

## ABSTRACT

### STABILITY ANALYSIS OF THE RETAINING WALL IN UIN SUNAN KALIJAGA YOGYAKARTA

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Relatively long bridge is a retaining wall built around a river or ditch which serves to protect or keep building on it in order to avoid erosion and shifting ground due to water and so other .purpose of this final project is to analyze the strong hold relatively long bridge Bronjong Safety UIN Sunan Kalijaga to shift, and the overthrow of the soil pressure that occurs at the base of foundation

Relatively long bridge stability analysis method bronjong River Gadjah Wong UIN Sunan Kalijaga Yogyakarta using the formula of source book Harry Christady Hardiyatmo, Foundations of Engineering I, 2006, in the Terzaghi equation, equation of Hansen (1970) and Vesic (1975).

Based on the analysis of the results obtained Bronjong relatively long bridge on the river Gadjah Wong UIN Sunan Kalijaga Yogyakarta safe shift in terms of stability, largely due to secure the stability of the overthrow of  $F_{gl} > sf = 1,5$  and safe to the carrying capacity of the soil due to  $q_{max} < q_a$  the  $572,57 < 685,3 \text{ KN/m}^2$ , And after using the calculated volume of saturated soil  $177,738 \text{ kN/m}^2 < 401,54 \text{ kN/m}^2$  safe

Key words: soil retaining walls, Bronjong, shift, overthrow, land carrying capacity