

# عنوان مقاله:

USE OF GRANULAR DRAINS IN UPLIFT REDUCTION OF BURIED PIPELINES IN SATURATED SAND DEPOSIT

## محل انتشار:

ششمین کنفرانس بین المللی زلزله شناسی و مهندسی زلزله (سال: 1390)

تعداد صفحات اصل مقاله: 8

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### خلاصه مقاله:

during recent decades lifeline utilities have suffered considerable damages from earthquakes. Failures of some of these lifelines during dever earthquakes could deprive the civilians of vital municipal services or cause othe disasters which exacerbate the situation . one of the reasons of occurrence of these damages is the uplift of buried pipeline that is the result iof excess pore water pressure generation under earthquake loading

# کلمات کلیدی:

buried pipeline, saturated sand uplift, gravel drain, earthquake loading

# لینک ثابت مقاله در پایگاه سیویلیکا:

https://civilica.com/doc/115285

