

# Ground Stabilisation

Car Park, Gridtex and Abgrid, New College, County Durham, UK



CASE STUDY



## Project Description

New College in Durham is a higher education and adult learning centre in County Durham. The college is currently expanding their sports facilities with a new all-weather 4G pitch. As part of the first stage of the development the existing car park is being relocated to the edge of the site in preparation for the new amenities. The plans make provision for the creation of over 300 replacement parking bays, of which 20 are dedicated to electric vehicle charging.

## The Challenge

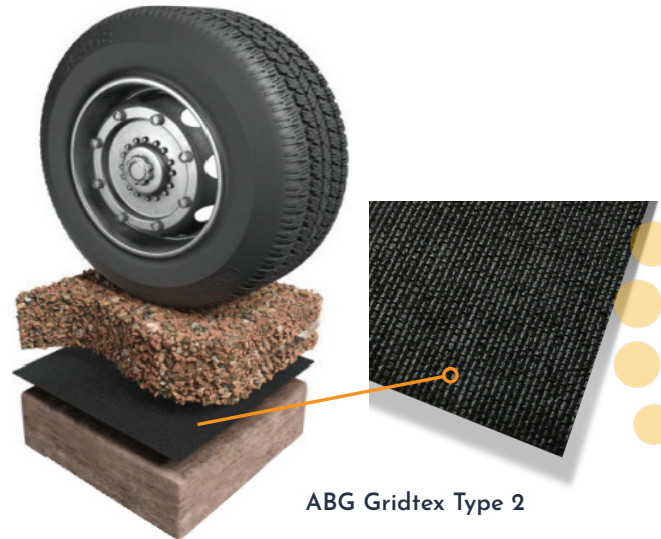
The new parking area had underlying areas of weak soil with low CBR values measured across the site. After the initial excavation, one area of the car park also had substantially lower CBR values due to a layer of vegetation within the formation causing deflection.

## The Solution

ABG's **Gridtex Type 2** was reviewed and proposed by the contractor for the new parking bays and access lanes and was duly accepted on the basis of cost and speed of installation. **Gridtex** is a high performance woven geotextile, engineered for reinforcement applications and suitable for strengthening a wide range of ground conditions.

## Project Information

<b>Client</b>	New College Durham
<b>Contractor</b>	Cleveland Land Services
<b>Products</b>	Gridtex Type 2 Abgrid 30/30
<b>Quantity</b>	9,975m <sup>2</sup> & 6,500m <sup>2</sup>
<b>Benefits</b>	<ul style="list-style-type: none"><li>• Speed of installation</li><li>• Cost saving (Gridtex provides combined geotextile and geogrid functionality)</li><li>• Geogrid utilised for weakest CBR areas to prevent deflection</li></ul>



ABG Gridtex Type 2

ABG LTD

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**Gridtex** is capable of fulfilling many of the functions required of a geogrid, with a high surface friction that reinforces adjacent aggregate materials. On areas of weak CBR, **Gridtex** acts as a separator and prevents the intrusion of fines.

## The ABG Service

ABG's Design Team offered advice on the stabilisation of the softest ground areas of the car park and **Abgrid 30/30** was specified beneath the **Gridtex** layer for additional protection against deflection.



New College, County Durham - plan showing relocated car park area



Reinforcement of weakest CBR car park areas utilising Gridtex and Abgrid 30/30 geogrid



Stabilised and separated layer of SHW Series 800 Type 3 sub-base

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