ABSTRAK

REDESIGN OF BETTERMENT ROAD BROMO PROBOLINGGO
STA 94+250 - STA 97+550
PROBOLINGGO CITY - EAST JAVA PROVINCE

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Jalan Raya Bromo is the main road that connects Probolinggo, Surabaya and vice versa. This project aims to improve the structure of the damaged roads for the convenience of motorists who pass through these roads.

The final project aims to find thick layers of additional road construction, road geometric control, find the dimensions of the drainage channel and calculate the cost of the necessary budget plan. The method used in the planning of this road include the analysis of road capacity by using the method of Road Capacity Manual Indonesia (MKJI) 1997, the calculation of thick layers of additional

From the analysis of road capacity calculation results obtained value of the initial degree of saturation in the way of Bromo in 2012 was 0.49 and the degree of saturation of the final in 2022 was 0.84. But in 2020 the DS = 0.77 so need widening at the beginning of the year 2020 by 0.5 meters. DS obtained after dilation and at the beginning of the year 2020 amounting to 0.68 and at the end of 2022, the DS of 0.74 Additional surface layers using Laston (MS 744) with a thickness of 3 cm and 4 cm, and control of the geometric path (vertical alignment) obtained results of -0.188 <10 m / km, it includes a flat-type alignment. Planning dimensional edge channel (drainage) or rectangular with a material made of stone.

RAB is needed to increase this road of Rp 7,405,562,991.19 (in words Billion Four Hundred Seventy Five Million Five Hundred Sixty Two Thousand Nine Hundred Ninety One Dollar). By planning and improvement of Highway Bromo - Probolinggo is the expected damage to roads can be overcome and achieve comfort up to 10 years.