

## 138kV-230kV Fulton Cut Replacement Design-Build

## Project Owner: JEA

**Client:** Pickett & Associates

Markets: Utilities

## **Project Profile:**

The site for the subject project was located along the north and south bank of the St. Johns River in Jacksonville, Florida. The Northbank portion was located south of William Mills Street on Blount Island. The Southbank portion was located west of Reed Island Drive. This project included the replacement of lattice towers supporting the transmission line to increase clearances of six existing overhead 138kV and 230kV transmission circuits. The project also included the complete replacement of these towers, foundations, and all associated conductors/wires. We performed the geotechnical exploration to evaluate the general subsurface conditions within the proposed drilled shaft foundations, and to provide recommendations for foundation support and design. To explore the subsurface conditions within the area of the proposed structure, we located and performed 12 Standard Penetration Test borings, drilled to depths of approximately 75 to 100 feet below the existing ground surface. Split-spoon soil samples



recovered during performance of the borings were visually described in the field and representative portions of the samples were transported to our laboratory for further testing. We performed quantitative laboratory testing on selected samples of the soils encountered during the field exploration to better define the composition of the soils encountered and to provide data for correlation to their anticipated strength and compressibility characteristics. The laboratory testing determined the percent passing US No. 200 sieve (percent fines), natural moisture content, Atterberg Limits, and organic material contents of selected soil samples.

Services: Geotechnical Engineering