

# MICROPILES



## COMMON USES:

- To provide pile foundations where access, geology or environment prevent the use of other methods.
- To support structures affected by adjacent excavation, tunneling or dewatering activities.
- To provide a fast, effective alternative to more traditional underpinning methods.
- To replace deteriorating foundation systems.
- To provide extra support for structures during renovation.

**N**icholson Construction Company has built its business and reputation on its ability to support and retain structures. For more than 30 years, Nicholson's high-capacity micropiles have been providing foundation support for new and renovated structures. Nicholson micropiles cost-effectively replace and strengthen deteriorated foundation systems, provide extra support during renovation, support adjacent structures during excavation and support new structures.

Micropiles are high-capacity drilled piles usually in the range of 5 to 12-inch diameter. Pile depths can extend to 300 feet and achieve working loads over 200 tons, depending on pile size and ground conditions. Reinforcing elements such as high strength steel bars are secured in place with durable cement grout.

In general, micropiles are applicable when there are problems with using conventional deep foundation systems like driven piles, drilled shafts, or augercast piling. These problem conditions include: karstic limestone geology, natural or manmade obstructions, sensitive ground with adjacent structures, and limited access/confined spaces. For example, micropiles are commonly the preferred foundation choice in the challenging urban areas that feature mixed fills, nearby buildings and difficult access.