



SOIL STABILISATION AT BAE, CHADDERTON

Client:

Bowmer & Kirkland



Project:

BAE Chadderton

PROJECT DETAILS

LIME MODIFICATION INSIDE FACTORY

An old factory, used for the construction of aircraft since the 1930s, was to be re-developed into a distribution centre. The condition of the floor slab and the presence of peat and soft ground beneath the slab required extensive remediation works including lime modification of unsuitable cohesive material to give an acceptable fill.





LIME MODIFICATION AT MINWORTH WASTE WATER TREATMENT WORKS

PROJECT DETAILS (cont.)

How Combined Soil Stabilisation Helped

Because of the large area and depth of weak subgrade the excavation of the unsuitable material was on the basis of 'expose and remove' rather than the complete removal of all material; prior to replacement. This entailed selective digging and the resultant void was irregular in shape with a confined space at the bottom leaving no room for insitu treatment. Accordingly, the soft material was stockpiled in layers within the confines of the building, each layer being lime treated and sealed. This method gave the earthworks contractor an immediate supply of acceptable material for the backfilling of the excavations.

The surface layer was stabilised 300mm deep using cement to give a capping layer (CBR 15%) trimmed to +/-10mm. These close tolerances allowed for a thin, granular, regulating layer upon which was cast the new floor slab.

