

ABSTRACT

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Cimanggis – Cibitung Toll Road Construction Project Section II. Method of Execution of Works and Calculation of Volume Requirements for Abutment Concrete A1 Gas Protection Bridge (Sta. 29+540)

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(XV+71+Attachment)

The Construction of the Cimanggis – Cibitung Toll Road has a 23.30 km long route which is divided into 4 zones and 2 sections, section 1 with a length of 3.17 km (Cimanggis – Jatikarya) and section 2 with a length of 23.30 km (Jatikarya – Cibitung). Pavement uses concrete (rigid pavement) and flexible pavement. The owner of this project is PT. Cimanggis – Cibitung Tollways in collaboration with PT. Virama Karya as supervisory consultant, PT. Perentjana Djaja and PT. Delta Global Structure as a planning consultant, as well as PT. Waskita Karya TBK as the main contractor. This project was implemented for 1281 days. In the construction of the Cimanggis – Cibitung Toll Road Section II using an inverted T type abutment with a wing wall. The stages in the abutment implementation method are: submission of work preparation, mobility work, measurement work, abutment excavation work, floor work, footing abutment reinforcement work, footing abutment formwork work, footing abutment pre-casting work, footing abutment casting work, footing curing work abutment, wall abutment reinforcement work, wing wall abutment reinforcement work, wall abutment formwork work, wing wall abutment formwork work, wall abutment pre-casting work, wall abutment casting work, wing wall abutment casting work, abutment curing work. Calculation of the volume of concrete abutment A1 is one of the things that affect the activity of the structure. Volume of concrete required abutment A1 Sta. 29+540 is 478,274 m³.

Keywords: Abutment, Abutment Implementation Method, Concrete Volume.