

# Vitrum, Cambridge Project

## Secant Pile Wall to support the development of the Vitrum, a state-of-the-art Science Facility.

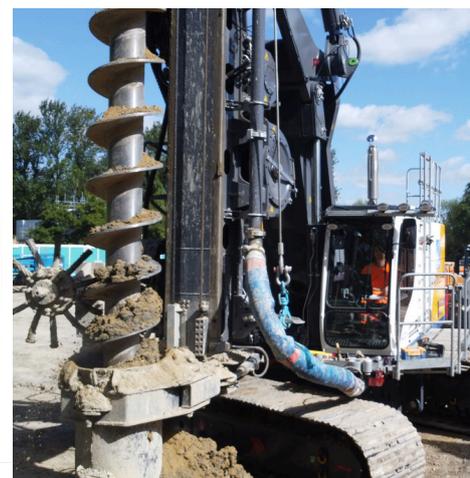
The project involved installing a secant pile wall to support the development of Vitrum, a state-of-the-art life sciences facility within the 21-acre St. John's Innovation Park in Cambridge. Designed by the renowned architectural firm Henning Larsen, this five-story building will offer approximately 175,000 square feet of flexible laboratory and office space, tailored to support a wide range of scientific research and development activities.

The site itself presented unique challenges, including service diversions and the proximity of high-voltage (HV) cables, requiring meticulous planning and execution. A total of 570 secant piles were installed, each 600mm in diameter and up to 10m deep. A fully cantilevered design was used, eliminating the need for props or anchors, reducing complexity and cost while maintaining structural integrity. The work was carried out in two phases to accommodate critical HV, water, and BT service diversions. Precision planning was essential, with dummy positions placed at key locations to ensure seamless transitions between phases.

Operations were conducted in close proximity to live services, requiring strict adherence to exclusion zones and close coordination with multiple stakeholders to minimise disruption and ensure safety.

Aarsleff utilised the new Bauer BG33 Multidiscipline Rig, which provided superior accuracy and efficiency in challenging ground conditions. The innovative use of the Bauer BG33 rig, combined with detailed planning and execution, allowed for a smooth operation while upholding the highest safety standards.

Successfully completed on schedule and within budget, this project exemplifies the importance of precision engineering and collaboration in overcoming complex logistical challenges.



### Data

570 x 600m secant piles up to 10m deep.

### Client

JF Hunt Regeneration

### Challenges

HV, water and BT service diversions

## Contact

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