



Mt JULIET

IProvision of drinking water system, and temporary wastewater treatment system with odour control

Client: Mt Juliet Properties

SUMMARY:

Value: €200,000

Population Served: 1,500 p.e.

Status: Complete

Services Provided:

Water/Wastewater Statutory Negotiations

Evaluation of Plant Requirements

Detailed Design

Construction Supervision

Mount Juliet Estate is one of the world's finest golf clubs, located near Thomastown, Co Kilkenny. Nicholas O'Dwyer Ltd were appointed as Engineering Consultants in relation to both the wastewater drainage and the drinking water treatment systems.

An evaluation of the wastewater system was carried out in order to verify compliance with a Trade Effluent Discharge Licence. As part of this exercise, the load generation from various sources in the system was examined, and specific operating practices were introduced in order to improve system operation. The collection system includes several pump stations in series with relatively long residence times and specialist advice was provided in relation to design to minimise septicity/odour generation at low cost.

Compliance with the Trade Effluent Discharge Licence was not possible given the load generation on site, and a cost effective means of treatment was installed to reduce the load to compliance levels. An odour reduction system was also installed to ensure that the effluent leaving the site was odour free and acceptable for discharge to the local public sewer.

The drinking water at Mount Juliet is exceptionally hard. An evaluation of the water treatment system was carried out in order to examine the quality of the water and specialist advice was provided in relation to appropriate treatment in order to reduce costs in relation to water treatment, whilst at the same time improving reliability of the treatment system and improving the water quality.

Instead of conventional treatment by means of softening, the hardness in Mount Juliet is sequestered. This means the hardness is permanently bound into the water. Boiling the water does not lead to a deposit of limescale on kettles or appliances. This method of treatment has other benefits in terms of reducing any potential corrosion and preventing iron or manganese deposits.

