

## MEMORANDUM

**TO:** Kitty Frazier & Michael Borders  
**FROM:** Jennifer Salyer  
**DATE:** June 9, 2023  
**Barge PROJECT NO.:** 36596-01  
**RE:** Riverbend Park – Phase 1: Design Modifications

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During the design of the Riverbend Park Phase 1 project, the City contracted with S&ME to conduct soil borings and prepare a report. 12 borings were taken along the trail, 1 at the plaza, 1 at the boardwalk and 1 at the fishing pier location. The design was based on the recommendations provided in the geotechnical report, and Barge consulted with S&ME throughout the design to check and verify the proposed design based on the available information.

The contractor encountered material that differed from the initial geotechnical report in the area of the boardwalk and fishing pier. After clearing the area for the boardwalk and installing a majority of the concrete pier foundations, 4 of the piers started to shift. This was exacerbated by heavy rains that began to wash out the embankment and behind the pier foundations. This resulted in the need to develop an alternative design for the boardwalk to stabilize the area. The final solution was to replace the section of boardwalk above the flood elevation with a concrete retaining wall and concrete sidewalk in lieu of the pier foundations and timber boardwalk. A rock seam was also encountered in this area affecting the pier foundations.

The original foundation design for the fishing pier was to install driven wooden piles with brackets that included rollers allowing for the pier height to adjust based on the water elevation and connected to a hinged gangway. Per the design documents, the fishing pier foundations were a delegated design to be provided by the manufacturer. After encountering rock at a shallow depth, the original driven pile design was no longer viable. The manufacturer submitted an alternative fishing pier design; however, they did not provide the foundation design. Due to the project schedule, Barge provided additional design services to prepare 2 foundation alternatives for the contractor to provide pricing.