



Earth retaining walls for Port One, Great Blakenham

Background

Catering for the increasing demand for e-commerce warehousing, Port One is a brand new development at Great Blakenham, near Ipswich, providing 90 million cubic feet of storage capacity. Located just off the A14 and a 20 minute drive from the Port of Felixstowe, the units have been purpose built to offer high ridge heights of approximately 20 metres coupled with narrow aisles to maximise the cubic capacity of the facility. The size of the development is huge and will operate 24/7, 365 days a year to satisfy the very specific needs of online shopping.

Due to varying heights of the topography, earth retaining walls were required to cater for differing levels between some of the warehousing units. In addition, boundary walls were needed in places to hold back banks of earth.

Main contractor



How we helped

Poundfield Precast supplied and installed 150 L-walls ranging in height from 3.5 metres down to one metre. The walls were bolted to a concrete base to anchor the units and resist overturning and sliding. Due to higher than usual loadings, we worked with our engineers and used larger ground fixings for the walls retaining the earth bank.

The walls between the warehouses had to be specially designed to take the additional loadings from the warehouse. We increased the reinforcement, wall thickness and foot size, as well as increasing the depth of the ground fixings from 180mm to 500mm.

Due to how far the job had progressed on site, we worked with the main contractor and their frame erectors to temporarily move steel work to allow access to install the L-walls.

By using precast L walls rather than building an in-situ wall, the amount of time required to complete the project was dramatically reduced. Precast walls also result in far less wastage, and ultimately can provide a more cost effective solution.

