CORE | CIVIL SYSTEMS®

MARKET SECTOR: RESIDENTIAL
CLIENT: GANNON DEVELOPMENTS
LOCATION: NORTH EAST, ENGLAND

GANNON DEVELOPMENTS

THE GRANGE

THE CONTRACTOR

Gannon Developments Ltd specializes in bespoke housing projects, delivering premium quality developments tailored to client specifications. Their commitment to preserving natural features while meeting regulatory standards made them an ideal partner for this project.

PROJECT OVERVIEW

Gannon Developments Ltd embarked on the construction of six large executive homes, uniquely designed for speculative resale. The site, set among a stunning tree-lined landscape, required careful planning to strike a balance between tree preservation and infrastructure development.

The primary goal was to construct adoptable roads without compromising the health of the mature trees, meeting strict ecological and highway standards. CORE TRP was the ideal solution, enabling compliance with all stakeholders' requirements while maintaining the natural character of the site.

TOTAL AREA: 850M²

KEY REQUIREMENTS

- Achieve a balance between tree preservation and infrastructure development.
- Meet AGN12 requirements for tree root protection.
- Provide a fully adoptable road design suitable for heavy vehicles.
- Ensure minimal ecological disruption with sustainable drainage.

PRODUCT

CORE TRP is a cutting-edge ground stabilisation system designed to protect mature tree roots while supporting vehicular loads. Manufactured from high-strength recycled plastic, the panels create a robust, load-bearing surface while preventing soil compaction and damage to roots.

Our cellular confinement system has been tried and tested on projects ranging from small residential to large commercial schemes and has a 100% success rate.

THE CHALLENGES & THE SOLUTION

The project faced several challenges:

Tree Preservation: The presence of significant tree roots required a solution that protected their health and complied with AGN12 tree root protection guidelines.

Highway Standards: The road design had to meet the Highway Authority's requirements for adoption, including accommodating heavy vehicles such as bin lorries and emergency services.

Ecological Concerns: The construction process needed to align with environmental preservation goals, minimizing disturbance to the natural landscape.

CORE TRP provided a robust solution by creating a load-bearing, porous subbase that protected tree roots while satisfying all regulatory standards. The system's 200mm depth ensured the road could support heavy vehicles, making it suitable for adoption by the local authority.

Additionally, the use of porous asphalt with CORE TRP eliminated the need for extra drainage provisions, reducing environmental impact and ensuring compliance with SuDS (Sustainable Drainage Systems) requirements.

SUMMARY

This project highlights the adaptability and performance of the CORE TRP system in challenging construction environments. By opting for CORE TRP, Gannon Developments Ltd successfully:

- Protected tree roots while constructing durable access roads
- Reduced dig-out and waste removal, lowering project costs.
- Minimized subbase material use, promoting environmental sustainability.
- Delivered a fully porous road that met all drainage and highway requirements.

The collaboration between Gannon Developments Ltd and CORE Landscape Products demonstrates how innovative systems can harmonize infrastructure development with environmental preservation.