



**SPEEDECK**  
FOUNDATIONS LIMITED



**45%**  
cost saving  
over traditional pile  
and beam  
foundations

Completed on-site  
**40%**  
faster  
than alternative  
proposals

# Clay Cross

## Derbyshire

**CLIENT TYPE**      Countryside Homes  
**LOCATION**          Clay Cross, Derbyshire  
**NO. OF UNITS**      59 units

## Project Overview

SPEEDECK was crucial in developing the northern section of the Clay Cross housing project in Derbyshire.

Assigned with the task of foundation design and construction for Clay Cross Works, SPEEDECK successfully completed 59 plots within an impressive timeframe of just 11 weeks.

Surpassing the original program estimate by a remarkable 19 days, SPEEDECK not only expedited the project but also saved valuable time for Countryside Homes, the client.

@ solutions@speedeck.uk

 [www.speedeck.uk](http://www.speedeck.uk)

 01582 361060

# 60%

reduction  
in muck away, the  
equivalent of 464  
lorries.



## Advanced Geotechnical Engineering

SPEEDECK specified further site investigation to gain clarity on sulphates, heave risk, and the location of the highwall, underscoring our commitment to economical and proactive risk management. This targeted investigation resulted in substantial cost savings, aligning with the client's objectives for cost-effective project delivery. Our team's dedication to maximising efficiency and value within budgetary constraints was evident throughout the process.

The zonation of the site involved a systematic assessment of the geology, categorising different areas based on factors such as soil composition, geological features, and historical land use.

This delineation provided crucial insights into the varying ground conditions across the site, allowing for a tailored approach to foundation design and construction methods. Identifying potential ground hazards enabled proactive measures to reduce the risk of delays, cost overruns, and safety issues during the project's execution.

One significant challenge identified was the high wall along the southern edge of the Clay Cross Works site, which impacted pile depths. SPEEDECK addressed this by conducting additional ground investigations to refine understanding and inform decision-making.

## Sustainability

Throughout the construction process, using a lightweight piling rig eliminated the need for a traditional piling mat, reducing pollution from raw material harvesting and ensuring efficient piling operations.

Additionally, opting for a 50mm Concrete Working Surface over conventional crushed granular material optimised material usage and formed part of the permanent works, enhancing sustainability by minimising the use of raw materials.

The project's longer-term impact is evident in the transformation of Clay Cross into St Lawrence Fold. This £22 million regeneration scheme has revitalised the area with improved transport links, new amenities, and a vibrant family community in the heart of Derbyshire.



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