

ROCK DRILLING – THE COST EFFECTIVE SOLUTION

ROCK DRILLING SYSTEM

Our Rock Drilling process utilises a concentric system, which simultaneously drills the rock with a down-the-hole hammer whilst installing a steel pipe. This means that the bore is sleeved at all times, so the risk of losing the bore due to broken unstable rock is eliminated, making it a more favourable method than using an open-hole system.



Due to the fact that the Concentric system sleeves the bore as it drills, there is no open void created at any time, which offers greater security to railway lines and rail traffic. The steel sleeve gives stability to the drill as it progresses and prevents deviation. The rock drilling hammer, with the pilot bit attached, is driven by an Auger Boring rig powered by air. The ring bit with internal bayonet coupling is attached to the steel pipe using a casing shoe. The pilot bit is attached to the ring bit.

ROCK

DRILLING



Both the pilot bit and the ring bit rotate clockwise and cut the hole, which is sufficiently large to allow the casing shoe to pull the steel pipe. The ring bit rotates freely on the casing shoe, which is welded to the first pipe. During drilling the steel pipe does not rotate.





ROCK DRILLING

ADVANTAGES:

- **Cost-effective** solution to rock or boulder crossings.
- Straight and accurate bores.
- Fast and reliable in adverse ground conditions.



Welding of joint on surface water pipeline

N7 crossing in Galway for commercial development For sewer and surface water connections.



N7 crossing in Galway for commercial development for sewer and surface water connections completed



New rock head ready to install 457mm gas main



Installation of 457mm Gas Main- adverse ground conditions

Typical sizes of steel pipe which can be installed:

- 300mm
- 450mm
- 600mm