



BLACKPOOL SEAFRONT | BLACKPOOL



LECA® LWA geotechnical fill from Leca® UK helped the £80 million transformation of Blackpool's seafront ... and saved the council hundreds of thousands of pounds.

Some 4,000m³ of LECA® LWA was used, for the first time by Birse Coastal, to fill the void between the existing sea defences and a new sea defence wall. The new 7m high sea wall of precast concrete units was constructed immediately in front of the existing defences, limiting the space for foundations. The only way around this would have been to break out the old wall which would have added serious costs to both temporary and permanent works.

Through value engineering workshops held with Birse Coastal, consultants Halcrow Group discovered LECA® LWA was 66% lighter than its closest rival and considerably more cost effective. Anthony Burgess, regional engineering manager with Birse Coastal, estimates that not having to break out the existing sea defences saved Blackpool Council some £250,000.

“We hadn’t used a lightweight fill before but the LECA® LWA product performed very well. We were a little concerned at first about using lightweight material because of the exposed environment. We thought it might blow away in the wind or float away on the tide.

“But we got a lot of support from LECA® LWA and when we trialled it slowly on the Blackpool project, it proved very effective and simple.”

To assist with minimising costs a dedicated shipment of 10-20mm LECA® LWA was received into Goole docks and trucked across the Pennines to Blackpool on walking floor vehicles carrying average loads of 86m³. More economies of scale were realised with the walking floor vehicles which negated Birse having to work around its ban on articulated tipper trucks.

FACTS

Amount of material: 4,000m³

Interesting Fact: Halcrow Group discovered LECA® LWA was 66% lighter than its closest rival and considerably more cost effective. It was estimated that not having to break out the existing sea defences saved Blackpool Council some £250,000.

Delivery Method: Walking Floor

Main Contractor: Halcrow Group