



# Staites, South Bank, Dunston, Gateshead



## The Project

Soil remediation and stabilisation of highly contaminated land for a new large Taylor Wimpey housing development. The site was previously the site of an old gas works and was also the location for the Gateshead Garden Festival in 1990.

Soil samples were collected from site and the UKAS accredited TRS Stabilisation laboratory carried out a mix-design to ascertain the binder additions required to achieve the specified 5% CBR. The tests showed that incorporating 2% quicklime to the existing materials would provide the required CBR. Once the powder additions were determined, work commenced on site late October 2012.



Thompsons of Prudhoe prepared the working area by excavating and replacing the material in 300mm layers ready for TR Stabilisation to commence work. Quicklime was applied to the working area using a Streumaster tractor mounted spreader with a spread-check undertaken to monitor and confirm that the correct amount of powder had been distributed. This was then mixed into the existing material using a Wirtgen WR2500S Mixer. Compaction followed using a state-of-the-art Hamm H18i Smooth Drum Roller – which is the first of its kind in the UK. Compliance checks were continuously carried out to ensure that the 5% CBR requirement had been consistently met.

Despite October typically having adverse weather for earthworks operations, the fast acting drying properties of the quicklime meant that wet working on site was not an issue and the works were completed to programme.

## Benefits

- Remediation of heavily contaminated old gas works site
- Use of quicklime facilitated earthworks operations during October

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- Remediation of old gas works site for large housing development.
- First UK use of state-of-the-art Hamm H18i Smooth Drum Roller

For more information visit  
[www.trstabilisation.co.uk](http://www.trstabilisation.co.uk)



The British Cementitious Paving Association

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## Project details

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|---------------------------------------|--|
| <b>Client:</b>                        | Taylor Wimpy                                     |
| <b>Project duration:</b>              | 2 weeks for Lime Modification Works              |
| <b>Main contractor:</b>               | Thompsons of Prudhoe                             |
| <b>Soil stabilisation contractor:</b> | T R Stabilisation                                |
| <b>Area stabilised:</b>               | 9,000 cu.m                                       |
| <b>Soil type:</b>                     | Made Ground/Cohesive Mix                         |
| <b>Blend:</b>                         |  |
| <b>Specialist plant:</b>              | Wirtgen WR2500S Mixer & Tractor Mounted Spreader |