

Ouseburn Valley, Newcastle

Drilling & Grouting and CFA piling for a new residential development.



AARSLEFF

Ouseburn Valley is to be a collection of 28 luxury two- & three-bedroom apartments in the heart of Newcastle. The new development will transform a small area of land that once was the cattle sanatorium in Lower Steenberg's Yard. The new mezzanine-style homes will be surrounded by a vibrant community of shops, entertainment, and visitor attractions, including the Toffee Factory and the Victoria Tunnel.

PfP Igloo awarded the main contract for the construction to ESH Construction Ltd, who awarded Aarsleff Ground Engineering the geotechnical and piling package.

Aarsleff commenced drilling and grouting works in February, deploying three of its Casagrande C6 drilling rigs. The grouting works involved treating a 1,508sq m area, drilling on a 3m grid pattern. Aarsleff's site team drilled to an average depth of 31m to ensure complete consolidation of the Pennine Coal Measure mining works underlying the site. The Pennine Coal Measure consists of a lower, middle, and upper formation of mudstones, siltstones, and sandstones, along with numerous coal seams.

Aarsleff Ground Engineering's Geotechnical Engineer Andrew Shaw oversaw the drilling and grouting on the project,

"We were able to carry out the drilling and grouting works quickly and safely, despite the area of the site being much smaller than other sites we have worked on. This required careful planning and coordination of our rigs movements and site deliveries to ensure no disruption to our piling and grouting works."

Aarsleff also installed 154no. CFA piles of 450mm diameter for the foundations of the development. An additional 16no. SFA mini piles were specified due to restricted access to some of the pile positions on the site. Aarsleff deployed its Klemm 709 rig which was able to safely install the mini piles, with some of the piles also being used to create a bridge over an existing water main under the site.

Jack Doran, Aarsleff's Contracts Manager who also worked on the project, commented saying,

"It is great to complete another project in Newcastle. We have worked on many projects within the city and the surrounding area, including cliff stabilisation works in Tynemouth, piling and grouting works at Durham train station, and the ground engineering package on the Sunderland Strategic Transport Corridor phase 3 for ESH."



Photo taken of the structure in September 2020

Scope of Works

Drilling & Grouting to depths of 30m
154no. 450mm diameter CFA Piles
16no. 450mm diameter SFA Mini Piles

Contractor

ESH Construction Ltd

Equipment

2X Casagrande C6xp-2
1X Casagrande C6
1X Casagrande B175 CFA rig
1X Klemm 709

Construction period

10th February – 19th March 2020

Aarsleff Ground Engineering Ltd, is the UK trading arm of Danish contracting giant Per Aarsleff A/S, and is one of the UK's leading piling and geotechnical design and installation specialist contractors; actively promoting early consultation to ensure each scheme can be Value Engineered to give clients the best service, quality design, safety and value. Aarsleff's strategy and philosophy of investment into the future has resulted in its wholly owned subsidiary Centrum Pile Ltd having the most advanced precast pile production facilities in the UK, producing segmentally jointed precast concrete piles to BS En12794 to Class 1A.

Contact

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