



Case

STUDY

ROCKBOX, HELICALS, LANDLOK, & EKOTEX

Kingham Hill School
Retaining Wall



MARKET SECTOR:
Commercial



LOCATION:
Chipping Norton,
Oxfordshire



CONTRACTOR:
Beard Construction



CONSULTANT:
Solid Structures

The BACKGROUND

Kingham Hill School is a small boarding school for 11-18 year olds located in the heart of the Cotswolds.

As part of the schools commitment to offer the best opportunities to its pupils, a site re-development incorporating a new sports centre was commenced in Autumn 2018.

Our Client's REQUIREMENTS

A sustainable solution for a site re-development

To create the footprint required for the new sports centre, the existing ground levels had to be reduced by approximately 5m into a combination of Made Ground and Whitby Mudstone.

Geosynthetics Ltd were contacted by local structural engineering consultancy, Solid Structures, to provide a suitable retaining solution along the northern face of the sports hall.

Our Value Engineered **SOLUTION**

Geosynthetics Ltd's in-house engineering team assessed a number of alternatives before a Rockbox retaining wall was chosen by the project team.

The required wall was approximately 100m in length, with heights varying from 0.5 to 3.0m. To value engineer the solution and minimise the wall height and associated costs, Geosynthetics designed the walls with a varying back slope of between 18-24 degrees.

Landlok turf reinforcement matting was pinned to the back slope to provide erosion protection and help the establishment of vegetation.

Beard Construction, experienced local contractor, undertook construction of the Rockbox/Landlok solution with Geosynthetics Ltd providing technical support by visiting site to ensure the wall was built in accordance with their design calculations and

