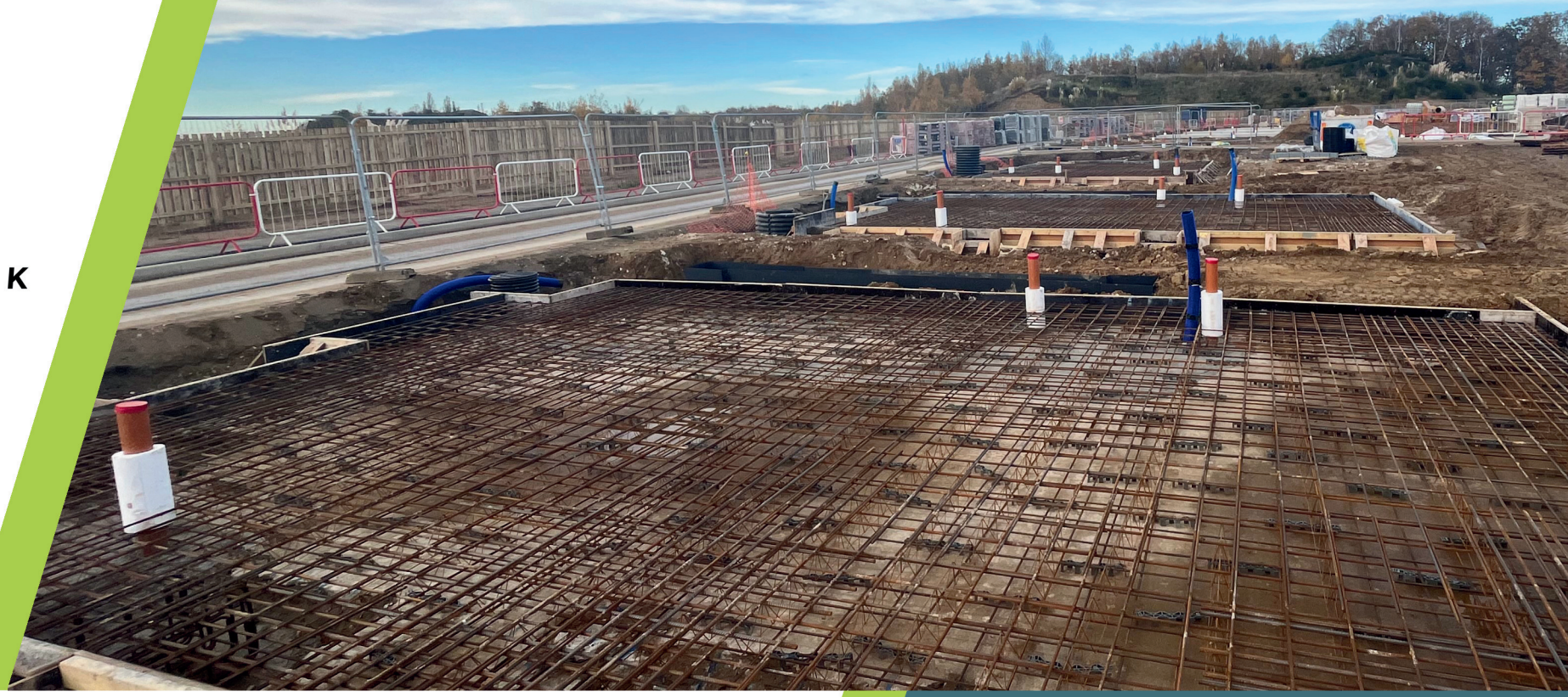
SPEEDECK
FOUNDATIONS LIMITED



Alkerden,
Swanscombe, Kent

CLIENT TYPE	Housing Contractor
LOCATION	Alkerden, Swanscombe, Kent
NO. OF UNITS	47 Units

Project Overview

Alkerden 5B is a key development within the Whitecliffe masterplan, formerly known as Eastern Quarry. It is part of the largest site in Ebbsfleet Garden City, which will provide 6,250 new homes set within a landscape of cliffs, lakes, and green spaces. As part of this significant project, Speedeck was appointed by Chartway Civil Engineering to deliver an engineered foundation solution for 47 residential houses and three apartment blocks.

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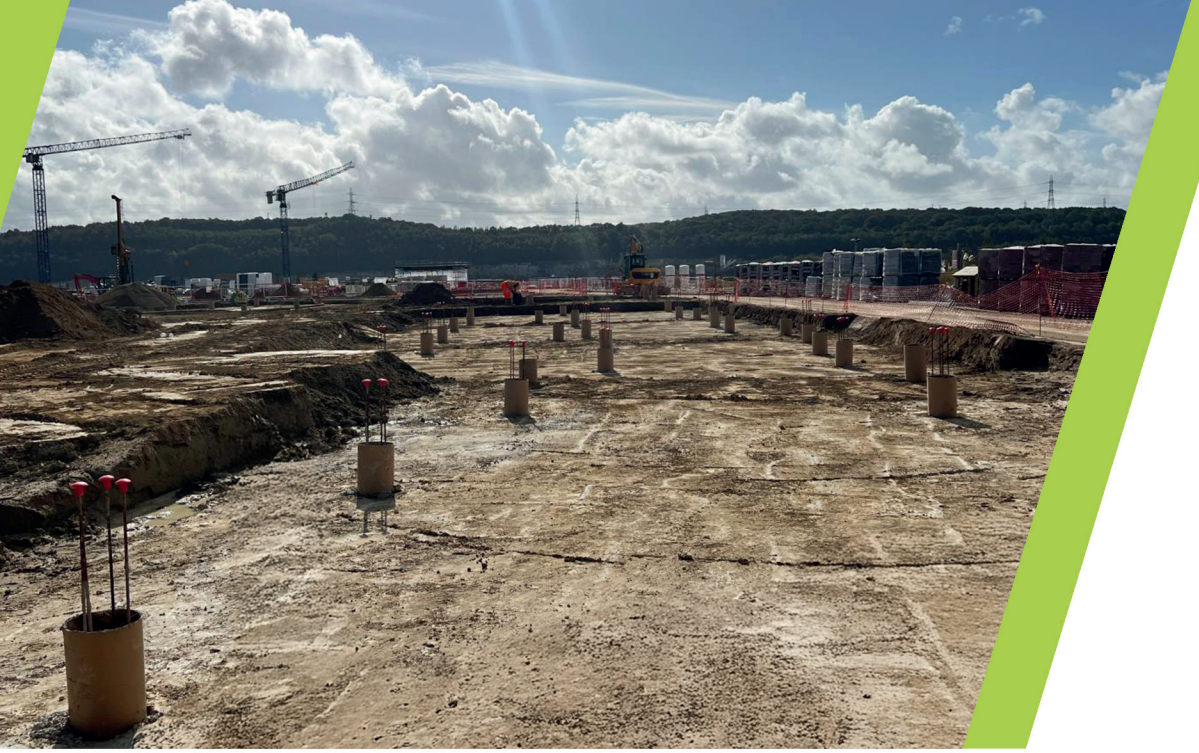

Concept Design & Engineering

Given the site's history as an Eastern Quarry, the deep Made Ground presented an interesting geotechnical challenge, which potentially would require 30m+ piles to support 2 storey housing.

Chalk depth across the site varied from 5m to approximately 35m. Working collaboratively with the LABC, we proposed a solution which allowed for much shorter piles terminating in fill, justified by a series of pile load tests and groundwater monitoring. This approach led to significant project savings and a bespoke Geotechnical strategy.

Our engineering team worked to demonstrate with the LABC that confidence in the bearing capacity of the fill could be gained in the higher risk areas with a series of pile load tests. With the results of this load testing, and a conservative pile design, piles were shortened by approximately 15m.

Construction

Construction commenced in September 2024, with concrete working surface in lieu of a granular piling platform. The piling rig mobilised on September 16th, followed by drainage works across the plots. By October, steelwork and concrete pouring had begun. The first two pours were completed by October 25th, and the final pour was successfully conducted in December, with site clearance completed by December 23rd.

We are thrilled to have partnered with Chartway Civil Engineering on this landmark project. Our proven track record led to trust with the LABC and their confidence in our ability to engineer a foundation solution which was both economical and suitable for the risk profile of the site. As work progresses, the Alkerden development is shaping the future landscape of Kent, ensuring secure and durable homes for future residents.

The Alkerden project is a testament to the power of strategic engineering and efficient construction.

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