



**Ecological survey:
Protected species and habitats.**

**Willow Cottage
Low Road
Alburgh,
Norfolk.
IP14 0BX**

Final report: 9th November 2019.

Author: John Parden

Natural England Bats (All species) Licence No. 2015-14697-CLS-CLS

Natural England Great Crested Newt Licence No. 2016-20270-CLS-CLS

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1.0: Executive Summary:

Protected Species legislation is not a consideration when determining the development proposals for Willow Cottage, Low, Alburgh. IP20 0BX.

The site was surveyed by John Parden of JP ecology on 8th November 2019 for all protected species and habitats, specifically habitats and Great crested newts.

The habitats within the defined development area were managed gardens associated with an occupied domestic property. There were 7 ponds within 150m radius of the proposed development site.

Desktop survey – A desktop survey, using data supplied by NBIS, identified no rare or protected species on the development site. No records of Great crested newts or amphibians were found within 500m radius of the site. The closest site designated for its ecological interest is approx. 1km away and is not connected to the development site by continuous ecological corridors.

Bats – There are no structures or trees on the site that could potentially be used by roosting bats.

Great crested newts. – The seven ponds within 150m radius of the site were surveyed for Great crested newts, all offered below average or poor habitat suitability.

Birds – Nesting birds can always occupy any development site prior to or during the construction process. Nesting birds should not be disturbed during the bird nesting season.

All other protected or rare species - No other protected species or habitats are relevant to this site.

Given the potential impacts of the development are minor and subject to the mitigation proposals listed below it was considered reasonable that the development would have no impact on the local biodiversity.

Mitigation.

Further surveys:

- No further surveys are required to support the conclusions.

Mitigation – all species.

- The contact details of a suitably licenced ecologist should be made available to the development contractors. In the unlikely event that any protected species are disturbed or found on the site then advice should be sought from a suitably licenced ecologist.
- Nesting birds – Nesting birds must not be disturbed during the breeding / nesting season typically 1st March to 31st July (species dependant).
 - Ideally all site clearance and demolition works should be conducted outside these dates, alternatively the building and those areas of the site to be cleared should be searched for active nests by a suitably qualified ecologist and any active nests protected until the young have fledged.
- Habitat manipulation. Should the local planning authority be minded to grant approval then the site should be maintained as bare ground or closely mown grassland up until the commencement of works on the site to prevent any ecological interest from becoming established on the site.
- To promote best practice and minimise risk of causing injury or harm to small mammals, amphibians and reptiles during the construction process the generic method statement attached in appendix 1 should be made available to all contractors.

Enhancement.

- Birds. 2 bird nesting opportunities (nest boxes) should be built into or attached to the proposed building, example of nest boxes include:
 - RSPB 1SP Sparrow Terrace. Product code R407816
 - RSPB Classic nest box. Product code R401639

Clients responsibility towards protected species.

The site owner has a responsibility to ensure that protected species or their resting places are not killed, injured or disturbed as a consequence of their actions.

Whilst the results of the survey are considered to be conclusive at the time that the survey was conducted, there is always a possibility that protected species might occupy the site between the period of the survey and the commencement of any works on the site. If any protected species are discovered during any construction works a qualified ecologist should be contacted for advice or assistance.

Contact details of suitably qualified and licenced ecologist:

John Parden, Natural England licenced ecologist

JP ecology – Office: 01379 586830 Mobile:07908 748079

If conditions within the buildings or the development proposals are significantly altered prior to the planning application being submitted then further advice should be sought from an ecologist to ensure that the conclusions of the ecological survey remains valid.

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Appendix 1. Generic Method Statement to avoid harm to reptiles and small mammals.

2.0: Contact details:

Client:

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Low Road
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IP20 0BX

Ecological Surveyor:

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3.0 Introduction:

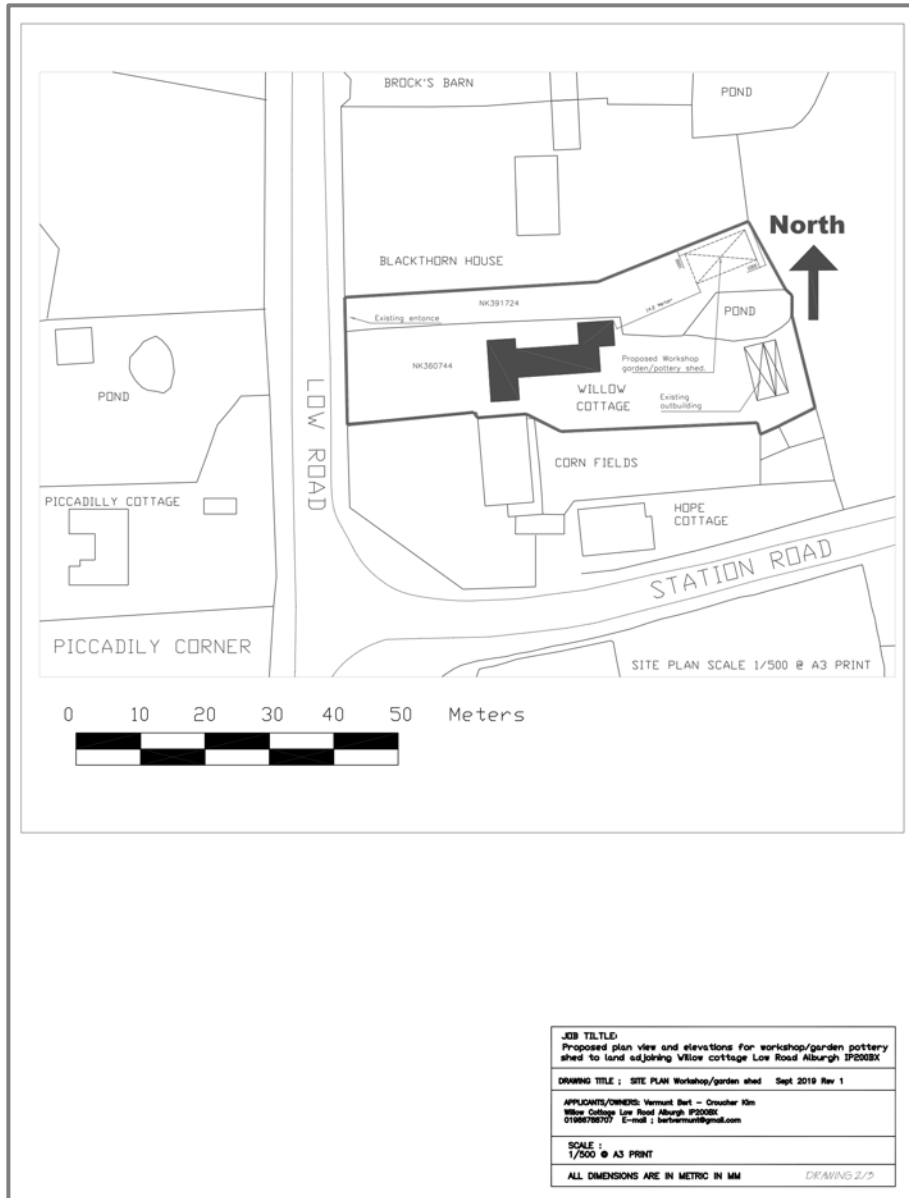
3.1 Brief:

John Parden (Licensed ecologist) of JP ecology was commissioned by the site owner, Mr B Vermunt to undertake a protected species survey (All relevant protected species) in or around the properties and grounds at Willow Cottage, Low Road, Alburgh, Norfolk, IP14 5LL
The survey is required for inclusion with a planning application for the site to enable the planning authority (South Norfolk District Council) to determine whether the proposals satisfy legislative considerations with regard to biodiversity and protected species.

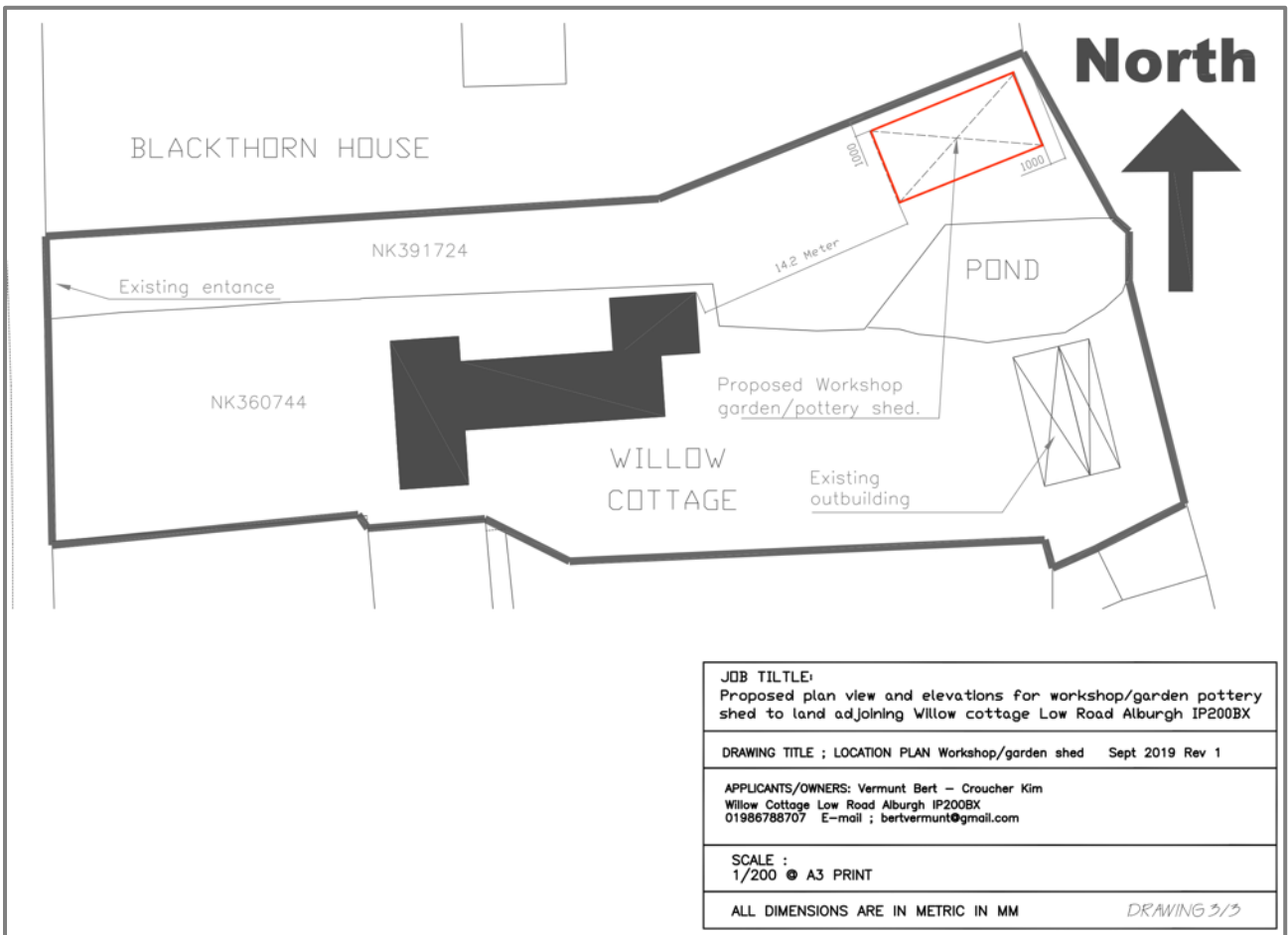
The application is for full planning permission.

3.2 Site development proposals:

Plan 1. Site location plan and site boundary plan. (Illustrative only do not scale)



Plan 2. Site development proposals (Illustrative do not scale).



Plan 3. Elevations (Illustrative do not scale).



The property is subject to a planning application including:

- Construction of 1 new garden shed / outbuilding.

For the purposes of the ecological survey it is assumed that:

- No temporary access points or temporary hard standing areas outside of the curtilage of Willow Cottage will be used for site access, construction traffic or storage of building materials.
- All site access will be via existing driveways and service areas.
- No ponds or watercourses will be disturbed or affected by the development works.
- There will be no loss of aquatic habitats on the site.
- There will be no loss of trees or hedgerows on the site.
- The building will be constructed on a concrete slab and will not involve extensive excavations for foundations or trenching for services.

3.3 Scope of the survey:

The survey includes:

- In accordance with the Planning validation requirements.
 - The development includes the following features that trigger the need for protected species surveys:
 - Ponds within 150m.
- The species triggered include:
 - Developments within 150m of a pond.
 - Great crested newts
 - Water vole
 - Amphibians
- Consideration was given to all other protected species that may be affected by the development.
- Habitats:
 - The site is entirely managed domestic garden, there are no natural or semi natural habitats on the site.

3.4 Survey objectives:

The survey aimed to establish:

- Whether protected species were present on the site and would be impacted upon by the development.
- Whether the development will have any impacts upon other sites of ecological interest within the wider landscape.
- Whether the development was likely to have any long-term impact upon the local biodiversity.

3.5 Site & location:

Within the wider landscape: The site is located within a wider landscape that is of low - medium interest for biodiversity, whilst dominated by agricultural land used mainly for intensive arable crop production, a habitat of relatively low ecological interest, it does include features of high ecological interest including pockets of woodland, grassland and meadows.

Significant barriers to migration.

- The wider site has public highways to the west beyond which is agricultural land and domestic residences, occupied domestic residence to the north and south beyond which is a public highway, and agricultural land, pasture, to the east.

Within the immediate vicinity of the site: The development site is entirely domestic gardens located within the grounds of the occupied domestic residence of Willow Cottage which includes associated hard standing areas, outbuildings and areas of well managed domestic garden. The development site is immediately surrounded by:

- To the north - managed domestic garden associated with an occupied domestic residence.
- To the east - agricultural land, grazed grassland.
- To the south - Domestic garden and occupied domestic residence.
- To the west - A pond and managed domestic garden.

The proposed development site has recently (within the last few years) been managed by mowing with some areas of bare ground.

Seven ponds were identified on the OS maps within 150m, of which five were accessible. The only ponds that permission could not be obtained to survey were separated by significant barriers, public highways and was overgrown and dry at the time of the survey.

Natural or semi-natural habitats on the development site.

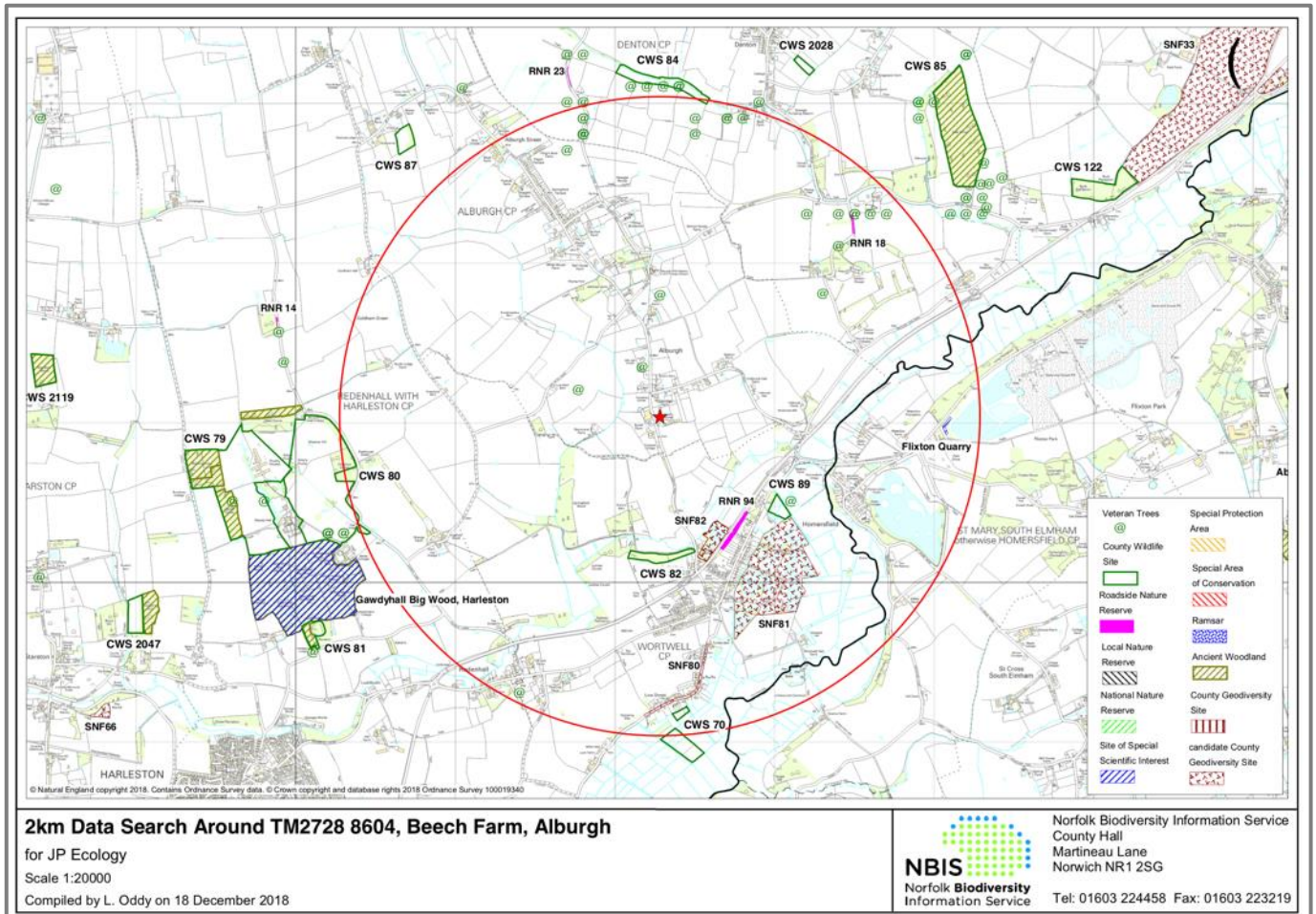
The development area is restricted to domestic garden within the grounds of Willow Cottage.

- Mown grassland.
- Bare ground.

There are no natural or semi-natural habitats on the site.

3.6 Desktop Survey

Map1. Illustration of data search supplied by NBIS.



Sites designated for ecological interest:

Nationally designated sites, Sites of Special Scientific Interest (SSSI). See Fig 1 above. There are no SSSI's within a 2km radius of the site.

Locally designated sites,

There is five locally designated site within a 2km radius. See Fig 1 above.

No sites designated for their ecological interest are connected to the site by continuous ecological corridors.

- CWS 82 Wortwell Wood, Approx. 1km to the south. Designated for its woodland interest.
- CWS 89 High Road Meadow, Approx. 1km to the south east. Designated for its grassland interest.
- CWS 84 Beck Meadow, Approx. 2km to the north. Designated for its grassland interest.
- CWS 80 Shadow Hill Grove, Approx. 2km to the west. Designated for its parkland interest.

- CWS 70 Low Road Meadows, Approx. 2km to the south. Designated for its wet grassland interest.

Protected species:

A local records search was supplied by Norfolk Biological Information Service.

Of those species triggered (section 3.3 above)

- Bats – 142 Audio records of 8 different species within a 2km radius. No records exist on the proposed development site.
 - Soprano Pipistrelle
 - Common pipistrelle
 - Brown long eared bat
 - Noctule
 - Natterers bat
 - Daubenton's bat
 - Serotine
 - Barbastelle

10 records of bat roosts exist, locations given to 4fig OS ref, one roost is within the same grid square as the development site, within a 'Dwelling', assumed not to be the agricultural building subject to development.

- Great Crested Newts – No records.
- Smooth Newts – No records.
- Other amphibians.
 - Common Toad – No records
 - Common Frog – No record
- Reptiles.
 - No records.
- Water vole
 - 6 records of water vole, associated with the River Waveney.
- Hedgehog and brown hare, -
 - Hedgehog - 2 records of hedgehog, no records within 1km of the site.
 - Brown hare – 5 records, with records in Alburgh.

Pond and waterbody survey:

A search for ponds within 150m and named / significant watercourses within 200m was conducted using Ordnance Survey Data and public Environment Agency data.

- Ponds within 150m radius:
 - There are seven ponds with 200m of the site. See section 5.2.1 (Map 2) for locations
- Watercourses within 200m radius:
 - There are no permanent or named watercourses within a 200m radius.

4.0 Wildlife and the law

4.1 UK legislation:

LEGISLATIVE FRAMEWORK

Bat Legislation

All bat species are protected under Annex IV of the Conservation of Habitats and Species Regulations (2017) (The Habitats Directive), and have further protection in the UK by the Wildlife and Countryside Act 1981 (as amended by the Countryside and Rights of Way Act 2000). This legislation offers protection to both the species, roost sites and feeding perches. It is an offence to kill, injure, capture, possess or otherwise disturb bats. Bat roosts are protected throughout the year (making it an offence to damage, destroy or obstruct access to bat roosts), regardless of whether bats are present at the time.

Licenses are issued to allow developments to commence once the level of bat usage has been determined. There are currently two main levels of licensing, the European Protected Species license (EPS) and the Bat Mitigation Class License (BMCL)

Great Crested Newt Legislation

The Great Crested Newt (GCN) is protected through the Wildlife and Countryside Act (1981), Habitat Regulations (1994) and Countryside Rights of Way Act (2000). In essence this legislation prohibits the following:

- *Intentional disturbance or harm.*
- *Reckless damage to a breeding site or resting place or a place used for shelter and protection.*
- *Intentionally obstructing a place used as shelter.*

Should suitable habitats be present then further surveys in line with the present guidelines may be necessary.

Bird Legislation

Most species of bird are protected under the Wildlife and Countryside Act 1981 (as amended) whilst at the nest against destruction of the nest and eggs. However, certain species such as Barn Owl achieve greater protection under Schedule 1 of the above act and species such as Spotted Flycatcher have attracted a Norfolk Biological Action Plan.

NERC Act 2006

Under the Natural Environment and Rural Communities Act 2006 biodiversity has to be taken into consideration at all levels of planning and this has been interpreted as a series of wildlife enhancements to protect or restore species or habitats. Reference has been made to S41 species such as hedgehogs under the above act.

5.0 Surveys.

5.1 Methodologies

Pond Survey - The pond survey was conducted following standard survey methodologies appropriate for Great crested newts, specifically the Great Crested Newt Habitat Suitability Index Assessment (HSI) (Oldham *et al.* 2000) and Natural England Standing Advice Sheet: Great crested newts. The results were interpreted in accordance with Natural England Guidance.

A survey area of 150m was considered appropriate based upon:

- There are no natural or semi-natural habitats on the proposed development site.
- The proposed development is minor – a garden shed which will be constructed on a simple concrete slab without the need for deep excavations for foundations.
- No water bodies will be disturbed.

Other species were surveyed by looking for tracks, droppings, feeding evidence and field signs.

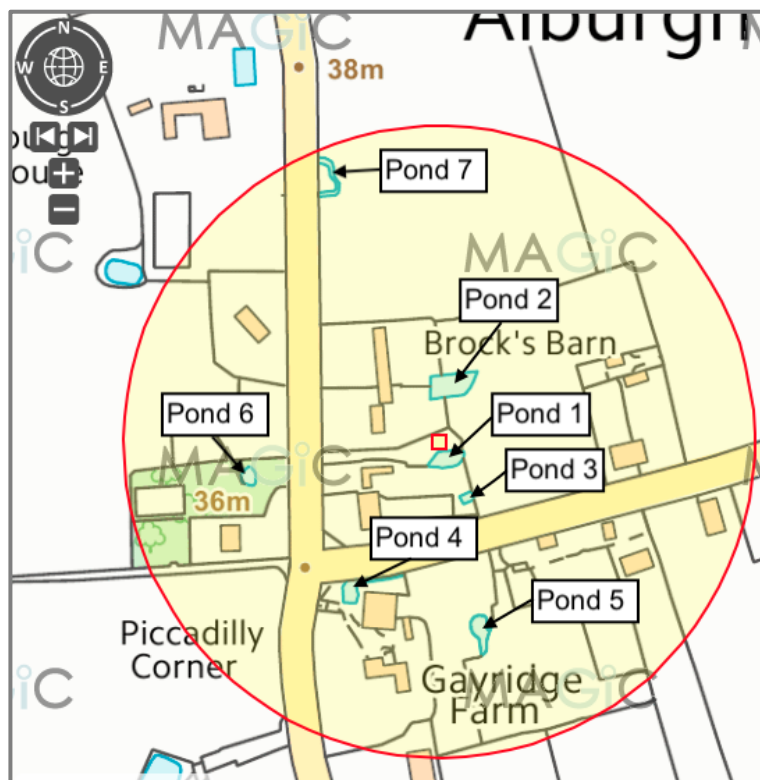
Habitats – consideration was given to conducting a JNCC phase 1 habitat survey, however this was considered unnecessary given that the site was entirely mown domestic garden.

5.2 Scoping Survey Results.

The ponds were surveyed by John Parden of JP ecology on 8th November 2019. The conditions were suitable to conduct a conclusive survey.

5.2.1 Pond Surveys.


Plan 3. Showing location of ponds.




Seven ponds were identified within 150m of the development site @ OS grid ref:

- Pond 1 TM27288623 @ >10m distance
- Pond 2 TM27288627 @ 23m distance
- Pond 3 TM27308621 @ 32m distance
- Pond 4 TM27248617 @ 83m distance
- Pond 5 TM27308615 @ 89m distance
- Pond 6 TM27198622 @ 94m distance
- Pond 7 TM27238636 @ 135m distance


5.2.1.1 Pond 1 survey results.

Table 1. Great Crested Newt Habitat Suitability Index (HSI)									
Background Information									
Pond Number	1			Survey date	8th November 2019				
				Location	OS grid ref: TM27288623				
Access	Good all round			Dist. from development	Approx. >10m to east,				
				Surveyor	J Parden. NE licence: 2016-20270-CLS-CLS				
General description.				Photo 1. Showing pond 1					
<p>A pond located in a domestic garden setting, surrounded by trees and fully shaded. Part of the drainage system, managing runoff from connecting surface water ditches to the east. The pond is connected to outfall pipes which drain excess water to the west.</p> <p>At the time of the survey the pond was holding water following recent heavy rain, the marks on the bank suggested significant fluctuations in water level. There was no evidence of aquatic vegetation, typical of ponds with significant fluctuations in water levels.</p>									
Factor							Score		
Location	SI1	Zone 1					1		
Pond area	SI2	Area approx. varies with water level average 15m x 5m = 75 sq.m					0.3		
Permanence	SI3	Dries sometimes					0.5		
Water quality	SI4	Poor – no invertebrate population visible, no aquatic vegetation.					0.33		
Shading	SI5	100%					0.2		
Waterfowl	SI6	Assumed minor – ducks on neighbouring pond					0.67		
Fish	SI7	Assumed none					1		
Pond Density	SI8	More than 9 = score of over 3					1		
Terrestrial Habitat	SI9	Moderate 25-75% with potential to support terrestrial GCN					0.67		
Macrophytes	SI10	0% No aquatic vegetation suggesting unfavourable water quality or fluctuating water levels.					0.3		
							Total		0.52 – Below average
Great Crested Newt Absence / Presence survey									
Date	Water temp <5°C*	Ph <6**	Torch		Net	Bottle trap	Egg search	Other species	Comment
			M	F					
Conclusions.	See discussion below. Screen out – pond scored 'below average'.								
* Water temp	Water temperatures below 5°C result in low newt activity.								
** Ph	Acidic water with a Ph lower than 6 is unfavourable to breeding Great crested newts.								


5.2.1.2 Pond 2 survey results.

Table 2. Great Crested Newt Habitat Suitability Index (HSI)									
Background Information									
Pond Number	2		Survey date	8 th November 2019					
			Location	OS grid ref: TM27288627					
Access	Good all round		Dist. from development	Approx 23m to north.					
			Surveyor	J Parden. NE licence: 2016-20270-CLS-CLS					
General description. A permanent pond set within a domestic garden. The pond is surrounded by trees and part shaded. It supports a significant population of ducks that are permanent residents. The water quality appeared to be good however there was no evidence of aquatic vegetation, presumably as a result of grazing by ducks. The marginal vegetation was shaded out by surrounding trees.			Photo 2. Showing pond 2.						
									
Factor								Score	
Location	SI1	Zone 1						1	
Pond area	SI2	Area approx. 20m x 10m 200 sq.m (est)						0.4	
Permanence	SI3	Permanent.						0.9	
Water quality	SI4	Assumed good						1	
Shading	SI5	40%						1	
Waterfowl	SI6	Yes significant						0.01	
Fish	SI7	Permanent water feature. Assumed minor						0.33	
Pond Density	SI8	9+ ponds = score of over 3						1	
Terrestrial Habitat	SI9	Moderate 25% – 75% some habitats within immediate surrounding favourable for amphibians, but set within a well managed domestic garden.						0.67	
Macrophytes	SI10	0% - 10% as a result of grazing and shading of margins						0.4	
							Total	0.44 Poor	
Great Crested Newt Absence / Presence survey									
Date	Water temp <5°C*	Ph <6**	Torch		Net	Bottle trap	Egg search	Other species	Comment
			M	F					
Conclusions.		See discussion below. Screen out – scored poor, compromised by wild fowl.							
* Water temp		Water temperatures below 5°C result in low newt activity.							
** Ph		Acidic water with a Ph lower than 6 is unfavourable to breeding Great crested newts.							


5.2.1.3 Pond 3 Survey Result.

Table 3. Great Crested Newt Habitat Suitability Index (HSI)									
Background Information									
Pond Number	3		Survey date	8 th November 2019					
			Location	OS grid ref: TM27308621					
Access	Good all round		Dist. from development	Approx 32m to south.					
			Surveyor	J Parden. NE licence: 2016-20270-CLS-CLS					
General description.			Photo 3. Showing pond 3.						
<p>The pond is a widening of the ditch that feeds into pond 1. This is typically dry other than those periods when it is carrying runoff from the adjacent land.</p> <p>This feature does not constitute a permanent pond.</p>									
Factor							Score		
Location	SI1	Zone 1					1		
Pond area	SI2	Area approx. 2m x 1m = 2 sq.m (est)					0.05		
Permanence	SI3	Assumed to be temporary – dries annually					0.1		
Water quality	SI4	Poor (assumed), given the ditch dries annually it is unlikely to support a diverse aquatic ecosystem.					0.33		
Shading	SI5	100% Shaded by hedgerow.					0.2		
Waterfowl	SI6	No					1		
Fish	SI7	No.					1		
Pond Density	SI8	9+ ponds = score of over 3					1		
Terrestrial Habitat	SI9	Moderate 25% – 75% immediate surrounding habitat is favourable.					0.67		
Macrophytes	SI10	0% aquatic vegetation.					0.3		
						Total	0.38 Poor.		
Great Crested Newt Absence / Presence survey									
Date	Water temp <5°C*	Ph <6**	Torch		Net	Bottle trap	Egg search	Other species	Comment
			M	F					
Conclusions.		See discussion below. Screen out – scored poor, compromised by early drying and size.							
* Water temp		Water temperatures below 5°C result in low newt activity.							
** Ph		Acidic water with a Ph lower than 6 is unfavourable to breeding Great crested newts.							

5.2.1.4 Pond 4 Survey Result.

Table 4. Great Crested Newt Habitat Suitability Index (HSI)									
Background Information									
Pond Number	4		Survey date	8 th November 2019					
			Location	OS grid ref: TM27248617					
Access	Good all round		Dist. from development	Approx 85m to south					
			Surveyor	J Parden. NE licence: 2016-20270-CLS-CLS					
General description.			Photo 4. Showing pond 4.						
<p>A pond set within the garden and grounds of Beech Farm, assumed to be permanent, however this pond has been surveyed in the past and water levels are known to fluctuate significantly which will affect the aquatic vegetation and can be very low in summer.</p> <p>The pond was surrounded by garden which was assessed as being of medium favourability for amphibians.</p> <p>The pond supports a breeding population of mallard ducks, it is reasonable to assume that their presence will have a significant impact on any amphibians that might have bred within the pond.</p>									
Factor								Score	
Location	SI1	Zone 1						1	
Pond area	SI2	Area approx. 5m x 10m = 50 sq.m (est)						0.1	
Permanence	SI3	Assumed to be permanent or rarely occasionally dries, assume fluctuating water level which impacts on aquatic vegetation. (From previous surveys of this pond)						1	
Water quality	SI4	moderate (assumed), the invertebrate population was not diverse and no aquatic vegetation. Affected by fluctuating water levels and lack of aquatic vegetation						0.67	
Shading	SI5	50% Shaded by shrubs.						1	
Waterfowl	SI6	Yes, significant - impact on aquatic vegetation.						0.01	
Fish	SI7	Possible minor - small.						0.33	
Pond Density	SI8	9+ ponds = score of over 3						1	
Terrestrial Habitat	SI9	Moderate 25% – 75% immediate surrounding habitat is favourable.						0.67	
Macrophytes	SI10	0% aquatic vegetation.						0.3	
							Total	0.36 Poor.	
Great Crested Newt Absence / Presence survey									
Date	Water temp <5°C*	Ph <6**	Torch		Net	Bottle trap	Egg search	Other species	Comment
			M	F					
Conclusions.		See discussion below. Screen out – scored poor, compromised by fluctuating water level and impact of wildfowl.							
* Water temp		Water temperatures below 5°C result in low newt activity.							
** Ph		Acidic water with a Ph lower than 6 is unfavourable to breeding Great crested newts.							

5.2.1.5 Pond 5 Survey Result.

Table 5 Great Crested Newt Habitat Suitability Index (HSI)									
Background Information									
Pond Number	5		Survey date	8th November 2019					
			Location	OS grid ref: TM27308615					
Access	Good all round		Dist. from development	Approx 75m to the north east					
			Surveyor	J Parden. NE licence: 2016-20270-CLS-CLS					
General description.			Photo 5. Showing pond 5						
<p>A field pond, holding a small quantity of water but previous surveys of this pond (May 2019 & Sept 2018) have found it to be dry or only holding a small quantity of water.</p> <p>At the time of the survey the pond was holding a small quantity of water, it is reasonable to assume that it dries early in the season and remains dry for most of the year, but can fill during periods of extensive rainfall. This is supported by evidence in the form of the recent establishment of terrestrial (as opposed to aquatic) vegetation below the indicated high water line.</p> <p>The pond is shaded by willow trees.</p> <p>Set within grazed meadow.</p>									
Factor								Score	
Location	SI1	Zone 1					1		
Pond area	SI2	Area approx. 10m x 20m = 200 sq.m (est)					1		
Permanence	SI3	Assumed to dry annually. (previous surveys of this pond have determined that it dries early in the season)					0.1		
Water quality	SI4	poor (assumed), the invertebrate population unlikely to be diverse due to annual drying.					0.33		
Shading	SI5	100% Shaded by trees.					0.2		
Waterfowl	SI6	no					1		
Fish	SI7	no					1		
Pond Density	SI8	9+ ponds = score of over 3					1		
Terrestrial Habitat	SI9	Moderate 25% – 75% immediate surrounding habitat is favourable.					0.67		
Macrophytes	SI10	0% aquatic vegetation.					0.3		
							Total	0.49 below average	
Great Crested Newt Absence / Presence survey									
Date	Water temp <5°C*	Ph <6**	Torch		Net	Bottle trap	Egg search	Other species	Comment
			M	F					
Conclusions.		See discussion below. Screen out – scored below average, compromised by early drying and heavy shading and lack of aquatic vegetation for egg laying.							
* Water temp		Water temperatures below 5°C result in low newt activity.							
** Ph		Acidic water with a Ph lower than 6 is unfavourable to breeding Great crested newts.							

5.2.1.6 Pond, 6&7 Survey Result.

Ponds 6 & 7.

Access and permission to survey was not granted by the land owners for ponds 6 & 7. Both were could be viewed from the road.

Pond 6 had become overgrown and no longer existed as an aquatic feature.

Pond 7 was a roadside pond set within a hedgerow and taking runoff from the public highway. It was 100% shaded and covered in a blanket of duckweed creating a permanently shaded pond without any observable aquatic vegetation and unlikely to support a significant or diverse invertebrate population on consequently unlikely to be favourable to Great crested newts.

5.2.1.7 Discussion and Conclusions ponds.

The local records returned no results for amphibians, including great crested newts, within a 2km radius of the site. Whilst this does not mean amphibians are absent from the local area, it does indicate that the local area is not known to support any significant populations of amphibians, specifically Great crested newts.

All ponds scored below average or poor suitability for Great crested newts.

The development is minor being a garden shed built on a concrete pad and will not include the excavation of deep foundations or extensive trenching / groundworks.

It is reasonable to conclude that great crested newts are not a consideration with regard to this development.

In the unlikely event that reptiles or amphibians are found on the site, the mitigation outlined in section 6 and Appendix 1 below will be sufficient to minimise the risk of causing injury or harm to any amphibians during the site clearance and construction works.

5.2.2 Nesting Birds.

The site is domestic garden and consequently of low favourability for nesting birds. As with all developments, given that birds are known to nest in the most unlikely of locations attention is drawn to Nesting Bird legislation.

Note; comments on legal protection of nesting birds and mitigation is offered in section 6.

5.2.3 Other protected species.

The site does not include any structures or mature trees that could potentially support a population of any protected species, eg. roosting bats. No surrounding trees would be lost to facilitate the development. Some pruning of surrounding trees may be required – attention is drawn to nesting bird legislation.




No other protected species were relevant to the site.

5.2.4 Habitats

The defined development site (see plan 2 above) is entirely domestic garden and exists as grassland and bare ground maintained by regular mowing. The boundaries were marked by fences and young trees / shrubs that were ornamental as opposed to a natural or semi-natural feature.

There were no natural or semi-natural habitats on the site.

Access to the development site to facilitate construction will be via a section of the occupied domestic garden that currently exists as mown grass / lawn (see photo

Table 6. Habitats on the site.		
Photo No.	Image	Description
Photo 6		Showing the proposed development site. The grassland is maintained as short mown grassland and bare ground.
Photo 7		Image to show grounds and gardens of Willow Cottage.
Photo 8		Showing access to the development site.

Discussion and conclusions.

The habitats potentially impacted by the development are all those formerly associated with the former working farm and consequently do not include rare or protected habitats.

Site clearance should be managed in accordance with the mitigation outlined in section 6 below to eliminate the risk of causing injury or harm to any wildlife, specifically terrestrial mammal and amphibians.

Precautionary mitigation is offered in section 6 and appendix 1.

6.0 Mitigation.

6.1 Further surveys:

- No further surveys are required to support the conclusions.

6.2 Mitigation – all species.

- The contact details of a suitably licenced ecologist should be made available to the development contractors. In the unlikely event that any protected species are disturbed or found on the site then advice should be sought from a suitably licenced ecologist.
- Nesting birds – Nesting birds must not be disturbed during the breeding / nesting season typically 1st March to 31st July (species dependant).
 - Ideally all site clearance and demolition works should be conducted outside these dates, alternatively the building and those areas of the site to be cleared should be searched for active nests by a suitably qualified ecologist and any active nests protected until the young have fledged.
- Habitat manipulation, to prevent the establishment of features of ecological interest. Should planning permission be granted:
 - All grassland should be cleared during the winter (November to March) and maintained as bare ground.
Or
 - All grassland should be maintained as short mown grass.
- To promote best practice and minimise the risk of causing injury or harm to small mammals, amphibians and reptiles during the construction process the generic method statement attached in appendix 1 should be made available to all contractors.
- All permanent fences that might be erected around the site should include gaps of 200mm x 150mm at ground level on each run to enable small mammals and vertebrates to migrate through the site and prevent entrapment.

6.3 Enhancement.

- Birds. 2 bird nesting opportunities (nest boxes) should be included, example of nest boxes include:
 - RSPB 1SP Sparrow Terrace. Product code R407816 (or similar)
 - RSPB Classic nest box Product code R401639 (or similar)

6.4 Clients responsibility towards protected species.

The site owner has a responsibility to ensure that protected species or their resting places are not killed, injured or disturbed as a consequence of their actions.

Whilst the results of the survey are considered to be conclusive at the time that the survey was conducted, there is always a possibility that protected species might occupy the site between the period of the survey and the commencement of any works on the site. If any protected species are discovered during any construction works a qualified ecologist should be contacted for advice or assistance.

Contact details of suitably qualified and licenced ecologist:

John Parden, Natural England licenced ecologist

JP ecology – Office: 01379 586830 Mobile:07908 748079

If conditions within the buildings or the development proposals are significantly altered prior to the planning application being submitted then further advice should be sought from an ecologist to ensure that the conclusions of the ecological survey remains valid.

Appendix 1.

Generic method statement to avoid harm to reptiles, amphibians and small mammals including hedgehogs and brown hare.

Timing:

- (a) Restrict works to the winter period (when amphibians are rarely active above ground) if the site is close to aquatic habitats or Amphibians are relevant to the site.
- (b) Keep duration of groundworks as short as possible.

Construction methods and special precautions:

- (a) Backfill trenches and other excavations before nightfall, or leave a ramp to allow newts to easily exit.
- (b) All open trenches, footings, and pipe runs should be covered with shuttering ply overnight and the edges sealed with damp sand.
- (c) Raise stored materials (that might act as temporary resting places) off the ground, eg on pallets.
- (c) For pipelines, use directional drilling to cross areas of core habitat and newt dispersal routes.
- (d) All caustic materials (cement, lime plaster etc) should be mixed on tarpaulin and folded at night or mixed on the floor of a sealed building.
- (c) No caustic material should be allowed to contaminate the adjacent ground or allowed to form run-off that may contaminate ponds or watercourses.
- (d) All piles of rubble and spoil should be removed from site and not left during late summer / winter to form hibernacula for Amphibians and reptiles.
- (e) All waste materials should be stored in skips resting on areas of shingle/bare or hard standing.
- (f) Keep vegetation around the developed site should be kept short to discourage use by reptiles and amphibians.
- (g) Fire sites should be in a designated area on shingle/bare ground and well away from the ponds/water bodies and should be burnt daily, they should always be checked for sheltering mammals eg. Hedgehogs.
- (f) Avoid installing structures that act as barriers close to ponds, or include gaps at ground level where walls or fences are unavoidable to prevent entrapment of reptiles, amphibians or small mammals within the construction area.
- (g) If any protected species (e.g. bats, great crested newts) are discovered during the redevelopment then work should stop immediately and advice sought from an ecological consultant.
- (h) If in any doubt contact a Natural England Licenced ecologist:
John Parden of JP ecology 01379 586830