METHOD PERTAINING TO DIRECTIONAL DRILLING

Method

- The initial drill out is carried out using high-pressure water through drill rods.
- Attached to the front of the rods is a cutting head and transmitter, which is controlled by a locator to achieve the correct line and level required.
- The rods pass through the ground mixing natural soil with the mud/water causing a small bentonite filled tunnel and at no time is a cavity formed.
- Once the initial drill out is achieved the transmitter and cutting head are removed.
- This is done by removing the securing collar and unscrewing the cutting head.
- A reamer is then attached which contains multiple water jets and a cutting face.
- This is attached by screwing it to the drilling rods and replacing the securing collar.
- The passing of different size reamers, mixing natural soil with the mud on a continual rotating system, is carried out until a bentonite filled tunnel is ready to receive the pipe.
- If at anytime a drill rod becomes bent, it is removed when it returns to the drilling rig.
- The final reamer is then attached to a towing head that is inserted and expanded in the pipe to be installed
- The pipe displaces the bentonite as it is drawn through the tunnel and the bentonite fills the excavated pits.
- The bentonite from the tunnel or from any blow outs will have to be removed by means of an excavator or honeysucker sucker by the main contractor.
- At no time is there a cavity created in the ground and the pipes are fully grouted in by displacement.