CASE STUDY

Atlanta, GA



CANTSINK™
SUPPORTING INNOVATION



Installation Challenge for Ourdoor Urban Stairway

Helical Piles Ideal for limited Access and Steep Grade

SITUATION

Stanley Martin Homes needed a foundation for a new staircase leading from their development down to the Atlanta BeltLine. The stair alignment ran down a grade on a tight urban site, leaving very little room to move equipment around. Several pile locations could not be reached by any machine at all.

The foundation still had to meet the engineer's requirement of 25 kips per pile, and the work had to be completed without disturbing the surrounding finished areas or the busy BeltLine corridor nearby. Conventional options were a poor fit. Drilled piers or poured footings would have meant bringing in larger rigs or concrete trucks, plus excavation, spoils removal and cure time on a site with almost no staging space.

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SCOPE OF WORK

To work within the access limits, Cantsink used two installation methods:

•MT85 compact track machine: used wherever it could physically reach the pile location. Its small footprint let the crew work along the narrow stair alignment.

•Hand-held drive unit: used for the piles the machine could not reach. The crew installed these piles by hand-held torque drive, with the same torque monitoring used to verify capacity.

ANCHOR SYSTEM

The crew installed 16 piles for an average of roughly 23.4 ft per pile. Each pile was advanced until it reached the torque needed to meet the engineer's 25-kip requirement. Every pile location was reached, including those inaccessible to machinery, by combining the MT85 with hand-held installation. There was minimal disturbance to the site and the surrounding BeltLine area. There were no excavation spoils or concrete cure delays, keeping the stair construction on schedule.

RESULT

Because helical piles are installed rather than excavated or poured, there was no spoils removal, no concrete delivery and no cure time. The staircase framing could move forward as soon as the piles were in and capped. Helical piles solve foundation problems on tight, sloped, urban sites. Small equipment and hand-held units can reach places that drill rigs and concrete trucks cannot, and torque-verified capacity gives the engineer and builder confidence in every pile. For builders like Stanley Martin Homes working in Atlanta's dense infill and BeltLine-adjacent areas, helical piles offer a fast, clean and verifiable foundation option.