



envirotech

**Ecological Consultants
Environmental and Rural Chartered Surveyors**

Preliminary Ecological Appraisal

Woodlands Nurseries



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ACCURACY OF REPORT

This report has been compiled based on the methodology as detailed and the professional experience of the surveyor. Whilst the report reflects the situation found as accurately as possible, all of the protected species this survey covers are wild and can move freely from site to site. Their presence or absence detailed in this report does not entirely preclude the possibility of a different past, current or future use of the site surveyed.

We would ask all clients acting upon the contents of this report to show due diligence when undertaking work on their site and/or in their interaction with protected species. If protected species are found during a work programme, and continuing the work programme could result in their disturbance, injury or death, either directly or indirectly an offence may be committed.

If in doubt, stop work and seek further professional advice.

Quality and Environmental Assurance

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1. EXECUTIVE SUMMARY

- 1.1.1 Envirotech NW Ltd were commissioned to carry out a Preliminary Ecological Appraisal of land at Woodland Nurseries. It is proposed that a new glasshouse is constructed on the site.
- 1.1.2 A data search and desk study of the site and an area within 2km of the site were undertaken to establish the presence of protected species and notable habitats.
- 1.1.3 The site was then visited by a licenced ecologist from Envirotech NW Ltd on the 23rd December 2024. A full botanical survey of the site was initially undertaken and this was followed by surveys to establish the presence or absence of notable species at the site or in proximity such that they may be affected by the proposed development.
- 1.1.4 The plant species assemblages recorded at the site are all common in the local area and are considered to be of low ecological value. Sympathetically landscaped open space is considered to offer habitat of equal or greater ecological value.
- 1.1.5 None of the hedgerows around the site perimeter were considered important under the Hedgerow Regulations (1997).
- 1.1.6 No notable or protected species were recorded on the site.

2. INTRODUCTION

2.1 Background

- 2.1.1 Envirotech NW Ltd were commissioned to carry out a Preliminary Ecological Appraisal of land at Woodlands Nurseries, central grid reference NX988217 (Figure 1). A site investigation was undertaken and a report compiled which includes recommendations for any future actions and or mitigation required.
- 2.1.2 The survey was requested in connection with the proposed construction of a new glasshouse.



2.2 Objectives

2.2.1 The main objectives of the study were:

- The completion of a UKHabs Version 2 (UKHab Ltd (2023)) survey including the preparation of a vegetation and habitat map of the site and the immediate surrounding area.
- The survey and assessment of all habitats for statutorily protected species.
- An evaluation of the ecological significance of the site.
- The identification of any potential development constraints and the specification of the scope of mitigation and enhancement required in accordance with wildlife legislation, planning policy and other relevant guidance, and;
- The identification of any further surveys or precautionary assessments that may be required prior to the commencement of any development activities.

3. METHODOLOGY AND SOURCES OF INFORMATION

3.1 Data Search

- 3.1.1 The Envirotech dataset, and the Multi-Agency Geographic Information for the Countryside (MAGIC) were searched to establish the presence of any records of statutorily protected, notable or rare species, and any designated sites of international, national, regional or local importance within a 2km radius of the site boundary.
- 3.1.2 The Envirotech dataset is compiled from extensive field surveys from the period 2004-present, as well as records obtained from third parties during this time.
- 3.1.3 Google Earth and Google Street View were consulted to establish the presence of any features of ecological importance within the local area.
- 3.1.4 Due to the scale of development, in accordance with CIEEM guidelines, a data search of the county records centre was not required. The likely presence and impact on protected species could be adequately determined from the level of data search undertaken.

3.2 Vegetation and Habitats

- 3.2.1 A vegetation and habitat map was produced for the site and the immediate surrounding area. The mapping is based on the UKHabs V2 survey and reporting methodology.
- 3.2.2 Searches were made for uncommon, rare and statutorily protected plant species, those species listed as protected in the Wildlife and Countryside Act (1981) and indicators of important and uncommon plant communities. All plant nomenclature follows Stace (2019).
- 3.2.3 Searches were carried out for the presence of invasive species, including those listed on Schedule 9 of the Wildlife and Countryside Act (1981), namely Japanese knotweed (*Fallopia japonica*), Himalayan balsam (*Impatiens glandulifera*) and giant hogweed (*Heracleum mantegazzianum*) on terrestrial habitat and aquatic species such as floating pennywort (*Hydrocotyle ranunculoides*), water hyacinth (*Eichhornia crassipes*) and New Zealand pygmyweed (*Crassula helmsii*).
- 3.2.4 The survey was also informed by questioning the landowner/site agent to ascertain the recent history of the site.
- 3.2.5 Habitats of Principal Importance (HPI) were cross referenced with Natural England's inventory against the site boundary and where found ground truthed.

3.3 Timing and Personnel

- 3.3.1 During the visit, weather conditions were suitable for the survey types undertaken being cool and dry in mid-winter.

3.3.2 The site and surrounding land was visited on the 23rd December 2024 by

- (AG) Mr Andrew Gardner BSc (Hons), MSc, MRICS
Natural England Bat Class Licence (Level 2)
Natural England Bat Low Impact Class Licence
Natural England Barn Owl Licence
Natural England Great Crested Newt Licence (Level 1)
Natural England Badger Class Licence
Natural England White Clawed Crayfish Licence

4. SPECIES SURVEY METHODOLOGY

4.1 *Amphibian*

- 4.1.1 Great crested newts (*Triturus cristatus*) are protected under Schedule 2 of the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 and Schedule 5 of the Wildlife & Countryside Act (1981).
- 4.1.2 Water-bodies located within or adjacent to the study area were identified and where access was possible were assessed for their potential to support great crested newts.
- 4.1.3 The criteria used in the assessment are based on those contained in the Herpetofauna Workers Manual and Oldham et al, 2000, and in applying these criteria a precautionary approach was adopted. Following the criteria developed by Oldham et al (2000), the HSI tool developed for use with great crested newts and forming part of Natural England's Licensing process was used to determine the suitability of ponds for great crested newts.
- 4.1.4 The pond assessment was undertaken in order to determine which water-bodies, based on their potential to support great crested newts, should be subject to presence/absence surveys.
- 4.1.5 The site was considered sufficiently low risk for GCN that no further assessments were warranted.

4.2 *Badger*

- 4.2.1 Badgers (*Meles meles*) and their setts are protected under the Protection of Badgers Act (1992). This legislation arises from animal welfare issues (rather than on the basis of nature conservation grounds) and protects badgers from being killed, injured or disturbed whilst occupying a sett.
- 4.2.2 A disturbance to badgers in their setts may occur as a result of construction operations. Natural England recommends that the use of heavy machinery in proximity of a sett entrance should be avoided, with a 'disturbance free-zone' being established.
- 4.2.3 The degree of disturbance attributed to construction activity is a function of the background level of activity badgers are accustomed to and that which will be attributed to a proposed activity. The "disturbance free zone" is therefore site specific.
- 4.2.4 The survey for badgers comprised an assessment of all suitable habitat within and outside the study area boundary (where this was possible) to a distance of 30m for indications of use by badgers.
- 4.2.5 Signs of badgers which were searched for included:
 - Setts - 'D' shaped entrances at least 25cms wide and wider than they are high with large spoil mounds
 - Discarded bedding at sett entrances (this includes grass and leaves)
 - Scratching posts on shrubs and trees close to a sett entrance

- The presence of badger hairs which are coarse, up to 100mm long with a long black section and a white tip
- Dung pit latrines and footprints
- Habitual runs through vegetation and beneath fences
- Hedgehog carcasses

4.3 Bats

- 4.3.1 All British bat species are fully protected under Schedule 5 of the Wildlife and Countryside Act (1981), and are included on Schedule 2 of the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019, as a Protected Species. Taken together, these pieces of legislation make it an offence to:
- Intentionally or recklessly kill, injure or capture bats;
 - Deliberately or recklessly disturb bats (whether in a roost or not);
 - Damage, destroy or obstruct access to bat roosts.
- 4.3.2 The Bat Conservation Trust Collins, J. (ed) (2023) issued guidelines on bat survey methodology, a key feature of their recommendation is for the undertaking of a pre-survey assessment - an initial desk-study and a walkover assessment of the survey area and its surrounding area to identify the relative value of the habitats present for bats and likely commuting routes. This is to be followed by a survey program that is appropriate to the likely level of bat activity within the survey area to be determined by and based on the experience of the surveyor.
- 4.3.3 The potential value of the survey area for foraging bats was assessed through consideration of two main factors: professional knowledge of bat ecology and foraging behaviour in combination with the geographical location, topography and habitats present within the survey area and surrounds.
- 4.3.4 Trees and structures on and within the survey area boundary were assessed for their potential to support roosting or hibernating bats. This comprised a close inspection of all trees and buildings on the site to allow an assessment of their potential to be used by bats to be made by a licensed surveyor.
- 4.3.5 Trees were all assessed in accordance with Collins, J. (ed) (2023) and categorised as No potential, PRF-I or PRF-M. PRF I is only suitable for individual bats or very small numbers of bats either due to size or lack of suitable surrounding habitats. PRF M is suitable for multiple bats and may therefore be used by a maternity colony.

4.4 Birds

- 4.4.1 All breeding birds, other than pest species, are protected under the Wildlife and Countryside Act of 1981 when building a nest, rearing young or sitting on eggs. Some bird species, such as barn owl (*Tyto alba*), are protected when near an active nest site. Several birds are listed as Species of Principal Importance (SPI).

- 4.4.2 Bird species and behaviour was noted during the other field surveys. All areas are covered equally, in order to avoid the subjective survey of better quality 'bird habitat'.

4.5 Brown Hare

- 4.5.1 The brown hare (*Lepus europaeus*) is a SPI.
- 4.5.2 The survey method involved walking boundaries and surveying with binoculars. The survey was conducted at a suitable distance to ensure that the hares were not disturbed. Generally, surveys were undertaken throughout the early afternoon and evening when hares are thought to be most active and feeding.
- 4.5.3 Where present the number of brown hares in each field or hedgerow was recorded, together with the nature and use of the field, climatic conditions and time of day. The presence of forms and faeces where present were also recorded.

4.6 Survey limitations

- 4.6.1 Due to the habitats present on site there were no significant constraints in respect of identifying the botanical interest of the site.
- 4.6.2 The duration, extent and scope of the surveys were considered sufficient to plan appropriate mitigation and recommend additional precautionary survey work required prior to the commencement of work.
- 4.6.3 No significant survey limitations were encountered.

5. RESULTS

5.1 *Data Search*

- 5.1.1 Envirotech hold no records of protected or notable species for the site. There are however records of protected or notable species within 2km (Figure 2). These are discussed in the relevant sections below.
- 5.1.2 The site does not lie in or adjacent a non-statutory protected site or mapped Habitat of Principal Importance (Figure 3).
- 5.1.3 The site is 1km East of Solway Firth SPA (Figure 4).



 Red Line Boundary


Mammals

-  Common Pipistrelle
-  Delphinus delphis
-  Erinaceus europaeus
-  Lepus europaeus
-  Lutra lutra
-  Meles meles
-  Sclurus vulgaris


Bats

-  Common Pipistrelle

Amphibians

-  Rana temporaria

Reptiles

-  Anguis fragilis

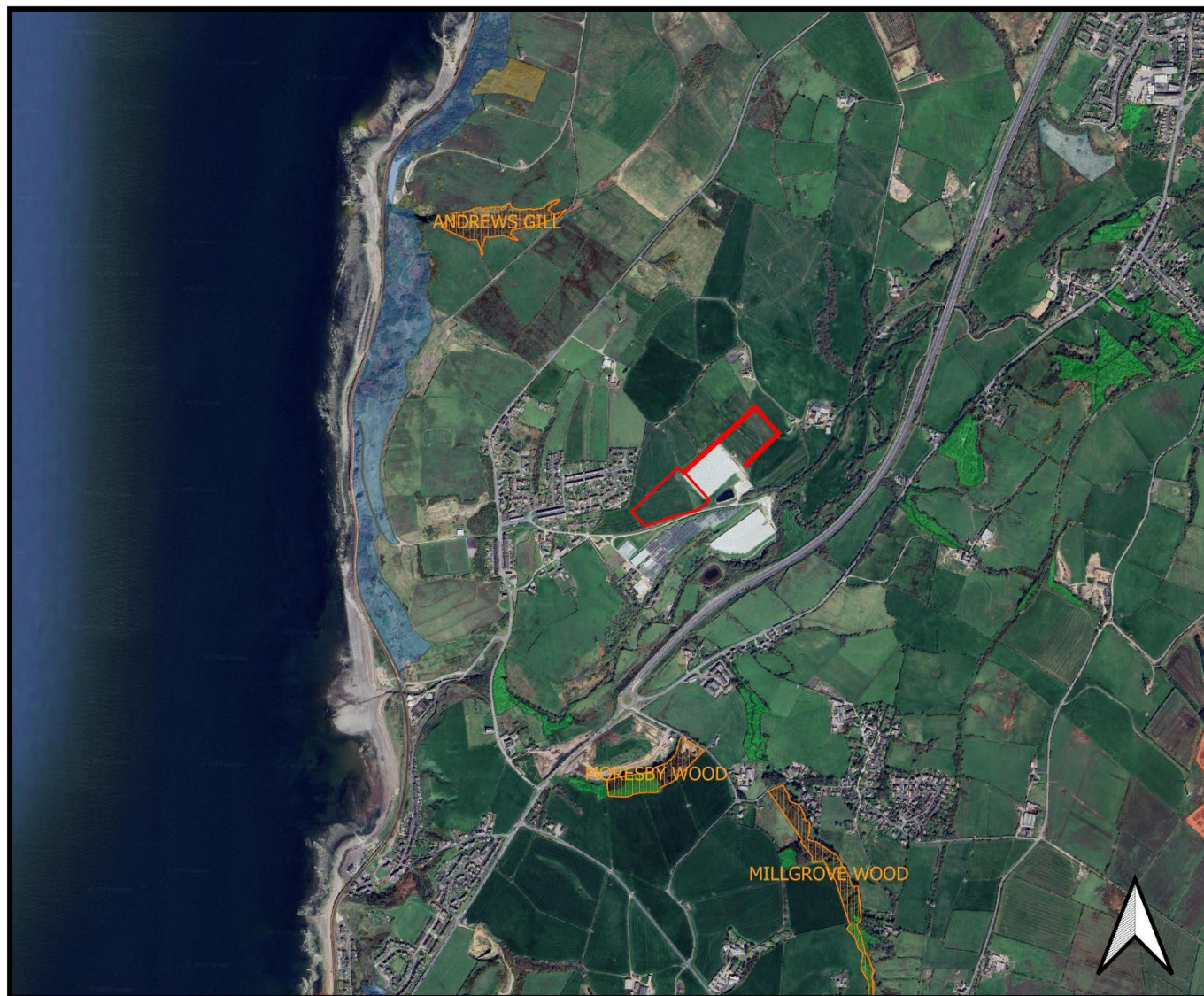
NERC

-  Brown Hare
-  Common Dolphin
-  Eurasian Red Squirrel
-  European Otter
-  Slow-worm
-  West European Hedgehog

Figure 2

Protected and
Notable Species





- Red Line Boundary
- Ancient Woodland
- Deciduous woodland
- Lowland heathland
- Maritime cliff and slope
- No main habitat but additional habitats present
- Purple moor grass and rush pastures
- Traditional orchard

Figure 3

Mapped Habitats of
Principal Importance
and Non-statutory
Protected Sites





 Red Line Boundary

 SPA

Figure 4
Protected Sites
and Habitats



6. UKHabs V2 SURVEY RESULTS

6.1 *Habitat Results*

6.1.1 A drone was overflown on the 23rd December 2024. This produced a number of images which were stitched together to form a orthomosaic map and provided upto date imagery of the site from which UKHabs habitat mapping has been based. Figure 5 shows the hi-resolution imagery overlain to google earth without the UKHabs mapping overlay.

6.1.2 The site comprises modified grassland with small hedges on its boundary.

6.1.3 See Figure 6 for the UK Habs V2 Plan and Table 1 for the descriptive Target Notes.



Figure 5
Orthomosaic map
drone imagery taken
23.12.25



Target Note	Description	Comment
TN1	Modified grassland	The entire site comprises modified grassland dominated by Perennial Ryegrass (<i>Lolium perenne</i>) with occasional Mouse ear (<i>Cerastium fontanum</i>), Creeping Buttercup (<i>Ranunculus repens</i>) and Yorkshire Fog (<i>Holcus lanatus</i>) and Cocksfoot (<i>Dactylis glomerata</i>) to the field boundary/ hedgeline.
TN2	Defunct Hedge	A defunct hedge dominated by Hawthorn (<i>Crataegus monogyna</i>) with occasional Oak (<i>Quercus Sp</i>), Heavily flail mown, no associated hedgerow species at ground level other than Bramble (<i>Rubus fruticosus agg</i>) with intensive sheep grazing likely to have occurred. Hedge partly removed to East extent with fresh cut stumps at ground level.
Table 1 Details of Target Notes.		





Modified Grassland- The site comprises modified grassland which is sheep grazed and or mown. It is species and ecologically poor



Defunct hedge to the North boundary of the site



Standing water to its base but the hedge is not associated with a “bank” the landform being natural and or a “ditch” again the standing water being surface water rather than from an attempt at drainage

Table 2 Photographs

6.2 Vegetation

- 6.2.1 Details of the plant species found on site are included in the target notes. Species recorded are all commonly occurring and undoubtedly occur elsewhere in similar habitats in the local area.
- 6.2.2 The modified grassland has a very low species diversity and ecological value.
- 6.2.3 The defunct hedge bounding the site to the North is species poor and contains a low diversity of woody plant species.
- 6.2.4 There is no evidence of Japanese knotweed, giant hogweed or Himalayan balsam on the site. No other invasive or notable weed species listed on Schedule 9 (Section 14) of the Wildlife and Countryside Act (1981) (as amended) was identified within the site or adjacent land.

6.3 Amphibian

- 6.3.1 There are records for amphibians within 2km of the site. There are no records of great crested newt in the local area, though there are several records for smooth newt (*Lissotriton vulgaris*).
- 6.3.2 There is an irrigation pond to the East, which is lined with a butyl liner and drained by pump. It has no vegetation associated with it and would not be suitable for amphibian breeding.
- 6.3.3 The core development area has a low value to amphibians being open and exposed. The boundary hedgerows could be utilised as refuges and/or hibernacula but there are no breeding ponds in proximity to the site.
- 6.3.4 Structural diversity at ground level across the site is very poor. There are no areas with log, rubble piles or compost heaps which would be particularly favourable to amphibians.
- 6.3.5 Amphibians would be unlikely to attempt to cross the site as it comprises an area that is mostly open with uniform length grass. Whilst not a physical barrier to the dispersal of amphibians, the site is regarded as being a potentially hostile environment to them.
- 6.3.6 The proposed development will not result in the permanent loss of or a substantial negative effect on any waterbodies or foraging areas linked to them. Boundary areas which may provide foraging or refuge sites, are to be retained.

6.4 Badger

- 6.4.1 Two records of badgers occur within 2km of the site.
- 6.4.2 Badger setts do not occur on site and a lack of feeding signs or runs across the site would suggest that they do not occur within 30m of site boundaries.
- 6.4.3 The proposed development will not impact on any existing badger runs or setts. The porosity of the surrounding fields to the passage of badgers will not be affected.

6.5 Bats

- 6.5.1 There are records of Common Pipistrelle (*Pipistrellus pipistrellus*) bat within 2km of the site.
- 6.5.2 The foraging habitat at the site is very poor for bat species being open and exposed. The modified grassland offers negligible foraging opportunities for bats. The hedge lines are poor in terms of their structure, diversity and interconnectivity.
- 6.5.3 The glass houses to the East of the site have no potential for roosting bats.
- 6.5.4 There are no trees on site or its boundaries with anything more than negligible potential for use by roosting bats.
- 6.5.5 It is not considered there would be significant degradation of foraging habitat as a result of the proposal.
- 6.5.6 We consider bat species are highly unlikely to rely on the site for feeding but may occur in the local area. Roosting by bats will not occur on the site.

6.6 Birds

- 6.6.1 There are records of birds within 2km of the site.
- 6.6.2 The modified grassland has a low potential for use by nesting birds as the grassland is grazed and as such is usually short. Trampling risks are also very high within this area of the site.
- 6.6.3 The habitat on site is open and exposed and would not be suitable for use by birds associated with Solway Firth SPA.
- 6.6.4 The gappy defunct hedges within the site have insufficient density to be of high value to nesting birds.
- 6.6.5 A risk assessment of the site in respect of its future potential for and value to nesting birds could be adequately made.

6.7 Brown Hare

- 6.7.1 Brown hare are a SPI. There are records of brown hares within 2km of the site.
- 6.7.2 No indication of brown hares was recorded on the site.
- 6.7.3 The site boundary has some potential for brown hares to create forms but use of the site is likely to be limited due to its open and exposed nature and regular human presence.
- 6.7.4 A risk assessment of the site in respect of its future potential for and value to brown hares could be adequately made. We consider the risk to brown hares is very low.

6.8 Other

- 6.8.1 The boundary hedgerows are species poor and provide little potential for use by hedgehog (*Erinaceus europaeus*). Fragmentation of habitat locally and existing land use do not provide optimal conditions for the free passage of this species across the site and slugs and snails are likely to occur only at very low numbers.

6.9 Statutory and Non-Statutory Sites

Direct Impacts:

- 6.9.1 There are no statutory or non-statutory sites which are connected to the site such that site development would directly affect the dispersal of species between them or directly impact upon their integrity.
- 6.9.2 The habitats on site do not represent or are linked to those found in any of the statutory or non-statutory sites locally.

Indirect Impacts:

- 6.9.3 There are no statutory or non-statutory sites which are connected to the site such that site development would indirectly affect the dispersal of species between them or indirectly impact upon their integrity.

7. MITIGATION/RECOMMENDATIONS

7.1 *Compensatory planting and habitat enhancement*

- 7.1.1 If the defunct species poor hedges are removed, transplantation of them is not considered to be of significant ecological benefit as there are no notable species assemblages associated with them, replanting of linear lines of trees/ shrubs would be more beneficial.

7.2 *Amphibians*

- 7.2.1 There is no requirement for specific mitigation for these species. There are currently no suitable breeding sites on or near the site. However, as a precautionary measure, in the unlikely event that any signs of any amphibian activity is subsequently found, all site works should cease and further ecological advice should be sought with a view to a detailed method statement and programme of mitigation measures being prepared and implemented.

7.3 *Badger*

- 7.3.1 Badger setts are known to occur within 2km of the site. These setts will be undisturbed by work but in order to minimise impacts on badgers passing over the site the following points should also be followed.
- All work must take place during daylight hours as badgers are more likely to be commuting over the site at night and this will ensure the risk to any badgers passing through the site will be minimised.
 - Should any trenches and excavations be required, an escape route for animals that enter the trench must be provided, especially if left open overnight. Ramps should be no greater than of 45 degrees in angle. Ideally, any holes should be securely covered. This will ensure badgers are not trapped during work.
 - All excavations left open overnight or longer should be checked for animals prior to the continuation of works or infilling. Back filling should be completed immediately after any excavations, ideally back filling as an on-going process to the work in hand.
 - Boundary fences/walls should incorporate gaps at their base to facilitate the passage of badgers across the site.

7.4 *Bats*

- 7.4.1 There is no requirement for specific mitigation for these species. There are currently no suitable roosting sites on or near the site. However, as a precautionary measure, in the unlikely event that any signs of any bat activity is subsequently found, all site works should cease and further ecological advice should be sought with a view to a detailed method statement and programme of mitigation measures being prepared and implemented.

7.5 Birds

- 7.5.1 Nesting by birds within the development area is considered unlikely to occur. Birds may nest within hedges on the periphery of the site.
- 7.5.2 Any vegetation to be trimmed or cleared should be checked for nesting birds before it is removed. Ideally this should occur outside the bird nesting period March- September. If vegetation clearance is to occur in the March-September period a check for nesting birds should be conducted first by a suitably qualified individual.
- 7.5.3 If nesting birds are found at the site all site works shall cease and further ecological advice shall be sought with a view to a detailed method statement and programme of mitigation measures being prepared and implemented.

7.6 Brown Hares

- 7.6.1 There is no requirement for specific mitigation for this species. However, as a precautionary measure, in the unlikely event that any signs of any brown hare activity is subsequently found, all site works should cease and further ecological advice should be sought with a view to a detailed method statement and programme of mitigation measures being prepared and implemented.
- 7.6.2 The points in respect of not working at night and leaving open trenches with means of escape detailed for badgers are also applicable to this species.

8. REFERENCES

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