



# NUCLEAR POWER STATION

Working on the UK's first new build nuclear power station in a generation.

## CONTRACTOR KIER/BAM NUTTALL JV

DURATION
2 YEARS

# PROCESS

VALUE

### VOLUME 750,000 CU.M.

#### The Project

Hinkley Point C will be the first in a new generation of nuclear power stations in the UK. A Kier/BAM Nuttall joint venture was awarded the £203 million earthworks package for the project. Combined Soil Stabilisation (CSSL) subsequently worked with the Kier Bam Joint Venture for a total of three years including through a period of uncertainty as the viability of the project was forensically examined.

#### Design

CSSL initially undertook some insitu trials for Hyder Consulting 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. Kier BAM's on site laboratory undertook some design trials as instructed by CSSL prior to and during the contracted works..

#### Construction

As part of the construction works a large earthworks operation is required create a large level platform for the construction of the new Nuclear Power Station. There was a requirement to fill a large valley with up to 850,000m3 of site won materials which had to be compliant with a stringent engineered fill specification to ensure long term and differential settlements were kept to a minimum.

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 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.





