

New Industrial Park, Building and Loading Areas

CASE STUDY

Year of Construction: 2022

Location: Vaughan, Ontario

Product Installed: NX750™ + Terrafix 270R

CHALLENGE

The site had soft soils (18.6 MPa resilient modulus) in the area where the parking and loading areas would be constructed. If the specified pavement section was built over this soft subgrade, the calculated drop in performance would be 75% compared to building the section over a competent subgrade. Excavation and removal of the soft soil was considered too expensive and time consuming. The engineer contacted the Terrafix technical team for a solution using geogrid.

SOLUTION

Digging out the soft soil and replacing it with additional 50mm minus crushed limestone would have nearly doubled that lift from 350mm to 650mm. Instead, Terrafix designed a solution with non-woven geotextile 270R and NX750™ geogrid underneath that worked without any additional undercut from the original design.

SPECIAL NOTE

Geogrid saves time when subgrade soils are soft. Use of InteraAx™ geogrid allowed for 30% faster construction and 25% cost savings compared to additional undercut and fill.

