

# COMPARISON OF PLANNING THICKNESS ROCK HARDEST METHODS FOR 2017 AND AASHTO 1993 DEVELOPMENT METHOD

(Case Study: Cape medang road – Kadur, north rupal)

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## Abstract

Road is a very important means of transportation access. Road cape Medang - Kadur, is one of the roads in Rupal Utara sub-district which is experiencing thick pavement problems. This pavement thickness design refers to the Revised Road Pavement Design Manual September 2017 and AASHTO 1993, For traffic flow capacity refers to PKJI 2014, this design includes calculating pavement thickness, Budget Plan (RAB), Bar Bending schedule and planning drawings.

In order to solve this problem, it is needed data on the carrying capacity of the subgrade and LHR data obtained from the results in the field in order to calculate the pavement thickness as the goal of this plan so that the results can be compared.

From the design of rigid pavement using the Revised Road Pavement Design Manual September 2017, case study Road cape Medang - Kadur, starting from STA 4 + 200 to STA 6 + 200, plan age 40 years, pavement type is planned to use Concrete Reinforced Concrete (BBDT), concrete quality K-250 kg / cm<sup>2</sup>, then the pavement thickness is 160 mm , and obtained a budget of Rp. 16,442,330,000.00. while for pavement using AASHTO 1993 by using a plan age of 40 years of concrete quality K-250 kg / cm<sup>2</sup>, the thickness of the pavement is 150 mm, and a budget of Rp. 16,940,140,000.00. So from the results of these comparisons, the pavement thickness of the 1993 AASHTO method is obtained. The pavement thickness is thicker than the Revised Road Pavement Design Manual September 2017.

Keywords: Pavement Thickness, Revised Road Pavement Design Manual September 2017, AASHTO 1993