



A595 MORESBY HALL HIGHWAY



Over 11,000m³ of Leca LWA has been specified and delivered for a £16 million improvement scheme on the A595 next Moresby Hall. Over several years the local authorities have been monitoring localised areas of movement within the embankment supporting the A595. A developed scheme was planned and funding was

secured to deliver a repair to the embankment and create 1300m of new drainage which allowed for the improvement and maintenance on the A595.

A.E Yates Contracts Manager, Ruairi Flynn MCIOB provided an overview on the specification of Leca LWA, “Due to height of embankment we required material that would limit settlement and significantly reduce load risk on new drainage infrastructure installed below the embankment. The material also had to possess internal load bearing stability to take construction and traffic loads. It needed to be lightweight, high angle of internal friction and reasonably easily manageable on site.”

FACTS

Client: National Highways

Contractor: A.E Yates

Delivery Method: Direct Ships to Workington/ 7 mile distance on Walking Floor

Product: 11,000m³ [Leca LWA \(10-20mm\)](#)

The first phase of the work started in late 2022 and was mostly off the road - minimising the impact for road users. During this phase – the site team A.E Yates built the embankment, installed new drainage system to capture surface water run-off from the hillside above Parton; installing two new large, open channels to control and regulate the flow of rain and creating a large pond to act as a filter to improve water quality before it enters the Lowca beck – improving the biodiversity in the area. The new drainage system will reduce the risk of flooding on the road in the future.

For this project, it was essential to ensure that the suitable material was specified due to the unique nature of this project and A.E Yates Contracts Manager, Ruairi Flynn MCIOB goes on to explain, “Leca’s presentation of technical data was very detailed & it provided us with the assurances we needed. It performed exactly as predicted & Leca LWA provided excellent technical support throughout.”

Two site compounds were built, one alongside each embankment of the A595. Here micro-tunnelling techniques were used to minimise disruption while we bored two tunnels were bored under the embankment as part the work to upgrade the drainage system along the A595.

The second phase of the reconstruction required a full road closure. Beneath the road and embankment there was a large gas pipeline which needed to be moved. It was in this phase where the focus was on additional drainage improvements to complete the embankment work.



By lightening the embankment in highway development with Leca® Lightweight Expanded Clay Aggregate, subsoil strengthening and lengthy settlement can be reduced or even avoided altogether. Using Leca® Lightweight Expanded Clay Aggregate on large scale cut and fill operations and construction on soft soils or bad ground can overcome stability problems, reducing the risk of landslide and deformation. Used in road embankments, Leca® LWA exerts much lower horizontal earth pressures compared with other backfill materials, helps improve stability and reduce the need for counterfill.

So, for the developers – for geotechnical reasoning - specifying Leca LWA both acted to reduce the burden of stress on the embankment and offer a flood water management protective system.

A. Yates Contracts Manager, Ruairi Flynn MCIOB when asked on whether Leca LWA would be considered in the future, “Yes, it would definitely be considered should it be appropriate to project constraints. I would highly recommend using Leca LWA.”