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Greenscape Environmental

SOMERSET HOUSING UK LTD

PHASE 1 ENVIRONMENTAL SURVEY

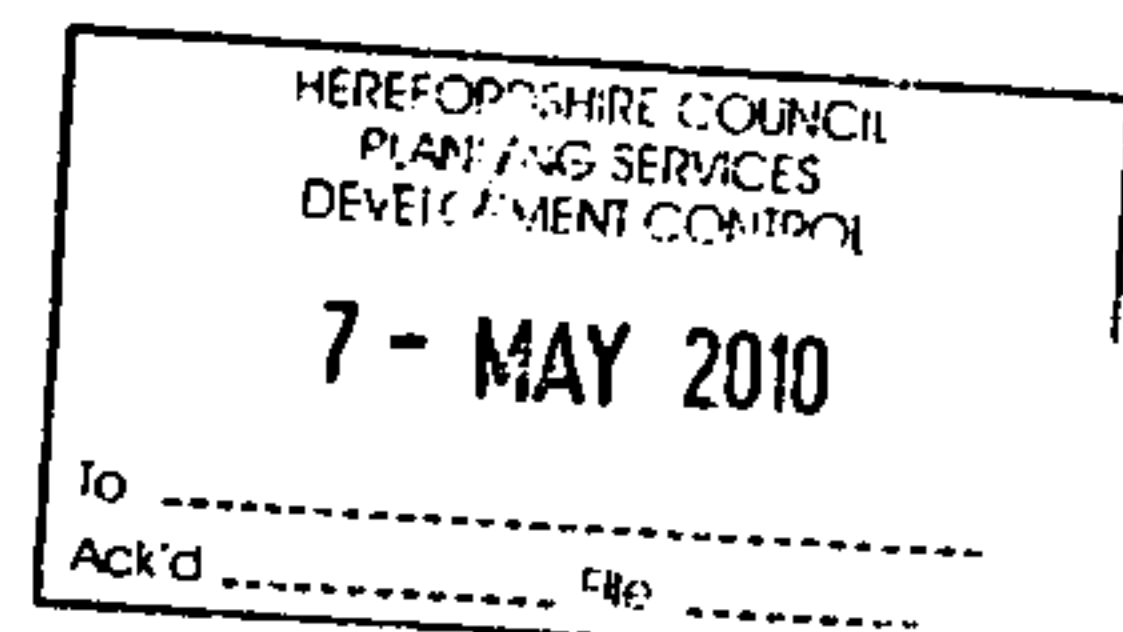
**FIELD AT DARK LANE
LEINTWARDINE**

MARCH 2010

761 01R

**Inscape
Lyth Hill
Shrewsbury
SY3 0BS**

01743 872900

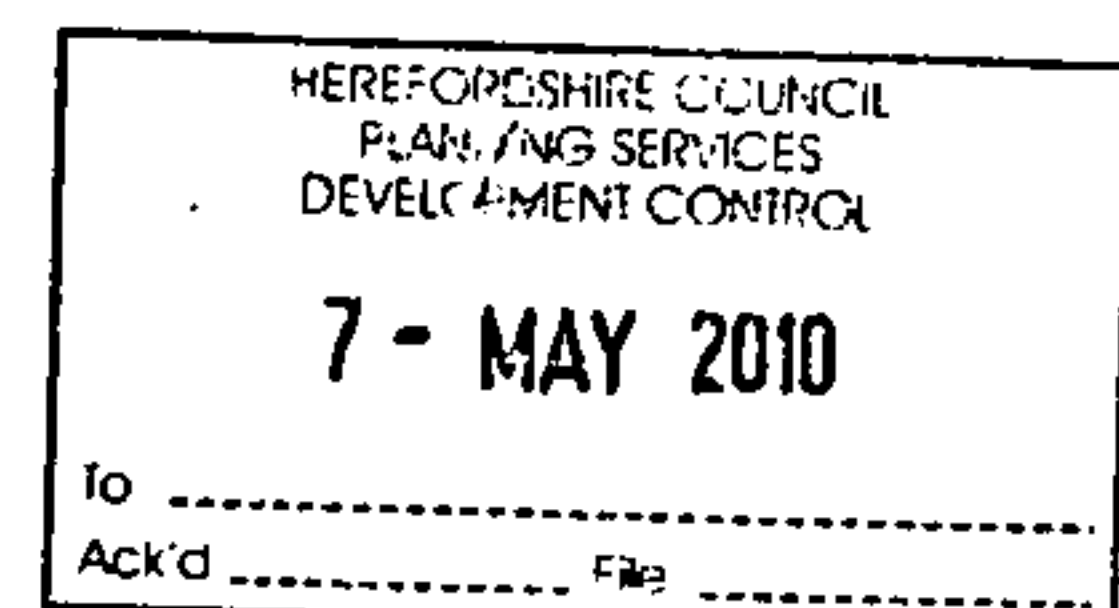


Report Classification:		Phase 1 Environmental Survey	
Report Status:		Final	
Report Reference:		761 01R.doc	
	Name	Signature	Date
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HEREFORDSHIRE COUNCIL PLANNING SERVICES DEVELOPMENT CONTROL	
7 - MAY 2010	
To	File
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Table of Contents

EXECUTIVE SUMMARY	4
1 INSTRUCTION	5
2 OBJECTIVES	5
3 SURVEY TYPE - METHODOLOGY	6
4 PROPERTY	7
4.1 LOCATION	7
4.2 DESCRIPTION.....	7
4.3 DESCRIPTION OF AREAS NOT ACCESSED	7
5 SURVEY RESULTS	8
5.1 FINDINGS.....	8
5.2 CONCLUDING REMARKS.....	9
6 RECOMMENDATIONS	10
6.1 BATS.....	10
7 STOCKISTS.....	12
8 OTHER.....	13
APPENDICES	14
A ORDNANCE SURVEY MAP ABSTRACT.....	
B ENVIRONMENTAL MAPS	
C SITE PLAN	
D PHOTOGRAPHIC EVIDENCE	
E BREEDING BIRD LEGISLATION.....	
F BIBLIOGRAPHY	



Executive Summary

Scope of Survey

Greenscape Environmental was commissioned by Mr K Anderson of Somerset Housing UK Ltd, Winchester House, 9 St Marys Court, Shrewsbury, SY1 1EG to conduct a phase 1 survey to consider the impact on protected species, of the potential development of a field off Dark Lane, Leintwardine. Concern has been raised for bat species observed flying in the area.

A phase 1 environmental survey for protected species was undertaken at the site, OS grid reference SO4040 7466 on 4th March 2010, by P Marshall, an experienced biologist, Natural England scientific licence number 20093799 (bats) 20091601 (GCN), 20090928(barn owl).

The survey undertaken comprised a preliminary desktop survey to ascertain local species previously recorded presence of SSSI's, a thorough on site daytime survey.

The Rivers Teme and Clun are SSSI's notified under Section 28 of the Wildlife and Countryside Act 1981. These lie within 700m of the proposed development site. No impact on these SSSIs would be expected from the development of the field.

A search of the NBN Gateway revealed bat species recorded within 10km of the site previously include Common pipistrelle (*Pipistrellus pipistrellus*), Soprano pipistrelle (*Pipistrellus pygmaeus*) Brown long-eared bats (*Plecotus auritus*) Brandt's Bat/Whiskered Bat (*Myotis brandti/mystacinus*), Natterer's bat (*M. Nattereri*) Noctule (*Nyctalus noctula*) and Lesser horseshoe bats (*Rhinolophus hipposideros*). However no standard trees are to be removed during this development so little impact on potential roost sites is expected. A length of hedgerow will be removed and recommendation for the suitable compensation for the removal of a potential foraging area and connectivity has been made.

Although badgers (*Meles meles*) have been recorded in the area, no evidence of a sett nor badger activity was found in the field.

No evidence of nesting birds was seen in the length of hedge to be removed. However it is recommended that if the hedge is to be removed between Feb and August a survey is conducted immediately before works to ensure nesting birds are not disturbed. If nesting birds are found then the removal of the hedge MUST cease until young birds leave the nest.

No other protected species were recorded in the vicinity of the site.

Opinion

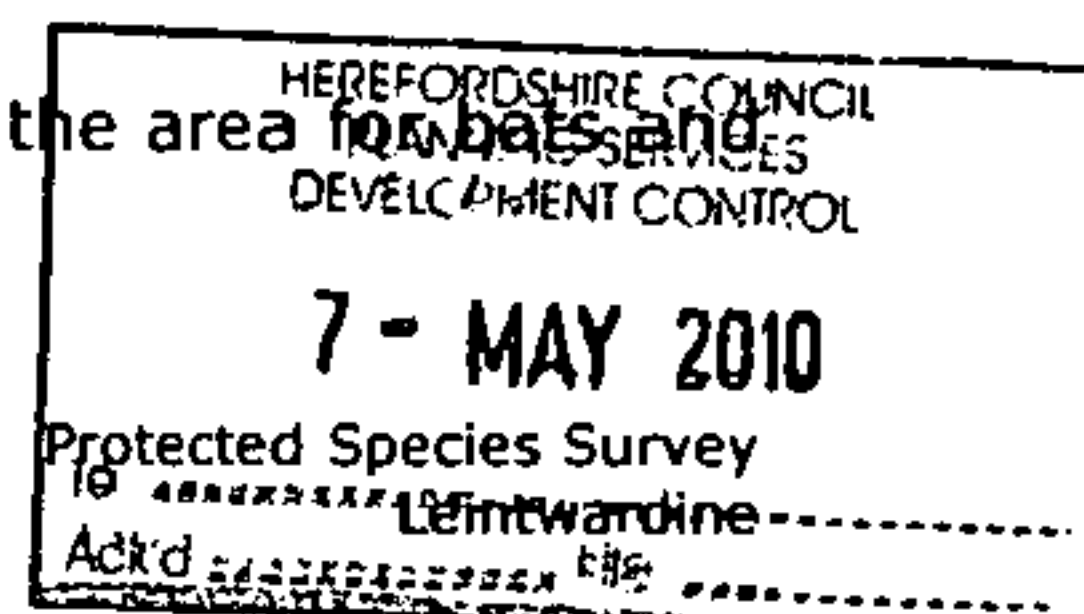
In the opinion of the surveyor, should this development proceed it will not affect the conservation status of any protected species.

- Nesting birds: If birds start nesting in the hedge before the length of hedge is removed the removal of the hedge MUST cease till young birds leave the nest.

Recommendations have been made for the enhancement of the area for nesting birds

- Bats:

Recommendations have been made for the enhancement of the area for bats and the compensation for the loss of a potential foraging area.



1 Instruction

Greenscape Environmental was commissioned by Mr K Anderson of Somerset Housing UK Ltd, Winchester House, 9 St Marys Court, Shrewsbury, SY1 1EG to conduct a phase 1 survey to consider the impact on protected species, of the potential development of a field off Dark Lane, Leintwardine. This is in accordance with the guidance given in Planning Policy Guideline PPS 9.

A detailed environmental survey was undertaken at the field, OS grid reference SO4040 7466 on 4th March 2010, by P Marshall, an experienced biologist, Natural England scientific licence numbers, 20093799 (bats) 20091601 (GCN), 20090928 (barn owl).

It is understood that the proposal is to construct 20 semidetached affordable homes for social housing to a the standard code 3 sustainable homes. An area of the field is to remain as open access land and a cycle path and foot path is to be constructed to provide access to the local facilities including school. Vehicle access to the development will be from the main road. A 40m length of hedge line will need to be removed to provide a reasonable sight line for vehicles.

2 Objectives

The aim of this type of survey is to locate and describe, as far as reasonably practicable, evidence of use, scope and potential impact for wildlife including all protected species, such as bat species, which may be disturbed in the event of development.

This is in accordance with:

The Wildlife and Countryside Act 1981(as amended) – as listed in:

- Schedule 1. Birds protected by special penalties at all times
- Schedule 5. Protected animals
- Schedule 8. Protected plants

The Conservation (Natural Habitats, &c.) Regulations 1994 (as amended) – as listed in:

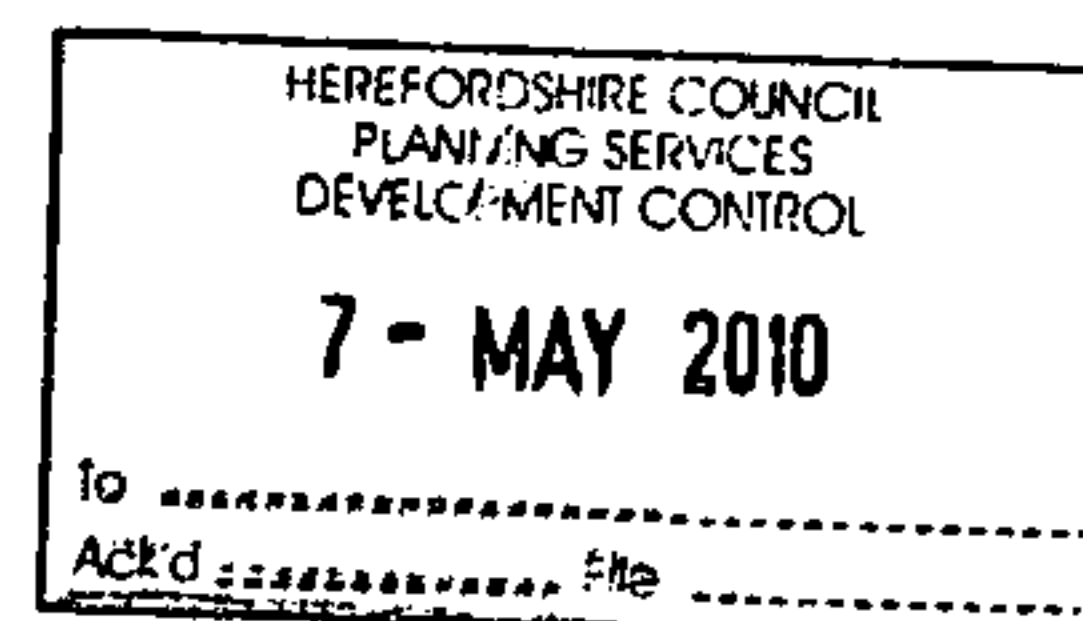
- Schedule 2. European protected species of animals
- Schedule 4. European protected species of plants

Countryside and Rights of Way Act (2000)

The Protection of Badgers Act 1992.

It involved inspection, as necessary, to all accessible areas, and a desktop study to ascertain reports of protected species and notifiable sites in the vicinity of the site and to look for potential for habitats for species such as great crested newts.

Summary recommendations have been made outlining reasonable avoidance measures and the associated habitat creation/management required to offset any impacts associated with the proposed development.



3 Survey Type - Methodology

The building(s) and the surrounding were subject to a thorough walkover survey recording evidence of use or scope for habitats and of any signs of protected species.

Mammals

Bats:

Daytime surveys for bats may only identify potential roost sites if bats are not visibly present. Bat species may leave little evidence of their presence.

Evidence for the presence of bats includes:

- An onsite search for sites that could have potential for a roost.
- Consideration for surrounding habitats and features likely to be used by bats.
- Holes, cracks and rot holes used as roosts, marked by streaks of urine and faeces.
- Smoothed, darkened edges where bats have rubbed and left natural body oils when entering and exiting a space.

Badgers:

Daytime surveys for badgers involve looking for

- Scrapings where badgers have dug for food or used as latrines.
- Signs of a sett, including signs of use such as presence of badger hair
- Tracks and prints.

Birds

Barn owls

The use of a building or tree by Barn owls can be determined by looking for signs such as

- Highly distinctive droppings or splats under roosting points.
- Presence of owl pellets/feathers

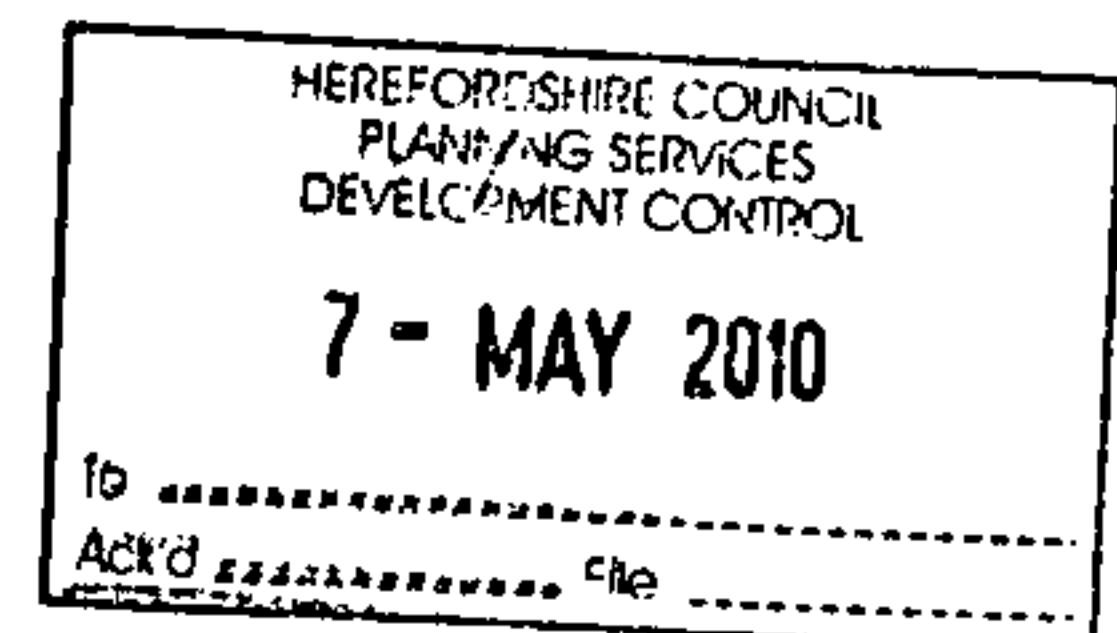
Other birds

Evidence of other birds using a site will be from looking for

- Presence of nests
- Collections of droppings and/or feathers

Amphibians and reptiles

Great crested newts (GCN) spend some time in ponds and also have a terrestrial phase. The presence of suitable slow moving and still water within 250m of the site might trigger the need to carry out further survey work at an appropriate time of the year. Reptiles and other amphibian are searched for under logs, stones and other debris.



4 Property

4.1 Location

Leintwardine is situated in the north of Herefordshire, close to the Shropshire border. It is a small village set in a rural situation, 10km to the west of Ludlow and 11km to the east of Knighton. The Rivers Teme and Clun confluence close to the village. Several areas of mixed woodland, particularly Coleswood lie to the north east of the village.

It is approached via the A4113, a section of Roman Road.

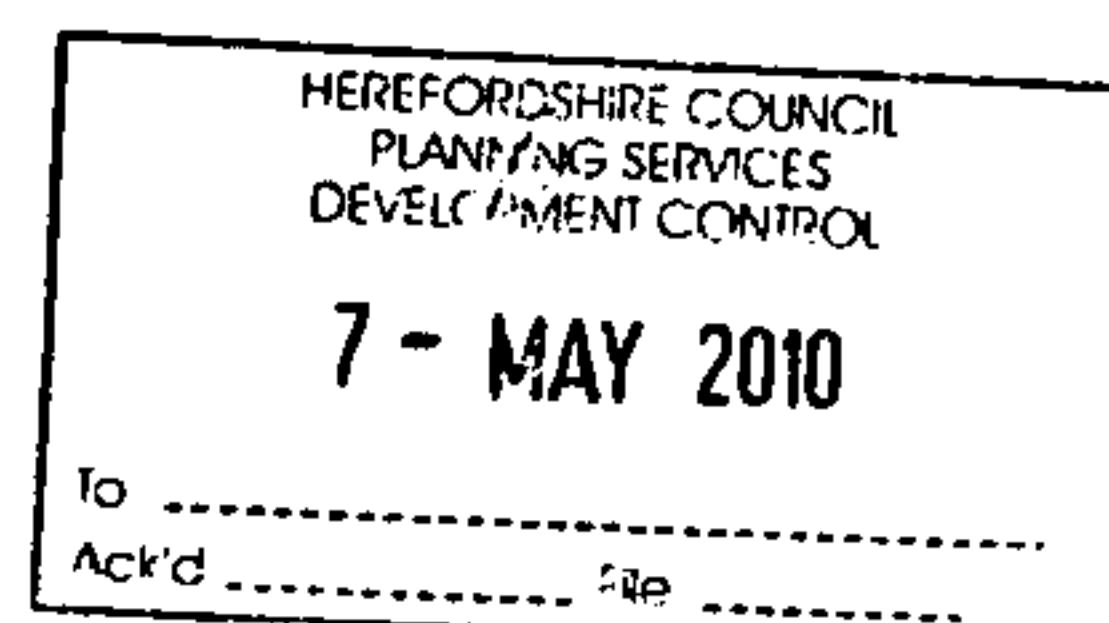
The field which is potentially to be developed lies on the northern outskirts of the village. It is a triangular shaped piece of land bounded to the west by the A4113 and to the east by an unclassified lane, Dark Lane.

4.2 Description

The field is bordered by the roads to the east and west and by housing to the south. The paddock has been used for grazing. It appears to be neutral unimproved rough grazing, but of little interest to plant life. The hedges to the east and west comprise approximately 4m high mixed species. The housing is separated from the field by fencing. There is one large mature oak in the field boundary. It is not planned to remove this tree during development.

4.3 Description of areas not accessed

All areas were accessible for this survey.



5 Survey Results

5.1 Findings

Desktop Survey

The map from Nature on the map presented in Appendix B indicates that the buildings are not adjacent to an SSSI. The rivers converging to the west of the village are notified as SSSIs. Therefore no affect is expected from the development at this site.

Scrutiny of the OS map (Appendix A) and a walk around the locality showed there are no significant areas of still water in the vicinity of the field therefore no further survey with respect to great crested newts is deemed necessary.

Local bat species recorded previously in the area previously include:-

Common pipistrelle (*Pipistrellus pipistrellus*),
Soprano pipistrelle (*Pipistrellus pygmaeus*)
Brown long-eared bats (*Plecotus auritus*)
Brandt's Bat/Whiskered Bat (*Myotis brandti/mystacinus*),
Natterer's bat (*M. Nattereri*)
Noctule (*Nyctalus noctula*) and
Lesser horseshoe bats (*Rhinolophus hipposideros*).

Other protected species recorded within 10km of the site include

Badgers (*Meles meles*)
Water voles (*Arvicola terrestris*)
Otters (*Lutra lutra*)

Conditions on the survey date

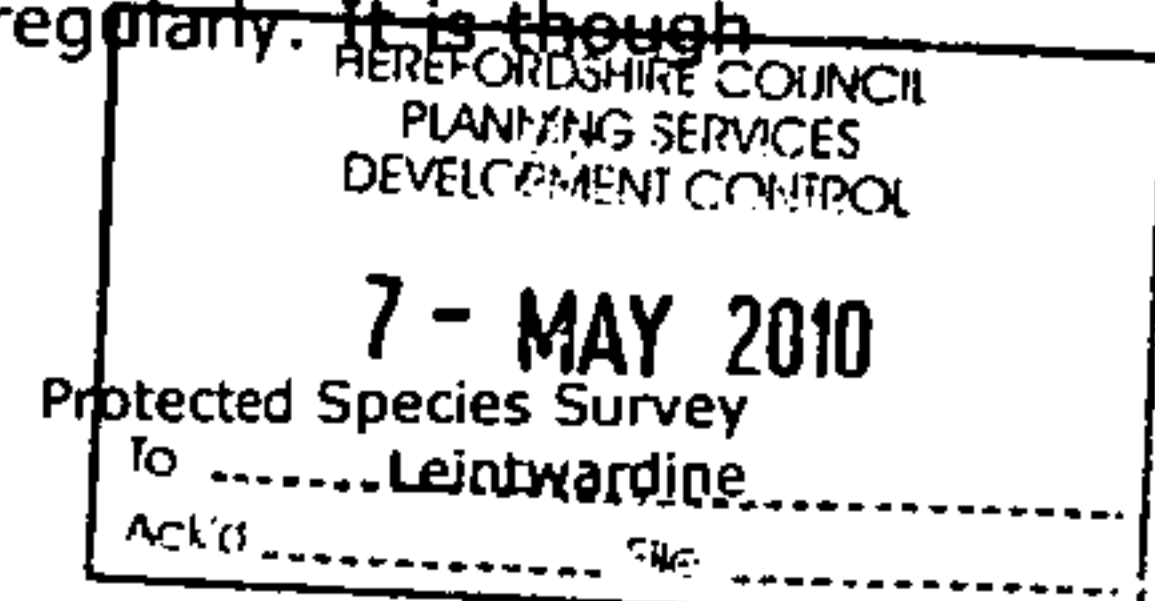
Date	Time	Temp °C	Sunset	Condition
04 03 10	1400	5		Sunny, low wind speed

Field

The hedge to be removed on the western aspect of the site is tall, about 4m high. It is a mixed species hedge line with evidence of layering in the past. The predominant species is hazel (*Corylus avellana*) with some hawthorn (*Crataegus monogyna*) blackthorn (*Prunus spinosa*) and elder (*Sambucus nigra*). To the north of the length of hedge to be removed are some stands of Wych elm (*Ulmus glabra*). From the condition of the bark on these it would appear these are not healthy specimen. A bank leads from this hedge down to the road. The hedge will potentially provide good connectivity for bat species between houses in the village and woodland to the north and east. No wood in this section is considered mature enough for a bat roost. No birds were observed to be nesting during the survey.

The hedge to the eastern aspect of the field is to remain. This is a 4m high mixed hedge of similar species. A large veteran oak stands nearly centrally in this hedge. There is a bit of die back with some dead branches providing excellent opportunities for invertebrates, birds, and bat species. There is no intention of removing this for the development. The planned buildings will be situated beyond the canopy of the tree ensuring its continued success.

The field is unimproved grassland which has been grazed regularly. It is though unlikely to contain any important plant species.



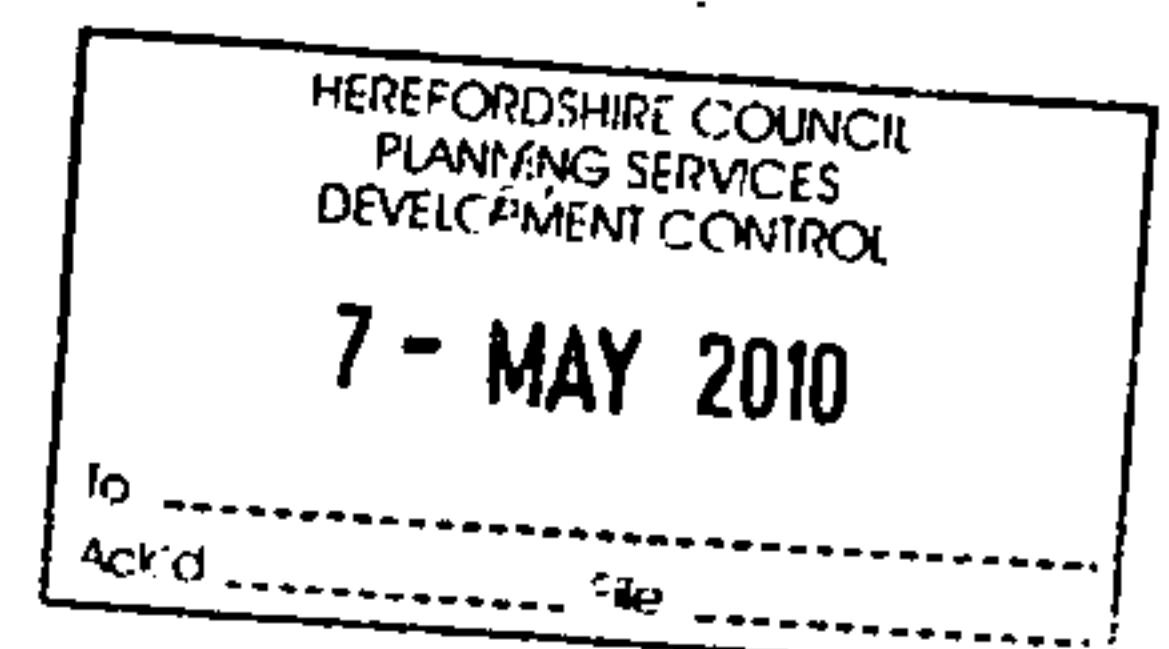
Consideration of Conservation status of species

In the opinion of the surveyor no protected species will significantly be affected by this development. No potential bat roosts will be affected. However the connectivity of habitats will be reduced by the removal of a length of hedge line. This may have an impact on bat species in the area as the potential flight lines may be temporarily reduced until housing and new hedges are developed.

Although no birds were observed nesting at the time of the survey, it is considered highly likely that this hedge will be used by bird species. A check should be made prior to its removal by a qualified ecologist.

5.2 Concluding remarks

The development can be conducted in a manner to reduce the impact on protected species, both bats and birds. The following recommendations should be considered in the light of the above survey information.



6 Recommendations

The aim of these recommendations is to outline reasonable avoidance measures and the associated habitat creation/management required to offset any impacts associated with the proposed development.

6.1 Bats

Planting of trees and hedges

The removal of the hedge line may have an impact on commuting and foraging bats in the area.

- 1) Planting on the area of field to be left for access will be of trees to compensate for this.
 - a) Three trees will be planted about 15m apart to provide suitable replacement connectivity and potential foraging opportunities. These will be sited around the southern outer perimeter of the area to be left as open space.
 - b) Trees to be used include species from this list.
 - i) Oak tree (*Quercus petraea*)
 - ii) Apple trees (local variety)
 - iii) Crab apples (*Malus cultivars*)
 - c) All these will be locally sourced
- 2) Replacement hedge planting behind the current hedge line will be of mixed species emulating the current range of plants,
 - a) Species to be used include
 - i) Hazel (*Corylus avellana*)
 - ii) Hawthorn (*Crataegus monogyna*)
 - iii) Field maple (*Acer campestre*)
 - iv) Guelder rose (*Viburnum opulus*)
 - v) Dogwood (*Cornus florida*)
 - b) These will be planted in a double row, 30cm apart. Ground around them will be mulched to assist in the successful establishment of the hedge.

Enhancement of the environment

- 1) Bat bricks will be placed at eaves height on the south faces of the new dwellings. Ideally this will be on houses 1, 14 and 16. Two makes are recommended.
 - a) Schwegler bat box N27



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b) Ibstock bat brick



B



C

Any of these three will be suitable. B is available in other brick colours to blend with the new buildings.

No external illumination will be placed near these entrances.

2) Bird boxes will be incorporated into the new build ideally at the gable ends on house 6 and 7

a) Swift box



These can be purchased from Ibstock Bricks or a Schwegler model is available.



b) Sparrow terrace



These can be placed on as many of the west facing aspects of the buildings as possible. House sparrows are becoming increasingly rare in our gardens.

c) Artificial House Martin Nest

Schwegler 9A double House Martin nest



Placed by the gables, these nest boxes are used by House Martins and even by wrens during winter months. Ideally these should be placed on south/westerly aspects, buildings 16, 18 and 20, would be ideal.

Lighting

Lighting can have a harmful effect on bats, impacting on their use of foraging areas and commuting routes to and from roosts. It is recommended that should street lighting be deemed necessary by the planning authority at the new development that low bollard lighting is used.

7 Stockists

Schwegler products:

Alana Ecology: <http://www.alanaecology.com>

Jacobi Jayne: <http://www.jacobi-jayne.co.uk/>

CJ Wildbird foods: <http://www.birdfood.co.uk/>

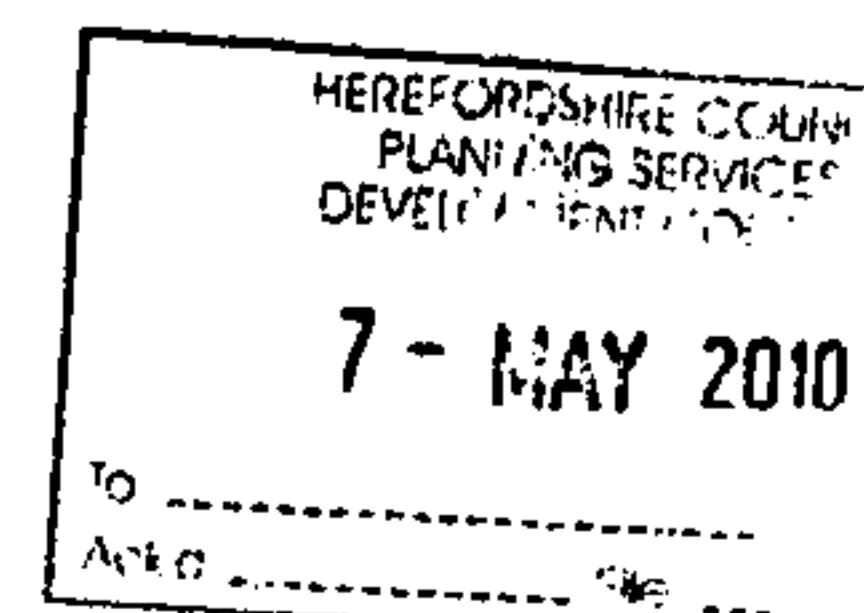
Ibstock products

Ibstock Brick Company: <http://www.ibstock.com/sustainability-ecozone.asp>



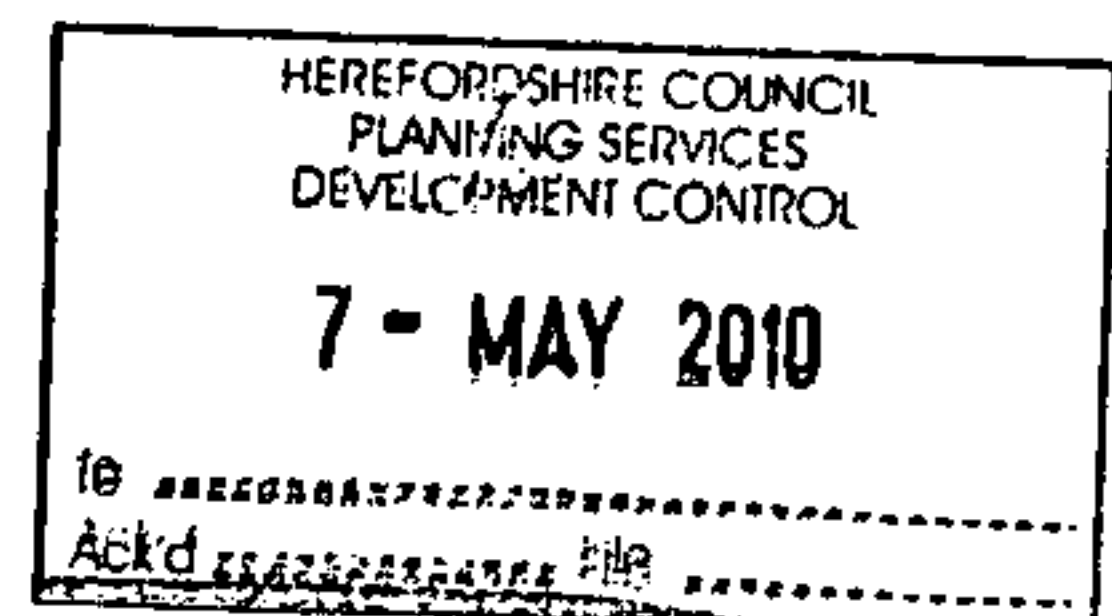
8 Other

- This report may not be reproduced other than in full. The report should be read in its entirety.
- Questions arising from the survey report should be directed to the author of this report, who will be pleased to clarify any technical issues raised.
- Whilst the surveyors make every reasonable effort, Greenscape Environmental cannot guarantee that all protected species have been identified and survey results are definitive.



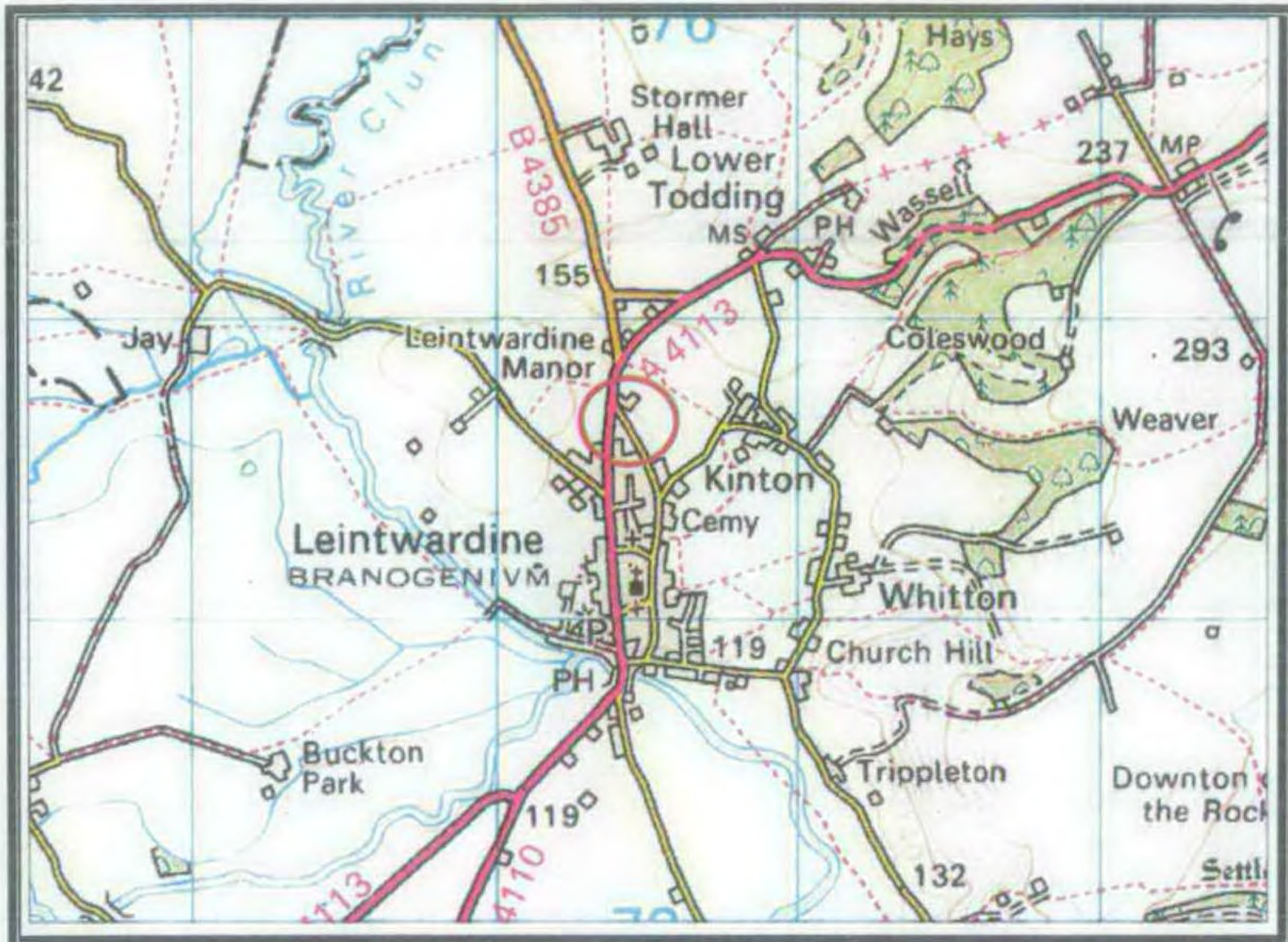
Appendices

- A** **Ordnance Survey Map Abstract**
Sheet(s): 1
- B** **Environmental Maps**
Sheet(s): 1
- C** **Site Plan**
Sheet(s): 1
- D** **Photographic Evidence**
Sheet(s): 1
- E** **Breeding Bird Legislation**
Sheet(s): 1
- F** **Bibliography**
Sheet(s): 1



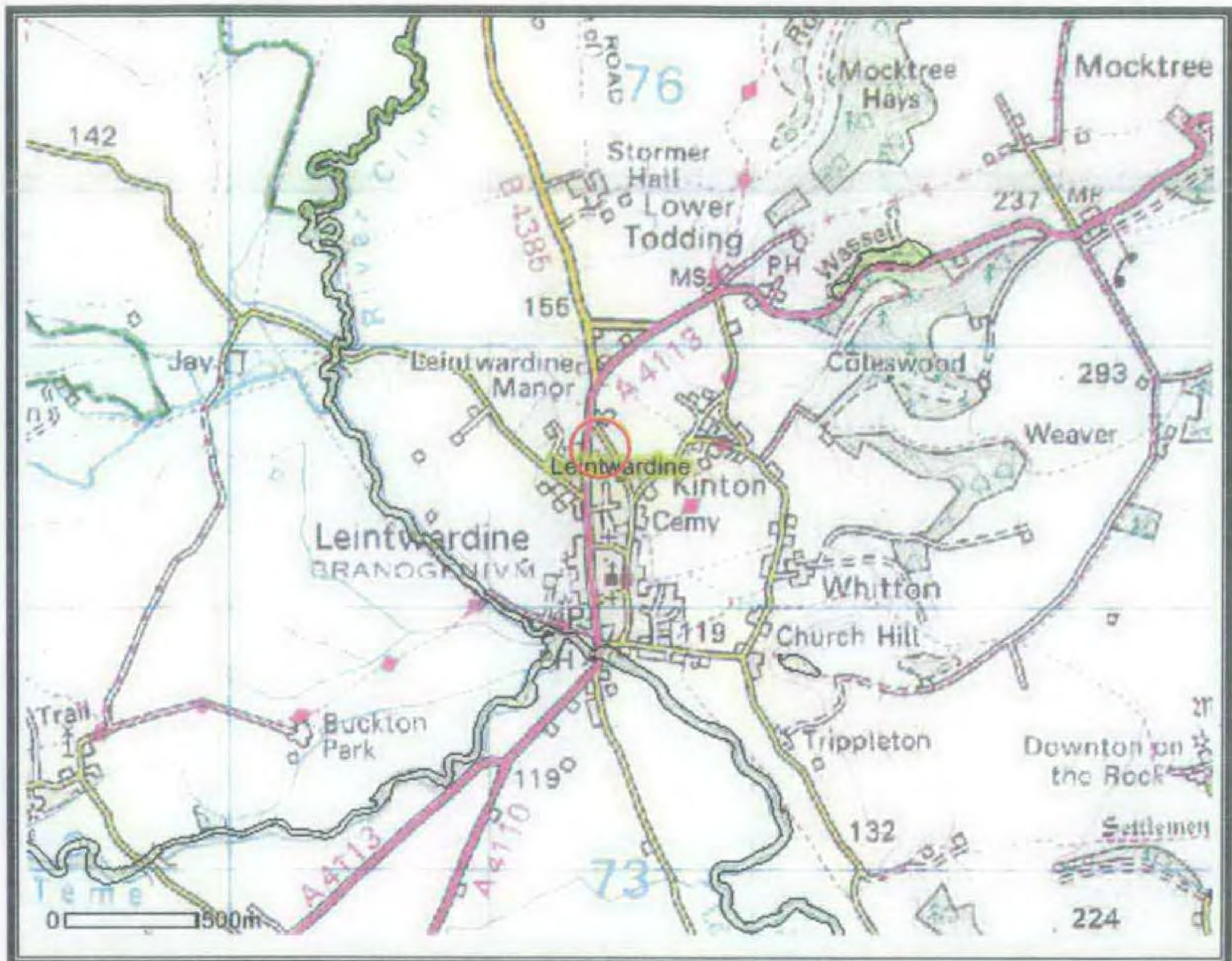
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A Ordnance Survey Map Abstract



Position of Field off Dark Lane, Leintwardine, Herefordshire



B Environmental Maps

Environmental map for Leintwardine from "Nature on the Map".

This shows that the site is not adjacent to an SSSI as notified under Section 28 of the Wildlife and Countryside Act 1981.

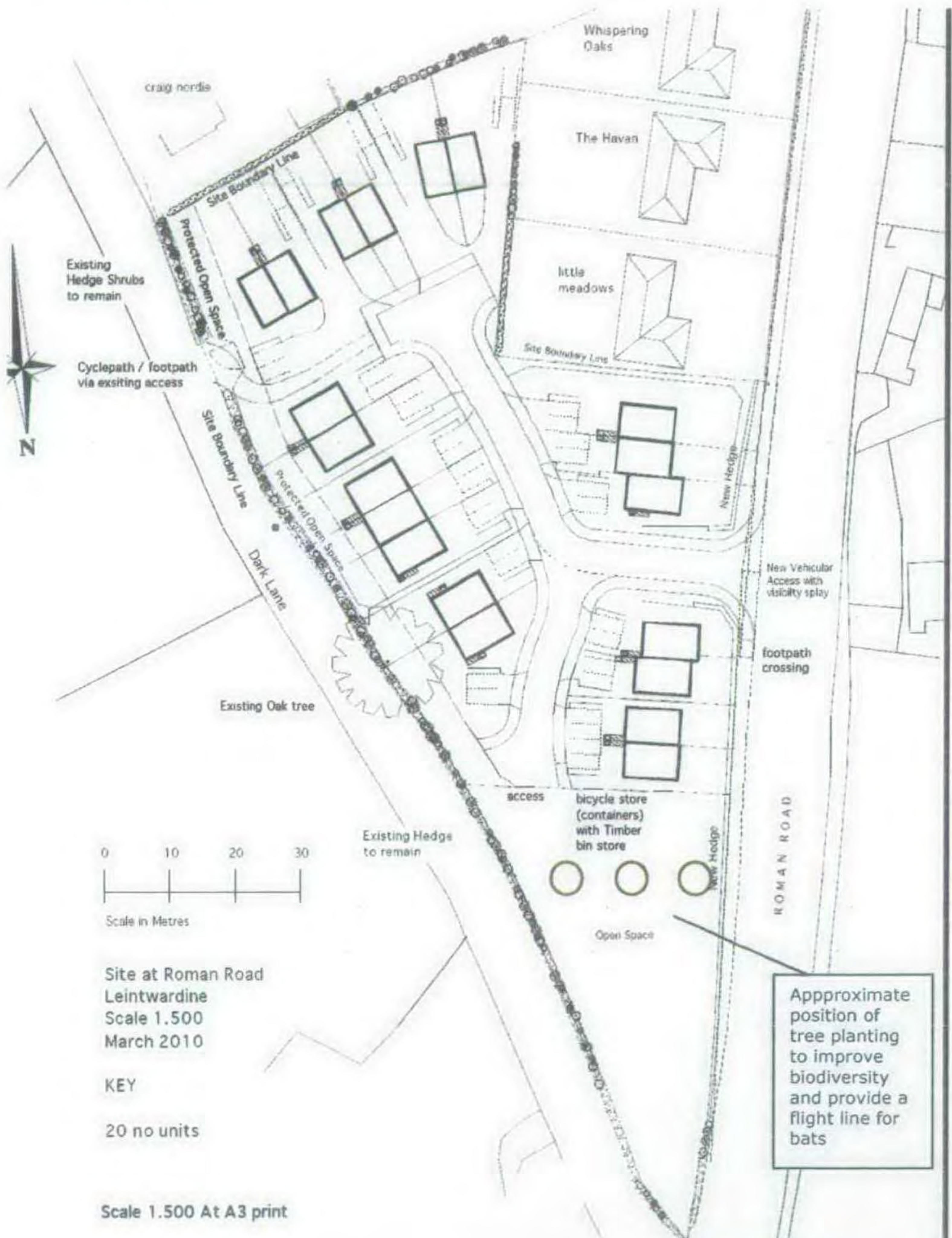
The highlighted areas to the west and south of the site are SSSIs. These are the rivers Clun and Teme.

However no impact on these sites would be expected from potential development at Dark Lane.



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C Site Plans



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D Photographs



Dark Lane, field to right



Field showing mature oak tree to remain and hedge to rhs.



Triangle to be amenity area with tree planting



Section of hedgerow to be removed to allow access then replaced a few meters back



Length of hedgerow to be replaced as part of development



Neighbouring housing to south of site, some behind fences as above.



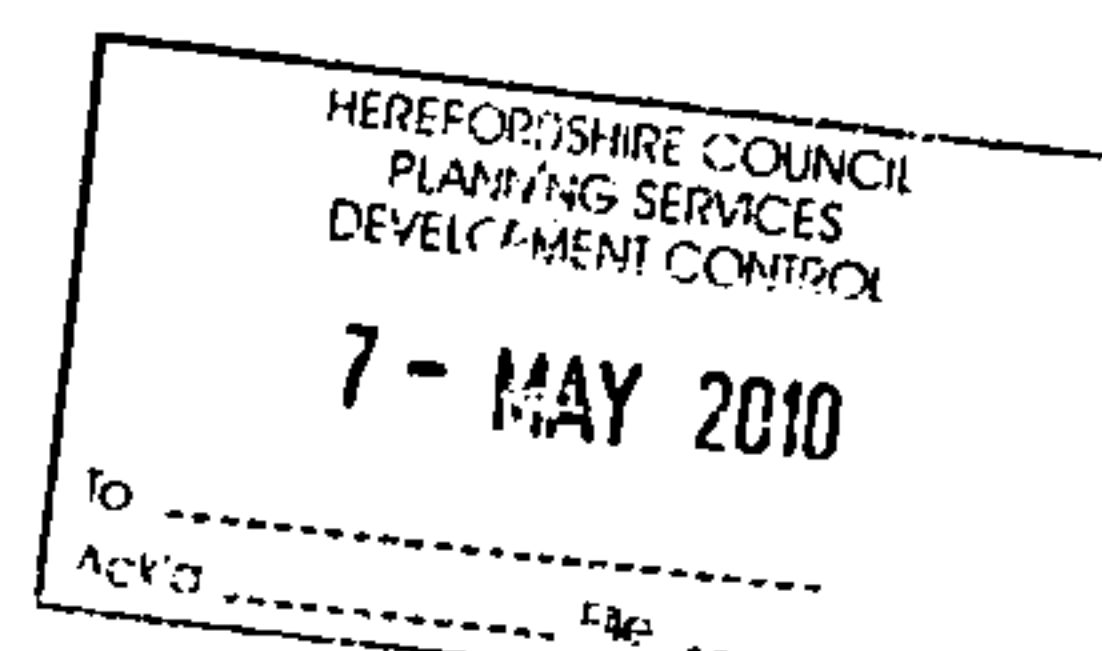
*Greenscape Environmental***E Breeding Bird Legislation**

All birds, their nests and eggs are protected by law and it is an offence, with certain exceptions to:

- Intentionally kill, injure or take any wild bird;
- Intentionally take, damage or destroy the nest of any wild bird while it is in use or being built;
- Intentionally take or destroy the egg of any wild bird;
- Have in one's possession or control any wild bird (dead or alive) or part of a wild bird which has been taken in contravention of the Wildlife and Countryside Act 1981 or the Protection of Birds Act 1954;
- Have in one's possession or control an egg or part of an egg which has been taken in contravention of the Act;
- Have in one's possession or control any birds of a species occurring on Schedule 4 of the Act unless registered and ringed in accordance with the Secretary of State's regulations;
- Intentionally (or recklessly in England and Wales) disturb any wild bird listed on Schedule 1 while it is nest building or is at (or near) a nest with eggs or young; or disturb the dependant young of such a bird.

Amendments include:

- Amendments to section 1(6) so that in section 1 the definition of "wild bird" does not include any bird, which is shown to have been bred in captivity, except where it has been released as part of a re-introduction programme.
- Creating a new schedule of bird species, whose nests are protected on a year round basis; this schedule to include the golden eagle and osprey.
- Extending the application of the term "reckless" to all offences in relation to species listed on Schedules 1, 5 and 8.
- That codes of practice be developed with stakeholder industries.
- Creating a new offence of possession of certain pesticides.
- To rectify the error made in CroW and amend section 7(3a) to include offences under this section (regarding a prohibition on the keeping of a schedule 4 bird for 5 years after a conviction under section 7(1)).



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