ABSTRACT

UNGGUT KENCONO JATI. Soaking Lataston Using Fine Aggregate Sand Beach At Marshall Parameter. Thesis, Jakarta: Department of Civil Engineering, Faculty of Engineering, Universitas Negeri Jakarta, February 2016.

The problem is complex pavement road damage is caused partly because of the traffic load excessively repetitive (overload), heat / air temperature, water and rain, as well as the poor quality of the initial product. Based on the study and research, the use of economically sand beach is not optimal in the construction field, including pavement. This study aims to determine the value of the parameter Marshall in Lataston HRS-WC that uses sand as the fine aggregate by using immersion samples of 1 day, 2 days, and 3 days. This study used an experimental method which is carried out at the Laboratory Institute of Irrigation Jalan Bekasi during the period September 2015 to January 2016.

Fine aggregate data from Carita beach sand taken at a distance of 20 meters from the beach obtained the specific gravity of fine aggregate sand Carita Beach by 3.0574 to 0.9387% absorption and salinity of 0%.

The study used three fine aggregate content variation of 0%; 50%; 100% with test samples of each grade of 3 (three) pieces by soaking treatment three (3) days for each variation and use plan bitumen content of 5%. In this study, the optimum value without soaking the samples are at levels of 50% variation Carita beach sand with the stability of the value of 927.072 kg, flow (flow) of 3.5 mm, MQ amounted to 264.878 kg / mm, 15.77% VMA, VFB 69.941% and VIM 4.394%.

The results of the Marshall test sample with immersion 1 day, 2 days, and 3 days show that the value of stability at levels of 0%; 50%; 100% meets the minimum requirements for heavy traffic, ie on the variation of 0% the second and third day, a variation of 50% on the second day and 100% on the second day. In a variation of 0% level VMA and VFB value does not meet the minimum requirements, on the content variation of 50% Value VMA does not meet the requirements of which is below the minimum value, and the content variation of 100%. VMA value and VIM does not meet the minimum requirements.

Keywords: Sand Beach Carita, Lataston HRS-WC, Parameter Marshall