

ABSTRACT

Cebu and the metropolis are undergoing a period of rapid industrialization and urbanization. Commercial industrial and government infrastructures are being constructed. As part of the commitment of tapping our natural resources, Cebu field-run coarse aggregates constitutes an asset of immense importance in the construction industry.

With this in mind, the researcher conducted a thorough investigation on the physical and chemical properties of Cebu field-run coarse aggregates. Comparable analysis on the compressive strength capacity of concrete, using field-run and mountain-crushed coarse aggregates were also analyzed to produced a recommended cement-aggregate ratio as well as water-cement ratio.

The physical and chemical properties of Cebu field-run coarse aggregates are within the recommended limits of a desirable coarse aggregates based on the British and American standards. Though in the test for compressive strength of concrete, the concrete mixture using mountain-crushed coarse aggregates exhibits a higher capacity, still, concrete mixture using field-run coarse aggregates produced the desired strength.