



## KILCULLEN SEWERAGE IMPROVEMENT SCHEME

Scheme Designed to Cater for a Population up to 6,000

**Client: Kildare County Council**

### SUMMARY:

**Value:** €4 million

**Status:** Complete

### Services Provided:

Preliminary Report  
Site Investigations  
Detailed Design  
Archaeological Report and Monitoring  
Project Management

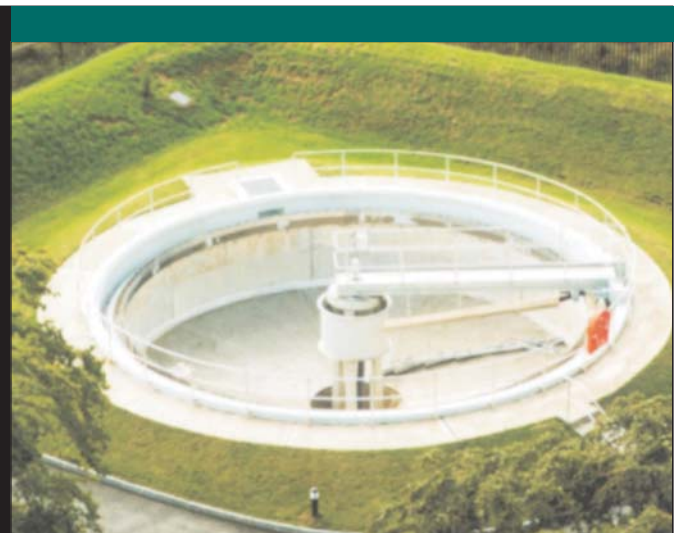
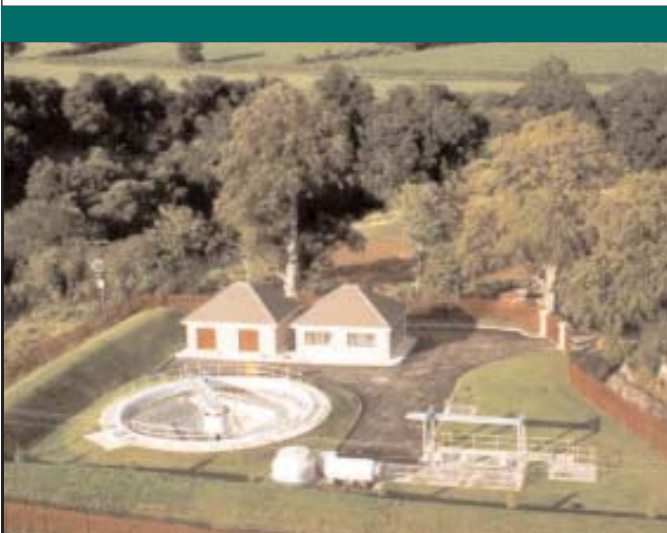
The Kilcullen Sewerage Improvement Scheme was designed to cater for a population equivalent of up to 5,750 and had the following two main objectives:

- To relieve the overloaded existing sewers to provide for the current requirements and the future development of Kilcullen. This first objective was achieved by removing as much surface water as possible from the existing combined system and by augmenting and extending the sewer network.
- The second objective was to eliminate the discharge of undiluted foul sewage to the River Liffey. This was achieved by transferring flows from Kilcullen to the Osberstown WwTW.

### These two objectives were attained through the provision of the following mainworks:

- A new surface water draining system consisting of 2 km of sewers (varying in dia. from 225 to 450 mm).
- The augmentation and extension of the foul sewer network consisting of 2 km of sewers (varying in dia. from 225 to 500 mm) with an inverted siphon under the River Liffey.
- A pumping and stormwater tank installation consisting of underground foul and stormwater sumps; an overground automated, self-cleansing stormwater tank with a two-hour retention period; surge and sewage conditioning facilities; control and generator buildings.
- A link sewer between Kilcullen and Newbridge consisting of 3.6 km of 200 mm diameter rising main and 3 km of gravity sewer.

An interesting element of this scheme was the rising main design. Due to the length of the rising main and the topography of the route, careful consideration was given to surge protection and the avoidance of septicity.



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