

# APEX PARK DAVENTRY

Combined Soil Stabilisation undertook a project at Apex Park in Daventry for Volker Fitzpatrick.

CLIENT  
**VOLKER FITZPATRICK**

PROCESS  
**LIME & CEMENT  
MODIFICATION**

VALUE  
**£1,240,000.00**

VOLUME  
**86,000M<sup>2</sup> 30%CBR, 27,000M<sup>3</sup>  
15%CBR, 65,000M<sup>3</sup> 8%CBR**

Located in 'The Golden Triangle', an area of the East Midlands that has become renowned for its high density of distribution facilities, a 500,000 square foot warehouse was to be constructed on the site.

Whilst on site the COVID-19 pandemic materialised and to keep our employees safe at work during these difficult times we introduced comprehensive additional measures, to fully comply with government guidelines.

The site was sloping and required up to 10 metres of fill in places. A stringent earthworks specification has therefore been applied. Any area with more than 4m depth of fill has been dynamically compacted prior to upfill. To guarantee a requirement for 65MPa, 15% CBR and 98% compaction we chose to use a lime and cement treatment to 30,000m<sup>3</sup>. In areas with less than 4m the CBR is relaxed to 8%. A lime only mix will achieve this for the remaining 50,000m<sup>3</sup> of material.

Once at formation level we treated 85,000m<sup>2</sup> across the site - 45,000m<sup>2</sup> for the building footprint and 40,000m<sup>2</sup> of externals for yard, lorry and car parking. This area was lime and cement stabilised to 30% CBR to provide a non frost susceptible layer to the external areas. This option considerably reduced the volume of imported stone required as only 100mm depth was needed (300mm without treatment).

We met with the Principal Contractor and their designers on a number of occasions prior to contract award to ensure that the end product could be achieved. We further agreed the stringent testing requirements for the project to provide assurance that the treatment would achieve the specification.

An independent UKAS accredited laboratory is also being employed to ensure end user confidence in the testing regime.

