



CASE STUDY: UMA worked two shifts to install 304 micropiles to support a fabrication facility addition for a manufacturer in Goose Creek, South Carolina.

MICROPILES

THE PROJECT

UMA ended up securing two of the three phases of the addition in November 2019, including an addition to the fabrication building (Building F) and an expansion to accommodate the massive turntables used by the manufacturing facility (Building J). UMA's design-build skills were unexpectedly tested when its work was more than half-way completed. The contractor was informed that an additional four columns in the middle of the building would require support.

THE CHALLENGE

This project required a substantial amount of micropiles to be installed in challenging soils at a high production rate. The first phase, Building F, contained 290 piles, and Building J contained 14.

The Customer
Undisclosed
Manufacturer

Location
Goose Creek,
South Carolina

Type
Industrial

**Date of Project
Completion**
February 2019

Interesting Fact
UMA drilled through a unique soil formation comprised of seashells, organic matter, and sand referred to as Cooper Marl, which is only found on South Carolina's Lowcountry Region.



CASE STUDY

THE SOLUTION

UMA worked with general contractor Fessler & Bowman, Inc. and the owner's engineer to select a design-build deep foundation system. A 7-inch Outside Diameter (O.D.) casing was installed the full length of the micropile for structural capacity, and the bond zone was pressure grouted through the casing. A 14"x 14" x 2" plate was attached to the top of each pile with a non-structural bar and nut and embedded in the structural concrete slab.

THE RESULTS

UMA had completed 304 micropiles by the February 2019 deadline. The team worked a double shift, deployed its fleet of specialty foundation equipment, and tapped into its past success working with the unique Cooper Marl Formation. The result was a strong foundation that allowed this global manufacturer to increase production and further stimulate the economy.



8815 Neville Road, Colfax, NC 27235 | P.O. Box 1070, Kernersville, NC 27285
o- 336.992.0746 f- 336.996.8573 team-uma.com

