



M9 WINCHBURGH JUNCTION HIGHWAY DEVELOPMENT



We were specified for the M9 Winchburgh development, where over 9000m³ of LECA® LWA 10-20mm (Lightweight Fill) was delivered as a solution for poor groundwork conditions.

The new motorway junction on the M9 was developed to provide access for an expanding residential community at Winchburgh. The motorway will enable over 3,800 homes including 750 affordable homes, of which 450 will be for social rent to address the critical shortage of housing in the area. This includes the delivery of green, open spaces such as the 78 acre Auldathie Park, Daisy Park and a new marina on the Union Canal, to provide a more aesthetically pleasing and functional environment for the local residents.

This new sustainable development has been initiated by **RJ McLeod Ltd** on behalf of **Winchburgh Developments Ltd** to alleviate traffic congestion on the local roads; whilst creating improved access to the motorway within the region. Due to poor groundwork conditions, LECA® LWA was specified to provide a lightweight and structurally robust solution for the new highway.

FACTS

Amount of material: 9,000m³ of [LECA®LWA \(10-20mm\)](#)

Sub Contractor: RJ McLeod

Interesting Fact: The material was shipped directly to Leith Port to minimise road miles and reduce CO₂ emissions for the project.

Sustainable Development

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The 'pull out' resistance of LECA® LWA makes it an ideal solution for reinforced soil retaining walls and bridge design. Particularly when constructed over weak sub-soils or voids, this method has been proven to cut overall construction costs considerably. LECA® LWA is used extensively to reduce vertical loading.





As a fill material, LECA® LWA can effectively decrease the earth pressure. Due to its lightness the vertical earth pressure impacting the structure is up to 75% lower than induced by the natural rock fill. Lower earth pressure enables optimized dimensioning of supporting structures; and therefore application of LECA® LWA as backfill in these circumstances is usually a cost-efficient solution.

Leca UK National Sales Manager said *“It is great to be specified for this new highway development in Winchburgh. As a company we have a strong history within Scottish infrastructure and this project only supports this. We were especially proud to be able to offer a sustainable delivery solution for LECA® LWA material for this project; through our direct shipping delivery to Leith Port, which was locally stockpiled to limit the number of trucks required on the road; travelling long distances and polluting the local roads in the area. The reduction in CO2 emissions in transport for this development supports our robust sustainability aims and initiatives as a company. We are excited to see this development progress.”*