

Gandy Self Storage

VIBRO STONE COLUMNS and COMPACTION GROUT PROJECT

Project

The project is a new self-storage facility on W. Gandy Boulevard in Tampa, Hillsborough County. The structure is a 5-story storage facility with associated parking and drive areas. The site consists of an approximate 0.62-acre. The site is bounded to the north by trees and a creek, to the west & east by commercial property, and to the south by West Gandy Boulevard. Due to the presence of very loose soils at depths between 20 and 40 feet below grade within the borings along the western extent of the building, a pre-construction Compaction Grout (CG) program was performed within this area. Additionally, the client chose to also use a ground improvement program of Vibro-Replacement Stone

Challenge

- Overhead power lines
- Limited access within the tight, roadside site requiring MOT
- Limited movement around the site, due to neighboring commercial properties
- Delicate installation techniques along the north creek

Solution



Helicon followed the Compaction Grout (CG) parameters, provided by the Geotechnical Engineer of Record, during the installation. Our crew installed (21) grout injection points to approximately 40-45 feet. Helicon also worked alongside the general contractor & the geotechnical/structural design teams, to develop a site-conscious Vibro-Replacement design submittal. The VSC Program was designed to meet the design load criteria of 6,000 psf allowable. Helicon's VSC crew worked approx. 10-hour shifts for six days a week, in order to meet the client's critical path schedule. Efficient planning & coordination was key to overcoming the challenges & limitations. (220) Vibro-Replacement Stone Columns (VSC) were installed from site grade to depths ranging from 15-ft to 25-ft. Helicon collaborated with the Geotechnical Engineer of Record throughout the work and confirmed all recommended criteria were followed. The CG & VSC work was successfully completed in just (10) days and finished on-time and within budget.

Owner: Gandy Self Storage

Contractor: Plaza Construction

Engineer: ECS Florida

Market: Retail

Solution: Ground Improvement

Services: Vibro Stone Columns & Compaction Grout