ABSTRACT

In the construction work of houses and roads etc., the foundation is the (substructure) which has an important role in transmitting the load to the hard soil layer which has a high bearing capacity, which is deep enough in the ground, however, to calculate the carrying capacity there are several methods.

Analysis of the carrying capacity of the foundation piles for the construction of the Nurul Ilmi Mosque in West Bandung Regency was carried out based on Sondir and Standard Penetration Test data using the Meyerhoff and Aoki De Alencar calculation methods.

The results of the calculation of the carrying capacity of the foundation show different values, both seen from the use of the Aoki and De Alencar calculation methods, as well as the Meyerhof method. Where from the data sondir method Meyerhof $Q_{in} = 76.6160$ tonnes, from sondir data from the Aoki and De Alencar Q methods_{in} = 79,340 tonnes, from the SPT data of the Meyerhof Q method_{in} = 62,972 ton.

The bearing capacity of the pile foundation based on Sondir data has a greater value than the bearing capacity of the foundation based on SPT data

Keywords: pile bearing capacity based on CPT and SPT data