

Project Profile :: Secure Establishments 70 Bed High Secure Unit, Broadmoor Hospital

Client: West London Mental Health
NHS Trust

Scott White and Hookins' Role:

-  Structural Engineering
-  Civil Engineering
-  CDM Consultants

Scott White and Hookins provided a full civil and structural engineering services along with being involved as CDM Consultants. The £25 million project involved providing secure accommodation for 70 dangerous and severe personality disorder patients incorporating health, social and recreational facilities.

SWH were integrally involved with the project team at all stages of the design and construction process and assisted in many of the critical design and 'constructability' decisions associated with the project.

The sloping site plus loose ground conditions required careful consideration for the sub-structure design with the use of ground improvement techniques. These, together with access, site set-up and security issues figured strongly in the hazard assessment process, led by SWH as CDM Consultants.

For the superstructure a combination of reinforced insitu and pre cast concrete, structural steel framing and load bearing masonry were used as appropriate to from the four different levels of the structural shell of the building.

Reuse of existing balance ponds to control surface water discharge was analysed using special design software.

