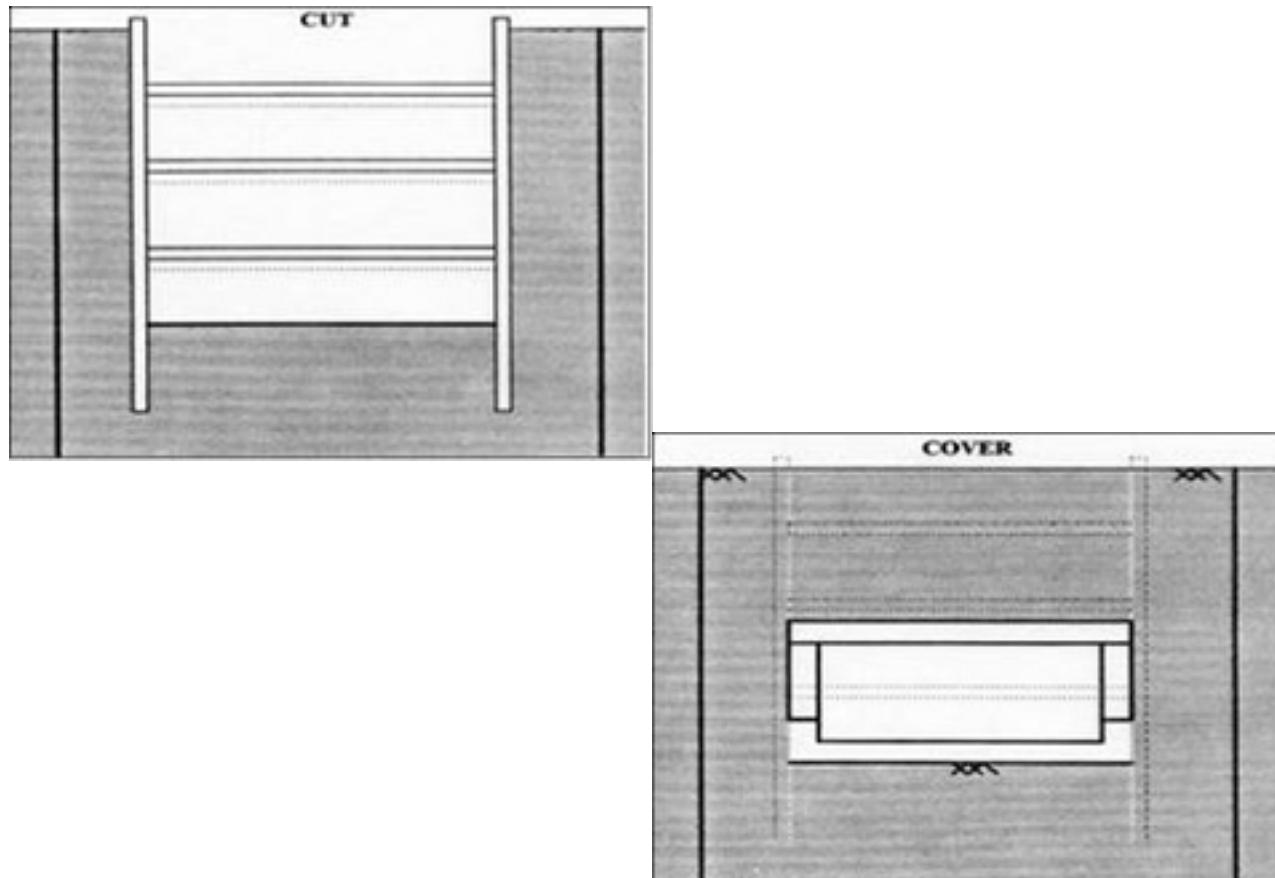


## Definition

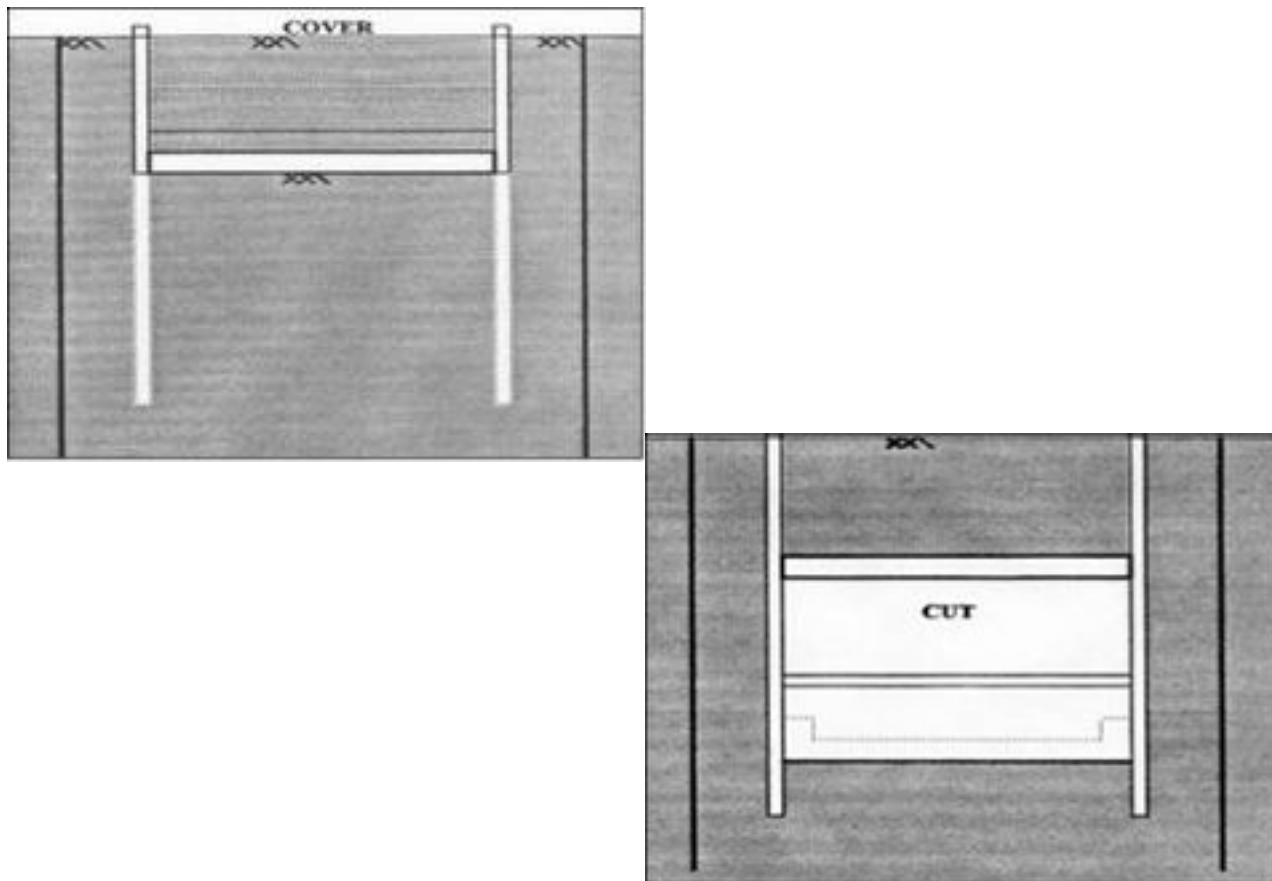
### Direct Excavation

Surface reestablishment after completing all works



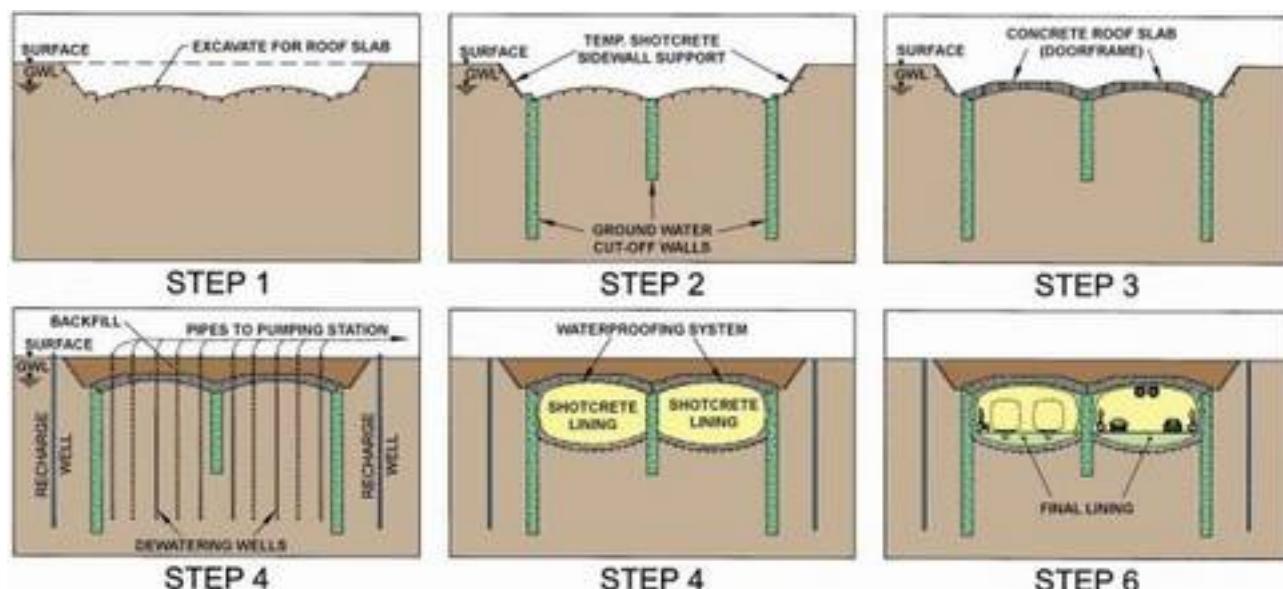
### Inverse Excavation

Surface reestablishment just after completing the first-level of the underground structure



### Door-Frame method

This is a cut-cover method with a construction sequence similar to inverse excavation.



### Related papers

- [Cut & Cover tunnels in metropolitan areas, A Saglamer. Training Session Istanbul 2005.](#)  
( pdf file / video)

## Case histories

- [Central Artery - Boston USA](#)