

## **ABSTRACT**

*The construction of basements is generally carried out using the bottom-up method. However, with the advancement of technology, a new method known as top-down has emerged, where the construction begins from the ground floor and continues downward to the basement. Basement construction has become increasingly popular due to the demand for parking areas and utility spaces. The top-down method allows basement and superstructure works to be executed simultaneously, making it a more efficient alternative compared to the conventional method.*

*This final project focuses on comparing the bottom-up and top-down basement construction methods in terms of cost and time. The case study is the construction of the BRI Museum Building in Purwokerto. The analysis was conducted through literature review, data collection, construction method analysis, calculation of material and equipment requirements, productivity and duration analysis, as well as cost estimation.*

*The results show that the bottom-up method requires 168 days with a total cost of IDR 6,7602,700,000, while the top-down method requires 129 days with a total cost of IDR 8,398,000,000. Therefore, the top-down method is superior in terms of time efficiency, whereas the bottom-up method is more economical in terms of cost.*

**Keywords:** *Basement, bottom-up, top-down, cost, time.*