



Delivering the design of a £10m vast warehouse through efficient steel framing, vibro-stone ground improvement, and integrated sustainable roofing solutions

Location: Cranmore, Somerset
Client: Willmotts Transport
Architect: MPR Architectural Designs
Contractor: Curtis Engineering

Industrial / Commercial / Long-span / Portal frame



Project Overview

In 2022, AWA embarked on the structural design of a new warehouse for Willmotts Transport, a leading warehousing and distribution company based in Cranmore, Somerset. The £10 million project aimed to provide additional storage capacity and a dedicated loading area for the company's extensive fleet of over 200 vehicles.

Engineering Challenges and Solutions

The proposed warehouse, standing at 12 meters tall, was the largest spanning structure AWA had designed to date, utilising a steel portal framed structure. The site required the demolition of an existing building, and subsequent soil investigations revealed poor ground conditions. To address this, AWA implemented vibro stone columns to enhance the soil's bearing capacity, offering a cost-effective alternative to traditional piling methods.

The warehouse roof featured translucent and cladded panels to ensure compliance with building regulations mandating at least 10% natural light. Additionally, the roof was equipped with solar panels, contributing to the facility's energy efficiency and reducing its carbon footprint.

Project Outcome

Completed in 2023, the new warehouse met the operational needs of Willmotts Transport. The project exemplifies AWA's capability to adapt and deliver complex engineering solutions in large-scale industrial settings for substantial storage load conditions.

