CASE STUDY CRANBROOK ROAD SYDNEY, NSW

PLATIPUS® EARTH ANCHORING SYSTEM TEMPORARY WORKS

CONTRACTOR	Access Piering
CLIENT	Private
ENGINEER	Taylor Tomson Whitting (TTW)
SYSTEM USED	Platipus Earth Anchoring System – Temporary Works

ADVANCED GEOSYNTHETIC SOLUTIONSTM

The Project

The Cranbrook road location in Sydney was a private residence where Platipus[®] anchoring systems were used as part of a comprehensive temporary works solution. Two upper levels of Platipus[®] anchor systems were installed and provided additional tied-back tension load forces for a 9m high concrete contiguous piled retaining wall.

Temporary Works Design



Design (Working) load requirements of the tied-back anchor systems were 50kN and 80kN. Platipus® B6 and B8 anchor systems were driven at raked angles (increasing overburden on the anchor head) to depths of 8m into a dense sandy soil where they easily achieved the required proof loads of 20% above the working loads. All 24no anchor systems were installed over a period of one month and the system provided construction flexibility of using an on-site excavator with mounted breaker and local operatives. Anchor installation could be switched 'on and off' as required by the site program with no mobilisation or demobilisation of specialist equipment and resources. A waling system and clever anchor top termination or connection arrangement was detailed and designed by the contractor.

The Platipus[®] anchoring systems were chosen and deployed for the following main features & benefits:

- 'Buildability' & Ease of Installation effective & efficient installation
- Installation and implementation of the system can be switched 'on and off' very easily requiring the support and availability of local resources and plant
- No messy grouting, load uncertainty or delay in load testing with immediate load verification to satisfy the Engineer and all project stakeholders
- Environmentally sensitive solution no contamination from wet slurry or grouting measures used on a traditional soil nail system
- Total (supply & install) cost savings over alternative traditional solutions





