

ABSTRAK

PERENCANAAN GEOMETRIK DAN TEBAL PERKERASAN LENTUR RUAS JALAN DABUK REJO – BTS. KAB. OKUT STA 00+000 – 06+667 PROVINSI SUMATERA SELATAN

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Jalan merupakan infrastruktur penting yang mendukung mobilitas masyarakat dan pertumbuhan ekonomi. Laporan akhir ini membahas perencanaan geometrik dan tebal perkerasan lentur pada Ruas Jalan Dabuk Rejo – Batas Kabupaten OKU Timur STA 00+000 – 06+667 Provinsi Sumatera Selatan dengan mengacu pada Pedoman Desain Geometrik Jalan (PDGJ) 2021 dan Manual Desain Perkerasan Jalan (MDPJ) 2024. Hasil perencanaan menunjukkan bahwa ruas jalan direncanakan sebagai jalan tipe 2/2-TT dengan lebar jalur 4,5 m, bahu jalan 2 m, dan kecepatan rencana 60 km/jam. Alinyemen horizontal terdiri atas 7 tikungan, sedangkan alinyemen vertikal terdiri atas 36 titik PVI. Nilai CBR tanah dasar sebesar 11,2% sehingga tidak memerlukan perbaikan tanah dasar. Struktur perkerasan lentur yang direncanakan memiliki total tebal 695 mm. Hasil perencanaan manajemen proyek menunjukkan kebutuhan biaya sebesar Rp. 32.117.737.172,00 dengan waktu pelaksanaan 124 hari kerja. Berdasarkan hasil tersebut, desain geometrik dan perkerasan yang direncanakan telah memenuhi standar yang berlaku sehingga diharapkan mampu memberikan pelayanan jalan yang aman, nyaman, dan berumur layan optimal.

Kata kunci: geometrik jalan, perkerasan lentur, PDGJ 2021, MDPJ 2024, manajemen proyek.

ABSTRACT

GEOMETRIC DESIGN AND FLEXIBLE PAVEMENT THICKNESS PLANNING FOR THE DABUK REJO – OKUT REGENCY BOUNDARY ROAD SECTION, STA 00+000 – 06+667, SOUTH SUMATRA PROVINCE

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Road infrastructure plays an important role in supporting community mobility and regional economic growth. Therefore, proper road planning is required to ensure safety, comfort, and structural durability. This final project discusses the geometric design and flexible pavement thickness planning for the Dabuk Rejo – East OKU Regency Boundary Road Section STA 00+000 – 06+667, South Sumatra Province, based on the 2021 Road Geometric Design Guidelines (PDGJ 2021) and the 2024 Pavement Design Manual (MDPJ 2024). The results indicate that the road is designed as a 2/2-TT road type with a 4.5 m lane width, 2 m shoulder width, and a design speed of 60 km/h. The horizontal alignment consists of 7 curves, while the vertical alignment includes 36 Points of Vertical Intersection (PVI). The subgrade CBR value of 11.2% indicates that no subgrade improvement is required. The designed flexible pavement structure has a total thickness of 695 mm. Furthermore, the project management planning estimates a construction cost of IDR 32.117.737.172,00 with a project duration of 124 working days. Based on these results, the proposed geometric design and pavement structure comply with the applicable standards and are expected to provide safe, comfortable, and durable road service performance.

Keywords: *geometric design, flexible pavement, PDGJ 2021, MDPJ 2024, project management.*