ALTERNATIVE IMPROVEMENT ON SOFT GROUND OF DEVELOPMENT PROJECTS LAMONG BAY MULTIPURPOSE PIER IN SURABAYA AREA

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ABSTRACT

Multipurpose pier in general and container stacking yard in particular has a strategic role in supporting the activities of the traffic flow ocean freight transportation. Each year growth in the flow of goods, especially in eastern Indonesian container yard both domestically and internationally in the port of Surabaya silver cape has a vital role to the eastern Indonesian region that has more than 100 years old and has been implementing restructuring programs and specifications to anticipate overload pier loading and unloading of goods has increased exceeds capacity.

So this needs to be the development of a new multipurpose pier area yard to accommodate the current overflow of untreated container cargo at the Port of Tanjung
Perak Surabaya before, but the problems that arise in this planning area soils or coastal bays are ugly. Then it really necessary planning done well with the first soil improvement using prevabrected vertical drains (PVD) to prevent failure of the building structure thereon which have been failed.

The purpose of this plan is to get the design on a pile of stacking a strong, stable, and economically. So based on the analysis that has been known that the yard will be used to stack containers block the movement of containers, the material used for reclamation deposits with $\gamma$ sat value of 1.8 t / m³ and, the value of C is zero, and the soil friction angle of 30 °. Due to land reclamation carried out on an ugly we perform the repairs by using PVD with surcharge at the initial high of +3,00 mLWS. The type used is PVD VD-808 dimensions 0.5 cm x 10 cm fitted with spaced 1.1 meters, a depth of 17 meters off the ground accrual basis using the triangle pattern.

Keywords: Multipurpose Pier, Container Yard.