Case Study:

Student Accommodation, Portland Green



Client:

Patrick Parsons & Metnor Construction on behalf of Newcastle University

Commercial/Retail

Drilling & Grouting Deep CFA Piles

Newcastle

£1m

2016/2017





Over the past few years, Van Elle have carried out the drilling & grouting and piling for the new student accommodation blocks at Portland Green in Newcastle for Patrick Parsons and Metnor Construction.

The grouting work carried out to stabilise the mine workings in the 2016/2017 financial year consisted of 352 boreholes, over 750t of PFA and 62t of cement.

Although the foundations for the first 3 buildings were constructed using traditional piling techniques, the most recent 3 structures required a rotary solution in order to advance beyond the coal seems and found in competent ground... or did they?

Van Elle's brand new Llamada P160TT CFA rig, the largest in the UK, enabled us to reach greater depths and install piles of a larger diameter than would otherwise not be possible. This new capability meant that we could redesign the piles to carry the required loads but install them using a CFA solution, significantly reducing both the programme and cost.

Plots 5, 6 and 7, all completed in 2016/2017 and totalling in excess of £1m revenue to the Group, required a total of more than 712 piles ranging from 400-500mm diameter and from 13m to 34m in depth depending on whether we were drilling within the footprint of the old landfill.











