

Orwell Quay, Geoenvironmental, Ipswich

Our Services

- Input to Master Plan
- Desk Study
- Intrusive Site Investigation
- Liaison with Regulators
- Remediation Strategy
- Implementation and Validation
- Foundation Design



Geoenvironmental Development Strategy

CGL advised Persimmon Homes on the development strategy associated with its regeneration of Ipswich Waterfront to include luxury waterfront apartments, low-rise townhouses and office/retail units.

The key barrier to development was ground contamination from previous land usage in the historic Ipswich docks area including gasworks, foundries, chemical works and timber treatment yards. This coupled with complex ground conditions comprising soft compressible ground and buried obstructions, deterred potential developers due to the high cost of clean-up and foundation design.

CGL's approach was to formulate a holistic solution covering both ground remediation and foundation design to achieve a cost-effective approach for the developer and to gain maximum development opportunity.

At Orwell Quay works have included bioremediation of hydrocarbon contaminated soils in conjunction with groundwater treatment, whilst a raft foundation solution was designed to minimise excavation and remediation of the underlying ground. For the high rise buildings **CGL** designed a post-tensioned raft foundation – the first in the UK for this type of structure. Groundwater clean-up has been designed to allow construction to continue in advance of remediation.

Validation of works was provided in line with the Environment Agency and local Council requirements.

Client: Persimmon Homes