

## **ABSTRACT**

Kevin Maulana Utiarta, 13318641

*Tarakanita 4 Rawamangun Junior High School Building Construction Project. Method of Implementation and Calculation of Concrete Volume Of Work Column 1st Floor Zone 4.*

*Civil Engineering Department. Faculty of Civil Engineering and Planning  
Gunadarma University  
(XV + 91 + Attachments)*

*Tarakanita 4 Rawamangun Junior High School Building Construction Project is located on Jl. Balai Pustaka Baru No.1, East Jakarta. This building is built on an area of  $\pm 17,000$  m<sup>2</sup> consisting of an 8-story building. Tarakanita Foundation As owner, Mr. Fx. Handi Hambali as construction management, and PT. Multibangun Adhitama Konstruksi as the main contractor of this project. The type of contract used is Lump Sum Fix Price with a contract value of Rp. 100.000.000.000,- . The project has an implementation time of 548 working days from December 8 2020 to June 8 2022 and maintenance time for 12 months after the project is completed. In the construction structure of a multi-storey building, the column is a vertical press rod of the frame of the structure that plays an important role of a building, so the collapse of a column is a critical location that can cause the collapse of the floor in question and also the total collapse of the entire structure. The stages in the method of implementation of the column are preparation of implementation, determination of column axes, assembly of reinforcement (fabrication), installation of reinforcement, checklist of reinforcement, installation of formwork, implementation of casting, opening of formwork, and curing. The calculation of concrete volume on the column is done by calculating the volume of the column and the total volume of reinforcement on the column. The columns located on the 1st floor of zone 4 are column K1 and column K4. The quality of concrete used for the column is k-300.*

*Keywords : Column, Method, Volume.*