



PENFOLD VERRALL
EARTHWORKS SPECIALISTS

Landfill Restoration

Multiple Biffa Waste Projects

2012 to 2024 (ongoing)





Introduction

Three sites, one client & 4.2 million tonnes tipped (and counting....)

Warnham
2,012,450
tonnes
(complete)

Pebsham
896,000
tonnes
(complete)

Redhill
1,295,00
tonnes
(ongoing)

Our ongoing partnership with Biffa Waste Ltd has been a cornerstone of Penfold Verrall's growth and success over the past decade. This collaboration began after we successfully restored Biffa's Windmill Landfill site in West Sussex to a high standard, leading to the award of restoration contracts for three additional landfill sites in the south-east: Brookhurst Wood in Horsham, Patteson Court in Redhill and Pebsham near Hastings.

Work began in 2012 at Brookhurst Wood, shortly followed by commencement at the Patteson Court and Pebsham Landfill sites.

Project Scope

Our role encompassed the full restoration of each site—from sourcing appropriate muck away contracts through our customer base to transporting the soil with our fleet of tippers, and ultimately deploying the necessary plant machinery for precise soil placement.

Sourcing of soils

Our muck away division was tasked with sourcing large volumes of suitable restoration-grade soil to satisfy each site's requirements. Given the scale of the three restoration projects, we expanded our efforts beyond our usual scope, servicing major construction developments across a wider area of the South-East to meet our growing demand for quality soil.

Soil Management / Placing

The restoration process involved importing and contouring restoration-grade soils to meet specific planting requirements.

We deployed a broad range of heavy plant equipment to maintain smooth operations, while our tippers efficiently transported large volumes of restoration soil sourced throughout the south-east.



Final restoration

Once the final levels were achieved, the last step involved seeding the area to restore it to natural grassland...

The restoration plan included planting wildflower mixes to earn environmental credits, demonstrating a commitment to biodiversity.

Penfold Verrall transformed each landfill site into vibrant ecosystems through sustainable restoration solutions, enhancing both the environment and biodiversity.

Key Challenges

Multi-site Restoration

Restoring landfill sites presents unique challenges, especially with the need to maintain operations year-round, regardless of weather conditions. Managing the restoration of three sites simultaneously was particularly challenging due to the large tipping voids involved.

Operating all three sites concurrently highlighted our ability to efficiently manage large-scale projects, ensuring timely progress and seamless coordination across every aspect. The substantial tipping voids at each site required a significant allocation of resources, emphasising the complexity and scale of the task.

'Live' Landfill Sites:

As some of the sites were still in the 'landfill' phase with waste being actively imported, our team was tasked with working safely and efficiently alongside other contractors and waste hauliers. A significant additional challenge was ensuring the protection of the on-site gas infrastructure running throughout and beneath our work areas, requiring careful coordination and attention to safety protocols.



Weather Conditions

Managing operations year-round, regardless of weather conditions, required a significant commitment of resources and meticulous planning. Earthworks became particularly challenging during the wet winter months, with these difficulties further compounded by the continuous operation of our fleet of 8-wheel tippers. These trucks ran daily throughout the winter, ensuring progress on the restoration sites while also meeting the demands of our muck away client base.

Conclusion

Our partnership with Biffa Waste Ltd has led to the successful restoration of several landfill sites, showcasing our ability to manage complex and large-scale projects.

From meticulous soil management to overcoming the challenges of working in active landfill environments, we have consistently delivered high-quality, sustainable results. Our ongoing commitment to sustainability and expertise in managing intricate projects ensures the transformation of these sites into thriving, biodiverse landscapes, benefiting both the environment and local communities.

