In planning the construction of an office building, shops, and apartments, land required ample parking. This is a own issue for the developer because the horizontal construction is no longer possible due to limited land. Therefore, the solution takes the form of building vertically upwards and downwards in the form of basement for the land use.

This is also a problem for the construction of the apartment "The Essence on Dharmawangsa". In the initial planning, the apartment tower would be built in stages 5. In the early stages of development, namely the South, was built as high as 36 floor apartment with 2 basement floors as deep as 10.7 meters with each semi-basement depth of 4.3 meters and 3.2 meters each floor basement as parking area and utility room.

However, it needs the land is still inadequate parking for residents and visitors to the apartment. Thus, for the construction of the second stage of The East, will be built with the same floor, but the addition of the basement floor as much as 1 to 3 floors so that the depth to 13.5 meters to accommodate the parking needs for the East and the West.
The main purpose of making this final project was to plan the construction of diaphragm wall of the basement Apartment The East Essence on this Darmawangsa.

Of the various alternatives that are planned, wall thickness of 0.8 m obtained with a depth of 30 m. Bore pile used was 1 m diameter with a depth of 20 m.

The construction method used is the Top-down Construction. Where the floor slab construction starts from the ground floor down to the basement lanta 3. Excavations carried out in stages with the floor plate as a strut.

Keywords: basement, diaphragm wall, top down construction