

Prediction Method of Ground Displacement Caused by Chemical Grouting

Takashi NAKAYAMA Noriyuki OKANO

This research proposed the numerical analysis method to predict ground displacement accompanying the execution of chemical grouting. In this method, the excessive pore pressure caused by the chemical grouting is calculated by means of Maag's formula at the first step. Then, the ground displacement is calculated by finite element analysis, in which the excessive pore pressure is used as load. This paper describes the simulation results, which are to correspond to field measurement. The proposed method was proven to be able to predict the ground displacement by taking into account the balance of pore pressure by Maag's formula and hydrostatic pressure.