



Preliminary Ecological Appraisal – Car Park Extension

Client: Lambrook School



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Registered Office
17 Station Road
Overton
RG25 3DU

07933941470
www.caecology.co.uk
Claire@caecology.co.uk

CA Ecology Ltd
Registered in
England
8994224

Quality management

Author	Name	Allyson Hawkins BA (Hons), MSc
	Title	Ecologist
	Signature	
Approver	Name	Claire Andrews BSc (Hons) MCIEEM
	Title	Director/Principal Ecologist
	Signature	
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Data contained within this report is considered most relevant during the season in which it was collected. For medium or high impact schemes or for multi-plot or phased developments, surveys should not be more than two years old.

Contents

1	SUMMARY	3
2	INTRODUCTION	4
3	METHODOLOGY	6
4	SURVEY FINDINGS	11
5	EVALUATION, POTENTIAL IMPACTS AND RECOMMENDATIONS	21
6	REFERENCES	27
7	APPENDIX 1: SURVEY RESULTS	29
8	APPENDIX 2: PLANNING POLICY GUIDANCE	30
9	APPENDIX 3: FIGURES	32

1 Summary

Proposal outline	It is intended to apply for planning permission to allow the extension of the existing gravel car park, providing an additional 62 parking bays.
Site description	The 0.305ha site comprises an existing gravel parking area with 48 parking bays set to the front of a regularly mown lawn, within the grounds of Lambrook School.
Surveys undertaken	A Preliminary Ecological Assessment including a UK habitat survey was undertaken on the 16 th of January 2024. This was supported by a desk study.
Results and ecological constraints	The site comprises a gravel parking area alongside an area of modified grassland with small areas of introduced shrub planting along the east boundary. No significant ecological constraints were identified for this site.
Recommendations	No further surveys or mitigation are required. Opportunities for biodiversity enhancement are given in Section 5.5.

2 Introduction

2.1 Background and development proposals

- 2.1.1 It is proposed to submit a planning application to allow the extension of the existing parking area in front of Westfield House, to provide an additional 62 parking bays.
- 2.1.2 The plans include the retention of a band of grass along the side and rear edges of the site, along with additional areas of introduced shrub planting. The proposals do not involve the removal of any trees.

2.2 Site information

- 2.2.1 The 0.305ha site comprises an existing gravel parking area with 48 parking bays set to the front of a regularly mown lawn, with three areas of shrub planting along the east edge. There are several mature trees in the lawn just outside of the development application boundary to the north. The site is bordered by a collection of residential staff buildings and associated parking to the east, a private fenced garden to the south, and a large parking area in front of Westfield House to the west. The site is on the east side of the school grounds near Westfield House, and is accessed from Winkfield Row (RG42 6LU, grid reference SU895712). A site plan is shown in Figure 1.
- 2.2.2 The site is located within the wider grounds of Lambrook School, an independent preparatory school for boys and girls set within a largely rural landscape in Winkfield Row, to the northeast of Bracknell.
- 2.2.3 The wider area around Lambrook School is primarily agricultural to the north, interspersed with woodland and villages, and more heavily developed to the south moving into Bracknell and Burleigh.

2.3 Purpose and scope

2.3.1 CA Ecology Ltd was contracted to conduct a Preliminary Ecological Appraisal (PEA) within the application site boundary. The purpose of a PEA is to identify the habitats present and to assess the potential for the site to be used by species that receive legal protection (at a UK and/or European level) and by species that are otherwise notable, including Species of Principal Importance or those of Conservation Concern. A desk study is undertaken to search for relevant biological records and to enable the site to be viewed in a wider ecological context. The key aims and objectives of the survey are to:

- Establish baseline conditions and determine the importance of any ecological features present, as far as is possible;
- Establish any requirements for more detailed or further surveys;
- Identify key constraints to the project and make recommendations for design options to avoid significant impact on important ecological features;
- Identify the mitigation and enhancement measures, following the mitigation hierarchy.
- Identify the opportunities offered by the project to deliver ecological enhancement.

2.3.2 The report provides an evaluation of the ecological features present and an assessment of the significance of any records. Potential constraints to the proposed development are identified and, where possible, recommendations for mitigation are made.

3 Methodology

3.1 Desk study

- 3.1.1 The purpose of the desk study is to identify the presence of designated or protected sites along with records of protected and notable species, providing a context for the site and helping to assess whether a given species is likely to occur on site if suitable habitat is present. In addition, it will identify any existing records from within the site itself.
- 3.1.2 The local environmental records centre is asked to provide details of sites designated for nature conservation, both statutory and non-statutory, along with records of protected and notable species for the site and a surrounding radius of 1km. In addition, a search is made of publicly available information that may be relevant to the site, including the Multi Agency Geographic Information for the Countryside (MAGIC) website which is reviewed for information on designated sites, along with protected habitats and records of past European Protected Species Licences (EPSL) within 2km of the site. The local action plan and any Local Biodiversity Action Plan (LBAP) are consulted for any species or habitats targeted for conservation effort in the area. In addition, Ordnance Survey maps and aerial imagery are used to identify water bodies on or within 500m of the site and to review the amount of suitable habitat surrounding the site along with the degree of connectivity.

3.2 Field survey

Habitats

- 3.2.1 During a UK Habitat Classification survey all areas within the application site boundary are investigated and the vegetation and habitat types are classified, recorded and mapped in accordance with standard methodology published in the UK Habitat Classification User Manual. This allows a rapid visual assessment of the extent and distribution of different habitat types. The hierarchal Primary Habitats of UKHab consists of five Levels and are supported by Secondary codes which are non-hierarchal and can be linked to each primary habitat. All habitats present on site were recorded on a UKHab map. Table 1 below shows the metadata from the survey.

Table 1: Protected and notable species assessment methodology

Metadata category	Metadata
Area surveyed	Area within the redline boundary
UKHab edition	UKHab – Professional Edition V2
Minimum Mapping unit used	25m ²
Level of UKHab Primary Hierarchy used	Level 4
List of secondary codes	All secondary codes
Additional attributes	N/A

Protected and notable species

3.2.2 The site is further assessed for its potential to support protected and notable species including those that receive protection under the following:

- Conservation of Habitats and Species Regulations 2017
- Wildlife and Countryside Act 1981 (as amended) and the amendments of the Countryside and Rights of Way (CROW) Act 2000
- Species listed under Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006 (Section 41 SPI)
- Protection of Badgers Act 1992
- species listed on the local Biodiversity Action Plan (LBAP)

3.2.3 The assessment is based on the presence of suitable habitat and key habitat features and connectivity to suitable habitat in the surrounding area, along with review of information provided by the desk study and consideration of the national distribution of the species. Field signs such as tracks, scat, paths and direct sightings are also recorded. However, no specific faunal surveys were undertaken. Table 2 sets out the species for which the site was assessed, along with the relevant guidelines.

Table 2: Protected and notable species assessment methodology

Species	Outline of methodology	Relevant guidelines
European protected species		
Bats	Assess the suitability of the habitat on site to support roosting bats and for commuting and foraging. Search the site for structures or trees that may have potential to support roosting bats.	Methodology in line with Bat Conservation Trust's <i>Bat Surveys for Professional Ecologists: Good Practice Guidelines</i> (Collins, 2016) and Natural England's <i>Bat Mitigation Guidelines</i> (Mitchell-Jones, 2004).

Species	Outline of methodology	Relevant guidelines
Great crested newts	<p>Assess the suitability of the site to support great crested newts (<i>Triturus cristatus</i>) in their terrestrial phase.</p> <p>Conduct a Habitat Suitability Index assessment (HSI) on any water body within site.</p> <p>Review of Ordnance Survey maps and aerial imagery to identify water bodies on or within 500m of the site.</p>	<p>Based on guidance in <i>Herpetofauna Workers' Manual</i> (Gent & Gibson, 2003) along with <i>Great Crested Newt Conservation Handbook</i> (Langton, Beckett & Foster, 2001) and "Evaluating the suitability of habitat for the great crested newt" (Oldham et al., 2000)</p>
Dormice	<p>Assess the suitability of habitat on site to support dormice (<i>Muscardinus avellanarius</i>).</p>	<p><i>Dormouse Conservation Handbook</i> (Bright, Morris & Mitchell-Jones, 2006)</p>
Otters	<p>Assess the suitability of the habitat on site to support otters (<i>Lutra lutra</i>).</p>	<p><i>Otters: surveys and mitigation for development projects</i> (Natural England & Defra, 2019) and <i>Ecology of the European Otter</i> (Chanin, 2003)</p>
Natterjack toads	<p>Assess the suitability of the site to support Natterjack toads (<i>Epidalea calamita</i>) if distribution and historical records suggest they may be present.</p>	<p><i>Natterjack Toad Conservation Handbook</i> (Beebee & Denton, 1996).</p>
Reptiles ¹	<p>Assess the habitats on site for their suitability to support reptiles.</p>	<p><i>Herpetofauna Workers' Manual</i> (Gent & Gibson, 2003).</p>
Protected plants	<p>Search site for suitable conditions/habitat or physical presence if distribution, habitat assessments and historical records suggest protected plants may be present. This includes the nine European Protected Species Plants Listed on Schedule 8 of the Wildlife and Countryside act along with NERC Act S41 priority species.</p>	<p><i>Plants: surveys and mitigation for development projects</i> (Natural England & Defra, 2015b).</p>
Protected invertebrates	<p>Search site for suitable conditions/habitat or physical presence if distribution, habitat assessments and historical records suggest protected invertebrates may be present. This includes European Protected Species of invertebrates along with Schedule 5 invertebrates and NERC Act S41 priority invertebrate species.</p>	<p><i>How invertebrates are protected</i> (Natural England & Defra, 2015a).</p>

¹ N.B. not all reptiles are European Protected Species, but common species are protected under UK law.

Species	Outline of methodology	Relevant guidelines
Other protected species		
Badgers	Assess the suitability of the habitat on site to support badgers (<i>Meles meles</i>).	<i>Surveying Badgers</i> (Harris, Cresswell & Jefferies, 1989).
Water voles	Assess the suitability of the habitat on site to support water voles (<i>Arvicola amphibius</i>).	<i>Water Vole Conservation Handbook</i> (Strachan & Moorhouse, 2006) and <i>Water Vole Mitigation Handbook</i> (Dean et al., 2016).
Birds	Assess the suitability of the habitats on site to support nesting birds. Where habitat assessments and historical records suggest Schedule 1 species may be present, assess the site and surrounding area for suitability for these species.	<i>Wild birds: surveys and mitigation for development projects</i> (Natural England & Defra, 2015c)
White-clawed crayfish	Assess the suitability of the site to support white-clawed crayfish (<i>Austropotamobius pallipes</i>) if distribution, habitat assessments and historical records suggest they may be present.	<i>Monitoring the White-Clawed Crayfish Austropotamobius pallipes</i> (Peay, 2003)
Other species	Assess the suitability of the site for other protected or notable species including invertebrates, birds and mammals. Including Section NERC Act Section 41 SPI.	<i>Guidelines for Preliminary Ecological Appraisal</i> (CIEEM, 2017)
Invasive species	Check for the presence of invasive plant species as listed on Schedule 9 of WCA 1981.	<i>Guidelines for Preliminary Ecological Appraisal</i> (CIEEM, 2017)

Surveyor competence

- 3.2.4 The survey was undertaken by Claire Andrews BSc (Hons) MCIEEM. Claire has over 19 years' experience as a professional ecologist conducting ecological appraisals. Claire also holds bat and great crested newt licences and has substantial experience of undertaking scoping surveys for protected species. Claire has undertaken over 60 structured hours of CPD in relation to UK Habitat survey and BNG in the past 2 years. Claire was assisted by ecologist Allyson Hawkins BA (Hons) MSc. Allyson has three years' experience of conducting bat surveys and is currently working toward applying for a level 1 bat licence. Allyson has undertaken 40 structured hours of CPD in relation UK Habitat survey and plant identification in the past 2 years and has shadowed on over 20 PEAs.

Limitations

- 3.2.5 The survey was carried out outside the optimal time of year when many plant species are dormant or not detectable. However, it was possible to record enough species to categorise the habitats on site and to evaluate their conditions, so this is also not considered a significant limitation.

4 Survey findings

4.1 Desk study

Designated Sites

4.1.1 There are no sites designated for their nature conservation value covering any part of or associated with the site. There are a number of designated sites with 1km of the site, and details of these are summarised in Table 3 below.

Table 3: Sites of Nature Conservation Value within 1km.

Site name	Designation	Distance and direction
Big Wood	Berkshire Local Wildlife Site (LWS)	320m SW
Paddock adjacent to The Cut	Berkshire Proposed LWS	345m N
Hayley Green Wood	Local Nature Reserve (LNR)	665m E
Adjacent to Chavey Down	Berkshire LWS	715m S
Stirrups Country House Field	Berkshire LWS	900m N
Chavey Down Pond	Berkshire LWS	980m S
Osman Close Woodland	Berkshire Proposed LWS	1km S

Priority habitats

4.1.2 There are several small parcels of priority habitat inventory deciduous woodland and traditional orchards within 1km, but none are covering or adjacent to the site. However, there are a number of trees surrounding the site that provide connectivity to many of these woodland areas. There are no other priority habitats shown on the inventory within 1km.

4.1.3 Protected and notable species

4.1.4 Table 4 provides a summary of records of protected and notable species as provided by the desk study. Significant records are shown on Figure 2.

Table 4: Records of protected and notable species

Species	Records
European protected species	
Bats	<p>There are 42 recent (within past 10 years) records of roosts within 2km of the site. The nearest roost is a brown long-eared (<i>Plecotus auritus</i>) day roost in a property 350m to the southwest. There are no records of maternity roosts.</p> <p>There have been nine European Protected Species Licences (EPSL) for bats granted within 2km of the site. The nearest is associated with a property 370m to the north and affected the resting place of common pipistrelles (<i>Pipistrellus pipistrellus</i>), soprano pipistrelles (<i>Pipistrellus pygmaeus</i>), and brown long-eared bats. The other licences pertained to common pipistrelle, soprano pipistrelle, brown long-eared bat, Daubenton's (<i>Myotis daubentonii</i>), and Natterer's (<i>Myotis nattereri</i>) day roosts.</p> <p>There are a total of 266 recent non-roost records of bats of 11 species, the majority are for bats in flight or injured bats brought into care, including records of noctules (<i>Nyctalus noctula</i>), soprano pipistrelles, and brown long-eared bats, which are Section 41 species of principal importance.</p>
Great crested newts	<p>There are no records of great crested newts within 1km of the site.</p> <p>However, one EPSL has been granted within 1km for this species. This record is associated with a property approximately 970m to the southeast. This record is shown on Figure 2.</p>
Dormice	<p>There are no records of dormice within 1km of the site.</p> <p>There are no granted EPSL within 1km for this species.</p>
Otters	<p>There is one otter record within 1km of the site which originated from Bracknell Road 712m to the west of the site.</p>
Natterjack toads	<p>The site is outside the known range of this species.</p>
Reptiles	<p>There are five reptile records within 1km, including two slow-worms (<i>Anguis fragilis</i>) and three grass snakes (<i>Natrix natrix</i>). The nearest record was a grass snake seen 445m to the southwest. These records are shown on Figure 2.</p>
Protected plants	<p>There are two protected plant species records for bluebells (<i>Hyacinthoides non-scripta</i>) within 1km of the site. There are also multiple records for plants listed as Nationally Scarce, on the IUCN Red List, or UK BAP priority species. However, no records derive from within the site.</p>
Protected invertebrates	<p>There are seven records of protected invertebrate species within 1km, including four stag beetle (<i>Lucanus cervus</i>) records. This species is protected under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) which prohibits the sale of this species and it is also a Section 41 species of principal importance under the NERC Act. There are</p>

Species	Records
	three small heath butterfly (<i>Coenonympha pamphilus</i>) records and this species is also a Section 41 species of principal importance. No records derive from within the site.
Other protected species	
Badgers	There are 16 records of Eurasian badgers within 1km of the site. The nearest living record is approximately 820m to the west of the site.
Water voles	There is one record of European water voles within 1km of the site, which originated from a location 698m to the northeast.
Birds	There are 229 bird records within 1km, including eight Schedule 1 species such as fieldfare (<i>Turdus pilaris</i>), redwing (<i>Turdus iliacus</i>) and red kite (<i>Milvus milvus</i>). There are also records for 15 species listed under Section 41 of the NERC act including bullfinch (<i>Pyrrhula pyrrhula</i>), cuckoo (<i>Cuculus canorus</i>), and turtle dove (<i>Streptopelia turtur</i>).
White-clawed crayfish	There are no records of white-clawed crayfish within 1km of the site.
Other species	Hedgehogs (<i>Erinaceus europaeus</i>) have been recorded within the 1km area surrounding the site. There are also records of common frogs (<i>Rana temporaria</i>), common toads (<i>Bufo bufo</i>), and smooth newts (<i>Lissotriton vulgaris</i>). No records derive from within the site.
Invasive species	There are records of invasive species including butterfly-bush (<i>Buddleja davidii</i>), rhododendron (<i>Rhododendron ponticum</i>), and Japanese knotweed (<i>Fallopia japonica</i>) within 1km of the site. However, no records derive from within the site.

4.2 Field survey: Habitats

- 4.2.1 The site was visited by Claire Andrews on the 16th of January 2024 and the habitats were recorded using UK Habitat survey methodology. Claire was assisted by Allyson Hawkins. All areas within the application site boundary site were accessed from ground level. See Figure 3 for a habitat plan showing key ecological features and plan of the site.
- 4.2.2 The site is relatively simple comprising a gravel parking area alongside an area of modified grassland with small areas of introduced shrub planting along the east boundary. Habitat types represented across the site are shown in Table 5 below.

Table 5: Habitat types recorded on site

Primary habitat	Code	Secondary code	Code
Modified grassland	g4	Mown	106
Artificial unvegetated, unsealed surface	u1c		
Suburban mosaic of developed and natural surface	u1d	Introduced shrub	847

- 4.2.3 Each habitat parcel present is described below with key dominant or notable species listed. Nomenclature for plant species lists follows Stace (2019). Scientific names for plants are not provided in the chapter text but are provided along with full species lists in [Appendix 1](#).

Modified grassland

- 4.2.4 There is a 0.181ha area of mown modified grassland which comprises just under two-thirds of the site area. This grassland appears to be heavily managed, likely including regular fertilizing, application of herbicides and re-seeding. Perennial ryegrass (*Lolium perenne*) is dominant along with occasional annual meadow-grass (*Poa annua*). There is a notable lack of forbs. Shown as g4 106 Figure 3.



Closely mown modified grassland (g4 106)

Built up areas and gardens

- 4.2.5 There is an existing gravel parking area totalling 0.115ha on the west side of the site, separated from the modified grassland by a line of timber sleepers. This is shown on Figure 3 as u1c.
- 4.2.6 Along the edge of the modified grassland on the east site boundary, there are three areas of well-maintained mature introduced shrub planting comprising a combined area of 0.009ha. These areas are shown on Figure 3 as u1d 847.



Gravel parking area (u1c)



Introduced shrub planting (u1d 847)

4.3 Field survey: Protected and notable species

Bats

- 4.3.1 There are no structures or trees on site, and therefore no roosting opportunities for bats within the site itself. The modified grassland and gravel on site provide limited foraging opportunities for bats.

Great crested newts

- 4.3.2 Great crested newts can be found across a range of habitat types such as grassland and woodland where invertebrate prey are abundant. In the spring they move to ponds and other water bodies to breed. There are 16 water bodies within 500m, and seven are within 250m. Details are given in Table 6 below. The only habitat on site which could be suitable for great crested newts is the modified grassland, however, this grassland is tightly mown, relatively disturbed, and lacks variation in vegetation structure and cover, providing little to no shelter. As such, this area of grassland does not provide suitable habitat for great crested newts.

Table 6: Details of waterbodies within 500m

Pond ID as shown on Figure 2	Description	Location in relation to site	Distance from site	Suitability
1	Drain	East	37m	Possibly suitable
2	Pond	South	70m	Possibly suitable
3	Drain	West	150m	Possibly suitable
4	Pond	Southwest	155m	Possibly suitable
5	Drain	West	186m	Possibly suitable
6	Pond	North	220m	Possibly suitable
7	Drain	North	226m	Possible suitable
8	Drain	Southwest	255m	Possibly suitable
9	Pond	South	258m	Possibly suitable
10	Pond	Northeast	360m	Possibly suitable
11	Pond	Southeast	380m	Possibly suitable
12	Pond	Southeast	387m	Possible suitable
13	Pond	North	400m	Possibly suitable
14	The Cut (River)	North	420m	Possibly suitable
15	Pond	Southwest	446m	Possibly suitable

Pond ID as shown on Figure 2	Description	Location in relation to site	Distance from site	Suitability
16	Pond	Northeast	484m	Possible suitable

Dormice

- 4.3.3 Key habitat for dormice includes deciduous woodland with a diverse understory that provides a continuum of arboreal food sources. Overgrown hedgerows, scrub and plantations are also often occupied where a suitable understory can be found. There is no habitat on site suitable to support this species.

Otters and water voles

- 4.3.4 Water voles are usually found within 2m of the water's edge along densely vegetated banks of slow flowing rivers, ditches, streams and marshes. Steep loamy or sandy banks with tall vegetation and high foliage diversity are also important (Harris & Yalden, 2008). Otters live along rivers, streams and wetland habitats with secure breeding and resting sites (Harris & Yalden, 2008). There is no habitat on site suitable to support either of these species.

Natterjack toads

- 4.3.5 In the UK, the natterjack toad is confined to coastal areas particularly sand dune systems, along with coastal grazing marshes and sandy heaths. There is no habitat on site suitable to support this species.

Reptiles

- 4.3.6 Reptiles tend to favour sunny, open, undisturbed sites including brownfield sites, allotments, embankments, south-facing banks, rough grassland and areas where there is a diverse structure. The only habitat on site which could be suitable for reptiles is the modified grassland, however, this grassland is tightly mown, relatively disturbed, and lacks variation in vegetation structure and cover, making it unsuitable for reptiles.

Plants

- 4.3.7 No protected plant species were recorded on site and there was no indication that the habitats on site are suitable to support protected plant species.

Invertebrates

- 4.3.8 No protected invertebrates were recorded on site and there was no indication from distribution, habitat assessments or historical records that would suggest they may be present.

Badgers

- 4.3.9 Optimal habitat for badgers is a mixture of deciduous woodland and earthworm-rich pasture (short grass). Setts can be located in a variety of situations including within scrub and hedgerows. There is no habitat suitable for setts on site and no evidence that badgers use the site for foraging.

Birds

- 4.3.10 The introduced shrub areas provide ideal habitat for nesting birds. Given the habitats present, these areas are most likely to be used by common and widespread species.

White-clawed crayfish

- 4.3.11 Crayfish are found in areas of hard, mineral-rich, calcareous waterbodies, including canals, streams, rivers, lakes, reservoirs and quarries. Crayfish are normally found in watercourses 0.75m – 1.25m deep in clean alkaline waters. Vertical banks and overhanging vegetation are important features determining crayfish abundance. There is no habitat on site suitable to support this species.

Other species

- 4.3.12 Consideration is given here to protected and notable species that are either listed of local interest or are recorded in the desk study.
- 4.3.13 There are records of hedgehogs in the surrounding area, however, there is no suitable foraging habitat or habitat that could provide shelter for this species on site.
- 4.3.14 There are also records of common frogs, common toads, and smooth newts in the surrounding area. The only habitat on site which could be suitable for these species is the modified grassland, however, this grassland is tightly mown, relatively disturbed, and lacks variation in vegetation structure and cover, making it unsuitable.

Invasive species

- 4.3.15 No invasive species were recorded on site.

5 Evaluation, potential impacts and recommendations

5.1 Statutory and non-statutory sites

- 5.1.1 The site falls within a SSSI Impact Risk Zone. However, the type of development does not fall into one of the categories that would be considered to have a potential impact on the SSSI.
- 5.1.2 Providing the proposed development will be confined to the existing site boundary and pollution will be controlled during construction works in accordance with Pollution prevention for businesses guidelines (Defra, 2019), and given the small scale and nature of the development and the distance to any protected sites it is not anticipated that development proposals will significantly affect any designated sites and will be compliant with the relevant legislation and policy with respect to designated sites therefore no further survey or mitigation will be necessary with respect to protected sites.

5.2 Habitats

- 5.2.1 There were no ecological constraints identified for any protected habitats on this site.

5.3 Protected and notable species

- 5.3.1 The likelihood of the site to support each species is assessed based on the results from the field survey and desk study including details of national distribution and a consideration of the connectivity to suitable surrounding habitats. The probability of the proposed development having an adverse impact on the species, if present, is also considered. In each case the relevant legislation is given for species known or likely to be present on site. The need for further survey and or mitigation is then assessed. A summary of the ecological impacts of the development is provided in Figure 4 an Ecological Constraints and Opportunities Plan (ECOP).

Bats

- 5.3.2 All bats and their roosts are fully protected under European and domestic legislation and policy. There are no predicted impacts of the proposed works on any roosts or potential roosts. Although poor-quality foraging habitat will be lost as a result of the conversion of the modified grassland to gravel, the proposals will not cause any fragmentation or isolation as no trees will be felled. Indirect impacts such as disturbance will be negligible as the works are limited in scale. Therefore, there are no known legal or planning policy constraints with respect to bats at this site.

Great crested newts

- 5.3.3 Great crested newts and their habitats are protected under European and domestic legislation. There is a single EPSL record for great crested newts within 1km of the site, located 970m to the southeast, and the network of hedgerows in the surrounding area provide connectivity to the site. There are also seven waterbodies within 250m of the site. However, the habitat on site is considered to have negligible potential to support great crested newts. No further surveys or mitigation for this species will be required.

Dormice

- 5.3.4 There is no suitable habitat for dormice on site. No further survey or mitigation will be required for this species.

Otters and water voles

- 5.3.5 There is no suitable habitat for otters or water voles on site. No further survey or mitigation will be required for these species.

Reptiles

- 5.3.6 All species of native reptiles are protected under the Wildlife and Countryside Act 1981 (as amended) from intentional and reckless killing and injury. There are nearby records of slow-worms and grass snakes in the 1km area surrounding the site. However, the habitat on site is considered to have negligible potential to support reptiles. No further surveys or mitigation will be required for these species.

Plants

- 5.3.7 No further survey or mitigation will be required for these species.

Terrestrial invertebrates

- 5.3.8 Although there were records of stag beetles and small heath butterflies in the desk study, there is no habitat on site suitable to support either of these species. No further survey or mitigation will be required for these species.

Badgers

- 5.3.9 As there is no evidence of any setts or badger activity on site no further survey for this species will be necessary.

Birds

- 5.3.10 It is likely that nesting birds will be present within the introduced shrub areas. These areas are set to remain under the current proposals. However, if the proposals are modified to include removal of the introduced shrubs, this should be undertaken outside of the breeding bird season (i.e., works should be conducted from the end of August to February, inclusive). Under the Wildlife and Countryside Act 1981 (as amended), all birds are protected from killing and injury and their nests and eggs are protected from damage or destruction while that nest is in use or being built.
- 5.3.11 If site clearance needs to occur within the breeding bird season, a check for the presence of birds and their nests should be undertaken by a suitably qualified ecologist immediately before vegetation removal. If an active nest is discovered, then work in that area should cease until the young have fledged or the nest is no longer active.

White-clawed crayfish

- 5.3.12 There is no suitable habitat for crayfish on site and no records of crayfish within 1km of the site. No further survey or mitigation will be required for these species.

Other species

- 5.3.13 There is no suitable habitat for hedgehogs or amphibians recorded in the 1km area surrounding the site. No further survey or mitigation will be required for these species.

Invasive species

- 5.3.14 No further survey or mitigation is required for invasive species.

5.4 Biodiversity net gain

- 5.4.1 For major developments biodiversity net gain is now mandatory in England, under Schedule 7A of the Town and Country Planning Act 1990 (as inserted by Schedule 14 of the Environment Act 2021). However, small developments are exempt until the 2 April 2024.
- 5.4.2 The current proposal can be classified as a small development as the development area is less than 1ha, and it does not fall into any of the categories for major development as defined in article 2(1) of the Town and Country Planning (Development Management Procedure) (England) Order 2015.

5.5 Biodiversity enhancements

- 5.5.1 In line with the National Planning Policy Framework (NPPF) and local planning policy (see [Appendix 2](#)), measures to protect and enhance the site for biodiversity should be incorporated. The recommendations are based on information in this report along with information from the desk study. Wherever relevant, enhancement suggestions are linked to goals and targets contained within local planning policy documents, including targets for the restoration of and re-creation of priority habitats and the recovery of priority species populations.
- 5.5.2 Measures that could be considered for inclusion in the final scheme are given in Table 7 below and are shown on Figure 4.

Table 7: Biodiversity enhancement measures suitable for inclusion on site

Item	Ease (+++++ easiest)	Effectiveness (+++++ most effective)	Species most likely to benefit
<p>Create a nectar border – in a sunny location plant plants valuable for bees, butterflies and other pollinators in groups of three or five. Choose plants that have single, not double flowers; herbs and cottage garden perennials are best.</p> <p>Plant things that flower from the early spring right through until the first frosts.</p> <p>Plants that are particularly useful for pollinators include: Bush vetch, <i>Vicia sepium</i></p> <p>Catmint, <i>Nepeta racemosa</i> and related species</p> <p>Plume thistle, <i>Cirsium rivulare</i> ‘Atropurpureum’</p> <p>Comfrey, <i>Symphytum officinale</i>, ‘Bocking 14’</p>			<p>Insects</p> <p>Birds</p>

Item	Ease (+++++ easiest)	Effectiveness (+++++ most effective)	Species most likely to benefit
<p><i>Dahlia</i> ‘Bishop of Llandaff’</p> <p>Field scabious, <i>Knautia arvensis</i></p> <p>Meadow cranesbill, <i>Geranium pratense</i></p> <p>Giant hyssop, <i>Agastache foeniculum</i>, ‘Blackladder,’ ‘Blue Fortune’ and ‘Blue Boa’</p> <p>Lavender, <i>Lanvendula x intermedia</i>, ‘Gros bleu’</p> <p>Lungwort, <i>Pulmonaria</i>, ‘Blue Ensign’ or ‘Trevi Fountain’</p> <p>Marjoram, <i>Origanum vulgare</i></p> <p>Pussy willow, <i>Salix caprea</i></p> <p>Sicilian honey garlic, <i>Allium siculum</i></p> <p>Sneezewort, <i>Helenium</i>, ‘Moerheim Beauty’</p> <p>Thyme, <i>Thymus polytrichus</i> subsp. <i>Britannicus</i></p> <p>Viper’s bugloss, <i>Echium vulgare</i>.</p> <p>Plant list taken from Goulson, D. 2019.</p>			
Create an area of wildflowers. Base seed selection on soil type and purchase from a reputable seed trader that specialises in native plants (e.g. Emorsgate, Landlife or Habitat Aid).	++	+++++	Hedgehogs Insects Birds Bats Reptiles
Create areas of meadow or long grass. If a meadow area is not possible, simply allowing patches of lawn to grow longer provides cover for small mammals, food for caterpillars etc.	+++++	++++	Hedgehogs Harvest mice Insects Birds Bats Polecat Shrews
<p>Adopt good horticultural and sustainable practices:</p> <p>Use synthetic pesticides only as a last resort</p> <p>Use peat free compost</p> <p>Create your own compost</p> <p>Consider water use carefully</p>	+++++	+++++	All

5.5.3 For maximum effect combine one or more of the above features.

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7 Appendix 1: Survey results

UK habitat survey, plant species lists

[Page navigation – Back to text](#)

Modified grassland, mown (g4): g4 106

Common Name	Species Name	DAFOR
Perennial rye-grass	<i>Lolium perenne</i>	D
Annual meadow-grass	<i>Poa annua</i>	O

Suburban mosaic of developed land, introduced shrub (u1d): u1d 847

Common Name	Species Name	DAFOR
Mahonia	<i>Mahonia</i> sp.	
Choisya	<i>Choisya</i> sp.	
Weigela	<i>Weigela</i> sp.	
Ivy	<i>Hedera helix</i>	

Scale used to quantify relative abundance

Abundance		% Cover
D	Dominant	>75%
A	Abundant	51 – 75%
F	Frequent	26 – 50%
O	Occasional	11 – 25%
R	Rare	1 – 10%

After Wheater (2011)

8 Appendix 2: Planning policy guidance

8.1 National planning policy

[Page navigation – Back to text.](#)

8.1.1 The National Planning Policy Framework (NPPF) and the supporting ODPM circular 06/2005 provides the basis for making planning decisions with respect to conserving and enhancing the natural environment. It specifically sets out how the planning system should minimise impacts on biodiversity and provide net gains, including establishing coherent ecological networks. In addition to confirming that the presence of a protected species is a material consideration in the making of planning decisions, it sets out a list of principals, which local planning authorities should follow when determining planning applications. These include:

- ‘-if significant harm resulting from a development cannot be avoided...adequately mitigated, or as a last resort compensated for, then planning permission should be refused.’
- ‘...opportunities to improve biodiversity in and around developments should be integrated as part of their design, especially where this can secure measurable net gains for biodiversity or enhance public access to nature where this is appropriate.’
- The circular goes on to make it clear that Circular 06/05: Biodiversity and Geological Conservation - Statutory Obligations and Their Impact within the Planning System states it is essential that the presence or otherwise of protected species and the extent that they may be affected by the proposed development, is established before planning permission is granted.

8.2 Local planning policy

8.2.1 In order to conserve and enhance the environmental capacity within the Borough, Policy LP36 in the Bracknell Forest Local Plan states that:

Development in the Borough should achieve no net loss and wherever possible a net gain of biodiversity.

Development proposals will be expected to:

- Provide an adequate level of suitable ecological survey information and assessment to establish the extent of a potential impact where there are grounds to believe that ancient woodland, veteran trees, inland freshwaters(42), protected species, priority species or priority habitat may be affected during and after development. This information shall be provided prior to the determination of an application;*
- Retain, protect and buffer ecological features (including inland freshwaters) and provide for the appropriate management of those features;*
- Where appropriate, enhance biodiversity by designing-in provisions for wildlife; and*

- iv. *Avoid the net loss or fragmentation of habitats and support the creation of coherent ecological networks through both urban and rural areas such as improvements to Biodiversity Opportunity Areas.*

8.3 Biodiversity Action Plans and Biodiversity Opportunity Areas

- 8.3.1 The United Kingdom Biodiversity Action Plan (UK BAP) is a national strategy drawn up by UK Government to conserve threatened native species and habitats. The UK post-2010 Biodiversity Framework 2012 (Defra, 2012) means that the listing of species and habitats on the S41 list and its associated requirements under the NERC Act supersedes the UK BAP. However, the UK BAP action plans remain relevant to conservation aims and objectives. The UK BAP is supported by a series of Local Biodiversity Action Plans (LBAPs) which translate the targets identified in the UK BAP into targets for species and habitats appropriate to the local area. Each LBAP identifies those habitats and species considered most important in that area, commonly an LBAP will identify a number of habitats and species for which “action plans” have been prepared. In the Southeast region, the Biodiversity Opportunity Areas will be the focus for delivery of UK BAP habitats targets.
- 8.3.2 In 2009 The Southeast Biodiversity Forum has identified Biodiversity Opportunity Areas (BOAs), which represent a targeted landscape-scale approach to conserving biodiversity and the basis for an ecological network. BOAs identify where the greatest opportunities for habitat creation and restoration lie, enabling the efficient focusing of resources to where they will have the greatest positive conservation impact.

9 Appendix 3: Figures

Figure 1 – Location Plan

Figure 2 – Notable Desk Study Records

Figure 3 – UK Habitat Survey Map

Figure 4 – Environmental Constraints and Opportunities Plan (ECOP)

NB figures attached separately.