

Appendix 8.10: Riparian Mammals Survey

Land at Barkham Square

Land at Barkham
Square: Riparian
Mammal Survey
FINAL
November 2025

Approval for issue

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Contents

Glossary 1

Abbreviations 1

Units 1

1 INTRODUCTION 2

1.1 Overview..... 2

1.2 Site Description..... 2

1.3 Legislation 2

2 METHODOLOGY 3

2.1 Desk Study 3

2.2 Field Surveys..... 3

2.3 Limitations 4

3 RESULTS..... 5

3.1 Desk Study 5

3.2 Habitat Suitability 5

3.3 Field Signs..... 5

4 SUMMARY 6

5 REFERENCES 7

Annex

Annex A Survey Areas and Result 8

Glossary

Term	Meaning
The Applicant	Crest Nicholson Operations Limited (Chiltern m Division)
The Project	Land at Barkham Square

Abbreviations

Abbreviation	Meaning
ES	Environmental Statement
TVERC	Thames Valley Environmental Records Centre.
WCA5	Animal species protected from intentional killing injuring or taking under schedule 5 of the Wildlife and Countryside Act 1981 (as amended).

Units

Unit	Description
m	metre
Ha	hectare

1 INTRODUCTION

1.1 Overview

- 1.1.1 This Appendix of the Environmental Statement (ES) has been prepared by RPS on behalf of Crest Nicholson Operations Limited (Chiltern Division).
- 1.1.2 The purpose of this technical report is to present the methodology and results of the riparian mammals survey for the Project. The results of this report have been used to inform Chapter 8: Ecology and Nature Conservation of the ES.

1.2 Site Description

- 1.2.1 The site is located at Barkham Square, Arborfield south-east of Reading, Berkshire (the Site). It comprises approximately 61.3 ha of mainly grassland grazed by sheep. There are blocks of ancient woodland found on Site. There is a pond located to the south, adjacent to the Barkham Brook. The Barkham Brook runs through the centre of the Site in a north-south orientation.
- 1.2.2 The wider landscape is generally rural in nature with parcels of woodland, including ancient woodland. Arable fields are found to the east and north of the Site. Waterman's Lake is located approximately 30m south of the Site boundary.

1.3 Legislation

- 1.3.1 Otter *Lutra lutra* and water vole *Arvicola amphibius* are both fully protected under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended). They are given protection under Section 9 which makes it an offence to:
 - Intentionally kill, injure or take these species;
 - Possess or control live or dead specimens of these species or derivatives;
 - Intentionally or recklessly obstruct access to any structure or place used for shelter or protection;
 - Intentionally or recklessly disturb these species whilst occupying a structure or place used for that purpose;
 - Sell these species or offer or expose for sale; and
 - Publish or cause to be published any advertisement which conveys the buying or selling of these species.
- 1.3.2 Otter is also classified under the Conservation of Habitats and Species Regulations 2017 (as amended). The regulations prohibit;
 - Kill, take or injure an otter;
 - Damage destroy or obstruct access to a place of shelter;
 - Disturb an otter whilst using such a place;
- 1.3.3 Otter and water vole are both listed as a Species of Principal Importance under Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006.

2 METHODOLOGY

2.1 Desk Study

- 2.1.1 A data request was submitted to Thames Valley Environmental Records Centre (TVERC) for records of protected species including otter and water vole within 2 km of the Project site as part of the ecology desk study. The full results of the desk study are presented in Appendix 8.1: PEA. The results of the desk study pertaining to otter and water vole are presented in this report.

2.2 Field Surveys

Overview

- 2.2.1 Surveys for water vole and otter were conducted concurrently on the 15th September 2023 by experienced ecologists. The temperature on the day of survey was 15°C, there was no cloud or wind, and visibility was clear.

Study area

- 2.2.2 The surveys focused on water courses and associated suitable habitat that had been identified as being impacted during the development of the Project design. The survey areas are shown alongside the results of the survey in Annex A.

Water Vole

- 2.2.3 Survey for water vole was undertaken in accordance with the guidelines of best practice set out in the Water Vole Conservation Handbook – Third Edition (Strachan *et al.*, 2011).
- 2.2.1 Watercourses present on and immediately adjacent to site were walked and examined in detail for evidence of the presence of water vole field signs.
- 2.2.2 Evidence to confirm presence include;
- Latrines; piles of droppings found near nest sites, are of differing ages and used to mark water vole territory boundaries.
 - Burrows; found within the bank face above and below the water level and on the bank top.
 - Feeding stations; distinct piles of chewed vegetation, often found with small piles of droppings.
 - Footprints; may be found in soft margins of the watercourse and beneath overhanging vegetation.
 - Runways; distinct paths found in marginal vegetation of the watercourse and are result of repeated and consistent use.

Otter

- 2.2.1 Suitable areas for otter habitat were surveyed for the presence of otter field signs. Features that may be used as couches or resting places were surveyed and areas with a possibility for use as holts were inspected in detail. The search covered all potential field signs of otter.
- 2.2.2 Potential field signs of otter include;

- Spraints; deposited otter droppings which are found at key features and besides waterbodies and watercourse.
- Footprints; distinctive to otter and found in soft ground.
- Feeding remains; remains of fish or amphibians which are found in states that are distinctive to otter feeding behaviours.
- Paths / slides; Routes into and out of waterbodies and watercourses from terrestrial habitat.

2.3 Limitations

- 2.3.1 There are no limitations associated with the surveys for water vole and otter. Surveys were undertaken at optimal time of year and weather conditions.

3 RESULTS

3.1 Desk Study

Water vole

- 3.1.1 The desk study identified four records of water vole within the study area. All these records are associated with an unspecified section of the Barkham Brook.

Otter

- 3.1.2 A single record of otter was identified within the study area, which dates from 2016. The record location is associated with a length of the Barkham Brook to the north of the Site.

3.2 Habitat Suitability

Water vole

- 3.2.1 A section of the Barkham Brook runs centrally through the Site. It is approximately 1-2m wide for the entirety of its length through the Site and has a slow flow. Limited aquatic and marginal vegetation are present within the watercourse and is heavily shaded by the surrounding ancient woodland. Fallen deadwood is present within the channel and on its associated banks. The banks lack riparian vegetation.
- 3.2.2 The ditches present on-site are likely dry for the majority of the year.
- 3.2.3 Overall, there is limited optimal habitat to support water vole.

Otter

- 3.2.4 Barkham Brook as it runs through the Site is narrow and shallow, offering limited foraging opportunities for otter but does provide a connection to surrounding watercourses which are known to have previous records of otter and may support dispersing otters.
- 3.2.5 Additionally, the surrounding ancient woodland provides possible resting areas for otter.

3.3 Field Signs

Water vole

- 3.3.1 No evidence of water vole was found on site, as shown in Annex A.

Otter

- 3.3.2 No evidence of otter was found on site, as shown in Annex A.

4 SUMMARY

- 4.1.1 The desk study (see Appendix 8.1: PEA) identified four records of water vole within 2 km of the Project site. The desk study also identified one record of otter within 2km of the Site.
- 4.1.2 There is limited optimal habitat present on-site to support riparian mammal species, this includes the section of the Barkham Brook that runs centrally on Site, and this is sub-optimal to support riparian mammal species.
- 4.1.3 A walkover survey to identify presence/likely absence of riparian mammals on the Site was undertaken on the 15th of September 2023.
- 4.1.4 No evidence of the presence of riparian mammals were found.

5 REFERENCES

Strachen, R., Moorhouse, T., and Gelling, M. (2011) The Water Vole Conservation Handbook: Third Edition Wild Conservation Research Unit, Oxon.

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Notes

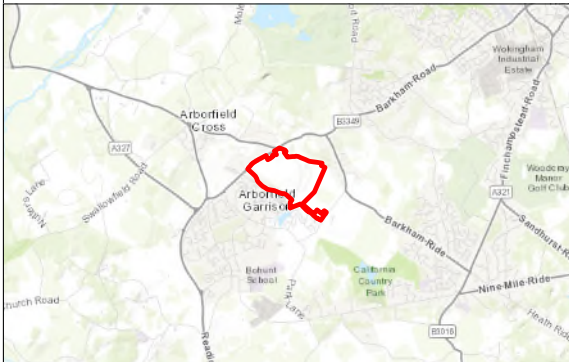
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Legend

Site Boundary

Barkham Brook



Rev	Description	By	CB	Date



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