

Prawit Paotong 2012: Parametric Study on Strength Properties of Laboratory Compacted Predominately Granular Materials. Master of Engineering (Civil Engineering), Major Field: Civil Engineering, Department of Civil Engineering. Thesis Advisor: Associate Professor Piphat Sornwong, M.Eng. 280 pages.

This study aims to determine the relationships parametric Compacted and physical properties Granular materials. The samples were collected from the Bang pa-in – Bang Pli Outer Ring Road. Crushed grad A-B, Crushed grad C, fine sieve rock, and Sand mix Crushed Dust 1:1 by Volume. The samples were prepared for laboratory tests. samples were prepared at the optimum moisture content and wet of optimum moisture content, using the compaction energy 15 ton-m/m<sup>3</sup> minimum and Energy 277.50 ton-m/m<sup>3</sup> maximum. Test by Mold cross-section 6, 8, and 12 in. A piston having a cross-sectional area of 1, 2, and 3 in<sup>2</sup>. relationships CBR and DPI Granular Material

$$\text{CBR}(\%) = 588.99(\text{DPI})^{-1.26}$$

Results from these studies were used to develop the relationships among CBR, DPI, Piston Cross-section, Mold Cross-section and Relation of Top and bottom Compacted to develop guideline and specification during highway construction control.

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