Subsurface Constructors

Ground Improvement

North Charleston Creative Arts Elementary



In 2011, the Charleston County School District established the North Charleston Creative Arts Elementary School, a partial magnet school to serve the students of North Charleston. Shortly after the school opened, the district opted to build a new facility, but the chosen site required extensive ground improvement work. Subsurface Constructors designed and installed 1,625 vibro stone columns for liquefaction mitigation, delivering a maximum bearing pressure of 3,000 pounds per square foot. The site consists of clean sands and silty sands at a depth of about 30 feet.

Project details:

Owner: Charleston County School District
Geotechnical Engineer: S&ME
General Contractor: Hill Construction
Structural Engineer: ADC Engineering
Services Provided: Ground improvement, stone columns
Year: 2014
Location: North Charlestone, South Carolina