The

BACKGROUND

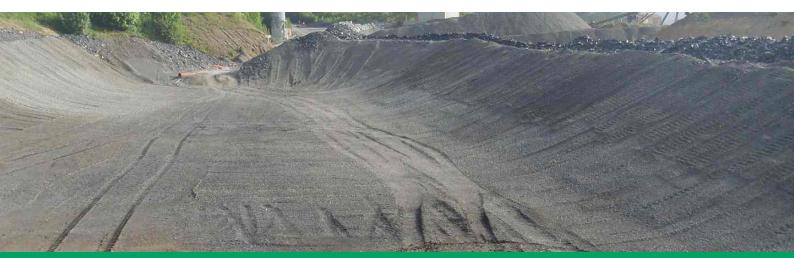**Mancetter Quarry is a source of Diorite which is a very hard granite like rock.**

The high skid resistance and durability of Diorite make it ideal for use in road building. The quarry has a further 5 years of reserves and is in the process of applying for planning permission to extend the life of the site.

Our Client's

REQUIREMENTS

A sustainable solution for a lagoon.

As the quarry works below the water table there is need to discharge water from the site.

Prior to discharge, water is passed through a series of two lagoons to settle out any suspended solids. The quarry footprint is huge and it was easy to accommodate the lagoon in the existing topography with minimal material movements required.

Our Value Engineered
SOLUTION

In order to complete such a large lagoon with minimal contracting costs; Tarmac looked to its own onsite labour to complete the task.

By using the Bentotex® GCL geosynthetic clay liner they were able to lay over 3,600m2 of liner without any specialist welding contractors. The only piece of plant that needed out sourcing was the "spreader beam", which allows for the unrolling of the 1200kg rolls using suitable lifting plant (the quarries existing plant was able to be used).

We were able to provide the details of a company that hire out beams, as well as providing relevant plant codes to help tarmac organise this. Another big consideration was the immediate availability on site of the required cohesive (no voids) fill for surcharging the Bentotex® GCL with the required 300mm of material.

"The whole project was completed in-house with Tarmac plant and labour, given the size of the lagoon (approximately 12 Million Litres), this meant a substantial saving in installed cost over a more traditional manmade liner."

Geosynthetics