EXECUTIVE SUMMARY

THE DESIGN OF GRAVITY RETAINING WALL AT BATAM INTERNATIONAL UNIVERSITY

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Retaining Wall is a structure which is constructed or designed to resist and withstand the lateral pressure of earth or water. Retaining wall should be able resist shear moment, uplift momen, dead load of the structure and live load as well. The retaining wall structure is considered to have some types just like gravity, crib, cantilever, anchored and many more.

The author chose to plan this type of gravity retaining wall by considering the condition of the existing land surface is quite steep even the slope of the ground can reach > 70% and also the existing soil condition is dense enough so that the gravity-retaining wall type is the most suitable type to be built on that area.

Based on the author's calculation, the dimensions of the retaining wall are the basic width is 2000 mm, the height of the retaining wall is 3600 mm and the thickness of the retaining wall is 120 mm. The calculation results are $1.75 \geq 1.5$ for overturning stability and $1.84 \geq 1.5$ for shear stability (1.5 is a safety factor)

Keywords : Retaining wall, construction, lateral earth pressure, landslide

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