

1 Building on firm ground

Ground improvements are needed to treat soft soils or areas of unconsolidated material. There are treatments to make soft ground sufficiently compact and a stable platform for the construction of roads and structures.

On the Huntly project the construction team will be using material loaded on to specific areas to compact and settle the base layer. It's called pre-load. So we will be using pre-load with wick drains to compact and strengthen the ground.

Pre-loading areas with wick drains

A wick drain is a vertical drain that allows an escape route for water when the soil is compressed.

The drain comprises a synthetic material wrapped around a piece of grooved plastic. It is inserted vertically into the ground, close to others, providing a path for water to flow and quickly escape once the pre-load

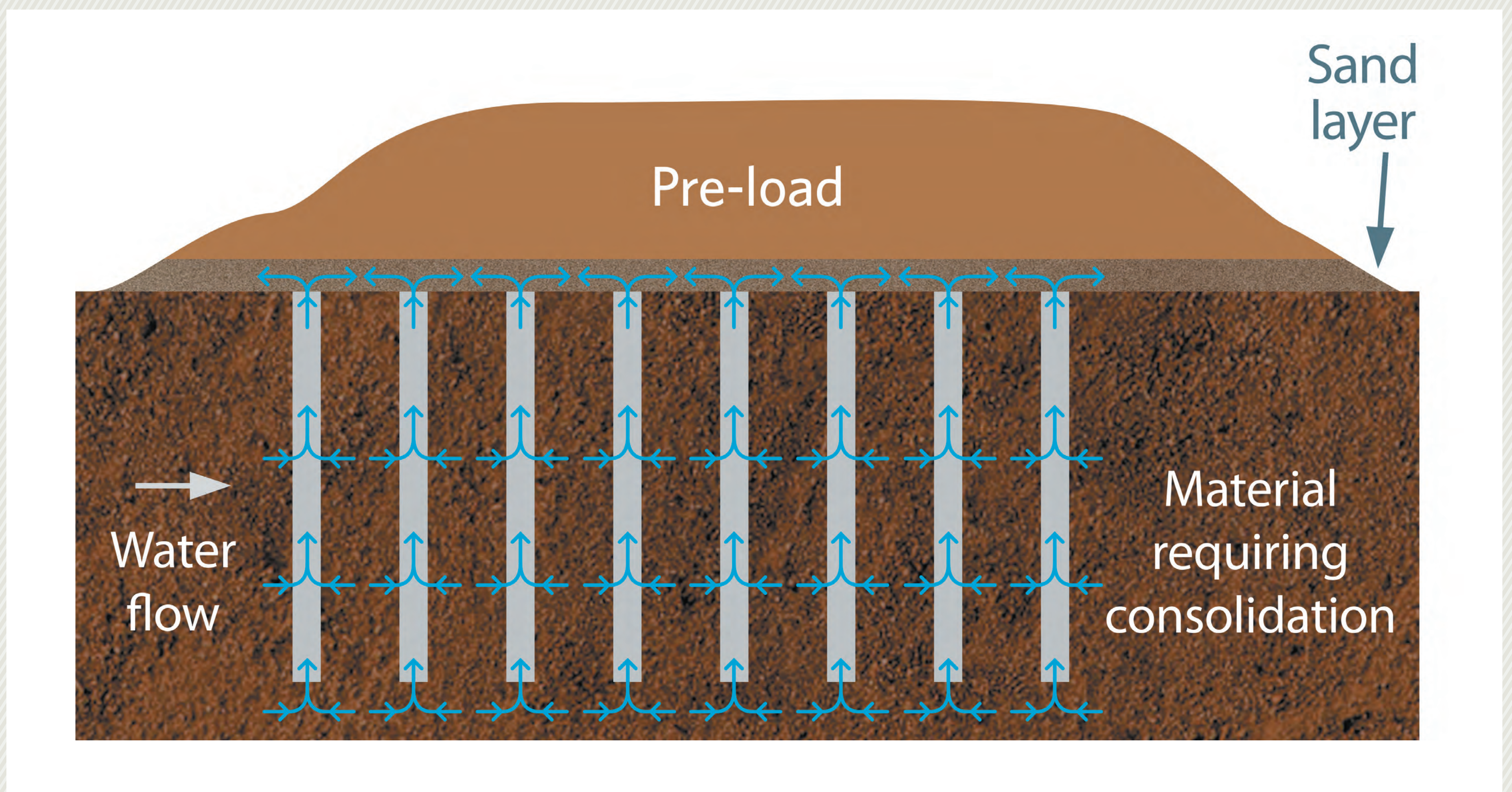


Diagram showing how wick drains remove the water content from soft soils.

material is placed on top.

Wick drains greatly reduce the time it takes for water to escape, speeding up the rate water is

removed from the silt and decreasing settlement time.

Wick drains will be installed to a depth of up to 15 metres.



Wick drilling: A crane is used to insert the wicks up to 25 metres into the ground.



Wicks installed in a grid-like pattern.