SOIL AS A FOUNDATION MATERIAL

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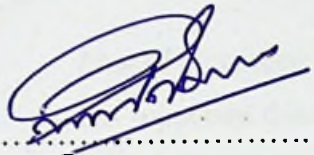
DECLARATION

The research work included in this dissertation, in part or whole has not been previously presented for any other academic qualification at any institution.



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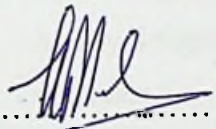
I have supervised and accepted this dissertation for the submission of the degree.



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ABSTRACT

Cement Stabilized Soil Blocks are now considerably popular in the construction industry as an alternative building material to burnt bricks and cement sand blocks. It provides a timely solution for the over exploitation of clay (for bricks) and sand which has resulted in several sever environmental problems. However, as a foundation material there has been little focus on the use of soil. Apart from concrete, rubble stones with cement and sand are widely used as a foundation material even in construction of one or two storied buildings. However, in some parts of the country burnt bricks are also used as a foundation material especially in construction of single story houses. All these materials used for foundation are transported from sources concentrated in particular areas. In this context if compressed soil (stabilized with cement) could be used as a foundation material it will also provide a solution against over exploitation of sources of rock and sand.

This dissertation presents the research work carried out to introduce compressed soil blocks stabilized with cement as a foundation material alternative to random rubble masonry and burnt brick work. These blocks are manufactured using lateritic soils and a locally designed and manufactured manually operated soil compressing machine.

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