BEDFORD PUMPS LTD.

+44 (0)1234 852071
sales@bedfordpumps.co.uk
www.bedfordpumps.co.uk

Bedford Pumps provides land drainage for Puny Drain

Bedford Pumps Ltd has completed the installation of the Mechanical and Electrical plant at a new pumping station at Puny Drain. The drain which is controlled by the East of Ouse, Polver and Nar IDB's, drains an area of low lying land to the south of Kings Lynn. The recent redesign of the drainage system in the area necessitated the construction of a new drain and pumping station to lift water into the River Great Ouse Relief Channel.

The arrangement was a slight departure from the "standard" land drainage pumping station design insofar as the discharge had to cross a high pressure gas main, railway line, river and road before discharging into the Relief Channel. This was achieved by installing two subterranean pipelines interconnecting the pumping station header tank with the outfall bay.

The station has a capacity of 4m3/sec and contains 3 Bedford pumpsets each rated at 1,333 l/s. By utilising the BPL siphon breaking valve the discharge pipework arrangement benefited from siphonic recovery thereby reducing the pumping head by up to 40%. The use of this technology resulted in smaller motors, switchgear and cabling as well as transformer and standby generator set ratings. Bedford Pumps Ltd. have a wealth of expertise in the design and project management of Land Drainage / Flood Defence pumping stations which was put to good use at this site resulting in reduced capital and operation cost.

Commenting Frank Cooper stated that this station demonstrated the benefits of purchasing all the M&E plant from a single source. Bedford Pumps Ltd. has a long history of Land Drainage pumping station design and this can be used to optimise the plant to the clients benefit. Saving energy has always been our objective long before it became fashionable.

Fig 1. Puny Drain Pumping Station