

CASE STUDY



WELSH RUGBY UNION CENTRE OF EXCELLENCE Vale Resort, Hensol, Wales

Project: Construction of 3 full size natural turf pitches 3 large off pitch training areas, an artificial 3G Rugby pitch and the re-surfacing of an indoor arena with 3G Rugby turf.

Client: Welsh Rugby Union

Contract Supervisors: White Horse Contractors Limited

Contract Value: £2.3m



White Horse Contractors (WHC) have been involved at the Vale Resort, Hensol for several years, initially for construction of a high specification natural grass pitch and training area for the Football Association of Wales (FAW), completed in 2006. As part of the extensive and on-going redevelopment of the site, WHC were appointed in 2007 to construct a further four natural grass pitches, three training areas and a world class 130 x 80m 3G artificial turf rugby pitch. Together, these formed training facilities for the Welsh Rugby Union (WRU), Cardiff Blues RFC and Cardiff City FC.



This project is a three-way partnership with investment from the Welsh Rugby Union, the owners of the Vale Resort and the Sports Council for Wales, which allocated a £1.5m National Lottery grant to the development.

Working to tight timescales and budgets, the pitch constructions started on the greenfield site in October 2008 and proceeded through the winter, a season normally avoided at all costs in the UK for this type of work. This was made possible through the careful use of the company's specialist plant and machinery, which are designed to work in the most adverse of conditions, together with close liaison with the project consultants Geoturf and the clients.

WHC proposed a surface system for the 3G rugby pitch consisting of TigerTurf Total Rugby artificial turf overlying a Brock performance base in order to offer the players the safest possible surface to train and play on. The Brock was laid upon 50mm of a specially blended aggregate which was used to achieve the required level tolerance whilst retaining porosity. Beneath this a depth of 300mm of porous sub-base stone was laid by laser grading bulldozer all above a 'Triaxial' geogrid to stabilise the soft and wet ground encountered on site. Within the sub-soil formation, WHC increased both the depth and intensity of the drainage installation to assist in dewatering the site for construction. The construction works were carried out using WHC owned and operated specialist plant and machinery.

Having experienced the performance of the artificial turf and Brock combination, the WRU instructed WHC to re-surface their 60 x 40m pitch within an indoor training area also on site at Hensol, with the same system so that the indoor pitch performance would replicate the outdoor pitch.



The grass pitches were designed by Geoturf to a similar specification as that employed on the FAW pitch which has received universal praise from those who play, train and coach on it. Their construction involved the installation of a gravel drainage layer over the drained formation, overlaid with a blinding sand, lower rootzone sand, followed by a 2:1 sand/soil mix manufactured on site by WHC. A pop-up irrigation system was also installed to enable efficient and effective pitch establishment and on-going maintenance.

White horse Contractors also resurfaced the indoor training pitch with a modern 3G artificial turf Carpet.

