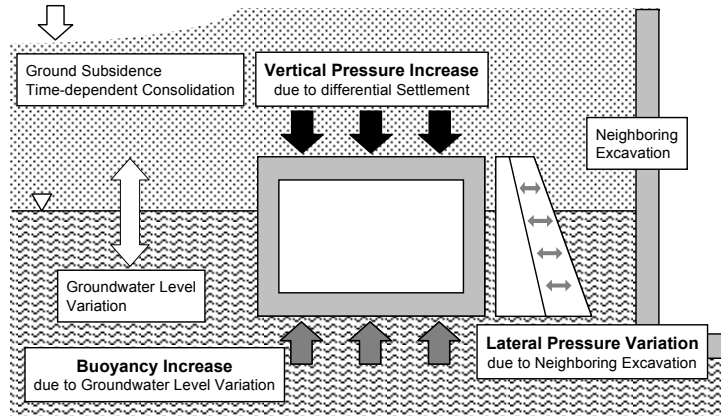


JSCE Task Committee 332 on “Coupled problems of concrete and foundations”

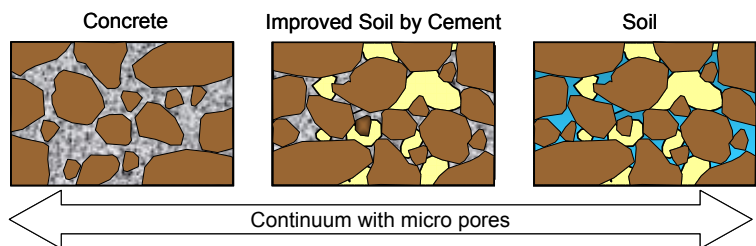
SCOPE

The coupled problems of concrete structures and soils or foundations have been individually investigated in the research areas of concrete engineering and geotechnical engineering. The performance-based design specifications and codes considering the soil-structure dynamic interaction problems have been established based on the cooperative works conducted by the engineers from both research areas. On the



other hand, static soil pressures and allowable stress of structures under service load in the current design codes and specifications dominate the design of underground structures. Therefore, it has become an important issue to realize rationally the safety, stability, and durability of such structures. The first task of our committee is to evaluate the time-dependent actions onto underground and foundation structures.

The intermediate materials, such as soil improved with cement, have been applied in practical constructions. Based on such background, it has become increasingly important to systemize the characteristics of concrete and soil as a continuum having



continuous and discontinuous pores. The leachate of chemical substances from hardened concrete will affect not only the durability of the structures but also the surrounding environment of soil and human beings. Moreover, the coupled problems are also the storage of high level radioactive waste and the deterioration of underground structures due to dissolved substances in the groundwater. The other task of our committee is to investigate the transport and equilibrium of substances and ions in concrete, improved soil and original soil, and to evaluate the long-term durability of underground structures and their surrounding geoenvironment.

WORKING GROUPS

WG1: Evaluation of the time-dependent actions onto underground and foundation structures

WG2: Evaluation of the long-term durability of underground structures and their surrounding geoenvironment

ACTIVITIES

The JSCE Task Committee 332 started its work in October 2004 with 13 members. A report of its activities of the first two years will be published in May 2007 in Japanese. The work will continue for more two years.