

Case study

The Leadership Trust Foundation, Weston-under-Penyard, near Ross-on-Wye, Herefordshire



A new treatment system was required to replace an old BioDisc, increase the treatment capacity to cater for an expansion of the Leadership Trust's facilities at their Training Centre and ensure that the final effluent discharged to a stream did not exceed 23,000 litres/day while meeting consent limits of 10:20 mg/l for BOD and Suspended Solids. A robust, flexible system was clearly required to treat and balance flows that varied between 4,000 - 34,000

litres/day from up to a maximum of 140 p.e./day.

Presented with these widely varying requirements we designed and installed a 3-stage combination vertical and horizontal flow reed-bed system followed by two large ponds in series. During an early inspection of the site we discovered two large abandoned ponds surrounded by willows and overgrown with reeds. By renovating and incorporating these we were able to produce a very high quality effluent and balance the rate of discharge from the site. At the same time we re-created an attractive pond feature with paths and seats for clients, guests and staff to enjoy.



In the completed system the BioDisc was converted to a septic tank, settled effluent from this tank is pumped on demand to the 1st stage vertical flow reed-beds and two sludge drying reed-beds were installed to treat the sludge and solids that collect in the tank. Flowforms fitted to the first pond keep the water aerated and moving providing further treatment as well as an added attraction