



## **Water Vole Survey**

**Report 2015**

**Land at Wenny Road, Chatteris, Cambridgeshire**

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### **Notice to Interested Parties**

To achieve the study objectives stated in this report, we were required to base our conclusions on the best information available during the period of the investigation and within the limits prescribed by our client in the agreement.

No investigative method can completely eliminate the possibility of obtaining partially imprecise or incomplete information. Thus, we cannot guarantee that the investigations completely defined the degree or extent of e.g. species abundances or habitat management efficacy described in the report.

This report is only valid for external use in its final issued version.

### **Document Information**

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## 0 EXECUTIVE SUMMARY

- 0.1 On behalf of Cannon-Kirk (UK) Ltd, Cambridge Ecology Ltd was commissioned by Savills to carry out a Water Vole survey of waterbodies (ditches, drains and ponds) on land at Wenny Road, Chatteris, Cambridgeshire. The survey was required to investigate the likely presence of Water Voles, a protected species, in the waterways and ponds within and adjacent to the development site, which could potentially be affected by a proposed residential development at the site.
- 0.2 A literature search was carried out aimed to gather biological data for Water Vole in a search area of up to 2km from the development site. The Water Vole survey carried out was based on the methods described in Water Vole Conservation Handbook (Strachan 2006).
- 0.3 Within and adjacent to the development site the survey comprised four visits to two drainage ditches and a pond located within the development site and two drainage ditches up to 50m beyond the eastern boundary of the development site which were linked to those within the development site by culverts under the A142 road.
- 0.4 There were no records of Water Vole within 2km of the development site during the last 10 years and no Water Voles or Water Vole field signs were found during the four survey visits.
- 0.5 Overall the waterbodies, especially the drainage ditches, and the adjacent bank side vegetation were considered to provide suitable breeding and foraging habitat for Water Vole. However, the absence of Water Voles indicated that this species currently does not constitute a constraint to the development proposals for the Wenny Road site and therefore not of material consideration during the planning decision process.
- 0.6 Based on the findings of this Water Vole survey, no mitigation measures are currently considered necessary. However, as a precaution a number of mitigation measures have been identified to address potential impacts of the development proposals on Water Voles should they appear on the development site in the future. These recommendations would provide an opportunity for the development proposals to proceed without causing a significant adverse effect on Water Voles and would aim to ensure the development proposals complied with wildlife legislation pertaining to Water Voles.
- 0.7 In addition a number of enhancement measures have been recommended to meet the policy requirements of the NPPF and feedback from scoping opinion consultations. These measures may be incorporated into the landscape/habitat creation design proposals for the proposed development scheme that would be expected to result in conservation gain. These would be focused on the provision, maintenance and enhancement of foraging habitats in proximity to the proposed development site.

## 1 INTRODUCTION

- 1.1 On behalf of Cannon-Kirk (UK) Ltd, Cambridge Ecology Ltd was commissioned by Savills to carry out a Water Vole survey of waterbodies (ditches, drains and ponds) on land at Wenny Road, Chatteris, Cambridgeshire. The survey was required to investigate the likely presence of Water Voles, a protected species, on the land within and adjacent to the development site, which could potentially be affected by a proposed residential development at the site.
- 1.2 The Water Vole survey was commissioned in order to establish whether Water Voles were actually present or had been present at the site; and if present, to identify their use of the site.
- 1.3 Figure 1.1 shows the red line boundary of the Wenny Road site that formed the main Water Vole survey area.
- 1.4 The aim of the survey and this report was to:
- identify the actual and/or likely presence of Water Voles in any of the waterbodies within or adjacent to the development site, considered suitable to support Water Voles.
  - evaluate the suitability of the waterbodies and terrestrial habitat for use by Water Voles within the development site and the status of a Water Voles found.
  - provide information to address any constraints caused by Water Voles at the site, and whether a European Protected Species (EPS) development licence (a Natural England licence for the purpose of development) would be necessary to ensure legal compliance is maintained.
  - identify appropriate mitigation measures, necessary to comply with legal requirements pertaining to Water Voles and animal welfare legislation, and provide enhancement opportunities in relation to national planning policy in terms of the National Planning Policy Framework (NPPF). The key principles in the NPPF require that *"the planning system should contribute to and enhance the natural and local environment by minimising impacts on biodiversity and delivering net gains in biodiversity where possible."*
  - identify appropriate biodiversity habitat creation and enhancement measures that should be included in the design of any landscaping (habitat creation plans).
- 1.5 The results of the survey would indicate whether Water Voles could be affected by the development proposals and therefore whether Water Voles presented a potential constraint to the proposed development. For instance, if the results confirmed the presence of Water Voles in any of the waterbodies, the information could be used to provide guidance on the need for changes to the design layout of the scheme and whether any mitigation requirements were necessary, including the need to apply for a EPS development licence.

## Study Area and Development Proposals

- 1.6 The survey area for the field survey comprised the red line boundary of the development site, plus an area up to 50m beyond the site boundary to the east and south (where access was possible). Due to the size and nature of the development and the character of the surrounding habitats the 50m area was chosen as the maximum potential zone of influence. The area beyond the site boundary to the north and west was not included in the field survey because it comprised entirely of a built environment with residential properties and roads, and therefore of very limited ecological value, while access to these areas was not possible.
- 1.7 For clarity in this report reference to the 'development site' comprises the red line boundary of the proposed development site, while the 'survey area' includes the area covered by the ecology survey, comprising the red line boundary of the proposed development site and the 50m zone of influence, where access was possible.
- 1.8 The Wenny Road development site was located approximately 1 kilometre to the south east of Chatteris town centre and is bordered to the north and west by residential properties, part of Chatteris town and the west and south by the A142 road. Chatteris lies approximately 28km north of the city of Cambridge. The centre of the site is situated at Grid Ref TL 400 856. The total area of the development site covers an area of approximately 26 hectares (ha).
- 1.9 The land beyond the A142 on the east and southern boundary of the development site and in the wider area around Chatteris is primarily intensively farmed arable land. It was considered that this arable land and the associated drainage ditches, which were sparsely vegetated and heavily engineered, would be unlikely to be suitable for Water Vole. In addition, the area beyond the A142 was considered to be beyond the maximum potential zone of influence and if Water Voles were present in this area, the main A142 road and engineered culverts would act as barrier to the movement of Water Voles from these areas onto the development site.
- 1.10 Within the survey area the habitats comprised:
- Arable land
  - Dry/Wet Ditches
  - Ponds/Standing Water
  - Amenity/Improved grassland
  - Scattered Scrub
  - Scattered Trees/Parkland/Broadleaved Woodland
  - Hedgerows
  - Tall Ruderal
  - Bare ground and Buildings
- 1.11 The development site and study area were primarily used for recreational dog walking and horse grazing.
- 1.12 The development proposals for the site adjacent to Wenny Road, Chatteris, would consist of various residential properties.



- 1.13 Details of the number and layout of the scheme were not available at the time of preparing this report. However it would be expected that the results of this ecology survey (and other species specific surveys in the future) would help provide details that would influence the layout of the scheme and especially the landscaping and habitat creation.

## 2 METHODS

### *Literature Search*

- 2.1 A desk-based literature search (of various sources – see para. 2.4 below) was undertaken in March 2015 to gather existing ecological information relating to the proposed development area.
- 2.2 For the purposes of this study, the literature search aimed to gathered biological data for Water Vole in a search area of up to 2km from the development site, although actual zone of influence was considered to be up to 50m beyond the boundary of the development site. Therefore, while records of Water Vole greater than 50m from the development site would be informative they were not considered directly relevant.
- 2.3 The desk-based literature included searching relevant biological data sources, including:
- Cambridge Ecology (2014). Report into the findings of an extended Phase 1 Habitat Survey and Protected Species scoping survey for Wenny Road, Chatteris.
  - Natural England (<http://www.naturalengland.org.uk>);
  - Multi-Agency Geographical Information Coverage (MAGIC) (<http://www.magic.gov.uk>);
  - National Biodiversity Network Database (NBN) (<http://www.searchnbn.net/help/helpIndex.jsp>);
  - Environment Agency (<http://www.environment-agency.gov.uk>);
  - Biological Records Centre (Cambridge and Peterborough Environmental Records Centre);

### *Water Vole*

- 2.4 The optimal time for Water Vole surveys is between late March, early April and October and should be carried out by an ecologist experienced in Water Vole survey methods and their ecology.
- 2.5 The survey carried out was based on the methods described in Water Vole Conservation Handbook (Strachan 2006).
- 2.6 Where considered safe to do so each survey entailed walking upstream, within the water channel (where access was possible) and searching the margins and banks for field signs indicating the presence of Water Voles. Where access in the channel was not possible; in cases where the water was too deep or unsafe, the waterbody was surveyed from the bank. One surveyor walked along the top of each bank and used binoculars to scan the opposite bank. This procedure was repeated for both banks.
- 2.7 Typical Water Vole field signs comprised any combination of the following:
- Burrows and bolt-holes in the banks, with diameters of 4 - 8cm;
  - b) Footprints in any soft mud and silt at the margins
  - Cylindrical, blunt-ended droppings, often deposited in 'latrines' to mark range boundaries or favoured spots close to burrows;

- Chewed lengths of vegetation, roughly 10cm long and deposited in feeding stations
  - e) Trampled runs and pathways through bankside vegetation;
  - f) Occasionally above-ground nests of finely shredded vegetation;
  - Feeding 'lawns' around burrow entrances (typically most evident mid-late in the breeding season).
- 2.8 The channels and banks of the waterways and pond were closely examined up to at least 2 metres from the edge of the water. Any signs of Water Vole were recorded on a detailed map to show the location and type of field sign found.
- 2.9 If signs indicating the presence of Water Vole were found the survey aimed to gather information on the size and extent of the population on and adjacent the development site. The number of latrines found could be used to approximate the number of Water Voles that may be present within the waterbody.
- 2.10 Table 2.1. provides details of the survey dates and weather conditions during the Water Vole surveys

**Table 2.1: Details of survey dates and weather conditions**

<b>Survey Date</b>	<b>Weather Conditions</b>
25/03/2015	Dry, overcast, cloud 100%, cool 9°C, wind light NW
01/04/2015	Dry, sunny intervals, cloud 60%, cool 11°C, wind light SW
07/04/2015	Dry, sunny, cloud 10%, warm 15°C, wind light SE
13/04/2015	Dry, sunny, cloud 50%, cool 12°C, wind light SE

- 2.11 The survey commenced at the end of March and was completed in mid-April 2015, and was carried out by an experienced ecologist, Darren Frost, who has knowledge of Water Vole surveys and their ecology.
- 2.12 The information gathered was used to help determine the likely presence of Water Vole in the ditches and therefore inform an assessment into the potential effects of the proposed scheme on this species.
- 2.13 Figure 3.1 shows the location of the waterbodies included in the Water Vole survey. There were two drainage ditches and one pond within the development site boundary that were included in the survey. There were also two drainage ditches adjacent to the development site on the eastern side of the A142 that were linked to the ditches within the development site. These ditches were also surveyed to ascertain whether there were any Water Voles in close proximity to the development site.

### **3 RESULTS**

#### **Literature Search**

- 3.1 The data search from March 2015 found no records of Water Vole within the development site or within 2km of the site boundary.

#### **Water Vole Survey**

- 3.2 No definitive Water Vole sightings or field signs were recorded during any of the four survey visits.
- 3.3 A single burrow approximately 5cm in diameter was located on the north bank in the drainage ditch in the northern section of the development site (TN1). The burrow was not considered to be of a size characteristic of Water Vole and no field signs or evidence showing the burrow had recently been used found.
- 3.4 Overall the waterbodies, especially the drainage ditches, and the adjacent bank side vegetation was considered to provide suitable breeding and foraging habitat for Water Vole.

#### **Survey Constraints**

- 3.5 The information and data gathered from the desk based literature search and the survey were considered to provide a robust and valid indication of the presence/absence of Water Vole within and adjacent to the proposed development site, as well as of the surrounding habitats extending, where necessary some 50m from the boundary of the development site.
- 3.6 There was no evidence to suggest that water levels had been excessively high in the ditches during the winter, so it was anticipated that the footprints or latrines would have been notably visible, if present.
- 3.7 During the surveys visibility and access to small sections of the ditch in the north east part of the development site were obstructed by the presence of dense patches of overhanging brambles. Therefore a full inspection of these sections was not possible.
- 3.8 It should be noted that the absence of certain protected or rare species would not preclude their presence on a site. There would always be a risk of protected or rare species being over-looked, either owing to the timing (both time of day and time of year) of the survey or the scarcity of the species at the site. In addition, the ability of wildlife (including protected species) to move to new sites periodically and therefore move into an area after the survey had been carried out should not be discounted. Consequently, it would be recommended that if the development proposals were to be delayed for three years or more, then a further ecological survey would be recommended to update the results provided in this report and inform the development proposals in the future.
- 3.9 In addition, biological records dating back 10 years (as provided during the desk-based literature search) were based on the information that was available at the time

for the site. Therefore, a lack of species records would not necessarily indicate that a species had not been present.

## 4 RECOMMENDATIONS

4.1 No specific mitigation measures are currently considered necessary as the Water Vole surveys did not find any evidence indicating that Water Voles were present. However, as the habitat was considered to be moderately suitable to support Water Vole, as a precaution, the following measures may be considered appropriate nearer the time when construction works are due to commence. These include:

- provision of tool-box talks to be given relating to protected species in general and Water Voles in particular. All appropriate site personnel should be informed of their legal obligations, responsibilities and what to do in the event that a protected species is found on site.
- an action plan should be developed for use during the construction work in the event that a protected species, such as a Water Vole is found. In the unlikely event of Water Voles being encountered at any stage of the development, work must stop and advice be sought. For immediate advice contact Cambridge Ecology 01954 231239. In this event, further advice can be given on how to proceed with the development whilst ensuring that Water Voles and their burrows at the site are protected maintained.
- an ecological clerk of work may be employed periodically to oversee the construction works to provide advice, guidance and on-site support, to address any unforeseen ecological issues that may arise. For instance, as with all ecological surveys and the nature of wildlife, the behaviour and dwellings of Water Voles can change periodically.
- vehicles and excavations must be kept at least 5m away from the top of any waterbody edges. To assist with maintaining an exclusion zone, barrier fences should be installed 5m from the edge of any waterbody to exclude construction traffic and excavation work.

4.2 The provision of biodiversity enhancement measures that should be included as part of the landscape/habitat creation design proposals for the proposed development are recommended and would be expected to benefit Water Voles.

4.3 The measures that would form part of the biodiversity enhancements comprise the following:

- any planting associated with landscaping/habitat creation to be aimed to provide suitable feeding, breeding and shelter for Water Voles. For instance, the planting of native species known to benefit wildlife would be expected to provide an enhancement, the location of which has yet to be decided. Areas sown with a suitable wildflower seed mix would be expected to be managed to ensure the plant species have the best opportunity to grow and flourish. These habitats would encourage vegetation to flourish and provide a food source for Water Voles, therefore enhancing the foraging habitat for Water Voles and benefit wildlife in general.

- the existing ditches and ponds should be retained and their suitability for wildlife in general and Water Voles in particular be improved by dredging out the build up of decaying matter and sediment and planting with new native aquatic vegetation, including submerged, emergent and marginal plants.
  - where possible new ditches should be created as part of a sustainable urban drainage system for the site and their design aim to incorporate features suitable for wildlife in general and Water Voles in particular.
- 4.4 This enhancement opportunity would be essential for the development to deliver a net gain in biodiversity and therefore meet the terms of the NPPF.
- 4.5 Bearing in mind the ability for wildlife to periodically move to new locations, it is recommended that if the development proposals were to be delayed for three years or more, then further Water Vole surveys would be required to update the results provided in this report and inform the development proposals in the future.
- 4.6 As with all ecological surveys and the nature of wildlife, the behaviour and distribution of Water Voles can change from time to time. Therefore it is recommended that a qualified ecologist be present on site during certain construction activities e.g. excavations, vegetation clearance etc; to ensure legal compliance and to advise on the response to any new ecology issues that may arise.

## 5 KEY POINTS AND FINDINGS

- 5.1 During March and April 2015 a Water Vole survey was successfully completed within and adjacent to the proposed development site at Wenny Road, Chatteris, Cambridgeshire.
- 5.2 The surveys were carried out by professional, qualified and licensed ecologists, with experience in Water Vole surveys and knowledge of their ecology.
- 5.3 The information gathered from the surveys was considered to provide a robust and valid indication of the potential and actual presence of Water Voles at the development site.
- 5.4 There were no records of Water Voles, within 2km of the development site during the last 10 years. Although it was recognised that the absence of records does not guarantee the absence of Water Voles. Biological records for an area are dependent on there being sufficient observer coverage and records actually being submitted.
- 5.5 Within the development site and throughout the survey area there were no Water Voles found or field signs indicating that Water Voles were present. The absence of Water Voles indicated that this species currently does not constitute a constraint to the development proposals for the Wenny Road site and therefore not of material consideration during the planning decision process.
- 5.6 Overall the variety and extent of the habitats within and adjacent to the development site were considered to be moderately suitable to support the life-cycle of Water Voles. However the survey indicated that Water Voles were currently absent from the development site. A number of factors could contribute to their absence. These factors include:
- the isolated nature of the drainage ditches and ponds within the development site from a network of other drainage channels. The channels have heavily engineered culverts at each end which would likely exclude Water Voles from the drainage ditches and ponds within the development site.
  - the absence of Water Voles within 2km of the development site.
  - the potential for predation from local domestic pets, primarily cats.
- 5.7 Based on the findings of this Water Vole survey, no mitigation measures are currently considered necessary. However, as the habitat was considered suitable and as a precaution, a number of mitigation measures have been identified to address potential impacts of the development proposals on Water Voles should they appear on the development site in the future. These recommendations would provide an opportunity for the development proposals to proceed without causing a significant adverse effect on Water Voles and would aim to ensure the development proposals complied with wildlife legislation pertaining to Water Voles.
- 5.8 In addition, a number of enhancement measures have been recommended to meet the policy requirements of the NPPF. These measures may be cost effectively



incorporated into the landscape/habitat creation design proposals for the proposed development scheme that would be expected to result in conservation gain. These would be focused on the provision, maintenance and enhancement of breeding, sheltering and foraging habitats in proximity to the proposed development site.

## 6 BIBLIOGRAPHY

Cambridge Ecology Ltd (2014). Report into the findings of an extended Phase 1 Habitat Survey and Protected Species scoping survey for Wenny Road, Chatteris.

Natural England (2008). Water Vole – the law in practice: guidance for planners and developers. Natural England, Peterborough, UK.

Natural England (2010) Water Voles and development: licensing policy. Technical Information Note TIN042. Natural England, Peterborough.

Strachan, R. & Moorhouse, T. (2011). Water Vole Conservation Handbook (3rd Edition). WildCru Publishing, Oxford, UK.

UK Biodiversity Action Plan (2010) Water vole.  
[http://jncc.defra.gov.uk/\\_speciespages/115.pdf](http://jncc.defra.gov.uk/_speciespages/115.pdf)

7 FIGURES

Figure 1.1 Map showing the red line boundary of the Wenny Road site and Water Vole survey area.

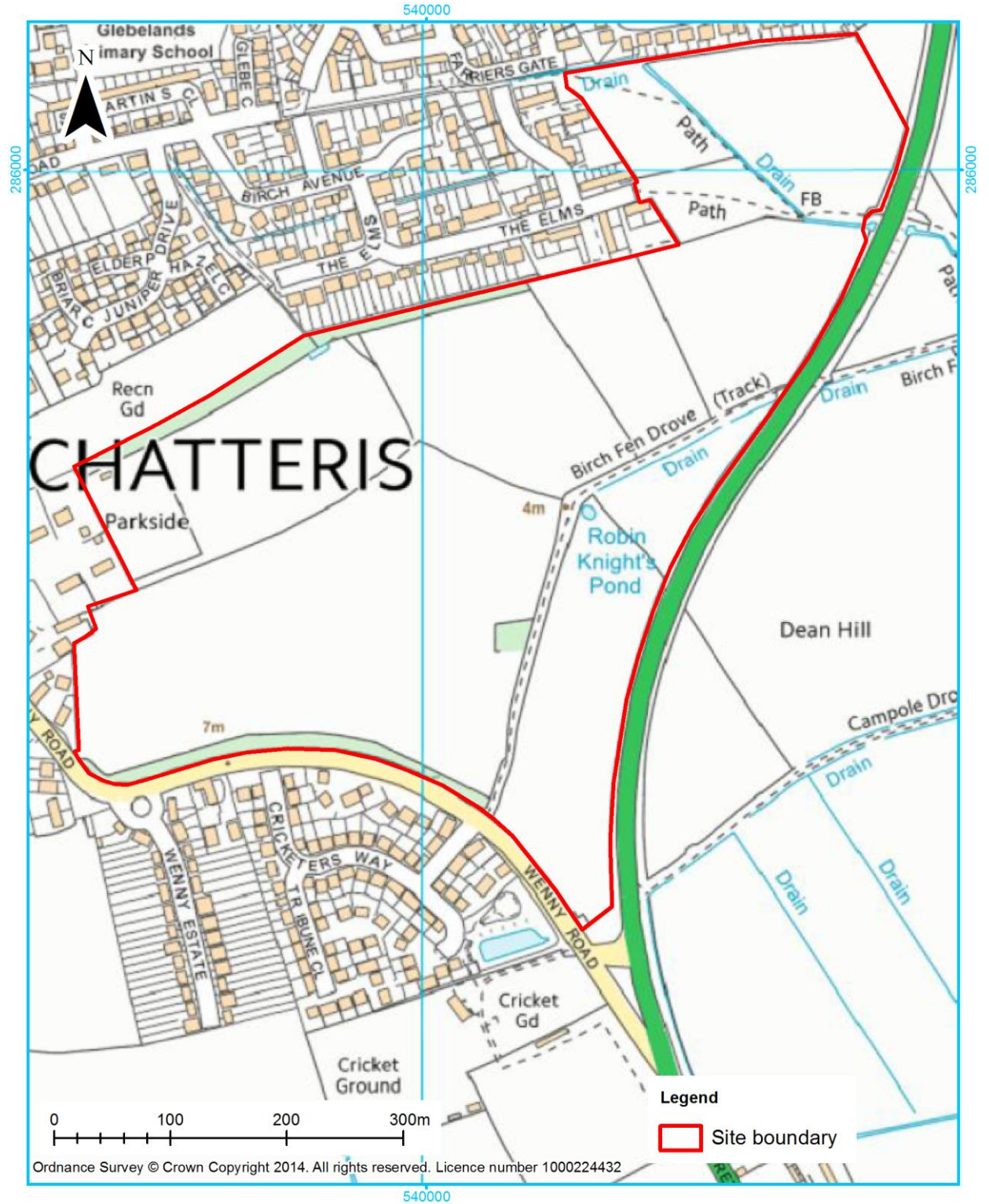
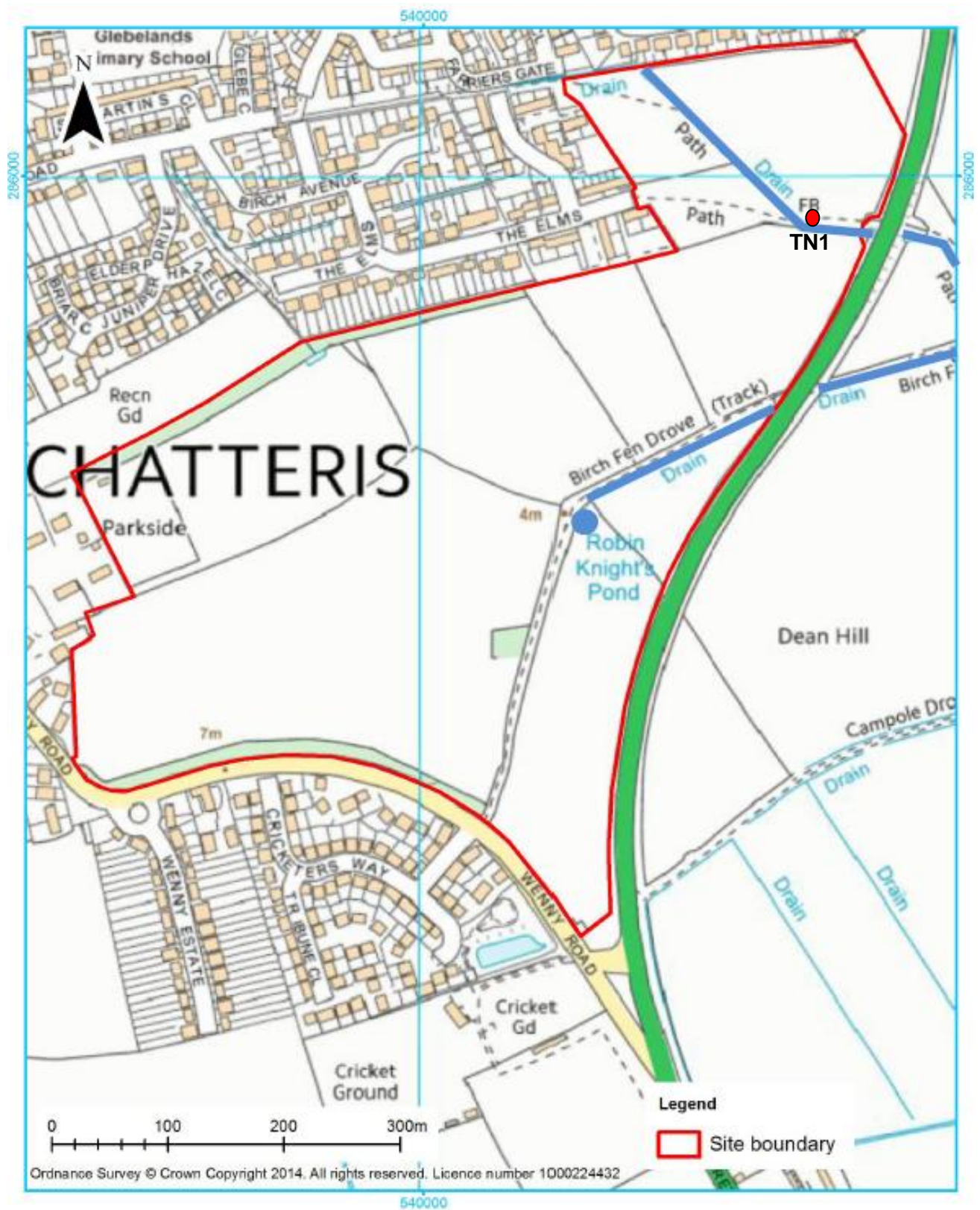







Figure 3.1 Plan showing the location of the waterbodies surveyed within and adjacent to the proposed Wenny Road development site








8 PHOTOGRAPHS

Photo No.	Photograph	Description
1		<p>Robin Knights Pond Pond No 1.</p> <p>Showing adjacent hedge, overhanging tree and surface covered with duckweed.</p>
2		

3	 A close-up photograph of a water vole habitat. The scene is dominated by tall, thin, brown reeds growing out of a body of water. Several reeds have large, fluffy, white seed heads (cattails) at their tips. The water is dark and reflects the surrounding vegetation. In the background, there are some green metal structures, possibly part of a fence or bridge.	
4	 A close-up photograph of a water vole habitat, similar to the one above. It shows a dense cluster of tall, thin, brown reeds growing in water. Several reeds have large, fluffy, white seed heads. The water is dark and reflects the reeds.	
5	 A wider photograph of a water vole habitat. The scene shows a body of water with several tall, thin, brown reeds growing out of it. The reeds have large, fluffy, white seed heads. The water is dark and reflects the reeds. In the foreground, there is a grassy bank with some green grass and some brown, dry grass. The background shows a line of trees and a fence.	

Water Vole Survey on land proposed for development at Wenny Road, Chatteris, Cambridgeshire

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## 9 LEGISLATION AND ECOLOGY

- 9.1 The information set out within this report does not constitute a legal opinion on the relevant legislation. The opinion of a legal professional should be sought if further advice is required.
- 9.2 The information below is intended only as guidance to the legislation relating to these species. The relevant legislation themselves should be referred to for the correct legal wording.
- 9.3 Full details of the legislation can be found at:  
[www.legislation.gov.uk/uksi/2010/490/contents/made](http://www.legislation.gov.uk/uksi/2010/490/contents/made),  
[www.legislation.gov.uk/uksi/2007/1843/contents/made](http://www.legislation.gov.uk/uksi/2007/1843/contents/made)  
[www.legislation.gov.uk/uksi/2009/6/contents/made](http://www.legislation.gov.uk/uksi/2009/6/contents/made)
- 9.4 It remains the client's responsibility to maintain legal compliance relating to national and international wildlife legislation.

### **Water Vole Legislation and Planning Policy**

- 9.5 Water Voles (*Arvicola amphibius*) and their habitat are provided full legal protection under Schedule 5 (section 9) of the WCA 1981 (as amended).
- 9.6 The legal protection makes it an offence to:
- intentionally kill, injure or capture or take a Water Vole;
  - possess or control (live or dead animal, part or derivative);
  - deliberately (intentionally) or recklessly damage, destroy or obstruct access to a breeding site or any structure or place used for shelter or protection by a Water Vole; i.e. their habitat and burrows;
  - deliberately (intentionally) or recklessly disturb a Water Vole whilst occupying such as structure or place, and
  - sell, offer for sale, possess or transport for the purpose of sale (live or dead animal, part or derivative).
- 9.7 Licences can be applied for from Natural England for specific activities relating to; scientific and educational activities; ringing or marking; conservation of Water Voles or introduction into certain areas; preserving public health and public safety; preventing spread of disease; and preventing serious damage to any form of property or to fisheries. Licences to trap and remove Water Vole from a development site for the purpose of conservation must meet set criteria from Natural England this includes that the act cannot reasonably avoided and the translocation will produce a conservation benefit.
- 9.8 Water Vole is a UK BAP Priority Species and is included in the Local BAPs for Cambridgeshire. When the Species Action Plan (SAP) for Water Vole was created it included plans to: "determine the current distribution and abundance of Water Voles in Lancashire; maintain viable populations at known sites; ensure that Water Voles are present throughout their 1970s range.

### **National Planning Policy**

- 9.9 National Planning Policy Framework 2012 (NPPF) and Section 40 of the Natural Environment and Rural Communities Act 2006 (NERC), places a duty on all public bodies including local planning authorities to consider habitats and species of Principal Importance listed in Section 41 of the NERC Act and Priority Species/Habitats within Biodiversity Action Plans when considering a planning application.
- 9.10 It is recognised by the NPPF that the planning system should contribute to and enhance the natural and local environment by protecting and enhancing valued landscapes, recognising the benefits of ecosystem services, minimising impacts on biodiversity and providing net gain where possible by establishing coherent and resilient wildlife networks. Furthermore, it prevents both new and existing development from contributing to or being put at unacceptable risk from, or being adversely affected by, soil, air, water or noise pollution or land instability.
- 9.11 When determining planning applications, local planning authorities should aim to conserve and enhance biodiversity by applying the following:
- If significant harm from a development cannot be avoided, mitigated or compensated, then planning should be refused;
  - Development within or outside SSSIs should not normally be permitted;
  - Development proposals where the primary objective is to conserve or enhance biodiversity should be permitted as should those that encourage opportunities to incorporate biodiversity; and
  - Development that would result in deterioration of irreplaceable habitats (such as ancient woodland etc) should be refused unless the benefits outweigh the loss.

### **Water Vole Ecology and Conservation Status**

- 9.12 The Water Vole is a member of the rodent family and is the largest of the British voles. Water Voles are associated with a range riparian habitats such as the banks and margins of streams, rivers, drainage ditches, field drains, as well as other wetland habitats such as ponds, rivers, canals and marshland. They have a preference for slow flowing water courses with dense bank side vegetation. They are generally herbivorous in their diet showing a preference for grasses, rushes, sedges and herbs in summer and fruits and bark in autumn and winter.
- 9.13 Water Voles tend to build their burrows in soft earth within 2m of the bank edge. Female Water Voles are territorial unlike their male counterparts. Typical Water Vole home ranges vary between 30m and 150m for females and 60m to 300m for males (Strachan and Moorhouse, 2006). Territories are marked out using piles of droppings in areas known as latrines.
- 9.14 The Water Vole breeding season occurs between March and October and a female can have between two and five litters per season with between five and eight young

per litter. During winter Water Voles do not hibernate but do become less active above ground. They tend to congregate in groups during the winter months.

- 9.15 Water Voles prefer static or slow flowing water courses where the water depth is greater than 1 metre. They require stands of emergent vegetation and/or tall grasses for feeding. Heavily shaded or wooded areas are unsuitable for Water Vole as they lack feeding habitat. Areas of dense vegetation which provide protection from predators such as mink are favoured. Soft earth banks are required so Water Voles can excavate their burrows. Bare, rocky or lined channel banks are avoided.
- 9.16 Water Vole populations have undergone a long term decline in Britain throughout the 20th Century. Evidence from national surveys carried out in 1989-1990 and 1996-1998 suggested a population crash; Water Vole had disappeared from 67.5% of their former sites. Reasons for this decline include agricultural intensification, habitat loss, changes in riparian management and the spread of American Mink (*Mustela vison*).
- 9.17 The latest data from the UK Biodiversity Action Plan (BAP) reporting website (BARS) indicates there may have been an overall increase in the UK Water Vole population in 2008. Localised expansion of Water Vole population range has been seen in some areas where there has been habitat creation, enhancement and management and a strict catchment-wide mink control regime.