

Deborah De Lima

Geotechnical Engineer with a degree from Merrimack College in Massachusetts. Based in Orlando, FL, she has been a member of the Forensic Engineering group for the past three years, where she oversees investigations into structural failures, focusing on design flaws, material deficiencies, and other contributing factors. Her work includes performing and reviewing engineering analyses such as slope stability, settlement, and bearing capacity calculations, as well as assessing soil suitability for foundations and excavation support. She also conducts rock and soil evaluations and considers environmental factors such as weather patterns and terrain conditions in her assessments.

In addition to her civilian role, Deborah has served for seven years as a reservist and continues to serve with the U.S. Army Corps of Engineers, specializing in horizontal construction.

St. Petersburg Pier – Optimized Pile Design Using SPT Borings and PDA Testing

Thornton Tomasetti collaborated on the St. Pete Pier project to optimize the originally conservative pre-cast concrete pile design. By analyzing SPT boring data and incorporating real-time PDA testing results, the team refined the foundation design calculations, leading to a more efficient and cost-effective solution that reduced both construction time and costs.