

Hedge End Sub-station - Rainwater Harvesting

Client:	Scottish and Southern Energy
Building Type:	Electrical sub-station
Roof:	100% pitch and tiles
Catchment Area:	110m ²
Rainwater Apps:	1 WC and hand basin
Sustainability:	N/A
Built:	2008



Rainwater Harvesting Requirements

Remote infrastructure sites, such as wind farms and substations are often, only occasionally manned. The cost of installing a mains water supply to these remote sites is often over £100,000. At Hedge End, near Southampton, Skanska required a proven rainwater harvesting system supplier to design and supply a rain recovery solution to eliminate the need to install a mains water service to the site. Ecozi has already supplied several other remote infrastructure sites when approached by Skanska so the solution was already proven. The system is designed on the assumption the rainwater demand is low enough so the tank does not run dry. No mains water back-up is available for WC flushing and hand basin applications.



Due to poor ground conditions and uncertainty of vehicle loads on the tank precast concrete was specified. Precast concrete tanks are rated for 44T trucks as standard and require no additional structural works. Shipped pre-fitted with all internal components the tank was placed in the final position by delivery truck mounted crane.



The submersible pump is controlled by a flow switch located with a tank contents display panel inside the building. A fine particle and UV filter provide disinfection to the water for hand washing in the WC basin. An auto filter spray was specified to eliminate routine maintenance. Every 7 days a solenoid controlled valve sprays rainwater for 3 minutes on the filter.



rainwater harvesting systems

Ecozi Ltd
Unit 54 Myton Crescent
Warwick
CV34 6QA

01926 403 442
info@ecozi.com