



Case

STUDY

STRATAGRID & LANDLOK

Inland Port
Reinforced Soil Wall



MARKET SECTOR:
Commercial



LOCATION:
Rakes Lane-Rail Bridge
Doncaster, South Yorkshire



CONTRACTOR:
Buckingham Group Contracting



CONSULTANT:
BWB Consulting Limited

The BACKGROUND

In order to increase traffic movements for bulk earthwork activities on the scheme, it was necessary to widen the approach roads either side of the existing railway bridge.

To avoid encroaching on adjacent land owned by a 3rd party and incurring significant costs, Geosynthetics were approached for their technical expertise relating to geogrid reinforced soil structures.

Our Client's REQUIREMENTS

Reinforced soil wall to widen the approach to either side of a railway bridge.

The batter of the slope needed to be increased beyond the natural repose of the proposed soils.

It was determined that a reinforced earth solution represented the most economical and cost effective solution. When designing this structure several factors had to be taken into consideration, including the heavy loads that the wall would be subject to after installation.



Our Value Engineered **SOLUTION**

Geosynthetics suggested using Stratagrid (its Uniaxial geogrid) as it met the high tensile strength required whilst also providing a long term solution.

To ensure speed of installation and that a constant slope angle was achieved, the face of the slope was constructed using sacrificial steel framework which was bent to the desired angle. Immediately behind the framework Geosynthetics TRM 450 Erosion Control matting was used to retain soils and promote vegetation growth.

Geosynthetics Limited were able to provide the client with expert knowledge and engineering assistance combined with high quality products at competitive prices. This solution demonstrates the level of service Geosynthetics can provide from the original design stages through to completion with full support throughout the process.

“We were very happy with the solution provided by Geosynthetics Limited in respect of technical assistance, quality of product and speed of delivery”

LAURENCE BONNER
Senior Project Manager

