



**ROTERRA
PILING**^{LTD}

A Name You Can **Build On**



BORED PILING

Bored piling is a method that involves boring a circular hole into the ground, installing steel reinforcement and filling the bore hole with concrete to form a pile. Boring is carried out to the required depth by means of a purpose-built hydraulic drilling machine. We're proud to offer Soilmec drilling rigs for our Bored piling projects.

We have extensive experience in drilled, cast-in-place piling and can handle any project size. Our large and technologically advanced equipment provide straight shaft piles, belled piles, and caissons. High capacities can be achieved with single piles through the use of bellings, which expands the base of the pile up to 3 times the diameter of the shaft.

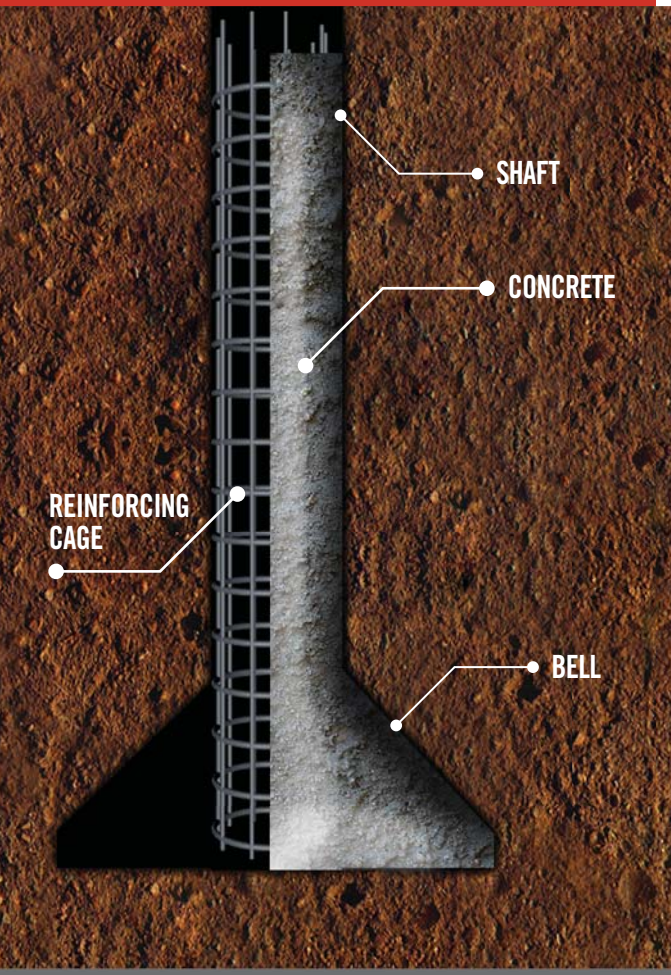


Bored pile foundations are suitable for all types of soil conditions - and compared with conventional driven piling methods, bored piling activities generate less noise and vibration. We work to collaborate with our customers to determine if this type of piling is the most economical, given the proximity to concrete and the project conditions (soil profile and pile loads).

Contact Roterra Piling today for all of your foundation needs. Our experts can help you with pile feasibility, design, budgets, execution plans, load testing, pile analysis, fabrication, and installation. Roterra's team are dedicated to assisting you in a timely manner.



P: 780.948.8556 F: 780.948.8657 | roterra.ca | info@roterra.ca



BORED PILE ADVANTAGES

- ➔ Length can be readily varied to suit varying ground conditions
- ➔ Soil removed in boring can be inspected and if necessary sampled Or in-situ tests made
- ➔ Can be installed in very large diameters and very long lengths
- ➔ Belling provides large end bearing capacities economically
- ➔ Material of pile is not dependant on handling or driving conditions
- ➔ Low noise and vibration installation
- ➔ Can drill into hard rock
- ➔ Able to carry very high load / shear / moment capacity

DISADVANTAGES

- ➔ Significant spoils are generated that need to be handled, adding costs
- ➔ Susceptible to "waisting" or "necking"
- ➔ Belled piles cannot be formed in cohesionless materials
- ➔ Reliance and coordination on multiple trades (rebar supplier, piling crew, and concrete supplier)

APPLICATIONS

Rotary bored piles are constructed by use of an auger that excavates the soil to a required size before a steel cage or pattern of reinforcing bars is introduced followed by pouring of concrete. A steel casing may be inserted to maintain the bore through unstable ground that is typically later withdrawn. Bored piles are ideal for any application and are the dominant foundation type in urban areas, where there is economical access to concrete. Bored piles provide the largest load carrying capacity of any pile type and the piles axial capacity can be increased economically by belling the base of the pile.

