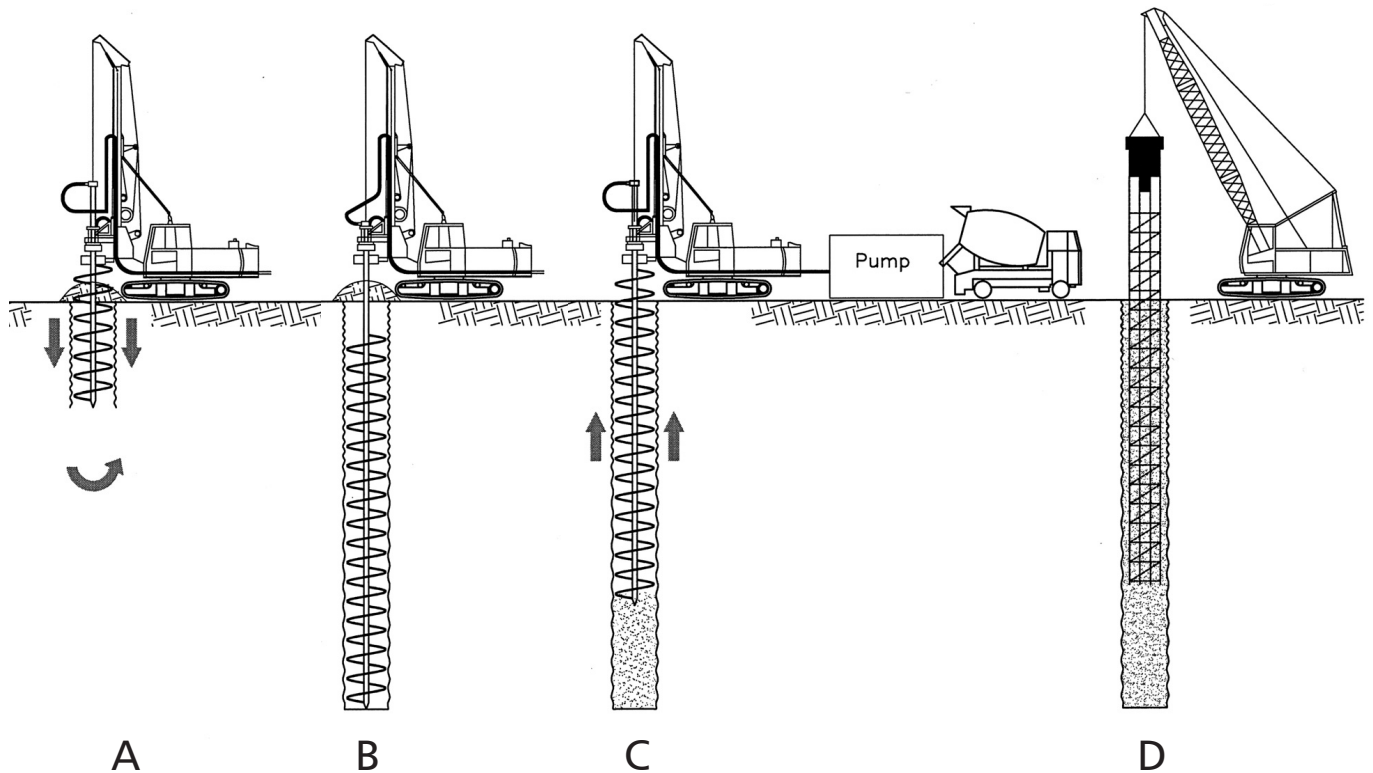


## CONTINUOUS FLIGHT AUGER (CFA) PILE INSTALLATION SEQUENCE



- A. The hollow-stemmed Continuous Flight Auger is drilled into the ground by means of the drive-head. Penetration of the auger into the ground is slower than the combination of pitch and rotation, so a certain amount of soil is ejected at the surface. This decompression is necessary to allow penetration of the auger.
- B. The auger is drilled down to the founding level after which the concrete/grout pump is connected to the hollow-stemmed flight by means of high pressure hoses.
- C. The concrete/grout is pumped down the hollow-stemmed flight as the latter is gradually withdrawn. A high level of control is necessary to ensure that the rate of extraction matches the rate of flow of the concrete/grout. If the extraction rate is too fast, a necked pile shaft will be formed. If it is too slow, there will be a pressure build-up which forces grout up the sides of the auger, and can lead to the flight becoming stuck.
- D. The steel reinforcing cage is lowered into the wet concrete/grout in the pile shaft until it is at the correct level. This completes the installation sequence.