

REVIEW OF DRAINAGE CAPACITY IN THE SELATBARU AREA STREET OF SOEKARNO-HATTA

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ABSTRACT

Selatbaru is one of the islands in Bengkalis Regency. Selatbaru is a tropical island, when the rainy season is very large. While at certain times the rain air discharge is very high which can be resolved by the amount of drainage and roads and houses of residents sinking. One of them is the drainage issue issued by Selatbaru area street of Soekarno-Hatta.

The method used in analyzing rainfall intensity uses the Gumbel distribution and Mononobe method. To analyze rainfall discharge and drainage channel discharge using the Rational method based on data obtained from the field, including longitudinal profile measurement data, transverse profiles, flow velocity measurements and existing water level measurements.

From the calculation results, the existing capacity in the drainage channel for Soekarno-Hatta Road, during normal conditions is $Q_n = 7.2926 \text{ m}^3 / \text{sec}$ Calculation of rainfall discharge of $Q_{ch} = 4.2926 \text{ m}^3 / \text{sec}$. Calculation of channel capacity $Q_s = 14,75 \text{ m}^3 / \text{sec}$. Calculation of discharge plan $Q_T = 11,8555 \text{ m}^3 / \text{sec}$.

Keywords : Existing Channel, Dimension, discharge, rainfall, flood, landslide.