

Leeds University Business School

Contiguous wall & bearing piles for new teaching facility on Cloberry Street.



AARSLEFF

Established in 1904, the University of Leeds is a public research university based in Leeds, West Yorkshire, England. Renowned globally for the quality of its teaching and research, its origins go back to the nineteenth century with the founding of the Leeds School of Medicine in 1831 and then the Yorkshire College of Science in 1874.

In October 2019, BAM Construction Ltd (North East) awarded Aarsleff Ground Engineering the contract to deliver both a contiguous pile wall and bearing piles for the University's new teaching facility on Cloberry Street. The new six-storey teaching block forms phase three of the Business School's expansion plans, and includes technology-rich, flexible teaching spaces, lecture theatres, a new Trading Room and Behavioural Laboratories to provide more flexible and innovative ways of teaching.

From the 25th November to 15th January, Aarsleff were on site with a Soilmecc SR-45 CFA piling rig, installing a 1517m long contiguous pile wall, constructed on 600mm nominal diameter continuous flight

auger piles for retained heights up to 5.85m. The contig piles were designed to be cantilever in the temporary condition then propped by the basement and ground floor slab in the permanent condition. Aarsleff utilised a SR-45 to install the piles due to it being an easily transportable hydraulic piling rig around the university's campus.

Aarsleff Ground Engineering were notified of restricted access piles adjacent to the university building that required to be carried out during office closure hours. As a result, they ensured that access was planned, the correct cages were on site and ready for the correct install dates, and monitoring of the building during the construction of the piles had been thoroughly arranged beforehand.

Aarsleff delivered the project ahead of the programmed completion date. This was very important as the students were taking exams 5 days after their last pile was put in the ground. The piling was planned to finish so BAM Construction could use the quiet time to get another phase work running.



All logistics on site were carried out during quiet traffic times as to not impact on the neighbouring nursery and the campus. In addition, they utilised a quiet and vibration free piling method too.

Aarsleff have been commended on their planning and organisational skills and for causing absolutely no disruption in the community or the campus, allowing the University students to revise and sit their exams as normal.

The company have worked with BAM Construction Ltd on several schemes over the years. In 2017, Aarsleff carried out the drilling and grouting, soil nailing and driven steel tube piling for a new primary school in Leeds, and delivered a steel driven pile solution in Bannerdale for a new build secondary school a mile south of Sheffield city centre.

Scope of Works

1517m contiguous pile wall

Main Contractor

BAM Construction Ltd (North East)

Main Client

University of Leeds

Equipment

80 Tonne Crane

40 ft concrete wagon

SR-45 CFA rig

Concrete pump and agitator

Construction period

25th November 2019 - 15th January 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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