



During construction



After construction

TTT UGLIE POLES

TTT Uglie Poles were used to provide a Ground Improvement solution under a new commercial warehouse development. The site was located in Otahuhu, Auckland.

Project background:

- A new commercial warehouse development was to be constructed.
- The project was completed by the contractor in 2018.

Why use TTT Poles:

- The ground conditions were exceptionally soft.
- The warehouse required foundations to support a high live load of 75 kPa. This was a particularly high loading as commercial buildings usually only require a live load of 15 kPa.
- The project needed to be completed on time and on budget – there was no tolerance for overruns.
- Due to the soft ground conditions lightweight installation equipment and materials were required. Poles, when compared with steel and concrete alternatives, are lightweight, easily handled, and installed using equipment with a lightweight footprint.
- TTT Poles were identified by the contractor as being the best, most cost effective solution that would achieve the high live load required with rapid installation.

How TTT Poles were used:

- TTT Uglie Poles were ordered by the contractor.
- TTT Uglie Poles are similar to SED poles but are debarked rather than peeled. They offer greater skin friction when used as piles and are stronger than SED poles.
- TTT supplied in excess of 1400 pieces, 14.0m x 250mm Uglie Poles.
- The poles were installed at 2.5m centres.
- The contractor installed the poles using pile driving. A gravel layer of 150mm was placed to enable easy site access for equipment establishment. The site remained very tidy during and after installation.
- The contractor installed all the poles in only 20 days.
- PDA (Pile Driver Analyzer) testing was carried out on approximately 30 poles. The results showed geotechnical loads in excess of 700 kN were achieved.



Photos courtesy of Markovina Pile Driving