



KNIGHT GROUP GREAT WAKERING

Example of HIA appraisal supporting
an application for a groundwater
abstraction licence for a dewatering
system at a housing development

A temporary wellpoint dewatering system with mitigation measures to water resource impacts highlighted in HIA

As part of the application process for a groundwater abstraction licence, Stuart Wells undertook a Hydrogeological Impact Assessment (HIA). This assessment is a crucial component of an abstraction licence application in understanding the impacts of dewatering on the local hydrogeology and ensuring that the project complies with environmental regulations.

The HIA identified potential impacts on the water levels in the nearby Fishing Lakes. To mitigate any impacts, a T-junction with control gate valves was installed along the discharge line to allow the diversion of all or part of the discharge water back into the Fishing Lake. A strategy was established to monitor the water levels in the lakes and the licence was undertaken.



Objective

Phase 2 of the Taylor Wimpey housing development at Great Wakering required temporary dewatering to enable the construction of deep foul and storm pipeline sections where the excavation level is below groundwater level.



Solution

The proposed dewatering required a groundwater abstraction and recharge licence. Stuart Wells undertook the Hydrogeological Impact Assessment and applied for the licence, which was subsequently approved allowing the dewatering to proceed.



Services	<u>Wellpoint Dewatering</u>
Location	Great Wakering, Essex
Industry	Utility
Max abstraction	9lts/sec (788cum/day)