عنوان فارسی مقاله:
برهمکنی جنبشی در ناحیه پراکندگی

عنوان انگلیسی مقاله:
Kinematic interaction of piles in laterally spreading ground

توجه!
این فایل تنها قسمتی از ترجمه میباشد. برای تهیه مقاله ترجمه شده کامل
با فرمت ورد (قابل ویرایش) همراه با نسخه انگلیسی مقاله، اینجا کلیک نمایید.
5 Discussion

To evaluate the practical significance and the field of application of the previous findings, numerical predictions are compared to empirical predictions with the recently proposed methods of Brandenberg et al. (2007), Cubrinovski and Ishihara (2007) and Tokimatsu and Suzuki (2009). All these methods draw upon experimental results from centrifuge and large shaking table tests, and do not make any explicit reference to the dilation effects discussed in this paper.

The numerical, as well as, the empirical predictions refer to the same case, where an $L = 8$ m long and $D = 0.6$ m diameter concrete pile, with bending stiffness $EI = 250000$ kNm$^2$, is installed in an 8 m thick uniform Nevada sand layer with $D_r = 50$ % relative density, and is rigidly supported at its base. The friction angle of the soil was taken equal to $\phi = 33^\circ$ and the buoyant weight as $\gamma' = 9.81$ kN/m$^3$. Based on the empirical relation by Tokimatsu and Seed (1987), the equivalent SPT blow count for this soil was estimated as $(N_{160-cs}) = 44 \times 0.50^2 = 11$.

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