# Landfill Cap Drainage

Pozidrain, Haulbowline Island Capping, Cork, Ireland





## **Project Description**

Cork County Council's East Tip is located on the Haulbowline Island near the town of Cobh in Ireland. The site was a dumping ground from the former Irish Steel factory and a highly controversial and unsightly legacy of the industrial past.

In 2005 the Haulbowline Island site was found to be in breach of the Waste Framework Directive. The European Commission accepted Cork County's proposed remediation strategy for this environmentally sensitive site.

The Sirius Group and P.J. Hegarty & Sons designed and constructed this complex restoration project for Cork County Council. The project was awarded the Best National Engineering Project of the Year 2019.

#### The Challenge

The Lower Harbour and the town of Cobh are leading tourist attractions and popular cruise destinations. The visual impact of the East Tip with a huge volume of unsightly waste in the vicinity was unacceptable and detrimental to this top tourist destination.

A comprehensive risk assessment for the remediation of the East Tip and capping of 650,000m<sup>3</sup> of industrial waste was required to transform this steelworks site into an outstanding public recreational amenity.

The requirement was to design and construct a capping system that maximised use of the existing materials and would meet all environmental constraints in difficult marine conditions.

## **Project Information**

Client	Cork County Council
Contractor	P.J. Hegarty & Sons
Consultant	The Sirius Group
Products	Pozidrain 6S250D/NW8 & 6S250/NW8
Quantity	90,000m²
Benefits	<ul> <li>High flow capacity in both directions</li> <li>Enabled maximum re-use of existing soils</li> <li>Adequate puncture resistance</li> <li>Large rolls for fast installation</li> </ul>



ABG Pozidrain Geocomposite drainage layer

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## **The Solution**

Remediation of the East Tip required a highly complex design solution and engineering works in the ecologically sensitive marine environment of Cork Harbour.

The Sirius Group designers worked with ABG to develop a geosynthetic capping solution that would provide adequate protection, drainage capacity and frictional performance to ensure slope stability. Pozidrain 6S250D/NW8 and 6S250/NW8 geocomposite drainage layer was specified and installed on top of the 1mm LLDPE textured membrane with 1m of soil cover. The project was delivered on time and below budget. Cork Harbour has been completely transformed by the remediation of the East Tip with excellent benefits for the local residents and a positive impact on society.

## The ABG Service

ABG provided design assistance, slope stability calculations and delivered material to site.



**Completed restoration project** 



Large Pozidrain geocomposite rolls enabled rapid installation and superior drainage performance



Pozidrain geocomposite drainage installation

Contact ABG today to discuss your project specific requirements and discover how ABG past experience and innovative products can help on your project.