Background & Project Challenges

The Colebrook Municipal Landfill is an unlined 12 acre landfill located in northern, NH. USEPA regulations required that all unlined landfill be closed and capped. In order to achieve final site grades for cap construction, a perimeter earth berm (max. 25 foot height) was required around the landfill perimeter. The eastern slope of the landfill, however, is underlain by weak compressible organic soils, that posed stability problems to the proposed perimeter berm.

Geocomp Role & Accomplishment

Geocomp provided geotechnical design services for a 25 foot high perimeter berm associated with closure of the Colebrook Municipal Landfill located off of Skyline Drive in Colebrook, New Hampshire. The berm was constructed over very soft organic foundation soils that posed settlement and stability problems. High strength geosynthetic base reinforcement was designed to provide adequate construction stability. In addition, staged construction of the berm was required, to allow sufficient strength gain in the organic soils prior to completing the berm to its full height. The performance of the berm was monitored by Geocomp using remote real time monitoring.

Client:
Lynnfield Engineering, Inc.

Location:
Colebrook, NH

Value Provided:
- Geocomp developed a design solution providing a stable perimeter containment berm that allowed an increase in the volume of the landfill as part of the closure design
- Real-time 24-7 monitoring of perimeter berm with in-place inclinometers using Geocomp’s iSiteCentral™