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EVALUATION OF SOIL BEARING CAPACITIES

IN SAN MATEO, RIZAL AREA

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ABSTRACT

The identification and analysis of the physical and engineering properties of soils which are of principal interest for the design of foundation elements is an essential process that precedes the construction of any establishment. This process is being considered for San Mateo since little or no study has been done so far to evaluate the soil properties of the aforementioned area.

Significantly, San Mateo has been identified as one of the areas covered by a housing development plan in Rizal as of September 10, 1991.

This thesis presents the determination of index properties of soil samples such as: 1) grain-size and hydrometer analysis; 2) Atterberg limits; 3) permeability, 4) compaction, and 4) direct shear test. These tests are conducted to understand the parameters that control the mechanical behaviour of the soil.

Borehole photographs, rainfall, geologic, structural, and borehole location maps of the studied area are provided as support materials.

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