DESIGN TOLL WAY MOJOKERTO - KERTOSONO STA 5+350 – STA 10+350 USING RIGID PAVEMENT AT MOJOKERTO REGENCY EAST JAVA PROVINCE

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ABSTRACT
Mojokerto – Kertosono toll road is an alternative way which the function is very important as a connecting road between Mojokerto until Kertosono which is a main path for the transportation vehicle, industrial, or personal vehicle, then the capacity and the service of road need to be improved. In this final project design toll way mojokerto - kertosonosta STA. 5+350 – STA. 10+350 using rigid pavement at mojokerto regency east java province is planned along 5 km.


Analysis result of road capacity in accordance with 20-year design period (2032) obtained the value of DS – 0.749 with 21 m wide road. Construction analysis use continuously reinforced concrete pavement with 29 cm thick plate using
concrete tie on bone $D_{13} - 200$ mm for longitudinal direction and $D_{13} - 300$ mm for transverse direction. For the planned channel dimensions using a trapezium with masonry materials with a finishing time obtained by the following dimensions $b = 43$ cm, $d = 52$ cm, $w = 51$ cm. Needed funds to construct this project is **Rp. 161,114,822,000,00** (Spelled Out Members One Hundred Sixty Milliard One Hundred Fourteen Million Eight Hundred Twenty Two thousands Rupiah).

From the planning result of road above expected could overcome and serve heavy traffic load according to design period which have been planned.

*Keyword : Road Geometric, Rigid Pavement Thickness, Reinforcement, dimension of channel, RAB.*