EVALUATION AND SOLUTIONS IN THE LAND SLIDE PARKING AREA OFFICE OF WALIKOTA BONTANG

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Abstract

Bontang city is a East Kalimantan, Indonesia. The city is located 120 kilometers from the city of Samarinda, directly adjacent to the East Kutai Regency in the north and west, Kutai Regency in Makassar Strait in the south and east. geography latitude 0.137° LU and 117.5° BT. In real history, which previously only Bontang a settlement In areas of the river flow, and then change that into a burgeoning city.

When this has happened in the parking lot sliding Bontang walikota office that promote damage to the slopes and if not repaired soon it will threaten the buildings thereon and may also lead to the path behind the office can not be used.

This thesis aims to analyze the stability of the slope, then the alternative will be planned retrofitting and strengthening levees to determine alternatives that are economical and efficient.

The method used was to analyze the slope safety factor against sliding using Janbu method of slices with the help of DX-STABLE 5:22 © 1997, then planning will be strengthened to anticipate that the slope did not avalanche.
The results obtained from analysis of the safety factor is less than the requirements. These problems are given four alternatives slope reinforcement. In the first alternative by using the alternate Soldier Pile where soldier pile of steel pipe used to hold the function field of landslides. The second alternative that is Tenax T-Block where the alternative materials used in the form goegrid and rely on the concrete block retaining wall upright. The third alternative in which the Freyssissol that is Freyssissol also rely goegrid use as a buffer area of avalanche is mounted horizontally with a distance based on the results of the analysis. The fourth alternative form of Reinforced combined with geotextile wall as a buffer area of avalanche.

Based on the analysis, based on the volume of materials used and the availability of materials used from each of the selected alternative with the ease of using the alternative of retrofitting soldier pile with the installation of 7 pieces each 1 (one) meter in the direction of the field of landslides.

Key words: Bontang, slopes, sliding, soldier pile, Tenax T-Block, Freyssissol, Reinforced wall, geogrid, geotextile.