

LEICESTER ROYAL INFIRMARY

Leicester

Van Elle's Specialist Piling division was appointed by Henry Brothers Construction Limited to deliver foundation works for a new hospital unit at Leicester Royal Infirmary.

The works were delivered over three phases, utilising a Klemm 708 rig during Phase 1 and a Klemm 709 rig for Phases 2 and 3.

PROJECT BACKGROUND

- Appointed by Henry Brothers Construction Ltd.
- Working within an operational healthcare environment, the team installed 72 No. 450mm diameter Sectional Flight Auger (SFA) piles to depths of up to 14m.
- The SFA technique was selected to suit the site's ground conditions, providing an efficient and reliable foundation solution for the development.

CHALLENGE

During the piling works, the team encountered variable ground conditions and identified an existing culvert that impacted four of the planned pile locations.

These unforeseen site conditions required a review of the construction methodology and the introduction of an additional phase of works to ensure the foundation design requirements were maintained.

A further challenge was the restricted access to the lower moat area. To overcome this, a mobile crane was utilised to safely lift the piling rig onto the working platform, enabling the works to proceed while maintaining programme and site safety requirements.

SOLUTIONS

To overcome the challenges, the affected areas were excavated and investigated before the team returned to site to complete the remaining works.

The excavated ground was subsequently cased to provide stability within the backfilled made ground, allowing the SFA piles to be installed safely and effectively through the casings.

Through a flexible approach and close collaboration with the project team, the works were successfully completed across all three phases, delivering the required foundation solution while adapting to the site's changing ground conditions.

AT A GLANCE

Sector: Commercial

Solutions & Techniques: Sectional Flight Auger (SFA) Piling

Client: Henry Brothers Construction Ltd

Van Elle Division: Specialist Piling

EQUIPMENT

- Klemm 708
- Klemm 709

