



SA1 Swansea Waterfront Development



Leca LWA was recently specified for a new SA1 Swansea Waterfront development in South Wales. This new area will house faculties for architecture, computing and engineering and much more. The SA1 development will also be home to the Construction Wales Innovation Centre (CWIC). This new development

area created 1,000 square metres of floor space, providing a ConstructZone, classrooms, dedicated IT suites and conference facilities.

To accommodate this large geotechnical project, an existing promontory was required to be raised to a new level and a suitable lightweight fill solution was required behind a new reinforced concrete wall. It was originally proposed for EPS to be used, but following much deliberation and assessment with the LECA UK team, it was found that LECA LWA would be the perfect solution for this specific design and LECA LWA was used as the primary fill solution.

The contractor was inexperienced with the use of LECA LWA and had not used the material on any previous geotechnical projects, so he was unfamiliar with the different grades available for LECA LWA, which ranges from 2-4mm to 10-20mm. It was decided that 400m³ of LECA LWA (10-20mm) would be the perfect solution. LECA LWA 10-20mm is the material which contains the most unique lightweight properties to be a structurally sound material for backfilling reinforced walls, due to its light and compaction properties.

FACTS

Amount of material: 400m³

Interesting Fact: It was originally proposed for EPS to be used, but following assessment with the LECA UK team, it was found that LECA LWA could be used as the primary fill solution

Delivery Method: Artic Tipper

Main Contractor: Alun Griffiths (Contractors) Ltd.