

# Bell Farm, Bedford

Driven sheet piling for a 40 acre logistics park



**AARSLEFF**

On behalf of Winvic, one of the UK's leading 'shed specialists', Aarsleff Ground Engineering were awarded the piling contract for Bell Farm, part of the construction for a new 40-acre logistics park in Bedford.

Having commenced on the 19th October, the piling work followed a 6-week programme whereby Aarsleff installed 329.4 l/m of driven steel sheet piles: a key geotechnical feature for the Bedford Link Logistics Park.

The greenfield site is approximately 4.5km southwest of Bedford Town with a farmhouse and associated outbuildings located to the north west of the site. The southern east of the site is bordered by A4280.

Specifically, Aarsleff Ground Engineering installed 329.4 l/m of AZ12-770 (section modulus of 1245cm<sup>3</sup>/m) and AZ17-700 (section modulus of 1730cm<sup>3</sup>/m) steel sheet sections along the western boundary of the site which was complemented with pre-boring and folded steel capping beam to assist a max RH of <math>\leq 3.6\text{m}</math>.

Aarsleff Ground Engineering carried out a detailed assessment with care, skill, and diligence to ensure that a final workable product was fabricated that considered the varying ground stratigraphy.

Aarsleff's design strategically produced 5 sections which accompanied and suited the true ground conditions by defining each section with its own personalised steel section size and length. Aarsleff employed pre-boring of the pile positions to loosen the surrounding ground to ensure the design toe depth was achieved and to gather observations pertaining to ground conditions.

Aarsleff deployed 5 machines to ensure the piling programme was met without any delays using a Hitachi excavator to offload the steel sheet sections, their Soiltek drilling rig to conduct pre-boring, a Sennebogen crane to handle and pitch the piles and a leader rig to install and back install the steel sheet sections using driving vibratory hammer.

Aarsleff's work is a fundamental component of commercial building projects throughout the UK, having provided the foundations and geotechnical solutions for many schemes including mega-retail sheds, distribution warehouses, University accommodation and major supermarket and household name units.



**Scope of Works**

329.4/m steel sheet piles

**Contractor**

Winvic

**Equipment**

Hitachi ZX350LC-5

Soiltek S80

Sennebogen 643R

Leader Rig RTG16T

**Construction period**

19th October 2020 - 23rd November 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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