



Stabilised Access Road, North West Cambridge



Purpose

As part of Cambridge University's multi-billion pound investment over the next 10 years, land previously used by the university's farm is being used to create a whole new district for Cambridge. CJ Pryor was employed to build a dedicated construction access road for the development. Soil stabilisation was identified as an alternative to the original design due to the soils being softer than envisaged as a result of the of wettest winters on record.

Pryor analysed the chemical and geotechnical properties of soil samples and then determined the best binder mix design to achieve the required 30% CBR. Frost susceptibility testing was carried out on the mix as only 200mm of construction would be placed above the stabilised layer. When the testing results came back and the specification parameters were satisfied, Pryor mobilised their own Terragator spreader together with tractor mixer, grader and roller.

Quicklime was added to flocculate the heavy clay. Cement was added after a mellowing period. The mix was compacted and then trimmed then a final compaction was carried out with a dead roll to smooth the surface.



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- Treatment of very wet and soft soil and provision of a construction access road

For more information visit www.proyer.co.uk

Testing was carried out during and after cement addition for moisture content, laboratory CBR, pulverisation degree, compaction and in situ CBR by plate bearing.

Stabilising the soil enabled the project to regain lost time due to the poor weather and complete within programme. Savings was also made on the contract value for the client.

Benefits

- Addressed very wet soils
- Regained lost time due to poor weather condition
- Provide savings on contract value for client



The British Cementitious Paving Association

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Project details

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| Client: | University of Cambridge |
| Project duration: | 5 weeks |
| Main contractor: | Skanska |
| Soil stabilisation contractor: | C J Pryor |
| Area stabilised: | 15,000 m ² |
| Soil type: | |
| Blend: | |
| Specialist plant: | |