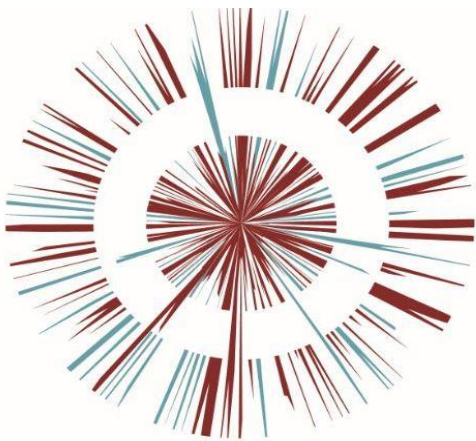




# OMEGA ZONE 8, ST HELENS

Omega St Helens Ltd / T. J. Morris Limited



Document Title  
ES Vol. 2 Appendix 9.13 Water Vole  
Survey Location and Results  
Document No. OPP DOC.11.22k

Ecological Assessments

Environmental Statements (Biodiversity)

Species Surveys

Phase I Habitat Survey

National Vegetation Classification

Planning Guidance

Habitat Regulation Assessment

Protected Species Licensing

42020 CEMP: Biodiversity

BREEAM LE01 - 05

# Water Vole Survey Report



**Omega Zone 8**

St Helens, WA5 3UG



Consultant Report on behalf of:



## REPORT STATUS

Issue/revision	Issue 1: DRAFT TO CLIENT	Issue 2: FINAL	Issue 3: AMENDED FINAL
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<b>Signature</b>			

# CONTENTS

<b>1</b>	<b>INTRODUCTION .....</b>	<b>4</b>
1.1	BACKGROUND .....	4
1.2	LOCATION.....	4
1.3	PROPOSALS .....	4
1.4	SITE DESCRIPTION.....	4
1.5	WATER VOLES.....	4
<b>2</b>	<b>METHODS .....</b>	<b>7</b>
2.1	SURVEY BACKGROUND .....	7
2.2	METHODS OF SURVEY .....	7
<b>3</b>	<b>RESULTS .....</b>	<b>9</b>
3.1	WATER VOLE SURVEYS (MAY-JUNE 2019).....	9
3.2	WATER VOLE SURVEYS (MAY-JUNE 2020).....	11
<b>4</b>	<b>APPENDIX I (2020 SURVEY IMAGES).....</b>	<b>12</b>

## FIGURES

Figure 1	Location.....	6
Figure 2	Water Vole Survey Areas .....	8

## TABLES

Table 1.	Water vole survey results 2019 .....	9
Table 2:	Water vole survey results 2020 .....	11

# 1 INTRODUCTION

## 1.1 BACKGROUND

- 1.1.1. The following report has been prepared on behalf of Omega Warrington Ltd and provides the results of water vole surveys undertaken at Omega Zone 8, St Helens (hereafter referred to as 'the Site').

## 1.2 LOCATION

- 1.2.1 The Site forms part of the Omega business estate located west of Warrington, falling just within St Helens Borough. It is immediately south of the M62, west of Junction 8, and immediately west of the Warrington District County boundary and Lingley Mere.

## 1.3 PROPOSALS

- 1.3.1 This is a hybrid application for full and outline planning permission:

*Hybrid Planning Application*

- i. Full Planning Permission for the erection of a B8 warehouse, with ancillary offices, associated parking, infrastructure, and landscaping; and
- ii. Outline Planning Permission for Manufacturing (B2) and Logistics (B8) development with ancillary offices and associated car parking, landscaping and infrastructure (detailed matters of appearance; layout and scale are reserved for subsequent approval)

## 1.4 SITE DESCRIPTION

- 1.4.1 The Site (~75.5 ha) is dominated by arable land with woodland belts, a network of ponds and ditches improved grassland and scrub habitat present. A brook runs through the centre of the Site from the northwest and adjoins to the southern boundary. Off-site woodland is present to the south and west of the Site and a woodland belt forms the eastern boundary.

## 1.5 WATER VOLES

### Ecology

- 1.5.1 Water voles feed on the stems and leaves of waterside plants. Optimal sites have a highly layered bankside vegetation with tall grasses and ruderal herbs including willowherb, often fringed with thick stands or rushes, sedges or reeds. The water vole breeding season lasts from March to October. Females' territories are demarcated with latrines (piles of droppings).
- 1.5.2 Water voles prefer ditch margin habitats with well-established marginal vegetation, and earth-banks to allow burrowing, preferably adjacent a water course of reasonable depth, holding water most of the year

### Legislation

- 1.5.3 Water voles are protected under Section 9, Schedule 5 of the Wildlife and Countryside Act 1981 (amended 2008). The legislation makes it an offence to:
- intentionally kill, injure or take (capture) a water vole;
  - possess or control a live or dead water vole, or any part of a water vole;
  - intentionally or recklessly damage, destroy or obstruct access to any structure or
  - place which water voles use for shelter or protection or disturb water voles while
  - they are using such a place;
  - sell, offer for sale or advertise for live or dead water voles.



Figure 1

Location

Omega Zone 8, St Helens

Legend

- Development Site
- Site Location



Drawing No.: 16903-1BBS\_A

Revision Dates			
A	B	C	D
10/10/2019			

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## 2 METHODS

### 2.1 SURVEY BACKGROUND

- 2.1.1 A series of water vole surveys were initially carried out across the Site between May-June 2019. While some ponds and ditches were considered to contain some suitable habitat, the Site as a whole was deemed as unsuitable for water vole, due to a combination of land management practices, the isolated nature of habitat present, and the lack of local records suggesting that water vole distribution within the local area is limited. Nonetheless, the LPA requested for a second water vole survey to fully determine the likely absence of water vole. This second survey was undertaken on 11<sup>th</sup> June 2020.

### 2.2 METHODS OF SURVEY

- 2.2.1 All surveys were carried out in accordance with Dean et al. 2016<sup>1</sup>. This included inspection of accessible sections of ditch and pond areas to check for field signs of water voles (Figure 2).
- 2.2.2 Typical water vole field signs include droppings, latrines (piles of droppings), feeding remains/feeding stations (piles of short sections of distinctively cut vegetation), burrows, lawns (short grazed vegetation outside burrows), footprints and pathways at the water's edge created by regular trampling.
- 2.2.3 The recommended extent of survey for water vole activity in relation to bankside disturbance where works will permanently affect 15-50m of ditch/bankside habitat is 100-200m upstream and downstream the proposed area of works (Dean et al. 2016<sup>1</sup>). All surveys included a metre-by-metre search of suitable habitat for field signs pertaining to water vole, as per the recommended guidelines.

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<sup>1</sup> **Dean, M., Strachan, R., Gow, D. and Andrews, R. 2016.** The Water Vole Mitigation Handbook (Mammal Society Mitigation Guidance Series). Eds Fiona Mathews and Paul Chanin. Mammal Society, London.






Figure 2

Water Vole Survey Areas

Omega Zone 8, St Helens

Legend

-  Site Boundary
-  Ditches Surveyed
-  Ponds Surveyed



Drawing No.: 16903-01WVS\_A

Revision Dates

A	B	C	D
24/10/2019			

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## 3 RESULTS

### 3.1 WATER VOLE SURVEYS (MAY-JUNE 2019)

3.1.1 During the 2019 surveys, no field signs or evidence indicating the presence of water voles on site was observed. No water voles were recorded during field surveys at the Site, results are found in Table 1.

**Table 1. Water vole survey results 2019**

SECTION	Field Sign	Plant species in feeding remains / Comments
Pond 1	None	(no access granted due to crops). Previous notes indicated lack of ground vegetation around pond. Alder and oak trees present at banks, a small area of rushes located on south eastern bank. Otherwise poor suitability
Pond 4	None	Alder, ash surrounding pond. Grey willow and sycamore within pond. Himalayan balsam present. Limited burrowing opportunity and limited food plants present. Poor suitability.
Pond A	None	Shallow – flat earth banks. Some rushes and grasses present although generally sparse. Quite poor suitability overall, although better in isolated places. No field signs observed.
Pond B	Rat droppings / burrow	Shallow earth banks with limited ground flora/food plants present. Vegetation present at bank tops. Rat droppings and burrow near pond edge.
Pond C	None	Poor suitability owing to overshadowing and very limited ground flora/food plant opportunity
Pond D	None	Inaccessible due to crop in field. Pond is isolated.
Pond G	None	Poor suitability owing to overshadowing and very limited ground flora/food plant opportunity, with grasses locally present.
Pond H	None	Poor suitability owing to overshadowing and limited ground flora/food plant opportunity. Some rushes present on eastern bank. No mammal signs observed. Earth banks steep to west and near flat to east.
Pond I	None	Shallow – flat earth banks. Heavy overshadowing by trees. No suitable food plants present.
Pond K	None	Moderately-steep earth banks to east, flat ground to west. Dense soft rush on eastern bank, some rushes on west bank.
Pond Ki	Rat droppings	Some shallow-moderate earth banks. Flat banks to south. Improved grassland at bank tops. Rat droppings noted within grain dropped by farmer on southern bank.
Pond S	None	Shallow to flat earth banks. Some limited grassland at tops of eastern bank, although generally heavily shaded by trees. Generally poor suitability
Pond X	Likely rat burrows	Flat ground surrounding pond. Heavy use by mallards and some Canada geese. Fox kills and eaten eggs near to pond within grass. Poor suitability for water vole. Likely rat burrows noted near pedunculate oak, although water has altered shape of burrows making them larger.
Pond Z	None	Heavily overshadowed with no ground flora/food plants present. Shallow – flat earth banks.
Pond AZ	None	Shallow – moderate earth banks. Some limited grasses present but generally poor suitability. No
Pond BWP	None	Heavily shaded and limited ground flora/food plants present. Shallow – moderate earth banks. Hemlock water-dropwort at western bank, rhododendron along eastern and south banks. Poor suitability.

SECTION	Field Sign	Plant species in feeding remains / Comments
Ditch 1	None	Dominated by reed canary grass
Ditch 2	Field/Bank vole feeding remains	Shallow -moderate steep earth banks. Grassland verge at banks tops providing suitable food plants including; yorkshire fog, nettle, red campion, cleavers, broad leaved dock, bindweed and reed canary grass. Himalayan balsam present along northern extent. Suitable habitat but no evidence of water vole presence. Field/bank vole feeding remains.
Ditch 3	Field/Bank vole feeding remains and droppings	Dominated by grasses including perennial ryegrass, false-oat grass, yorkshire fog, barren brome and reed canary grass. Cleavers, fox gloves, rosebay willowherb. Field/bank vole feeding remains and droppings along northern extent.
Ditch 5	None	Light flow of water running north to south. Ditch is overshadowed throughout with very limited ground flora/food plants present. Poor suitability. Locally abundant hemlock water-dropwort noted within depression. No mammal signs.
Ditch 6	None	Northern extent of Whittle Brook. Steep earth banks along northern extent before Booth's Wood, up to 2m high. Generally well vegetated with suitable grasses. No mammal signs observed. Himalayan balsam noted as occasional. Water depth to 100cm in places, with riffles and shallower water present at times.
Ditch 7	None	Moderate earth banks throughout this section of Whittle Brook. Well vegetated, although mostly bramble/scrub habitat with locally abundant areas of suitable vegetation. Himalayan balsam locally abundant to northern section of ditch. No evidence of mammals. Water depth up to 60cm in places. Riffles present at northern extent of ditch under tree canopy.
Ditch 9	Field/Bank vole droppings and feeding remains	Most suitable area of water vole habitat on site. Highly vegetated ditch, with tall grasses and variety of potential food plants. Some areas of very dense scrub present. Banks up to 1.5m high. Shallow water ~5cm present throughout, although choked by reed canary grass in areas. Field/bank vole droppings and feeding remains present along ditch.
Ditch 10	None	Moderate – steep earth banks. Largely overshadowed by trees within limited ground flora/feeding remains. Grasses at bank tops. Banks up to 2m high and water depth up to ~90cm in places. Largely pebbles and riffles present.
Ditch 11	None	Steep ditch with ~5cm water present. No flow. Banks up to 2m high and show signs of previous mechanical damage. Bank highly shaded with little ground flora/food plants present. Bank tops well vegetated. No signs of mammals.



### 3.2 WATER VOLE SURVEYS (MAY-JUNE 2020)

Habitats identified as containing some potential water vole habitat in 2019 were again surveyed in 2020. Overall, conditions had changed within most habitats with ditches and ponds becoming dry and much of the habitat deemed as being now unsuitable to water vole. Nonetheless, for completeness, all previously identified as suitable were fully surveyed. No evidence indicating the presence of water voles was recorded during the 2020 survey at the Site. Results are found in Table 2. Images of the 2020 survey can be seen within Section 4. Appendix I.

**Table 2: Water vole survey results 2020**

SECTION	Field Sign	Plant species in feeding remains / Comments
Pond A	None	Similar conditions to 2019 survey, although the water level had dropped somewhat.
Pond B	None	Same conditions to 2019 survey.
Pond K	None	Pond was completely dry during survey.
Pond Ki	None	Same conditions to 2019 survey, although water level had dropped quite considerably.
Ditch 1	None	Ditch completely dry during 2020 survey. Habitat is now unsuitable.
Ditch 2	None	Ditch 2 remained vegetated as in 2019, although it was completely dry and unsuitable for water vole.
Ditch 3	None	Dominated by grasses including perennial ryegrass, false-oat grass, yorkshire fog, barren brome and reed canary grass. Cleavers, fox gloves, rosebay willowherb. Field/bank vole feeding remains and droppings along northern extent.
Ditch 6	Rat droppings	Conditions as in 2019. However, water level was much reduced with a maximum depth of ~50cm. Water depth was mostly shallow throughout to ~5cm. The habitat remains suitable for water vole. Rat droppings observed occasionally along Ditch 6.
Ditch 7	Rat droppings and prints	Conditions similar to 2019, with a shallower water depth to maximum ~30cm, although mostly shallow (~5-10cm) throughout. Rat droppings and prints were relatively frequent throughout.
Ditch 9	Field/bank vole feeding remains	The ditch remained highly vegetated as in 2019. However, the ditch was dry throughout, with the rare puddling of water (~1cm deep).
Ditch 10	None	Conditions similar to 2019, although with a lower water level to ~50cm in places, but generally ~5cm throughout.

## 4 APPENDIX I (2020 SURVEY IMAGES)

Image 1: Ditch 7 (Whittle Brook), containing suitable habitat for water vole. No evidence of found.



Image 2: Rat droppings located on Ditch 7. No evidence of water vole found.



Image 3: Ditch 9, well-vegetated but dry and unsuitable. No evidence of water vole found.



Image 4: Dry floor of Ditch 9. No evidence of water vole found.





Image 5: Ditch 10 (Whittle Brook). No evidence of water vole found.



Image 6: Pond K, dry during 2020 survey. No evidence of water vole found.



Image 7: Ditch 6 containing suitable water vole habitat. No evidence of water vole found.



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