



Earnest Commercial Construction Installs (24) Helical Piles as Deep Foundations with Challenging Limestone Issues for a New House in Pahokee, FL

March 2025



BK Earnest, LLC
Helical Pile Contractor
Servicing All of Florida
(407) 383-1019
Bob Earnest - rearnest@bkearnest.com
<https://bkearnest.com/home>

Project Name & Location:	Single Family House - Pahokee, FL
Project Date:	March 2025
Project Type:	Helical Pile Deep Foundations
Helical Pile Installation Contractor:	BK Earnest , - Oviedo, FL
General Contractor:	Assist2Build - Middleburg, FL
Geotechnical Engineers:	Intertek, Jose M. Gomez, P.E. - Tampa, FL
Structural Engineers:	Royal Engineers & Consultants, Beau J. Tate, P.E. - New Orleans, LA
Helical Piles Specifications:	(24) 2.875" Round Shaft Helical Piles - with 10", 12", 14", Helix Bearing Plates - New Construction Pile Caps - All Galvanized
Soils & Embedment Depth:	Very Loose Muck with an Underlying Limestone Layer at 8 ft.
Project Timeline:	(2) Weeks Due to Delays for Testing & Design Modifications
Helical Pile Manufacturer:	Helical Anchors, Inc. - Supplied by Patriot Foundation Systems

Project Overview

Geotech testing revealed very loose muck with an underlying limestone layer at 8'. We were asked to perform (2) helical pile installations to determine if the piles could embed sufficiently into the broken limestone.

This testing was installed on February 20th and penetrated to 21' reaching a torque above 8,000 ft. Lbs.

Production began on March 17th, but only about 1/3 of the piles penetrated the limestone, with 2/3 of them only achieving tip embedment to the first helix. Engineering then requested compression load tests to 125% capacity, which was performed on March 25th. One test was successful, while the other test resulted in a reaction pile pullout at 90%. Engineering then decided to install an additional 11 piles, which was completed on April 7th.

