Construction Of Diaphragm wall

Schematic section of Diaphragm Wall showing typical use

01. Installation of Retaining Wall

02. Excavation & Installation of Steel Strut

The underground retaining wall, which is usually a concrete diaphragm wall, is installed before excavation commences.

The soil is excavated to just below the roof slab level of the underground structure. Struts are installed to support the roof slab in turn support the soil at the sides.

03. Construction of Underground Structure

The roof slab is constructed, with access openings provided on the slab for workers to proceed downwards. The roof slab not only provides a massive support across the excavation, it also acts as a noise barrier.

04. Construction of Underground Structure

The next level of slab is constructed, and this process progresses downwards till the base slab is completed.
Different Shapes of Diaphragm Wall Panel

05. Construction of Underground Structure

The side walls are constructed upwards, followed by removal of the intermediate shut. The access openings on the roof slabs are then sealed.

06. Backfilling & Reinstatement

After the underground structure is completed, the soil is backfilled to the top strut level before the strut is removed. This is followed by completely backfilling the top of the underground structure and finally reinstating the surface areas.

Schematic Diagram Showing Construction Joint between Adjacent Panels

T-Shape Panel  L-Shape Panel

Thank You
If any Query please mail me-gagangoswami@yahoo.co.in