TTT Products

Retaining Wall

using TTT Poles

TTT SED POLES

TTT SED Poles were used to create cantilevered retaining walls in a residential development.
The site was located in Stonefields, Auckland.

Retaining Wall

Project background:

- A residential development required cantilevered retaining walls to retain a steep bank.
- The site was located in a disused quarry.
- The project was completed by Gibbons Contractors Limited in 2019.

Why use TTT Poles:

- The ground conditions were a mix of soil, clay, and rock material that had been excavated from the old quarry.
- The poles had to be installed down to a significant depth so they could be anchored into structurally stable material.
- The retaining walls needed to support a large concrete gravity wall, with a road on top.
- The poles had to be installed very accurately to tight tolerances as the houses were to be built with only 50mm clearance from the retaining walls.
- The retaining walls were stepped in order to distribute the load.
- TTT Poles were identified by the contractor as being the best solution that would satisfy the need for accurate installation using lightweight installation equipment and materials, resulting in minimal impact on the remaining section of road.

How TTT Poles were used:

- TTT SED Poles (TTTested – High Density) were ordered by the contractor.
- TTT SED Poles are naturally tapered, machine-peeled poles. Minimal wood is removed during processing so each pole retains its strength.
- TTTested – High Density poles are poles that have been proof-tested with a characteristic bending stress of 52MPa or greater on TTTs purpose-built Pole Tester.
- TTT supplied in excess of 350 pieces of 10.0m, 12.0m, 14.0m x 400mm SED Poles.
- The contractor installed the poles by first drilling holes, then concreting the poles into place.
- Due to the close spacing of the SED Poles the contractor installed every second pole for the length of each wall, then passed back to install the remaining poles. Installation was done this way in order to avoid the possible collapse of the drilled holes.
- The SED Poles were installed in perfectly straight lines, meeting the stringent requirements of the customer.
- The walls were completed with H4 Roughsawn 150mm x 50mm G8 timber.

Photos courtesy of Gibbons Contractors Limited

Revolutionary timber pole solutions

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