

King's Mill Hospital Mansfield, UK



The largest geothermal lake loop installed in Europe

Using the Kings Mill Reservoir to provide all the hospitals current cooling requirements rated at about 5.4 Mw. This scheme involves the pumping of warm water from the energy centre via a lakeside manifold to a series of underwater heat exchangers.

Executive Summary

The new King's Mill Hospital in Mansfield is the product of over £320m investment by the Sherwood Forest Hospital Trust. The hospital offers over 550 beds, deals with over 30,000 inpatients, 106,000 emergency cases, and 77,000 day cases.

GI Energy partnered with the main contractor, Skanska to provide all of the cooling and approximately one third of the heating for the entire campus from the nearby 65,000m² reservoir.

The system installation was complicated by the requirement for a full environmental impact assessment, which was carried out by our team at GI Energy, and demonstrated the sustainability of the scheme.

We also had to cross the busy A38 dual carriageway with a pair of 350mm pipes! The installation is the largest of its type in the world.

