



## THE CURRAGH - WASTEWATER TRANSFER SCHEME

Provision of a local collection scheme for the settlements on the Curragh edge and the Curragh military camp and transfer to the regional collection network

**Client: Kildare County Council**

### SUMMARY:

**Value:** €4,500,000

**Population Served:** 7,200 p.e.

**Procurement:** Traditional

**Status:** Complete

### Services Provided:

Feasibility Report

Detailed Design

Contract Documents

Contract Administration

A feasibility study was requested to examine the options available to deal with the wastewater generated by the settlements on the edge of the Curragh plain including the military camp. This study assessed the condition of the three treatment plants serving some of the areas, potential receiving waters, potential transfer options and the possibility of aquifer injection.

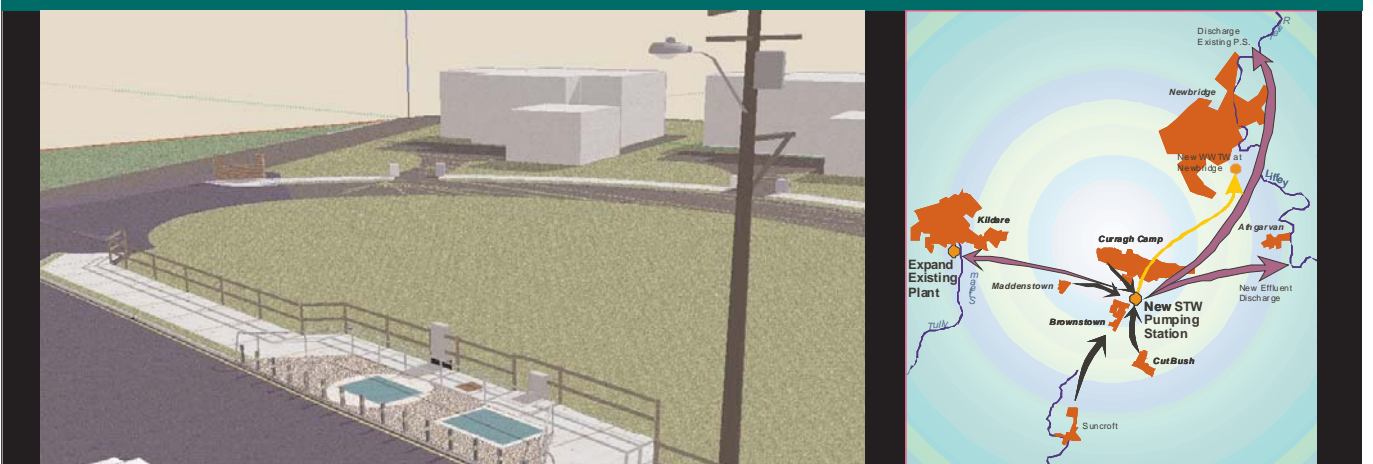
The solution proposed was the collection of flows from new and existing sewered areas. The transfer routes however involved long and undulating rising mains coupled with relatively low flows which provide more challenging design issues than conventional rising main designs.

In addition the Curragh is designated as an NHA. This required close consultation with National Parks and Wildlife given that two of the treatment plants and the proposed transfer pumping station were located on the Curragh plain. To aid with consultations, 3 dimensional computer models were created for visualisation purposes.

Surge analysis was essential to the mains as was the correct location of the air valves on the system. The longest main was approximately 7,000m and required chemical injection to the rising main to ensure septic conditions did not arise.

Six pumping stations were involved in the final solution and a carefully derived control system needed to be established between them to avoid operational difficulties in the event of failure and/or shutdown.

Upon completion of the contracts (Civil and M&E) a point of particular note was the fact that it took several days to prime the principle rising main; again highlighting the difficulties involved in long undulating pumped transfer.



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