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MIX DESIGN

C-614

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A C K N O W L E D G E M E N T S

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S U M M A R Y

This project is an experimental one and the main purpose of it, is to obtain a strong, workable and a durable concrete mix using as fine aggregate the crushed sand zone 2. In order to succeed this, some trial mixes with various workabilities are performed, following the design Mix Method of concrete.

The project begins with a reference to the properties of concrete (Chapter 1). Strength, workability and durability are explained analytically and their importance to concrete technology is mentioned.

In the second chapter the materials for using in concrete are explained (Aggregates, cement, water). Aggregates is the section mainly discussed, especially the problems of natural aggregates and the suitability of crushed sand zone 2 for working concrete.

Chapter 3 explains Mix Design method and the relative data, graphs and tables are provided. The Designing of the mixes which are performed to this project are also provided.

In the experimental part the procedures for making and curing concrete cubes as well as the compressive tests are written. Apparatus are also explained and photographs provided.

Results are provided in tables and conclusions are written about these results supporting the reasons for obtaining such results. Finally some comments are written and the main points of the project mentioned.

C O N T E N T S

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