

ABSTRACT

This study is an experiment to find out the comparison result of pugger cement filler and without filler as an asphalt concrete mixture which is appropriate with the specifications. In this case, the researcher used pugger cement as an alternative filler material as the asphalt concrete mixture. Thus, it was expected that the material in question can replace and increase the stability value of an asphalt concrete mixture. This research method conducted the material test in a laboratory with a variety of pugger cement filler (1%, 1,5%, 2%). After conducting a test of the optimum asphalt content mixture design material using two methods those are the mathematical method and lab graphing method it was obtained the optimum asphalt level value is 6.2%. Then a comparison was conducted with the standard specimen and the filler variation specimen with the Marshall Test results to obtain the stability and flow values. The results showed that the addition of filler resulted in increased stability (6,250.24 kg - 7,296.75 kg), and decreased flow values (from 2.25 mm - 2.10 mm). Meanwhile, the VIM (3.90% - 3.63%) and VFA (76.45% - 73.76%) tended to decrease. On the other hand, the VMA value (17.20% - 17.40%) tended to increase.

Keywords : cement of Pugger, stability, flow