

# Project Overview

SPEEDECK contributed to developing 50 low-rise housing units in Cheshunt for a main contractor, delivering a complete foundation scheme over a swift 10-week span.

Successful handover of all plots at Structural Slab Level (including under-slab drainage) in just ten weeks. Despite the ground challenges, SPEEDECK delivered sustainable solutions and unparalleled value to the client with intricate technical knowledge and targeted site investigations.



**SPEEDECK**  
FOUNDATIONS LIMITED



## Dark Lane Cheshunt

<b>CLIENT TYPE</b>	Main Contractor
<b>LOCATION</b>	Cheshunt, Hertfordshire
<b>NO. OF UNITS</b>	50 units



# Design Engineering

**Heave Report:** We submitted a detailed heave report addressing potential ground movements and ensuring foundation stability. This proactive measure eliminated the need for heave precautions, simplifying construction.

**Temporary Works Calculations:** By conducting essential stability and safety calculations early on, we avoided the requirement for an engineered piling platform. This decision saved resources and transportation and enhanced construction pace and cost efficiency.

**Pile Design Refinement:** Considering environmental challenges, we fine-tuned the pile design for robust structural support.

**Standardised Design Pack:** Our consolidated design pack streamlined approval and secured full sign-off from the NHBC, emphasising the compliance and quality of our design approach.

## Challenges

SPEEDECK tackled a significant challenge when faced with a high water table at the construction site. Instead of building below it, which would incur extra costs, our team devised a tailored solution.

We opted for a Piled Raft Foundation to avoid excavation below the water table, ensuring a swift, safe, and uncomplicated construction process. CFA Piling was chosen to address the high water table, preventing issues like borehole collapses and accelerating construction timelines with minimal disruptions.

Our design choices, including avoiding piling mats below the water table, resulted in significant cost savings compared to traditional methods. Despite the cost challenges, we committed to a fixed price for the entire project, demonstrating our client-focused approach and delivering value for the scheme.

