Soil Work Finalized for Belleville Apartments

THE PROBLEM

CNC Foundations' Team recently completed ground improvement to support a new six (6) story multi-family, mixed-use building in Richmond, Virginia. As with most urban area projects, this one had numerous challenges such as urban fill, overhead power lines, and an aged neighboring brick building with zero lot line issues. Not only did the new parking structure and building need an increased bearing capacity, the soil conditions noted in the Geotechnical Report would lead to long-term total and differential settlement issues without specialized foundation support.

OUR SOLUTION

CNC Foundations was engaged by the General Contractor to evaluate ground improvement options to densify and reinforce the loose sands and silts. Ultimately, Aggregate Piers, also called Vibratory Stone Columns or VSCs, were selected by CNC Foundations' Engineering team as the most effective option to support this structure and to meet the Structural Engineer's design criteria.

The Aggregate Piers/VSCs were designed to increase the bearing capacity as well as limit total and differential settlement.

RESULTS

Our design and installation allowed for an efficient project schedule and sequence because CNC Foundations utilized our direct-push bottom feed method of installation. As a result of using this method, limited spoils generation prevented excess material handling, and it allowed the client to improve their construction schedule as well as minimize extra site grading cost. CNC Foundations provided load tests and computerized pier installation logs to successfully closeout this project within 72 hours of our completion.

1ST CHOICE