

ANALISIS STABILITAS DINDING PENAHAN BANJIR PADA PROYEK PEMBANGUNAN PRASARANA PENGENDALI BANJIR SUNGAI SERANG DAN ANAK-ANAK SUNGAINYA KABUPATEN KULON PROGO

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ABSTRAK

Banjir merupakan bencana yang dapat terjadi sewaktu-waktu dan menjadi suatu halangan bagi aktifitas masyarakat sehari-hari. Pembangunan dinding penahan banjir merupakan salah satu langkah untuk mengatasi banjir yang sering terjadi di bantaran sungai. Stabilitas suatu konstruksi bangunan merupakan hal yang paling penting dalam perencanaannya. Seperti halnya konstruksi dinding penahan banjir pada proyek pembangunan prasarana pengendali banjir Sungai Serang dan anak-anak sungainya Kabupaten Kulon Progo, harus diperhitungkan dengan baik.

Tujuan dari studi ini adalah untuk mengetahui nilai faktor aman dari konstruksi bangunan dinding penahan banjir. Konstruksi bangunan harus memenuhi syarat faktor aman, baik terhadap gaya geser, guling dan daya dukung tanah.

Berdasarkan hasil analisis dinding penahan banjir lokasi Sungai Serang, Dusun Graulan, Desa Giripeni, Wates, Kulon Progo, yang telah diambil sampel perhitungan pada segmen 29, STA 15 + 529, dapat disimpulkan bahwa dinding penahan banjir aman terhadap stabilitas gaya geser, guling dan daya dukung tanah.

Kata kunci : analisis, stabilitas bangunan, dinding penahan banjir, faktor aman

***ANALYSIS OF THE FLOOD RETAINING WALL STABILITY IN
THE CONSTRUCTION PROJECT OF THE SERANG RIVER
FLOOD CONTROL INFRASTRUCTURE AND ITS TRIBUTARIES
IN KULON PROGO REGENCY***

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ABSTRACT

Floods are disasters that can occur at any time and may become a daily activity inhibitor to community. The construction of a flood retaining wall is a kind of the ways to overcome the frequent flooding on the riverbanks. The building construction stability is the most important thing in its planning. As well as the construction of the flood retaining wall in the construction project of the Serang River flood control infrastructure and its tributaries in Kulon Progo Regency, it must be properly calculated.

The aim of this study was to determine the value of the safety factors from the construction of flood retaining walls. Construction of buildings must qualify the requirements of safety factors, against the shear force, moment and bearing capacity of the soil.

Based on the analysis of the flood retaining wall location Serang River, Graulan Hamlet, Giripeni Village, Wates, Kulon Progo, which has taken the sample calculation on the segment 29, STA 15 + 529, it can be concluded that the flood retaining wall safely to the stability of the shear force, moment and bearing capacity of the soil.

Keywords: analysis, building stability, flood retaining wall, safety factors