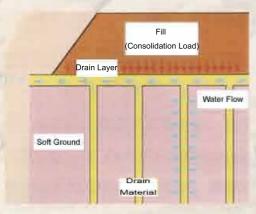
## DRAINAGE METHODS



The drainage method aims to secure drain channels through a large volume of drain material driven into soft ground.

In the case of clay ground, making the load of fill, etc., work on the ground can accelerate consolidation settlement and increase the shear strength of the ground.

For sandy ground, the method is used as a counter measure for liquefaction. It will quickly disperse excess pore water pressure caused by an earthquake.

This method has a number of variations according to drain materials usage, driving methods, work objective, etc.

Consolidation Acceleration (Capacity Reduction

Dredged Material Thrown In

Consolidation Accelerated by Negative Pressure Loading

■Application Example

## ■ Features

- Time required for consolidation drainage can be adjusted by changing the interval of drain material units driven in.
- 2. The fiber drain method using drain material made of jute and outer shell fiber of coconut is an environmentally friendly method.
- The lateral drain method is based on the novel idea of increasing the volume of dredged material to be received.
- 4. The grid drain method aims to prevent liquefaction at the time of an earthquake by plastic board drain, which has a large section area, driven into sandy ground

## Categorization by Materials



## Acceleration of Consolidation (To Increase Bearing Capacity) Sand Drain Driver Fill Fill Sand Mat Consolidation Liquefaction Counter Measure Sand Drain Settlement Improved Ground Soft Ground Drain Drainage Land Driver for Sand Drain Dispersion of Excess Pore Soft Sandy Ground Water Pressure

Refilling of Dredging Soil

Seismic Wave

