PRODUCTIVITY ANALYSIS OF HEAVY EQUIPMENT IN THE EMBUNG NGLURUP PROJECT, TULUNGAGUNG REGENCY – EAST JAVA VIEWED FROM TIME AND COST

Yoga Ilham Ramadhan
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Department of Civil Engineering
Institut Teknologi Adhi Tama Surabaya
Email: yogailham0@gmail.com

Advisor:
Siti Choiriyah, S.T., M.T.
ID: 941019

ABSTRACT

The construction of Embung Nglurup in Tulungagung District has a reservoir length of 50 meters, which is used to store water during the rainy season so that it can be used in the summer. The excavation process in the reservoir body uses heavy equipment to support the work of dewatering at the site, soil digging, and soil removal. Many units of heavy equipment operating at the site have limited their movement. Therefore, the placement of the heavy equipment must be planned carefully in order to facilitate the work. This research involved the field observation method. The excavation work of the reservoir body for 19 working days spent a total operating cost of heavy equipment of IDR 270,000,000. Meanwhile, the calculation of the plan for 14 days took the total operating costs of heavy equipment to IDR 382,889,800. The efficiency of the operator in terms of Ability Index, Physical Ability, Use of Ability, and Effective Utilization indicated that the operator's work in the plan was better than in the field.

Keywords: time, cost, heavy equipment, efficiency

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