



## Water Voles & development

MKA Ecology staff have considerable experience in the development and construction sector. Conflicts with populations of Water Voles are commonplace and we are able to advise on legislation, plan and conduct any necessary mitigation works.

### Case study: A1073 Eye to Spalding

This project was part of extensive ecological assessment and management work involved in the A1073 Road Improvement Scheme.

During the construction phase of the A1073 Improvement Scheme a temporary haul road was required to span Carr Dyke. This would form a critical path for the transport of materials during works. The temporary haul road was required to remain in situ for a period of twenty months.

A pre-construction assessment of Water Vole activity within the Compulsory Purchase Order (CPO) boundary of the road scheme was undertaken by MKA Ecology in 2007. The survey followed the methodology given in the Water Vole Conservation Handbook (Strachan & Moorhouse, 2006).

The presence of Water Vole was confirmed along a twelve-metre stretch of bank of Carr Dyke, approximately 50 metres from the CPO boundary.



*Carr Dyke*

Findings from the survey enabled a comprehensive and cost efficient mitigation strategy to be put in place.

It was considered that the construction of the temporary haul road would not constitute a significant direct disturbance to Water Voles. This was a small scale project and the temporary impacts of the haul road would not exceed 100 metres of the watercourse.

Impacts affecting Water Vole included short-term loss of sub-optimal foraging habitat and short-term habitat fragmentation. Following consultation with Natural England, appropriate species specific measures were put in place to maintain habitat connectivity for Water Voles.

To allow the continued flow of water the temporary haul road design incorporated three parallel 16 metre pipes which formed a culvert. The culvert was not to be fully submerged in water and the design and length was assessed as unlikely to prohibit Water Vole movement. This was considered to provide adequate mitigation against short-term and long-term impacts arising from habitat fragmentation for the duration of the temporary haul road.

To protect the welfare of Water Voles the banks within the working area and a buffer zone of five metres was trimmed to ground level in order to discourage voles migrating into the area prior to clearance works.

Appropriate habitat restoration techniques were developed to ensure that the loss of habitat was fully reversible. Turf within the footprint of the temporary haul road was removed by hand before being stored and maintained within the CPO boundary. The bank subsoil remained undisturbed during works.