

عنوان مقاله:

An Experimental Investigation on Design Parameters of Geocell Reinforced Sand

محل انتشار:

دومین کنفرانس ملی مکانیک خاک و مهندسی پی (سال: 1394)

تعداد صفحات اصل مقاله: 10

نویسندگان:

N Valinezhad - PhD student, K. N. Toosi University of Technology

M Ghazavi - Faculty member, K. N. Toosi, University of Technology, Department of Civil engineering

خلاصه مقاله:

Geocell reinforced soil is a cellular mattress with an almost honeycombed configuration, which not only increase the soil bearing capacity but also reduce its settlement. There is little information on interaction effects of its design parameters. This paper discusses the trends of footing behavior in terms of Bearing Capacity Ratio (BCR) variation which estimated by using Design Of Experiments (DOE) method. Several different configurations of geocell were examined. The obtained results show a slight interaction between the length of the Geocell layer and the required cover layer thickness. The most significant parameter is found to be the Geocell height. Although the optimum dimension for the height, length and aperture size of the cells is obtained

کلمات کلیدی:

Geocell, Soil Reinforcement, DOE, Bearing Capacity

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<https://civilica.com/doc/430981>

