SOIL STABILISATION AT HINKLEY POINT 'C' NUCLEAR POWER STATION

Client:
Kier BAM Nuttall JV

Summary:
Hinkley Point 'C' Nuclear power station is a proposed new power station that is to be constructed next to the existing Hinkley Point 'B' power station. As part of the construction works a large earthworks operation is required to create a large level platform for the construction of the new nuclear Power Station.

PROJECT DETAILS

CSSL initially undertook some insitu trials for Hyder Consulting in 2012 to assess the suitability of the materials and the best hydraulic binders for the materials. This works took place prior to the award of the main contract and was undertaken over several weeks. The trial included several different hydraulic binders being mixed into the soils in trial panels, the mixes included lime only, lime and cement and lime and GGBS. These were then tested and monitored to assess the optimum mixture for the different soils expected to be received for stabilisation.

Discussions with Kier BAM started in 2013 to advise on the best options for the works and hydraulic binders required to ensure a compliant material with the contract specification. Kier BAM's on site laboratory undertook some design trials as instructed by CSSL prior to and during the contracted works.

As so many variances were expected to be found within the materials to be stabilised Combined Soil Stabilisation were contracted for the supply, delivery and storage of hydraulic binders and to spread and rotivate the hydraulic binders into the soils. The hydraulic binder additions were decided upon by CSSL foreman once the Kier BAM on-site laboratory advised on the natural moisture content of the material and ongoing testing ensured that the stabilised material was within the required moisture / MCV range.

All operatives had to go through the security vetting process required to work on the Nuclear Power Station site and all deliveries had to be arranged through Kier BAM booking in system which required 24 hours notice, drivers name and vehicle registration.