

Water Treatment Plant



Ground Improvement – Installing Aggregate Piers

PROJECT OVERVIEW

A regional water treatment plant recognized that the concrete wall slope in one of their levees was experiencing a failed slope due to a crack in the concrete. Water treatment plants have levees surrounding their large tanks that assist in water containment. A crack in the concrete floor would prevent one of the levees from properly containing the water, exposing the foundation to leaks.

Replacing the concrete wasn't an option because the slope would continue to fail, and the client would have to cease operations until they fixed the problem. The client reached out to CNC Foundations to provide a permanent solution to provide a permanent solution to resisting future slope failures and to allow for the concrete slope to be repaired so the plant could resume operations quickly.

OUR SOLUTION

We used helical piers to provide permanent slope stability because they provide high-capacity capabilities and offer instant tension resistance. Working in conjunction with a concrete contractor, we installed a grid pattern of helical piers in a W formation and tied the pattern into the new concrete for slope stabilization. Our turnkey solution allowed our internal team to offer a quote in just three days, and we were able to start installation in under one week. We retained the assistance of a concrete contractor and were able to complete the installation of the helical piers in just over two weeks.

SOLUTION AND RESULTS

CNC Foundation's turnkey solution kept the process on time and within budget. Because of our rapid response and efficient installation, the plant resumed operations in under one month. Our permanent solution will ensure the levee slope remains stable and will prevent additional cracks from forming on the concrete slope.

Project Details

SECTOR Civic & Cultural

LOCATION Missouri

SERVICE Helicals

SOLUTION(S)

Bearing Capacity / Settlement Control

APPLICATION(S)

Helical Piles

