

عنوان مقاله:

Finite Element Modelling of the Settlement of a Foundation under Uniform Surcharge

محل انتشار:

دومین کنفرانس ملی مهندسی عمران، معماری با تاکید بر اشتغال زایی در صنعت ساختمان (سال: 1397)

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خلاصه مقاله:

This study aims at determining the settlements of a foundation under uniform surcharges over the soil surface. In this regard a Finite Element program has been developed. For the sake of numerical modeling, all sides of the set of soil unless its top surface are being considered fixed and hence, with prescribed zero deformation. There is an excavation in the foundation domain and thus for practical engineering purposes, deformations of the excavation must be properly investigated and lower than an allowable limit. Three different cases have been simulated, here. The first case is foundation with an excavation and uniform rectangular loading. In the second case, the rectangular code .changed with triangular loading in the left hand side. In the third case, a tunnel has been added to the second case

کلمات کلیدی:

Excavation, Finite Element Method, Foundation, Settlement, Deformation

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