

ABSTRACT

Bima Candra Nugroho, 11316421

Gatot Subroto BRI Tower Project. Method and the Calculation of Concrete Volume Requirements for Raft Foundation on Zone B.

Department of Civil Engineering. Faculty of Civil Engineering and Planning.

Gunadarma University

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Gatot Subroto BRI Tower Project is located on Jenderal Gatot Subroto Street Kav. 64 No. 177A, South Jakarta. The purpose of this project was for BRI office tower. PT. Bank Rakyat Indonesia as the owner works with PT. Arkitek Tim Empat as the architect consultant, PT. Arkonin as the electrical and plumbing consultant, PT. Ketira Engineering as the consultant planner and also PT. Cirajasa CM as the construction management consultant. This project is built on an area of $\pm 8.600 \text{ m}^2$ with $\pm 97.723 \text{ m}^2$ of building area, which has 37 stories and 5 basements.. Construction for the structure has Rp 845,900,000,000,- contract value. This internship program started when the project constructed ground anchor until reached 1st basement. Choosing of foundations is one of the things that need to be considered in building structure construction. The higher a building, the greater the rolling moment that can occur. This risk can be balanced by using a combination of raft foundation with pile. In the form of a wide paltes, raft foundation serves the load to the ground equally and pile below it, so the load can be properly transfered to the ground. The implementation method starts from dewatering, excavation, cutting the heads of borepile, casting of work slab, installation of reinforced steel, installation of waterstop, installation of formwork, installation of cast stop, casting and ended with raft foundation maintenance. Based on the calculation, it takes 121.370,63 kg of steel and $1.352,226 \text{ m}^3$ of concrete.

Keyword: Raft Foundation, Implementation Method, Concrete Volume