



Case

STUDY

ROCKBOX GABIONS

Birch Coppice
Wall Retention



MARKET SECTOR:

Commercial



LOCATION:

Birch Coppice, Dordon
Staffordshire



CONTRACTOR:

Buckingham Group

The

BACKGROUND

PHASE 2 of the successful re-generation of the former Dordon Quarry site that closed in 1987. With only 10 acres remaining on phase 1 of the development there was an urgency to get phase 2 ready.

Phase 2 covers 49.9 hectares and will consist of two million ft² of B8 distribution space linked to the Birmingham Intermodal Freight Terminal.

Our Client's

REQUIREMENTS

This layout yielded a material and excavation saving of over 20%

The project required extensive use of Gabions in retaining wall applications to achieve the required levels on site.



Our Value Engineered **SOLUTION**

This utilisation of identical volume units in a multiple layer configuration was only made possible after Geosynthetics Limited undertook an engineering analysis of the site conditions to prove that two units of single M3 volume could be used.

Site ground conditions were good and initial details proposed the use of two layers of Gabion Baskets. Buckingham Group Contracting asked us if we could do an engineering calculation to see if it was feasible to employ units with identical footprints to minimise the overall cut and fill operations; this would reduce the material and labour components significantly.

When compared to a standard detail this layout yielded a material and excavation saving of over 20%. When taking into account the considerable metrages involved this equated to substantial gains for the client and contractor in overall project cost.

