CASE STUDY

Providing a complete **retaining wall solution**

OVERVIEW

GRM Development Solutions Ltd (GRM) has teamed up with Acheson-Glover (www. achesonglover. com) to provide engineered designs for its Anchor segmental retaining wall system.

The Challenge.

The increasing trend in developing challenging sites has created a whole raft of new issues associated with the selection of cost-effective, aesthetically pleasing and sustainable retaining wall and soil reinforcement solutions. Soil reinforcement and/or retaining walls must be visually appealing and in harmony with the surrounding environment.

Traditional solutions may have been the construction of solid reinforced concrete or brick gravity retaining walls, which take time to construct, may require skilled labour, and have limited scope aesthetically.

A Solution – Segmental Retaining Walls.

Segmental retaining walls (SRW's) are immensely versatile. At their simplest (up to around 1.2m high), they are gravity retaining walls that can be quickly and easily built without special skills or the need for using mortar or adhesives. However, with proper design, SRW's can be utilised in a wide variety of more demanding situations. These larger walls typically comprise of a mass of granular soil reinforced with a geogrid and faced with concrete facing blocks and where required can be built to heights of 10 metres and upwards.

KEY FACTS

- Cost benefits accrue because the onsite soils can often be re-used.
- The construction process is generally very fast compared to other retaining structures.
- There is generally no need to use skilled trades.
- Natural rock-like textures are available with a vast variety of colours, which can help the finished wall blend in with or compliment its surroundings.
- SRW's are designed so that as well as creating straight walls, they can be used in curves, corners and steps and even finished with matching cap details.

CASE STUDY

Site: Abercrombie Primary School, Chesterfield.

Project: Design of two segmental retaining walls.

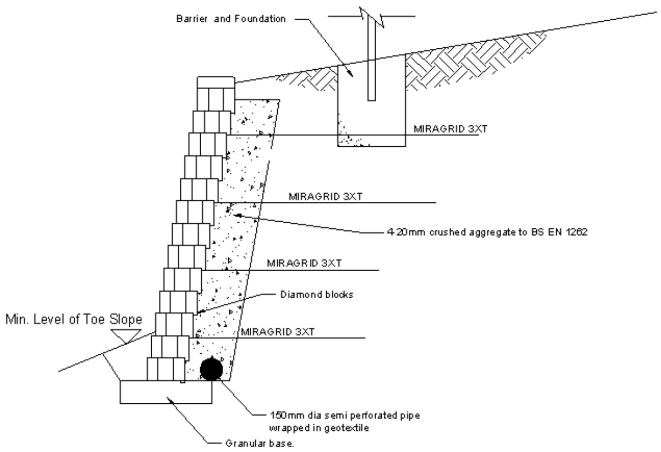
Client: Derbyshire County Council.

Contractor: Wildgoose Construction.

As part of the construction of a new primary school in Chesterfield, Derbyshire County Council required two retaining walls of up to 2.4m in height and 35m long.

One of these structures, a series of straight wall panels, formed the boundary of a proposed "Multi-Use Games Area" (MUGA) and included a stepped-back section to allow for a set of goal posts. The other wall was of a "softer" design being curved with changes in ground level. This wall was to be topped with an access path and a flight of steps.

In addition to the two engineer-designed walls, the Client also constructed some low (0.5m) high retaining walls using Anchor Diamond blocks, as part of the general landscaping scheme.



Initial feasibility designs were provided to the Client in March 2008, using the Clients preferred Anchor Diamond blocks in conjunction with geo-grid reinforced soils. GRM were asked to provide the detailed designs in early August 2008, and by the end of the same month construction work had started.

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Please contact us for an informal discussion on how we can save both time and money on your development project:

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