



Project Description

East Midlands Gateway rail development is located close to the M1/M42 junction, adjacent to East Midlands Airport near Kegworth, UK. As well as good links to the motorway network and airfreight terminal, the development connects directly to the Castle Donington rail freight line. This provides direct access to the UK Network of RFIs as well as major ports. The 50 acre intermodal rail freight terminal can accommodate up to sixteen 775m freight trains per day, along with container storage and HGV parking. Creating 6 million ft² of development plots required significant scale works. The 6 million m³ earthworks operation included the railway embankments. The topography of the site meant that the rail connection had to include an embankment. The client approached Hydrock and Winvic to design and build this railway embankment.

The Challenge

In some areas up to 25m of cut was required and in other areas embankments up to 7.5m high. The earthworks balance and economics meant that it was preferable to construct a mechanically stabilised embankment using minimum quantity of fill but this led to embankment slopes of 1:1.5. Such steep slopes are susceptible to erosion and require protection, particularly before the vegetation establishes. A geosynthetic system was required to provide the necessary long term erosion protection.

Project Information

Client	Segro PLC
Contractor	Winvic
Products	Erosamat 3/20Z500
Quantity	6,500m ²
Benefits	<ul style="list-style-type: none">• Designed for long-term vegetation reinforcement• Ideal 3D matrix for hydroseeding• Large rolls for rapid installation• Proven erosion control• Performance for very steep slopes



ABG Erosamat Type 3

Erosion Control

Erosamat, East Midlands Gateway Rail Terminal, Kegworth, UK



The Solution

ABG manufactures and supplies a complete range of permanent and biodegradable soil erosion control products and suggested a suitable product.

Erosamat 3/20Z500 turf reinforcement system with a proven performance was selected for the erosion protection of the embankment slopes and pinned in position in accordance with ABG pinning design. Erosamat Type 3 provides a 3D matrix that is ideal for hydroseeding. During germination the seeds and surface are protected by the polypropylene filaments of the Erosamat which encourages growth. As the roots establish they intertwine with the Erosamat to create a permanent and robust erosion control composite layer which provides permanent erosion control.

The ABG Service

ABG provided technical advice and design assistance.



Erosamat 3/20Z500 installed on railway embankment



Erosamat supporting wildflower and grass growth



Hydroseeded Erosamat erosion control system

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