

## GROUND SETTLEMENT AMOUNT MEASUREMENT METHOD AND GROUND SETTLEMENT AMOUNT MEASUREMENT SYSTEM

### Abstract

In water-area land reclamation, even if original ground and a land reclamation material have low water-permeability, a ground settlement amount can be measured based on a measurement value of a pore water pressure gauge arranged on an upper surface of original ground. Sandbag 10 contains pore water pressure gauge 11 and filter material 12, such as gravel or sand. Sandbag 10 is arranged on original ground G. Buoy 30, which is located on water surface W, contains processing apparatus 31. Processing apparatus 31 is connected to pore water pressure gauge 11 by communication cable 21. Drain material 22 has one end inserted into sandbag 10 and another end located in the water. Pore water pressure gauge 11 measures pore water pressure and transmits the measurement result to processing apparatus 31. Processing apparatus 31 transmits the measurement result to external apparatus 100 through wireless communication. External apparatus 100 calculates the settlement amount of original ground G based on the measurement result transmitted from processing apparatus 31.

FIG. 1