



## **Herns Lane**

Welwyn Garden City

An unusual treatment for a housing site which goes to prove that whatever the ground conditions, Keller has the solution.



## The project

To accommodate the increasing demand for land allocated to housing, marginal sites are increasingly developed. In Welwyn Garden City, Crest and their team had identified that voids beneath their site would require filling as they could pose a risk to purchasers and their reputation.

## The challenge

An extensive probing exercise had proved the location of the features beneath the site and Keller were appointed to treat all of these. The main challenge was to position rigs in such a way that the identified features could be infilled without the rig directly working over a feature. The working platform was designed with a geogrid layer to decrease the risk of rig collapse into a void.

## The solution

A total of 551 compaction grout holes were drilled and very stiff low slump mortar was injected in 1.0m lifts under a high pressure. Following the compaction all locations were re-tested with dynamic probing. Where low blow counts were encountered additional holes were drilled and the soft material re-treated until such point as high dynamic probe blow counts were attained. Keller lead the market in solution feature treatment and validation.

## Project facts

### Owner(s)

Crest Nicholson

### Keller business unit(s)

Keller UK

### Main contractor(s)

Crest Nicholson

### Solutions

Solution feature stabilisation

### Markets

Residential

### Techniques

Compaction grouting

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