



BERTHA PARK A9/ A85 PROJECT, PERTH, SCOTLAND



Leca® Lightweight Aggregate was recently specified by Perth & Kinross Council's design consultants CH2M to provide an innovative solution to a brand new infrastructure development in Scotland. The A9/ A85 project was delivered by the Scottish Council in order to alleviate current and future traffic congestion,

and to provide essential infrastructure to support economic growth in the surrounding area.

The poor ground conditions meant the use of traditional dense fill material to make up levels and backfill behind the new bridge abutments was not considered to be an acceptable solution, because a dense fill would have imposed loads resulting high settlement on the poor ground and unacceptable loadings against the A9 highway embankment. Leca® LWA was selected to reduce settlement and to alleviate the risk of possible movement as a result of the new A9 overbridge.

More than 20,000m³ of Leca® LWA 10-20mm was specified for this project and was shipped by boat to Perth harbour between January 2017 and January 2018 using Articulated Walking Floor Trailers, with around 70m³ per load. Leca was specified for many reasons and this included its lightweight properties in comparison to traditional fill material. The reduced settlements as a result of using Leca® LWA allowed for potential damage to surrounding road infrastructure was mitigated and the stability of Leca® LWA reduced the risk of deformation and landslide. Leca® LWA was used in both sides of the bridge development and this was to back fill the bridge abutments and to build up levels.

FACTS

Amount of material: 20,000m³

Interesting Fact: The poor ground conditions meant the use of traditional dense fill material to make up levels and backfill behind the new bridge abutments was not considered to be an acceptable solution, because a dense fill would have imposed loads resulting high settlement on the poor ground and unacceptable loadings against the A9 highway embankment.

Delivery Method: Walking Floor

Main Contractor: Balfour Beatty