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The Evaluation of Shear Modulus (Go) Consistency State of Consolidation Cohesive Soils and Seismic Reflection Survey Using Degree of Soil Consolidation

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Abstract : The geological formation at Limau Manis Besar area, are consist of low grade metamorphic rock and undulating mountaineers, rugged terrain and the quite steeply 45 degree slope gradient. The objectives of this paper are present the methods and devices used in measurement of P-wave velocity to estimate the initial Shear Modulus (Go) in steady state and critical state soil consolidation. The relationship between SPT-N values and the Shear Modulus (Go) at very small strain is widely considered to be evaluated. Based on the seismic reflection survey, the constant (K) poroelastic theory, mean effectives stress and primer wave velocity (Vs) increase as the soil depth increase. The steady state and critical state, Degree of Soil Consolidation(U) concept is used to interpret the behavior of Shear Modulus (Go). The relationship between Consolidation Test and Seismic Reflection Survey is also discussed.

Keywords : geological setting, shear modulus, poroelastic theory, steady state and none steady state degree of soil consolidation, consolidation test
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