

INTISARI

Mandalika International Street Circuit merupakan sirkuit berstandar internasional pertama di Indonesia yang memiliki luas 1.075 ha dengan lintasan sirkuit sepanjang 4,301 km dan memiliki 17 tikungan. Penelitian ini melakukan redesign pada jalan akses *service road Mandalika International Steet Circuit* berdasarkan metode Manual Desain Perkerasan Jalan 2017 dan AASHTO 1993

Redesign dilakukan dikarenakan lapisan Jalan Akses Service Road hanya terdiri dari lapisan AC – BC dan subbbase saja. Redesign dilakukan dengan menganalisa data volume kendaraan, berat kendaraan, CBR tanah dasar, material perkerasan, DED dan jumlah hari hujan berdasarkan metode Manual Desain Perkerasan Jalan 2017 dan AASHTO 1993 dengan menggunakan bantuan Microsoft Excel serta data-data yang bersifat sekunder.

Hasil *redesign* dengan menggunakan metode Manual Desain Perkerasan Jalan 2017, diperoleh tebal lapisan AC *Wearing Course* 4 cm, AC *Binder Course* 6 cm, AC *Base Course* 8 cm dan LPA Kelas A 30 cm. Sedangkan, dengan metode AASHTO 1993 diperoleh tebal lapisan AC *Wearing Course* 4 cm, AC *Binder Course* 6 cm, AC *Base Course* 10 cm dan LPA Kelas A 25 cm. Hasil *redesign* dengan AASHTO 1993 lebih disarankan dikarenakan metode analisis yang lebih sederhana dan lebih teliti.

Kata kunci : sirkuit, jalan, *redesign*, manual desain perkerasan jalan, AASHTO 1993

ABSTRACT

Mandalika International Street Circuit is the first international standard circuit in Indonesia which has an area of 1,075 hewith a circuit track of 4.301 km and has 17 turns. This study conducted on access road of service road Mandalika International Street Circuit based on Manual Desain Perkerasan Jalan 2017 and AASHTO methods

Redesign was carried out because the Service Road Access Road layer only consisted of layer AC – BC and subbase only. In redesigning, did analysis of vehicle volume data, vehicle weight, CBR of subgrade, pavement materials, DED and number of rainy days data based on Manual Desain Perkerasan Jalan 2017 and AASHTO 1993 method, used Microsoft Excel. These data were secondary.

The result of redesign with Manual Desain Perkerasan Jalan 2017, with the obtained thickness of 4 cm AC Wearing Course, 6 cm AC Binder Course, 8 cm AC Base Course, 30 cm Aggregate class A layer. Meanwhile, using AASHTO 1993 Method, with the obtained thickness of 4 cm AC Wearing Course, 6 cm AC Binder Course, 10 cm AC Base Course, 25 cm Aggregate class A layer. The results of the pavement design using ASSHTO 1993 is recommended because the analysis method is simpler and more accurate .

Keyword : *circuit, road, redesign, manual desain perkerasan jalan, AASHTO 1993*