

# NEWSLETTER

JUNE 2024

ISSUE #01



Celebrating a decade of foundations

## INTRODUCING THE NEW SPEEDECK NEWSLETTER!

Delve into a quarterly compilation featuring enlightening articles, insightful case studies spotlighting our latest projects, and the freshest updates straight from our company.

EST 2014



**SPEEDECK**  
FOUNDAT1ONS

A DECADE OF FOUNDATIONS

## CELEBRATING 10 YEARS

Over the past ten years, SPEEDECK has continually pushed boundaries, setting new standards of excellence in foundation solutions across the UK.

This milestone not only signifies a decade of success but also reflects the enduring commitment of the growing team towards delivering exceptional results and exceeding client expectations.





# NEWSLETTER

JUNE 2024

ISSUE #01



We're thrilled to announce we've been shortlisted for the Ground Engineering Awards 2024!

Our design and build piled raft solution at Clay Cross, Derbyshire for Countryside Partnerships has caught the judges' eyes, landing us in the running for the UK Project with a Geotechnical Value of between £500K and £1M category.

Watch this space for the results!

## COMPLETED PROJECT ALERT CLAY CROSS HOUSING, DERBYSHIRE

We played a crucial role in the development of the northern section of the Clay Cross housing project in Derbyshire.

Assigned with the task of foundation design and construction for Clay Cross Works, We successfully completed 59 plots within an impressive time frame of just 11 weeks. Surpassing the original program estimate by a remarkable 19 days, we not only expedited the project but also saved valuable time for the client.

The team navigated challenging ground conditions by specifying further site investigation and successfully zoning the site for pile design, and minimising heave precautions to a single raft.

Through meticulous design adjustments, we achieved a noteworthy reduction in pile numbers by 25%, accompanied by a decrease in total pile length, resulting in substantial cost savings. The structural design saved approximately 25% in steel used on the project and 8% reduction in total concrete. Additionally, the approach adopted resulted in both savings in muck away (approx. 400 lorries) and a reduction in imported aggregates. All this resulted in significant program savings of 3-4 weeks.

These optimisations, translated into a 40% cost saving for the client, exemplifying the commitment to cost-efficient project delivery. Find out more about this great project on our website.

# NEWSLETTER

JUNE 2024

ISSUE #01

## NEW PROJECT ALERT ONE HORTON HEATH, LOWER ACRE

We are delighted to announce that SPEEDECK Foundations has been appointed for the foundation works of the One Horton Heath development, Lower Acre. This prestigious project, commissioned by Eastleigh Borough Council, represents a significant milestone in the heart of Hampshire, offering a vibrant mix of 2500 residential homes, and commercial, and recreational spaces.

As the landowner and developer, Eastleigh Borough Council is committed to delivering a development that prioritises community, innovation, and sustainability. By integrating these core values, One Horton Heath aims to create a thriving and inclusive community that will benefit current and future generations.

SPEEDECK Foundations is honoured to contribute to this transformative project by delivering the raft foundations for 361 dwellings during phase one in the Lower Acre site. Our team is dedicated to applying the highest standards of engineering and construction to ensure the success of One Horton Heath. We will leverage our expertise to support Eastleigh Borough Council's vision of fostering job creation and economic growth through this development.



This venture marks a meaningful phase for us with a timeline of just 12 months to complete on-site, and we're eager to help shape a dynamic One Horton Heath.

We look forward to embarking on this exciting journey and contributing to the success of One Horton Heath. Together, we will build a sustainable and thriving community in the heart of Eastleigh Borough.



# NEWSLETTER

JUNE 2024

ISSUE #01

## NEW ARTICLE

### WHEN ARE STRIP FOUNDATIONS NO LONGER SUITABLE?

Despite being commonly used, Strip foundations come with their own set of challenges, especially when ground conditions are not ideal, and the decision to use strip foundations must be based on a comprehensive evaluation of ground conditions across the site.

This evaluation would include assessing the load-bearing capacity, identifying areas with weaker soil, and considering external factors like access or water flows that might affect the foundation. Failure to accurately assess these conditions can lead to unexpected complications and costs, diminishing the cost-effectiveness of using strip foundations.

Certain site conditions significantly challenge the feasibility of strip foundations, compelling the consideration of alternative solutions, including areas of thick made ground, soft ground conditions, shallow groundwater and the presence of dissolution feature or voids. Strip foundations can be reinforced to resist some of these effects, however the cost this adds to the construction will make other foundations solutions a better choice.



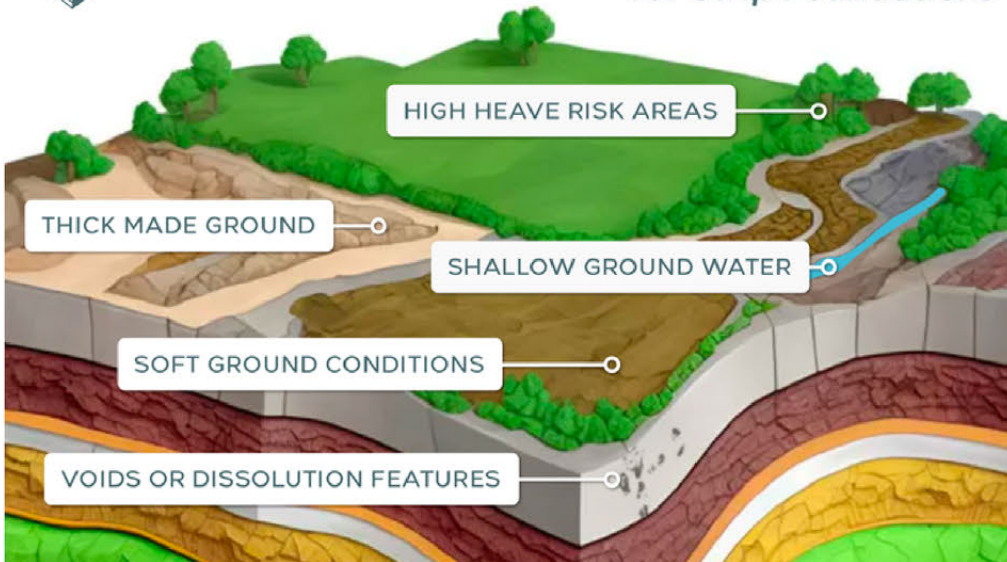
*Dissolution features or voids in the subsoil pose a significant hazard to strip foundations.*

*Bearing capacity may be unreliable and unexpected voids could lead to differential settlement and/or significant structural damage.*



**SPEEDECK**

### Unsuitable Ground Conditions for Strip Foundations



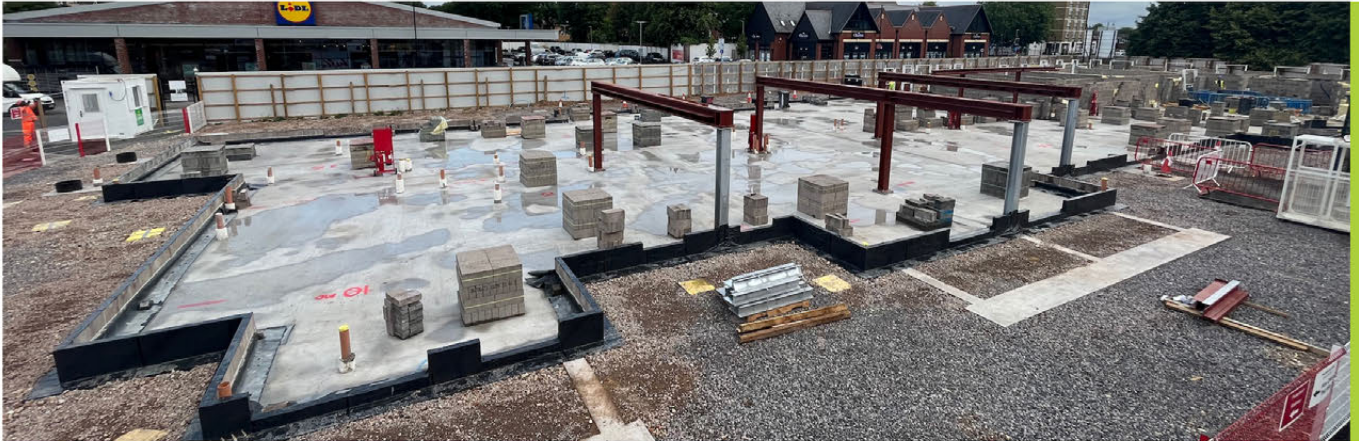
The critical importance of selecting the right foundation type in house building cannot be overstated. Ground conditions play a pivotal role in this decision-making process, dictating the need for either traditional strip foundations or exploring alternative solutions like piling and raft foundations.



# NEWSLETTER

JUNE 2024

ISSUE #01



## COMPLETED PROJECT ALERT BANNISTER ROAD CARE HOME, SOUTH



We designed a thinner than typical slab for an apartment block for a Care Home provider in Southampton, overcoming on-site restrictions and enhancing coordination with all the parties to produce an effective foundation.

The construction of the raft foundation for the apartment included piling, and the offering of a waterproof lift pit, backed by a materials guarantee. The construction was efficient, with the handover of the first part of the slab in 5 weeks and the total slab successfully handed back in a 12-week time frame.

The primary objective was to enable the drainage to remain shallow due to the connections into the main runs outside the site. The slab thickness was kept to a minimum, with the shallow drainage combined within the slab where heave precautions were required.

Our foundation design was a significant deviation from the initially recommended compliant scheme, requiring innovative engineering and effective collaboration. The challenge of restricted drainage levels affected more than just the foundation contractor. We improved coordination with all involved parties, responding quickly to site constraints and ensured the design was complete prior to starting on-site, 6 weeks after instruction.

