



## **Able Marine Energy Park Environmental Statement**

*M456 Invertebrate Survey*

*Supplementary Report EX 11.31*

May 2007  
Revision: 0  
A. Godfrey

# **M456 INVERTEBRATE SURVEY**

**Report to Able UK Ltd**

**May 2007**

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# **M456 INVERTEBRATE SURVEY**

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# **M456 INVERTEBRATE SURVEY**

## **SUMMARY**

A walkover survey of a 1224 acre plot of land near East Halton, Lincolnshire was requested in order to identify potential invertebrate habitat as part of a proposed planning application. The site comprises mostly arable land, some improved pasture, field ditches, mature hedgerows and a concrete faced sea-wall. The site is located two kilometres north of Immingham on the south bank of the Humber.

The survey was conducted on 28th April 2007. No habitats of high or moderate value were encountered. Although details of the proposed development are still in preparation, it is suggested that the main impacts are likely to be indirect ones on adjacent habitats of known or potential nature conservation value, notably at East Halton Brick Pits, but possibly also at East Skitter. The final design should include appropriate mitigation to ensure that the Brick Pits will not be affected by the development.

# M456 INVERTEBRATE SURVEY

## INTRODUCTION

A walkover survey of a 1224 acre plot of land near East Halton, Lincolnshire was requested in order to identify potential invertebrate habitat as part of a proposed planning application. The site comprises mostly arable land, some improved pasture, field ditches, mature hedgerows and a concrete sea-wall. The site is located two kilometres north of Immingham on the south bank of the Humber. A site plan is attached.

## METHODS

The site was surveyed on 28th April 2007. Weather on the survey day was warm with 90% blue sky but with a strong cool breeze especially on the coastal sections. The site was accessed by car and surveyed on foot. The aim was to assess the habitats present for invertebrates and undertake limited sampling where suitable habitat suggested this might be useful (in order to further assess the value of the habitat for invertebrates).

## RESULTS

### ARABLE LAND

Arable crops (mainly oil seed rape) covered most of the area between East Halton Skitter and East Halton and covers the area known as Halton Marshes on the Ordnance Survey Landranger map 113. These arable areas are clearly of low value to invertebrates.

### WOODED COPSE

There is a small wooded copse dominated by hawthorn on the south bank of the East Halton Skitter. It was being used by motorbike scramblers when surveyed and has clearly been used for such activity as indicated by the hardened mud tracks dividing parts of the copse. Because of its use this way it could not be properly surveyed but given its small size, apparent low botanic and structural diversity and frequent disturbance as described, it is likely to be of local value only to invertebrates

### IMPROVED PASTURE

The land around the Centrica power station, formerly occupied by Chase Hill Farm comprised several fields of improved pasture crossed by public footpaths from the village. Cattle were grazing one field. The improved pasture is clearly of low value to invertebrates

### HEDGEROWS

Hawthorn appeared to be the dominant woody shrub comprising the hedgerows on the arable land. Other woody species such as bramble were present, but no attempt was made to identify species-rich or species-poor hedgerows. The hedgerows were often mature, gappy and neglected in terms of management. Reasonable but narrow hedgerow verges were present in some areas notably, the road leading down to East Halton Brick Pits. Insects such as solitary bees (*Andrena* and *Nomada* species) and the common hoverfly *Rhingia campestris* were active in the sun here on the east facing hedges on the day of the survey. The common orange-tip butterfly was present by the hedgerows in the northern part of the site near East Halton Beck.

Overgrown but gappy hawthorn hedges separated the pasture fields around the site of the former Chase Hall Farm. Other woody shrubs were present in the hedgerows (such as dog rose) but these appeared to be species-poor. Hedgerow trees were occasional here.

### FIELD DITCHES

The area contains a reasonable number of field ditches as indicated on plan KI-12226 A provided

by the client. The main ditch which trends southeast-northwest from East Halton Brick Pits to East Halton Beck was examined where the ditch forms a kink in the track to East Halton Brick Pits. Water clarity was poor here with ivy-leaved duckweed forming a complete cover in many sections. The ditch was incised, the wetted part 20cm wide and the water depth was shallow (<20cm). Plants along the western bank included grasses, fool's water-cress, meadowsweet, docks and other ruderals with a hawthorn hedge above.

The ditch at 90° to this and running parallel with the track to East Halton Brick Pits was also examined. The section to the coast was overgrown with bramble, hawthorn, nettle, common reed, etc. No water was present in the channel. The ditch parallel to the track near its intersection with the Skitter road was inspected (at approximately TA142207). This ditch had improved grass banks which were very poor in plant species and a channel which was 15-20cm across which was damp at the bottom and contained no standing water.

The ditches bordering the improved pasture at the Centrica Power Station were dry (where examined).

#### **SEA-WALL**

The sea-defence structure supports a narrow access road on the inland side of a vertical splash wall. The defence has a hard sloping face to the sea comprising boulders set in concrete. Construction of the sea-defence will have destroyed valuable habitat since there are interesting low soft rock cliffs, saltmarsh and mud flats north of East Skitter where hard sea-defences are absent.

#### **AREAS OUTSIDE THE PLANNING APPLICATION AREA**

It is understood that the following are outside the proposed planning application boundary:

- A small area of saltmarsh and mudflats at East Skitter at the northernmost part of the site.
- A moat (part of a scheduled ancient monument) at East Halton at TA141201.
- A disused railway line which divides the site is not directly affected except for a bridge.

This is very overgrown with dense woody scrub and impenetrable in parts.

In addition, there are potentially valuable or known valuable wildlife areas immediately outside the planning areas namely East Halton Brick Pits and East Halton Skitter saltmarsh/The Grues SSSI immediately north of East Halton Skitter. These areas although not directly affected by the proposed development could be indirectly affected without appropriate mitigation.

#### **DISCUSSION**

A variety of habitats on the proposed development site were surveyed. The development area appears to have carefully avoided including any areas of potential or known nature conservation interest since it skirts around these, for example at East Halton Skitter and East Halton Brick Pits. The invertebrate value of the arable land, pasture at the former Chase Hill Farm, sea-wall, ditches, hedgerows and the small copse just south of East Halton Skitter must be considered low. Because of the absence of areas of potential invertebrate value within the development site, sampling was not considered important and the samples collected have not been identified. Although not included in the survey above, there are some road verges within the development site, but these appeared to be poor in terms of plant species and were not considered worthy of note on the day of the survey.

#### **MITIGATION**

Details of the development are still being finalised and consequently any comments regarding impacts or mitigation are provided as general guidance. From the above, the most likely impacts from the proposed development are likely to be indirect impacts on adjacent areas of potential or known nature conservation value (such as East Skitter and East Halton Brick Pits) rather than direct impacts on habitats of value within the proposed development area. Potential indirect impacts on adjacent areas might include increased run-off from areas of hardstanding, pollution from fuels and

oils, light and noise pollution, human disturbance, severance (for example between East Halton Skitter and Killingholme) and increased drainage resulting in a lowering of water levels. Accordingly, the detailed design of the development should include appropriate mitigation. In particular, the detailed design should ensure that there is no lowering of water levels within the East Halton Brick Pits and also that the Pits are protected from the development area. Lighting levels also need to be carefully designed to minimise the impact of light pollution on moths and other species near East halton Skitter and the Pits.

## **CONCLUSIONS**




The results of a walkover survey to assess the potential invertebrate nature conservation value of land near East Halton, Lincolnshire are presented. The survey was conducted in late April 2007. No habitats of high or moderate value were encountered within the proposed development site. Details of the proposed development have not been provided to the surveyor but it is suggested that the main impacts are likely to be indirect ones on adjacent habitats of known or potential nature conservation value, notably at East Halton Brick Pits, but possibly also at East Halton Skitter. Detailed design should include suitable mitigation to minimise potential impacts.



## **REFERENCE**

Environment Agency. The Humber Flood Risk Management Strategy [Available online]



Key

-  Site Boundary For Full Planning Application (427 Hectares)
-  Site Boundary For Outline Planning Application (41.67 Hectares)
-  Able Land

A	10-01-07	ISSUED FOR APPROVAL		K.C.	RC	RC
Rev.	Date	Description		BY	CHD	APP
Client:						
ABLE UK Ltd						
Project:						
Able Humber Ports Facility						
Title:						
M456 - Planning Application Boundaries						
		Able UK Ltd Able House Billingham Teesside UK TS23 1PX		Tel: +44-(0)1642 806080 Fax: +44-(0)1642 655655 email: info@ableuk.com www.ableuk.com		
FOR APPROVAL						
CAD Ref.						
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Scale		Drawn	Checked	Approved		
1:10,000 @ A2		K Cramman	R Cram	R Cram		
	Date	10-01-07	10-01-07	10-01-07		
Drawing No.			KI-12268 A			