



Site: Windroos Nursery, Wick, Littlehampton, West Sussex
BN17 6LY

Client: Dandara Ltd (Southern)

Reptile Presence/Absence Surveys

06/11/18

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Executive Summary

Arbtech Consulting Ltd. undertook a suite of reptile surveys at Windroos Nursery, Wick, Littlehampton, West Sussex BN17 6LY between 31st August and 11th October 2018. The aim of the surveys was to determine the presence or likely-absence of reptiles, the species present, and to gain an understanding of the distribution of reptiles across the site. The survey results, in combination with a review of the surrounding landscape and scale of the proposed development, are then used to inform a proportionate mitigation strategy to minimise the risk of killing and injury and ensure the survival of the local population.

The development proposals briefly comprise:

Redevelopment of the site to create 84 new dwellings.

Survey outcome:

The surveys revealed low populations of slow worms *Anguis fragilis*.

Mitigation will be required to ensure that no reptiles are killed or injured during the proposed works.

1.0 Introduction and Context

1.1 Background

Arbtech were commissioned by Dandara Ltd to undertake a suite of reptile surveys at Windroos Nursery, Wick, Littlehampton, West Sussex BN17 6LY. The survey methodology was based on the Froglife Advice Sheet 10: *Reptile Survey, An introduction to planning, conducting and interpreting surveys for snake and lizard conservation* (Froglife, 1999).

The reptile surveys were carried out in accordance with recommendations in the Preliminary Ecological Appraisal (The Ecology Consultancy 2015).

1.2 Aims and Objectives

The aim of the surveys and assessment is to confirm presence or likely-absence of reptiles within the proposed development footprint, gain an understanding of the distribution across the site, and identify the species present.

The reptile surveys and accompanying report will discharge the reptile element of Condition 13 of the Planning Notice (planning reference LU/229/10/) as shown below:

CONDITION 13 The development permitted by this planning permission shall only be carried out in accordance with the approved Extended Phase 1 Habitat Survey Report - Bat Survey. Reptile Habitat Assessment July 2010. The clearing of remaining vegetation, must not be carried out during the bird nesting season. A reptile survey shall be carried out prior to works commencing on site and submitted to the Local Planning Authority for approval. Vegetation on the western boundary shall be retained, as recommended in the tree protection plan. Bat and bird boxes shall be provided to enhance the ecological potential of the site and mitigate for the loss of mature vegetation.

The development shall be carried out in accordance with the approved details and any subsequent amendments shall be agreed in writing with the local planning authority.

Reason: This condition is necessary to ensure that Reptiles and its habitat is protected both within and adjacent to the development site. Without this condition, it is possible that avoidable damage could be caused to the nature conservation value of the site contrary to national planning policy as set out in Planning Policy Statement 9 and Planning Policy Statement 1. The applicant could also be liable to criminal prosecution under the Wildlife and Countryside Act 1981 (as amended by CROW 2000) and the Habitats Directive regulations for European Protected species.

1.3 Scope of the Report

This report summarises the methodology, results and conclusions of the reptile surveys and assessment undertaken at the site between August and October 2018. To achieve the aims, the following steps were taken:

- The survey area (including the 'zone of influence' of the scheme) has been identified;
- Baseline information on the habitat conditions and suitability on-site and in the surrounding area has been recorded;
- A suite of presence/likely absence surveys has been carried out in accordance with best practice survey methodology;
- Potential constraints to the proposed development have been identified;
- Mitigation recommendations have been provided based on current information.
- Survey plans are presented in Appendix 1, showing the survey area and location of each reptile felt; site plans showing the current site layout and proposed development (where known) are in Appendix 2; and a summary of relevant legislation can be found in Appendix 4.

1.4 Site Context

The site is located at National Grid Reference TQ03600346 and comprises an area of approximately 2.5ha. The habitat on site is currently dominated by bare ground, with re-growth from recent clearance dominated by short perennials and tall ruderals. There are areas of grassland associated with the dwellings on site and longer grassland and tall ruderals around the site boundaries. Scattered bramble scrub is also present.

The site is in a residential area in Littlehampton.

Table 1: Priority habitats in the landscape

Habitat	Closest distance from site (approx.)
Deciduous Woodland	900m north east
Ancient woodland	1.99km north
Good quality semi improved grassland	1.86km south west
Mudflats	1.8km south west
Floodplain grazing marsh	540m north east
Coastal vegetated shingle	1.99km south

1.5 Project Description

The development proposals briefly comprise:

Redevelopment of the site to create 84 dwellings

2.0 Methodology

2.1 Desk Study

Please see accompanying PEA (The Ecology Consultancy 2015).

2.2 Site Survey

The survey comprised laying 40 'reptile felts' (heavy duty roofing felt cut into approximately 0.5m squares) and 20 steel 'tins' in suitable habitat within the survey area (see Appendix 1 for indicative location of reptile felts). These 'refugia' were left to 'bed in' for just under two weeks before the first survey was undertaken. The felts were then checked by the surveyor on seven separate occasions in suitable weather conditions. Optimal weather conditions for surveying reptiles are temperatures between 10 and 18°C with intermittent or hazy sunshine and little or no wind, before 11am and after 3pm (Froglife, 1999, Griffiths & Inns, 1998). However, optimal survey temperatures and times vary according to the time of year and prevailing weather conditions. No surveys were carried out in heavy rain or on extremely hot days.

The surveyor walked slowly and carefully checked the top and underneath each felt. While walking the transects of the site the surrounding vegetation and basking areas were also visually checked for reptiles.

The felts were laid on 31st August 2018; survey dates, times and weather conditions are included in Table 1 below.

Table 1: Reptile survey dates, times and weather conditions

Survey number	Survey date 2018	Weather conditions	Reptiles found
1	18 th September	17°C, sunny	None
2	21 st September	18°C, sunny	None
3	25 th September	13°C, sunny spells	None
4	28 th September	14°C, sunny spells	No access to site

5	2 nd October	14°C, cloudy	One adult male slow worm
6	5 th October	15°C, sunny spells	None
7	10 th October	16°C, sunny	One juvenile slow worm
8	11 th October	16°C, sunny	None

2.3 Limitations

This survey follows best practice guidance to confirm presence/absence of reptiles and where present, characterise the site in terms of species and distribution, habitat suitability and context with the wider landscape. However, this information is collected at finite dates and times, and provides an indication of the conditions on site only. This survey cannot provide an indication of population. Best practice was deviated from with the October surveys as these are outside of the optimal surveys window. This is not considered to be a limitation however as conditions were ideal for reptile activity. All surveys were carried out in appropriate weather conditions.

3.0 Results

3.1 Survey Results

One adult and one juvenile slow worm was found on site beneath felts. The locations of these are found in Appendix 1.

Table 2 summaries the results of the seven successful survey visits.

Table 2 – Total number of reptiles found per survey

Total number of slow worms found							
Survey number	1	2	3	4	5	6	7
Adults	0	0	0	0	1	0	0
Sub-adults	0	0	0	0	0	0	0
Juveniles	0	0	0	0	0	0	1
TOTAL	0	0	0	0	1	0	1

4.0 Conclusions and Recommendations

4.1 Conclusions

Low populations of slow worms are present. As a juvenile was present it is assessed that a breeding population is present.

4.2 Impact Assessment

As the proposals include the removal of all suitable habitat across the survey area, it is possible that reptiles would be killed and injured during site clearance, and the conservation status of the population within the site would be significantly affected.

Reptiles are protected from killing and injury under the Wildlife and Countryside Act; see Appendix 3 for a summary of legislation protecting reptiles in the UK.

4.3 Recommendations

4.3.1 Mitigation

To comply with wildlife legislation protecting reptiles, a suitable mitigation strategy should be adopted to minimise the risk of killing and injury of these animals during site clearance and further works.

Vegetation removal will be undertaken under ecological supervision during the active reptile season between April and October (unless otherwise agreed with an ecologist to allow for exceptional circumstances such as a very mild autumn/early spring) as detailed below.

- Areas of vegetation will be strimmed to a height of 150mm. All arising will be removed, and these areas will then be left undisturbed for 48 hours.
- The vegetation will then be cut to ground level using a centre-out approach to encourage any slow worms to disperse into adjacent habitats.
- All rock/rubble piles will be dismantled by hand where achievable or utilising machinery under ecological supervision so that the area can be checked thoroughly as it is dismantled.
- Any slow worms found will be safely moved into the retained suitable habitat around the site boundaries.
- During the works, materials such as stacks of bricks, wood, tiles etc. must not be stored directly on the ground around the building as there will be a risk of reptiles seeking shelter within the stacks; the materials should be stored on wooden pallets or on trailers (or elevated by similar means) so that reptiles will not crawl into them.
- All trenches, or holes should not be left open overnight. They should either be backfilled or covered, and the edges sealed to prevent animals getting trapped overnight. They should be checked in the morning prior to work restarting.

- The development site will be kept clear of vegetation during deconstruction to avoid re-colonisation.
- As a result of the development there will be rough grassland/scrub habitat retained along the northern and western boundaries (shown by orange markings on the mitigation plan) which is outside of the current ownership but is unmanaged and is unusable for any other purpose. This will be retained as a wildlife corridor between the boundary fence and the fences of adjacent properties. The strip of land along the eastern boundary (shown by blue markings on mitigation plan) is an unused area which is a private right of way. This is also unmanaged and left to grow wild providing additional habitats. Along the southern boundary (shown by green markings on the mitigation plan) there is a strip of land designated to be green space within the development. In this area two log/stone piles will be created to provide refugia for reptiles. This area is linked directly to the habitat along the eastern and western boundaries. See appendix 3 for habitat locations.
- Gaps will be left in residential fences to allow the free movement of reptiles (and other fauna including hedgehogs) around the habitats on and adjacent to the site.

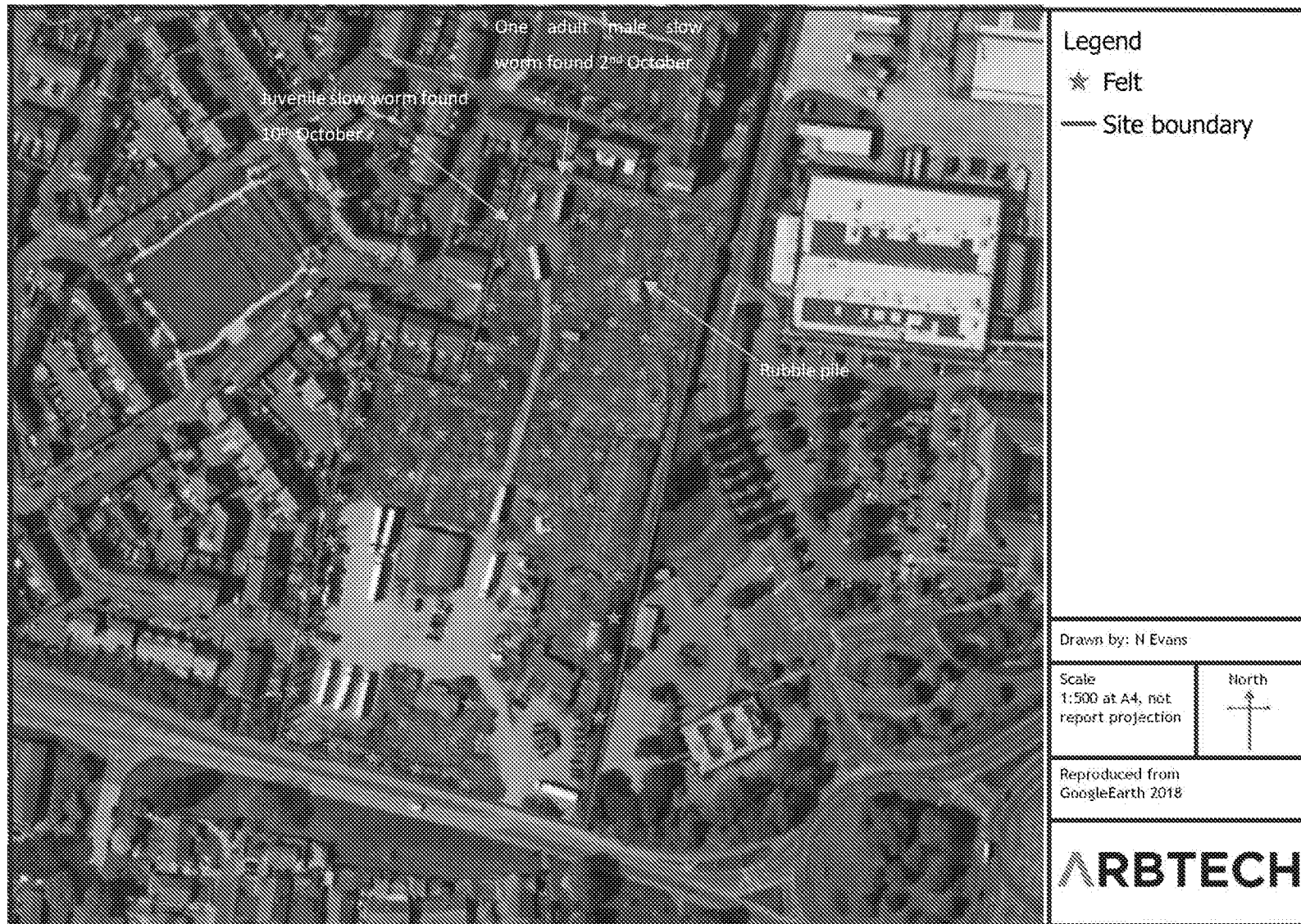
The exception to this strategy in terms of the timing of works applies for the archaeological excavations that are due to commence w/c 12th November. The weather for this week is forecast to be mild with night time temperatures not dropping below 8 degrees Celsius. At these temperatures and due to the mild autumn so far it is unlikely that hibernating animals will be encountered. The digging of the trenches will be undertaken under ecological supervision. The vegetation and topsoil of all areas to be excavated will be searched by hand by the ecologist prior to the start of work in that area. If any animals are found, they will be moved safely to refugia along the western boundary.

The demolition of the buildings on site can proceed at any time of year with negligible risk to reptiles.

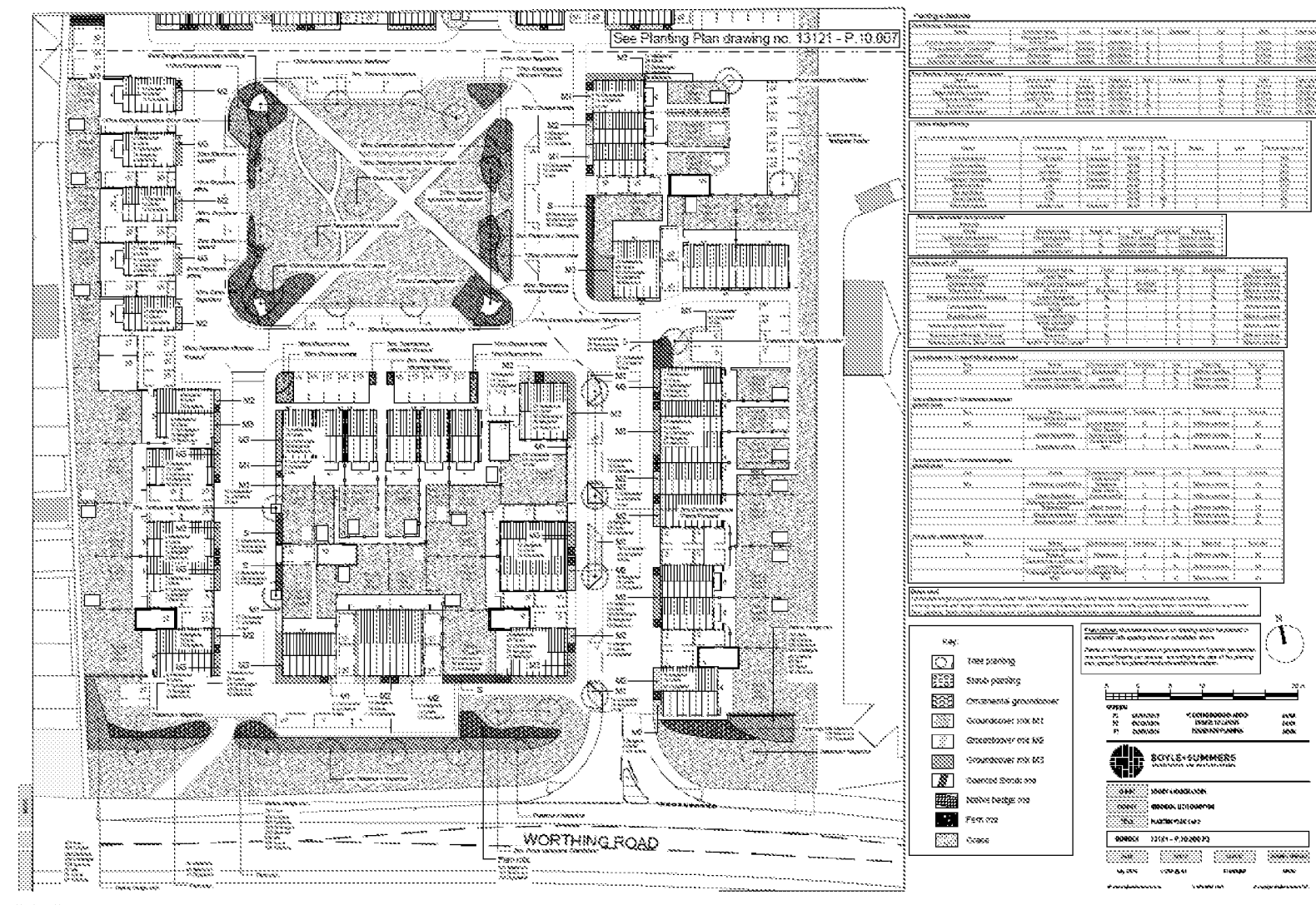
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Appendix 1: Survey Plan



Appendix 2: Proposed Site Plan



Appendix 3: Mitigation



Appendix 4: Legislation and Planning Policy related to reptiles

LEGAL PROTECTION

Herpetofauna (Amphibians and reptiles)

The sand lizard *Lacerta agilis*, smooth snake *Coronella austriaca*, natterjack toad *Epidalea calamita*, pool frog *Pelophylax lessonae* and great crested newt *Triturus cristatus* receive full protection under Habitats Regulations through their inclusion on Schedule 2. Regulation 41 prohibits:

- Deliberate killing, injuring or capturing of Schedule 2 species
- Deliberate disturbance of species in such a way as:
 - to impair their ability to survive, breed, or reproduce, or to rear or nurture young;
 - to impair their ability to hibernate or migrate
 - to affect significantly the local distribution or abundance of the species
- Damage or destruction of a breeding site or resting place

With the exception of the pool frog, these species are also listed on Schedule 5 of the WCA and they are additionally protected from:

- Intentional or reckless disturbance (at any level)
- Intentional or reckless obstruction of access to any place of shelter or protection
- Selling, offering or exposing for sale, possession or transporting for purpose of sale.

Other native species of herpetofauna are protected solely under Schedule 5, Section 9(1) & (5) of the WCA, i.e. the adder *Vipera berus*, grass snake *Natrix natrix*, common lizard *Zootoca vivipara* and slow-worm *Anguis fragilis*. It is prohibited to intentionally or recklessly kill or injure these species.

Effects on development works

A European Protected Species Mitigation (EPSM) Licence issued by the relevant countryside agency (e.g. Natural England) will be required for works liable to affect the breeding sites or resting places amphibian and reptile species protected under Habitats Regulations. A licence will also be required for operations liable to result in a level of disturbance which might impair their ability to undertake those activities mentioned above (e.g. survive, breed, rear young and hibernate). The licences are to allow derogation from the relevant legislation, but also to enable appropriate mitigation measures to be put in place and their efficacy to be monitored.

Although not licensable, appropriate mitigation measures may also be required to prevent the intentional killing or injury of adder, grass snake, common lizard and slow worm, thus avoiding contravention of the WCA.

NATIONAL PLANNING POLICY (ENGLAND)

National Planning Policy Framework

The National Planning Policy Framework promotes sustainable development. The Framework specifies the need for protection of designated sites and priority habitats and species. An emphasis is also made on the need for ecological infrastructure through protection, restoration and re-creation. The protection and recovery of priority species (considered likely to be those listed as UK Biodiversity Action Plan priority species) is also listed as a requirement of planning policy.

In determining a planning application, planning authorities should aim to conserve and enhance biodiversity by ensuring that: designated sites are protected from harm; there is appropriate mitigation or compensation where significant harm cannot be avoided; opportunities to incorporate biodiversity in and around developments are encouraged; and planning permission is refused for development resulting in the loss or deterioration of irreplaceable habitats including aged or veteran trees and also ancient woodland.

The Natural Environment and Rural Communities Act 2006 and The Biodiversity Duty

Section 40 of the Natural Environment and Rural Communities (NERC) Act, 2006, requires all public bodies to have regard to biodiversity conservation when carrying out their functions. This is commonly referred to as the 'biodiversity duty'.

Section 41 of the Act (Section 42 in Wales) requires the Secretary of State to publish a list of habitats and species which are of 'principal importance for the conservation of biodiversity.' This list is intended to assist decision makers such as public bodies in implementing their duty under Section 40 of the Act. Under the Act these habitats and species are regarded as a material consideration in determining planning applications. A developer must show that their protection has been adequately addressed within a development proposal.

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