عنوان مقاله:

Assessment of distribution of load in large piles embedded in dry sand of central porch’s foundation of Mossalla Building by measuring data and finite element method

محل انتشار:

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خلاصه مقاله:

This paper presents one year of measured data from instrumented piles existing in Mossalla’s central porchfoundation in Tehran. The project is under construction. A finite element model has been created to predictfoundation behavior after applying final loading of complete structure. Also the model is used to forecast final loaddistribution in large piles of the foundation. The model was verified using instrumented data and soil’s frictioncoefficient has been corrected due to different results between FE model and measurements. Lengths of piles areabout 50 meters with 1.5 meters diameter. Embedded piles are always subjected to drag loads which is producedby Negative Skin Friction phenomenon. In this paper, the magnitude of the drag load applied at piles are presentedin one year of measuring. .Results have shown that, although, soil is dry, there is significant drag loads modified inpiles

کلمات کلیدی:

Piled Raft Foundation, Load distribution, Finite Element Method, Drag Load, Negative Skin Friction