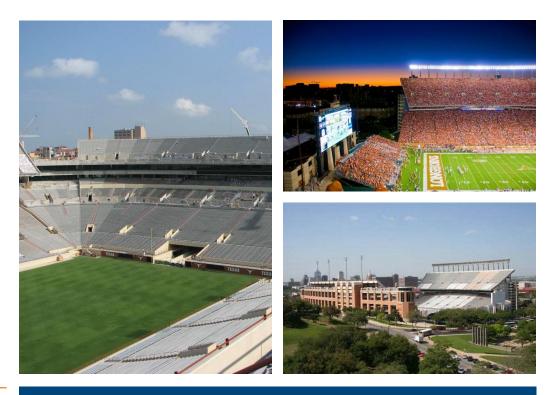
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PROJECT PROFILE

Darrell K. Royal - Texas Memorial Stadium

Structural and Architectural Condition Assessment and Repair Design | Austin, TX



CLIENT

Heery International, Inc.

BACKGROUND

Darrell K. Royal-Texas Memorial Stadium is an open-air facility that is the home field of the Texas Longhorns. The structure was originally constructed in 1924. Several major additions and renovations have been implemented since the original construction. The structural framing consists primarily of castin-place and precast concrete. Concerns related to this eighty-year-old facility included vibration in the upper deck during games, stability of deteriorated structural and architectural elements, the integrity of existing waterproofing systems, and the design of some substantial renovation/expansion items.





SOLUTION

In order to address vibration concerns, we developed and implemented an instrumentation program to monitor crowd-induced vibrations of the western portion of the upper deck stands. Using data obtained from the instrumentation, we determined that the most extreme movements occurred while music was being played after the Longhorns scored touchdowns and that these movements posed no structural hazard. We also performed a detailed survey of problematic structural and architectural components and developed appropriate repairs where necessary.

During several major renovation and expansion projects, we provided additional consulting services that were primarily related to waterproofing issues.



ENGINEERS Architects Materials scientists