

Ecological Appraisal

Report for:

***Hampshire County Council –
Property Services***

Hamilton Centre, Bulmershe Road, Reading, RG1 5SG

Complete refurbishment of the Hamilton Centre into a SEN school with sports hall and kitchen extension.

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Written by:	J Simpson
Approved by:	M Miri
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SUMMARY

This report constitutes an assessment of the potential impacts arising from the proposal and site set out below and provides recommendations to ensure that this proposal can reasonably avoid or mitigate such effects identified. If the proposal differs from that set out below, then this assessment and recommendations may not be applicable. Furthermore, the assessment and recommendations are based on surveys which may only be considered valid for up to two years following the date of this report.

- An Extended Phase 1 Ecological Survey was undertaken on 8 February 2019 at Hamilton Centre, Bulmershe Road, Reading, RG1 5SG. The proposals for the site comprise the complete refurbishment of the existing building and conversion of the site into a SEN school with a sports hall and kitchen extension.
- The Extended Phase 1 Ecological Survey comprised a desk-based study and field survey to assess the potential for the site to support protected habitats and species.
- The site is located in Reading, a large town in Berkshire. The surveyed area is centred on grid reference SU 7378 7245. Surrounding land uses include residential housing with associated gardens, schools and associated amenity grassland playing field, a large area of amenity grassland to the north and a large lake with the University of Reading to the south. The site itself contains a large building, hardstanding, amenity grassland and scattered trees. A small section of scattered scrub is also present.
- The survey of the site identified the existing building to be a fairly modern brick structure, in good condition. Other habitats included amenity grassland, scattered trees and patchy scrub. The site is considered to be of low ecological value overall.
- As a precautionary measure, a range of recommendations are made to ensure that impacts are avoided.
- In line with local and national planning policies, consideration should be given to incorporating ecological enhancements into proposals. Simple effective measures would be installing bird boxes on trees and/ or buildings and using species beneficial to wildlife in any proposed soft landscaping at the site.

1 INTRODUCTION

1.1 Project Description

Hampshire County Council Ecology Team (HCCET) has been commissioned to carry out an Extended Phase 1 Ecological Survey at the Hamilton Centre, Bulmershe Road, Reading, RG1 5SG (national grid reference SU 7378 7245).

1.1.1 Proposal

Hampshire County Council proposes the complete refurbishment of the existing building and the conversion of the site into a new SEN school with a sports hall and kitchen extension.

The proposed plans are shown below in **Figure 1**.



Figure 1: Site plan for proposed works

1.1.2 Requirement for Ecological Survey/Assessment

Consultation with HCCET has identified the potential for the site to support legally-protected species.

1.1.3 Limitations to Report

Ecological surveys are limited by factors which affect the presence of plants and animals such as the time of year, migration patterns and behaviour. The survey was carried out in February, a time when most plant species are typically harder to identify. Similarly, most animal species are not as active and field signs are not always visible. The ecological survey did not produce an exhaustive list of plant and animal species and the absence of evidence of any

particular species should not be taken as conclusive proof that the species is not present or that it will not be present in the future. Considering the nature of the habitats present on site and the location of the site, the results of field - and desk-based surveys have been sufficient to evaluate ecological features within the predicted zone of influence to a high degree of confidence and assess any potential impacts likely to require mitigating actions.

As the building has been unused and boarded up for quite some time it was not possible to internally inspect all parts of the building due to health and safety reasons. However, the structure of the building is known to be consistent throughout and due to presence of a suspended ceiling, which does not provide a suitable feature for roosting bats, the access constraints are not considered to have affected a robust assessment of the building.

1.2 Site Description

The school is located in Reading, a large town in Berkshire. The surveyed area is centred on grid reference SU 7378 7245.

The application site comprises a large brick-built building with a flat roof that was once used as a children's centre but is currently unused and boarded up. The surrounding habitats are predominantly hardstanding and amenity grassland with scattered trees and scrub.

The current proposals will involve the refurbishment of the current Hamilton Centre into a new SEN school with an extension. Landscaping is proposed around the new school buildings and between the school and the existing area of amenity grassland.

A second area was also surveyed which comprises a hardstanding sports pitch with associated fence and patchy scrub. This area will replace the current hardstanding pitch with an all-weather pitch.

An aerial photograph of the site within the wider landscape is shown on **Figure 2** below.

Surrounding land uses include residential housing with associated gardens to the north-east and south-west and an amenity grassland playing field to the east. Whiteknights Park lies to the south of the site and comprises woodland and a large eutrophic lake.



Figure 2: Site location (red dot) within the surrounding area (© Crown copyright and database rights 2017 Ordnance Survey [100019180].)

2 METHODS

2.1 Desk-based Assessment

A desk-based assessment was carried out by HCCET on 7 February 2019. Geographical Information Systems (GIS) mapping was used in order to identify all records of protected species and habitats within a 500 metre (m) radius of the site. Given the localised nature of the proposals this search radius was considered sufficient for assessing risk to all ecological features. In addition, records were obtained of all statutory and non-statutory designated nature conservation sites within the search radius.

HCCET had full access to the extensive biological database held by the Hampshire Biodiversity Information Centre (HBIC). The data is aggregated to meet the HBIC Data Users Agreement and attention is drawn to paragraph 5 of the agreement which states: *'Whilst every reasonable effort is made to validate information supplied to and by the Hampshire Biodiversity Information Centre, owing to the dynamic and judgmental nature of information relating to wildlife, HBIC disclaims any responsibility for the accuracy or comprehensiveness of the information supplied, and accepts no liability for any indirect, consequential, or incidental damages or losses arising from use of the information'*.

2.2 Field-based Assessment

An Extended Phase 1 Ecological Survey was carried out on 8 February 2019. The survey entailed a single surveyor (Jennifer Simpson, Assistant Ecologist) undertaking a methodical investigation of all areas of the site in order to identify the presence of, or habitat considered suitable for supporting, legally-protected species. A brief description of the survey methods used is provided below.

2.2.1 Vegetation

All broad habitat types were identified, and a list was compiled of characteristic plant species within each habitat type. Where necessary, habitat types of particular botanical interest were subject to more detailed survey using methods developed for the National Vegetation Classification (NVC) (Rodwell, 1992).

2.2.2 Badger

All areas of the site were inspected for field signs of badger activity. This includes badger setts, latrine sites, dung piles, well-used trails, prints and hairs.

2.2.3 Bats – Built Structures

All external areas of the building within the survey were inspected visually to identify potential bat access, egress and roosting features. Such features include missing, slipped, broken or bowed roof materials; gaps within soffits; gaps behind fascias; gaps/holes within brickwork; louvers; lifted lead flashing and gaps around window and door casements. Features were inspected using

binoculars and the surveyor was equipped with a high-powered torch. As the building does not contain roof voids, an internal inspection was not undertaken. Survey methods used were those described within Collins (2016).

The structure has been assessed for its potential to support roosting bats based upon the presence of direct evidence or the presence of features suitable access, egress or roosting features. Each structure has been graded using the criteria detailed in **Table 1**.

Table 1: Bat Roost Building Grading Criteria

Grading Criteria	Reason
Confirmed Bat Roost	Presence of unambiguous evidence: live bats, corpses, droppings, feeding remains, urine- and fur-staining. Bats heard within roost. Known roost based on desk-based assessment.
High Potential	A structure with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions and surrounding habitat. Examples may include older/historic buildings with traditional roof materials, roof voids etc. Potential often higher when structure is in a non-urban setting.
Moderate Potential	A structure with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions and surrounding habitat but unlikely to support a roost of high conservation status (roost type only). Examples may include structures of more-modern construction exhibiting gaps within roof materials.
Low Potential	A structure with one or more potential roost sites that could be used by individual bats opportunistically. However, these potential roosts sites do not provide enough space, shelter, protection, appropriate conditions and/or suitable surrounding habitat to be used on a regular basis or by larger numbers of bats (e.g. unlikely to be suitable for maternity, hibernation). Examples may include otherwise-suitable structures exhibiting a very small number of potential features.
Negligible Potential	Structure exhibits negligible habitat features for roosting bats. Examples may include modern structures in sound condition exhibiting no suitable features. Such structures are often within an urban setting.

2.2.4 Bats – Trees

All trees within the site likely to be impacted were subject to detailed visual inspection from ground level in order to identify features which may offer suitable roosting opportunities for bats. These features include dense ivy

cladding; woodpecker holes; rot holes; limb stubs; cavities; flaking bark; cracks and splits. The methods used were those described within Collins (2016). Each tree has been graded for its potential to support bats based on criteria within outlined **Table 2**.

Table 2: Bat Roost Tree Grading Criteria

Grading Criteria	Reason
Confirmed Bat Roost	Unambiguous evidence of roost: bats seen emerging/entering, bats audible, droppings/urine-/fur-staining visible. Known roost based on desk-based assessment. Three further surveys (May to September; two May-August) required.
High Suitability	A tree with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a regular basis and potentially for longer periods of time due to their size, shelter protection, conditions and surrounding habitat. Three further surveys (May to September; two May-August) required.
Moderate Suitability	A tree with one or more potential roost sites that could be used by bats due to their size, shelter, protections, conditions and surrounding habitats, but unlikely to support a roost of high conservation status. Two further surveys (May to September; one May to August) required.
Low Suitability	A tree of sufficient size and age to contain Potential Roost Features, but with none seen from the ground or features seen with only very limited roosting potential. No further survey required.
Negligible Suitability	Trees with negligible habitat features likely to be used by roosting bats. No further survey required.

2.2.5 Bats – Foraging and Commuting Habitat

An assessment was made of the suitability of the site and the surrounding landscape to support foraging/commuting/flying bats. These activities cover the varied range of behaviours exhibited by bats when they are not roosting and will include feeding, travelling between sites and other social behaviours. The assessment was based on the presence of key habitat features such as woodland, scrub, hedgerows, grassland and open water which are highly attractive to bat species for those activities. Of importance is the presence of unlit semi-natural vegetation and habitat linkage between the site and the surrounding landscape.

The quality of bat foraging/commuting/flying habitat has been assessed using the criteria detailed in **Table 3**.

Table 3: Bat Foraging/Commuting/Flying Habitat Grading Criteria

Grading Criteria	Reason
Optimal Quality	Continuous optimal habitat such as unlit woodland edge, scrub, hedgerows, grassland and open water well connected to similar habitats within the wider landscape that is likely to be used regularly by commuting bats. Optimal habitat that is well connected to the wider landscape that is likely to be used regularly by foraging bats such as broadleaved woodland, tree-lines watercourses and grazed pasture Presence of high potential buildings/trees and/or known roosts within immediate landscape. Sites are generally rural in character.
Moderate Quality	Continuous habitat connected to the wider landscape that could be used by bats for commuting such as lines of trees and scrub or linked back gardens. Habitat that is reasonably connected to the wider landscape that could be used by bats for foraging such as trees, scrub, grassland or open water Limiting factors may include size of site.
Low Quality	Presence of some limited habitat features that could be used by small number of commuting bats such as scrub or a gappy hedgerow or unvegetated stream, but isolated with minimal linkage to suitable habitats within the wider landscape. Suitable, but isolated habitat that could be used by small numbers of foraging bats such as a lone tree (not parkland) or a patch of scrub.
Poor Quality	Negligible habitat features present likely to be used by bats; or, if present, highly degraded/fragmented. Minimal unlit areas with no linkage to suitable habitat beyond site. Generally urban in character.

2.2.6 Hazel Dormouse

An assessment was made of the suitability of habitat on site to support hazel dormice. Key habitats are woodland, scrub and hedgerows, particularly where these habitats offer dense vegetation within which to nest/hibernate and key resources such as hazel nuts, fruiting/nectar-rich plants (e.g. hawthorn, bramble) and honeysuckle (for nesting material). Of key importance is the presence of landscape-scale habitat linkages such as hedgerows.

2.2.7 Birds

An assessment was made of the site's suitability to support breeding and wintering bird species. Nesting birds will utilise a broad range of habitats, including built structures; trees; scrub; isolated shrubs; dense herbaceous vegetation (terrestrial and aquatic) and open grassland. All bird species observed on site were recorded.

2.2.8 Reptiles

An assessment was made of the site's suitability to support reptile populations. Key habitat features include: tussocky/patchy grassland; scrub edge; linear watercourses; ponds; compost heaps; brash piles and rubble/soil heaps. Linkage to suitable habitat within the surrounding landscape will increase the potential for reptiles to occur, although populations can occur within isolated/fragmented habitats even within urban areas.

2.2.9 Amphibians

An assessment was made of all waterbodies and terrestrial habitat within the site for their suitability to support populations of amphibians. Suitable waterbodies will generally be characterised by the presence of good quality water, diverse macrophyte cover and an absence of fish.

For the European-protected great crested newt *Triturus cristatus* each waterbody was assessed using the Habitat Suitability Index (HSI) system (Oldham *et al.*, 2000) and assigned a grading score between zero (poor suitability) and 1 (excellent suitability).

2.2.10 Invertebrates

The presence of important invertebrate species or assemblages is generally dependent upon distinct micro-habitats such as dead wood (standing, fallen, of all decay stages), sap runs, damp/wet soils, mixed sun/shade, bare/friable soils (e.g. exposed sand banks) and a diversity of plant species. For aquatic invertebrates, important species/assemblages will generally be associated with high-quality aquatic habitats such as ponds, rivers, streams and ditches. Key factors will include water quality, substrate, waterbody morphology and plant diversity.

An assessment of the site's potential to support a diverse invertebrate assemblage and/or specialist species is based loosely on the presence of habitat features described in Kirby (2001). Where possible, a list of all invertebrate species encountered has been made.

2.2.11 Protected Species Assessment

The surveyed site has been assessed for its potential to support the above-named protected species based upon the criteria in **Table 4**.

Table 4: Protected Species Grading Criteria

Grading Criteria	Justification
Confirmed Presence	Species confirmed on site through direct sighting, presence of field signs (e.g. scat, hair, prints, nest, eggs, habitation etc.) or through desk-based assessment.
High Potential	Presence of optimal habitat features for species. Surveyed site within known range/close to known occurrence. Excellent connectivity to optimal habitat. No justification for discounting presence of species.
Moderate Potential	Presence of some suitable habitat features for species. Surveyed site within/close to known range or known occurrence but factors such as isolation/fragmentation may reduce potential. Presence of species is more likely than not.
Low Potential	Minimal suitable habitat present or, if present, highly degraded/fragmented. Minimal linkage to suitable habitat beyond site. Presence of species unlikely.
Negligible Potential	Site is entirely unsuitable for species. Presence of species highly unlikely.

3 FIELD BASED ASSESSMENT

3.1 Desk-based Assessment

3.1.1 *Designated Sites*

Two Sites of Importance for Nature Conservation (SINCs) occur within 500m of the site. **Table 5** provides summary details of these sites.

Table 5: Designated sites located within 500m of the site

Site Name	Distance and Direction from Site (km)	Reason for Designation
Reading Cemetery SINC	345m W	Semi-improved grassland with diverse flower-rich areas. The site has elements of Lowland Meadow.
Whiteknights Park SINC	480m E	Parkland and wood pasture with eutrophic standing water. Mosaic of landscaped trees with amenity grassland, mixed secondary woodland and several stands of introduced shrubs and trees, as well as areas of managed meadow.

3.1.2 *Protected Species*

A review of the biological database held by HBIC, as well as records of protected species submitted in association with local planning applications, revealed the presence of a number of protected and notable species within a 500m radius of the site. Relevant records are shown in **Table 6**.

Table 6: Protected and Notable species located within 500m of the site

Species	Details	Distance and Direction from Site of nearest record
Bats		
Common Pipistrelle <i>Pipistrellus pipistrellus</i>	Emerging from roost, 2017	320m E
Soprano Pipistrelle <i>Pipistrellus pygmaeus</i>	Field Observation, 2017	250m SW
Brown Long-Eared Bat <i>Plecotus auritus</i>	Emerging from roost, 2014	280m S
Serotine <i>Eptesicus serotinus</i>	Field Observation, 2016	170m SE
Daubenton's Bat <i>Myotis daubentonii</i>	Field Observation, 2015	200m S
Natterer's Bat <i>Myotis nattereri</i>	Field Observation, 2016	230m SW
Noctule <i>Nyctalus noctula</i>	Field Observation, 2017	120m W
Reptiles		
Slow worm <i>Anguis fragilis</i>	Field Observation, 1980	120m NW; 150m NE
Common Lizard <i>Zootoca vivipara</i>	Field Observation, 2006	500m S
Amphibians		
Smooth Newt <i>Lissotriton vulgaris</i>	Field Observation, 2007	300m W
Common Toad <i>Bufo bufo</i>	Field Observation, 2007; 2008; 2014	230m W
Common Frog <i>Rana temporaria</i>	Field Observation 2007; 2014	280m SW
Invertebrates		
Stag Beetle <i>Lucanus cervus</i>	Field Observation, 2006; 2007	250m SW
Badger <i>Meles meles</i>	Sett, 1991	190m E

3.2 Field Survey

3.2.1 Vegetation

An aerial photograph showing the surveyed area of the site is shown in **Figure 3** below.



Figure 3: Surveyed area of site (red outline)

(© Crown copyright and database rights 2017 Ordnance Survey [100019180].)

The site comprises a disused children's centre to the east, surrounded by hardstanding (**Figure 4**). A small area of amenity grassland is present to the south of the site comprising largely of perennial rye grass *Lolium perenne*, with frequent daisy *Bellis perennis* and dandelion *Taraxacum sp.* Semi-mature scattered trees and shrubs are located in the northern part of the site.

Another area surveyed as part of the proposed works (**Figure 5**) comprises a hardstanding sports pitch with associated fencing and patchy scrub, dominated by bramble *Rubus fruticosus* (**Figure 6**).



Figure 4: Hamilton Centre building



Figure 5: Map showing the location of the additional surveyed area (red outline) in relation to the Hamilton Centre (red dot)



Figure 6: Hardstanding sports pitch with patchy scrub.

3.2.2 Badger

No evidence of badger activity was recorded within the surveyed areas. There is very limited suitable habitat present for badgers, though badgers may occasionally utilise the recreational grassland habitat of site for foraging and commuting. Despite a historical record of a sett within 500m of the site, there is currently no evidence of setts onsite. Overall, the site is considered to offer **negligible potential** for supporting foraging badger, with no active setts present on site.

3.2.3 Bats – Built Structures

The building was inspected both externally and internally to identify signs of roosting bats.

3.2.3.1 External Inspection

The building is of a fairly modern brick construction with plastic cladding and aluminium framed windows. There is a strip of fascia between the brickwork and the roof. The roof is a flat roof composed of bitumen felt. Razor wire is present along the roof edge (**Figure 7**).

At the time of survey, the windows were boarded up to prevent unauthorised access to the building. These all appeared in good condition with the glass still present in the window frames.

No gaps were recorded between the fascia and the roof. Therefore, the building displays no potential entry/exit points for bats to utilise.



Figure 7: Exterior of the Hamilton Centre



Figure 8: Interior of the Hamilton Centre

3.2.3.2 Internal Inspection

The building is a two-storey structure with a suspended ceiling and lacks a loft void (**Figure 8**).

It was not possible to internally inspect all parts of the building due to health and safety reasons. However, the structure of the building is known to be consistent throughout and due to presence of a suspended ceiling, which does

not provide a suitable feature for roosting bats, the access constraints are not considered to have affected a robust assessment of the building.

Due to the lack of any potential entry points into the building or suitable roosting features internally, the building is considered to have **negligible potential** for roosting bats.

3.2.4 Bats – Trees

It is understood from the current proposals that no trees will be felled as part of the proposed development. The trees present on site were immature and scattered. They displayed no features to support roosting bats and therefore, the trees within the site have **negligible potential** to support roosting bats.

3.2.5 Bats – Foraging and Commuting

The site mainly comprises hardstanding and a building. Scattered trees and scrub are also present but offer limited foraging opportunities for bats. A large area of amenity grassland is present to the east of the site which is of low value as a foraging resource.

Bats are present within the surrounding landscape, so it is possible that they will commute over the site.

Overall, the areas of the site within the development area are considered to be of **low potential** for foraging and commuting bats.

3.2.6 Hazel Dormouse

Due to the small and patchy nature of the scrub on site and lack of any connectivity to more suitable habitats in the wider landscape, the site is considered to be of **negligible potential** for dormice.

3.2.7 Water Vole

The desktop assessment revealed no records of water vole within 500m of the site and there are no watercourses within or adjacent to the proposed works footprint. The site is therefore considered to offer **negligible potential** for supporting water vole.

3.2.8 Otter

The desktop assessment revealed no records of otter within 500m of the site and the site and surrounding area does not contain any watercourses or habitats suitable for otter. The site is considered to offer **negligible potential** for supporting otter.

3.2.9 Birds

The woody vegetation and scrub on site provide opportunities for nesting birds and it is inevitable that small numbers of common and widespread bird species

will occur and possibly nest within the vegetation. Overall, the site is considered to exhibit **low potential** for supporting small numbers of common and widespread breeding birds.

3.2.10 Reptiles

Records of slow worm and common lizard were returned within 500m of the site. The site is characterised by hardstanding and buildings, scrub and amenity grassland. The amenity grassland on site is short and well managed with frequent disturbance; therefore, this habitat is considered to be unsuitable for supporting reptiles. Overall, there is considered to be **negligible potential** for the site to support reptiles.

3.2.11 Amphibians

Records of common frog, common toad and smooth newt were returned within a 500m search radius. These records were from Whiteknights Lake which lies to the south of the site. There is no waterbody present on site and the habitats present are largely amenity grassland and hardstanding which are considered to be unsuitable for supporting amphibians. The site is considered to have **negligible potential** for supporting common amphibians.

3.3.10 Invertebrates

The habitats present on site are widespread and common. It is therefore probable that the site supports similarly widespread and common terrestrial invertebrate species. A record of stag beetle was returned within the 500m search radius. Stag beetles are classified as a 'protected species' in the UK, listed under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended). Stag beetles live on woodland edges, hedgerows and gardens. Deadwood or decaying wood is a source of food for stag beetle larvae. There are no areas of woodland or deadwood present within the site and therefore the site is considered to have **negligible potential** for supporting scarce or notable invertebrate species such as stag beetle.

4 IMPACTS

4.1 Introduction

This section is supported by the results of the Extended Phase 1 Ecological Survey and presents the likely impacts, in the absence of any mitigating actions, on protected and notable habitats and species associated with the proposed development. Only those features confirmed as present on site or considered to have potential to occur across the wider site have been taken forward for further assessment. In addition, all designated sites located within 500m of the site have been taken forward for further assessment.

4.2 Designated Sites

Reading Cemetery SINC and Whiteknights Park SINC lie within 500m of the site but are separated by residential development. Given that the loss of habitats on site is not considered to be of high ecological value and is not associated with the habitat types found within the designated sites, it is considered that there is **negligible potential for impacts to designated sites**.

4.3 Habitats/Vegetation

The habitats which could be directly impacted are hardstanding and amenity grassland. These habitats are considered to be of low ecological value. Habitat with higher ecological value, such as scattered trees and scrub will not be currently impacted by the proposed works. Overall, there is considered to be **negligible impact to habitats of ecological importance**.

4.4 Protected Species

4.4.1 *Bats – Foraging and Commuting*

The habitats across the site as a whole are of low value for supporting foraging and commuting bats. There is no new lighting proposed as part of the development.

Overall, it is considered that there is **negligible potential** for adverse impacts to foraging/commuting bats.

4.4.2 *Birds*

Areas of woody vegetation and scrub on site have the potential to support small numbers of common and widespread nesting birds. All species of bird and their nests and eggs (whilst active) are legally protected. It is likely that small numbers of common and widespread garden bird species will occur and possibly nest. Current proposals do not require the removal of any trees or areas of scrub. Therefore, it is considered that there is **negligible potential** for impacts to nesting birds.

5 MITIGATION AND RECOMMENDATIONS

5.1 Introduction

This section provides details of recommendations considered necessary in order to ensure that potential ecological constraints are considered fully. This includes recommendations for additional survey works and for mitigation, compensation or enhancement measures to avoid, lessen or offset the identified impacts to ecological features arising from the proposed works.

5.2 Mitigation

5.2.1 *Habitats and Vegetation*

The main area to be impacted by the development is the building and the surrounding areas of hardstanding. These are considered to be of low ecological value. Small amounts of amenity grassland and scrub will be lost as part of the development, but current proposals include soft landscaping of the new school site which will ecological enhance the site.

5.2.2 *Badger*

The impact assessment has concluded that there would be negligible impacts to badgers. However, if it becomes necessary to excavate larger areas to the extent that badgers could become trapped if they fall in (for example if investigating new spoil for prey), it is recommended that all excavations should be covered when not active to avoid badgers becoming trapped or a ramp (such as a scaffold board) installed if they are left overnight.

5.2.3 *Bats – Foraging and Commuting*

The impacts on foraging/commuting bats are considered to be negligible. However, soft landscaping of the site should include scattered trees, hedge and shrubs along the site boundary, where possible, to compensate for the loss of low value habitat for foraging/commuting bats.

5.2.4 *Birds*

The impact assessment identifies that impacts to nesting birds are likely to be negligible due to the retention of suitable nesting habitat.

However, if some minor pruning is needed, it is highly advisable to undertake this work outside the bird nesting season, which extends from March to September, although may extend longer depending on local conditions. If there is absolutely no alternative to doing the work during this period, then a thorough examination of the affected areas must be carried out before clearance starts. If occupied nests are present then work must stop in that area, a suitable (approximately 5m) stand-off maintained, and clearance can only recommenced once the nest becomes unoccupied of its own accord. The trees

which are to be coppiced should be first checked by a suitably experienced person before any works are undertaken.

5.3 Enhancements

Local and National Planning Policy encourages the incorporation of ecological enhancements into development proposals. Where opportunities exist, it is best practice to provide features which encourage greater biodiversity within development sites. The following is an example of some potential options for enhancing the site ecologically.

5.3.1 Vegetation Planting

It is recommended that any additional planting for the site utilises native, locally sourced species where possible, as these have a far higher ecological value than non-native species. Suitable species include:

- Pedunculate Oak (*Quercus robur*)
- Hawthorn (*Crataegus monogyna*)
- Beech (*Fagus sylvatica*)
- Hazel (*Corylus avellana*)
- Wild Cherry (*Prunus avium*)
- Field Maple (*Acer campestre*)

In addition, the incorporation of native herbaceous species (including within areas of new grassland), especially those providing nectar and pollen for insect pollinators, would benefit the ecological value of the site and local area.

5.3.2 Bat and Bird Boxes

The installation of bat boxes and bird nesting boxes onto new trees would be a simple and effective way of enhancing the site ecologically. Examples of suitable boxes are Schwegler 2F bat boxes (**Figure 9**) and Schwegler 1B nest boxes (**Figure 10**). It is advised that two bat boxes and four bird nesting boxes are installed on the new school site.



Figure 9: Schwegler
2F bat box



Figure 10: Schweglar 1B nest box

6 REFERENCES

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