عنوان مقاله:
Collapse Settlement in Rockfill Material

محل انتشار:
نهمین کنگره بین المللی مهندسی عمران (سال: 1391)

تعداد صفحات اصل مقاله: 8

نویسندگان:
Ali Alizadeh - *Ph.D Student, Department of Civil Engineering, Tehran University, Tehran, Iran*

Reza Mahin Roosta - *Assistant Professor, Department of Civil Engineering, Tarbiyat Modares University*

خلاصه مقاله:
The analysis of submergence in rockfill dams and road embankments is of great importance because of collapse settlement that occurs during first impounding. Here collapse settlement due to saturation of a rockfill media in a column and an embankment are numerically investigated. For simulation of collapse settlement in these separate geometries, 3 models have been used in finite difference code, FLAC including Elastic, Mohr Coulomb as well as modified Soil Hardening-Softening Model which has beenmodified by application of soil hardening behavior relationship. Nonetheless the main feature of the simulation is introduction of a collapse coefficient. Horizontal and vertical displacements at the slope of embankment are depicted to explain the nature of displacements due to impounding. To assess influence of different values of collapse coefficient, collapse analyses are carried out with a variety of collapse coefficient values

کلمات کلیدی:
Collapse settlement, Saturation, Rockfill, Embankment, Numerical modeling