

Rest research regarding earthquake resistant design method of underground structures considering large scale earthquakes.

(Part 2)

[Point]

Against the backdrop of the damage of underground structures in the Great Hanshin Earthquake, in order to properly assess earthquake-proof safety of underground structures against large scale earthquakes, underground structures design method for seismic critic condition is required. In this research, we perform analytical examination regarding nonlinear response characteristics of ground and underground structures against large scaled earthquakes, and aim development of earthquake resistant method of underground structures. We proposed assessment method of nonlinear response characteristics of ground against large scaled earthquakes, development of earthquake resistant design method of underground structures of transverse direction, which according to displacement amount, and proposal of seismic capacity simplified determination method of underground structures of transverse direction, considering ground condition and structure characteristics.

Keyword : large scaled earthquake , underground structures , earth surface maximum response disposition , design method for seismic critics condition , sheering disposition amount.