

## ABSTRAK

Dalam pekerjaan suatu konstruksi, pekerjaan fondasi (*struktur bawah*) merupakan pekerjaan pertama yang dilaksanakan sebelum melaksanakan pekerjaan struktur atas. Pembangunan suatu fondasi sangat besar fungsinya pada suatu konstruksi. Secara umum fondasi didefinisikan sebagai bangunan bawah tanah yang meneruskan beban bangunan yang ada di atasnya baik itu beban bangunan itu sendiri maupun beban luar yang ada di yang bekerja pada bangunan ke tanah yang ada di sekitarnya.

Analisis kapasitas daya dukung fondasi tiang pancang dan fondasi bore pile ini di pekerjaan pembangunan pondok pesantren raudha al-lawadz'i yang dilakukan berdasarkan dengan data sondir dengan menggunakan metode hitungan Aoki De Alencar.

Dari hasil analisis tiang pancang di S-14 hasil izin tiang di kedalaman 4 meter 236,63, di kedalaman 6 meter 500,29, di kedalaman 8 meter 906,18, dan di kedalaman 11 meter 1866,16. sedangkan hasil analisis bore pile di S-14 hasil izin tiang di kedalaman 4 meter 118,12, di kedalaman 6 meter 250,15, di kedalaman 8 meter 453,09, dan di kedalaman 11 meter 933,08.

Kapasitas daya dukung fondasi tiang pancang berdasarkan dengan data sondir memiliki nilai yang lebih besar dengan daya dukung fondasi bore pile dengan data sondir yang sama.

Kata kunci : kapasitas daya dukung fondasi tiang pancang, kapasitas daya dukung fondasi bore pile, metode aoki de alencar

## **ABSTRACT**

In the work of a construction, the foundation work (substructure) is the first work carried out before carrying out the work of the upper structure. The construction of a foundation has a very large function in a building. In general, the foundation is defined as an underground building that continues the load of the building above it. Both the load of the building itself and the external loads that work on the building to the surrounding land.

The analysis of the carrying capacity of the pile foundation and bore pile foundation is carried out the work on the *raudhah al-lawadz'i* Islamic boarding school which was carried out based on sondir data using the Aoki De alencar calculation method.

From the results of the pile analysis at S-14 the results of the pile clearance are at a depth of 4 meters 236,23, at a depth of 6 meters 500,29, at a depth of 8 meters 906,18, and at a depth of 11 meters 1866,16. while the result of the bore pile analysis at S-14 are the result of the pile clearance at a depth of 4 meters at 118,12, at a depth of 6 meters at 250,15, at a depth of 8 meters at 453,09 and at a depth of 11 meters at 933,08.

The carrying capacity of the pile foundation based on the sondir data has a greater value than bearing capacity of the bore pile foundation with the same sondir data.

Keywords : pile foundation capacity, bore pile foundation bearing capacity, aoki de alencar method.