

RESEARCH ON SEISMIC DESIGN METHOD BASED ON DYNAMIC SOIL-STRUCTURE INTERACTION

This research aims to clarify the soil-structure interaction which is the input loss effect of earthquake ground motion and the increase of soil damping according to various soil conditions and foundation types and to propose the seismic design method considering the above. A series of numerical analyses were performed to investigate the input loss of earthquake ground motion and the damping factor depending on various ground conditions and foundation types. The seismic design method considering the soil-structure interaction was proposed based on the analyses.

Key words : soil-structure interaction, damping factor, input loss, SR model, FEM model