



CONTAINER TERMINAL

Working in winter to provide a concrete hardstanding for steel containers

CONTRACTOR TARMAC

PROCESS
LIME AND LIME/CEMENT TREATMENT

8 WEEKS

This project on Teesside provides a Class 2 foundation for a container storage facility. The project should have been fairly straight forward but the weather gods were frowning on us. At times if it wasn't raining and halting work it was below 3degrees Celsius and not rising meaning the frosty conditions prohibited cement addition. However our teams are made of stern stuff and shook off the elements to complete the project to the customer's satisfaction.

The compound covers 22,000sq.m. and consists of two materials. Part of the site is clay and the remainder a recycled aggregate requiring different design mixes to achieve the required 160MPa surface stiffness specification. The clay was initially lime improved to remove excessive moisture and allow pulverisation then followed by cement stabilisation. The aggregate was cement stabilised and both products created a hydraulically bound material (HBM).

In areas where CBR values were less than 3% the subgrade was also treated with lime improvement to increase the strength prior to pavement layer stabilisation. Due to the inclement weather some of the aggregate area required lime conditioning prior to the lime/cement treatment to ensure tight moisture parameters were met. Testing included Falling Weight Deflectometer which was used to correlate the Light Weight Deflectometer test.

Site batched roller compacted concrete was laid over our foundation followed by a poured concrete slab giving a very robust construction. One team carried out the project over a six week period. In addition to the mixer and rollers our brand spanking new Binding Agent Spreader was used on this project. It offers high spreading efficiency and accuracy and has 18cu.m. silo capacity for fewer refills.





