

Preliminary Ecological Appraisal

SITE LOCATION Land at Junction of Harts Lane & Winchester Rd, Burghclere PREPARED FOR 8th Earl of Carnarvon

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1. Introduction/Background

1.1 Author

- 1.1.1 The Principal Author of this report is Matt Wall *BSc (Hons), MSc* (Senior Ecologist). The Principal Author has over seven years of professional experience in ecological consultancy and has worked on projects ranging from large aggregate extraction proposals to commercial and residential sites throughout the country.
- 1.1.2 The Principal Author is a capable botanist and attained Level 4 Field Identification Skills Certificate (National Vegetation Classification level) from the Botanical Society of Britain and Ireland, and currently holds Class 1 licences from Natural England for great crested newts (*Triturus cristatus*) and bats (*Chiroptera* spp.). He has worked on many mitigation schemes and has successfully delivered many ecological projects throughout the UK. The Principal Author is a member of the Chartered Institute of Ecology and Environmental Management (CIEEM) and is therefore subject to CIEEM's Code of Professional Conduct.
- 1.1.3 The detail provided within this report is a true and accurate reflection of both the Site conditions at the time of the survey, as well as the professional opinion of the Principal Author.

1.2 Purpose and Brief

- 1.2.1 Savills commissioned Wharton Natural Infrastructure Consultants Ltd ('WNIC') on behalf of the 8th Earl of Carnarvon to undertake a Preliminary Ecological Appraisal ('PEA') at land at the junction of Harts Ln and Winchester Rd, Burghclere (see land within the red line boundary on Appendices 1 and 2), known herein as 'the Site', which is centred approximately at OS National Grid Reference SU 46132 60714.
- 1.2.2 The purpose of the PEA (as per CIEEM guidance (CIEEM, 2018)) is to inform the design of the Proposed Development. The key objectives of a PEA are to:
 - Identify the likely ecological constraints associated with a project
 - Identify any mitigation measures likely to be required, following the '*Mitigation Hierarchy*'
 - Identify any additional surveys that may be required to inform an Ecological Impact Assessment (EcIA)
 - Identify the opportunities offered by a project to deliver ecological enhancement

1.3 Description of Site and Local Area

- 1.3.1 The Site currently supports an unmanaged area of grassland and scrub with boundary hedgerows to the east, west and south, and a line of semi-mature trees to the north.
- 1.3.2 The Site is bordered immediately to the north by a car park and office buildings, to the east and southeast by Harts Ln, and to the west and southwest by Winchester Rd.
- 1.3.3 Land use in the local area comprises small residential areas, along with commercial properties and agricultural fields. Large areas of woodland are also present to the north, west and northeast.
- 1.3.4 The Site does not form a significant contribution to wildlife corridors in the local area. The wooded corridor of the A34 does provide good commuting habitat through the wider landscape, linking with larger areas of woodland.

1.4 Development Proposals

1.4.1 The Proposed Development is to build 18 plots, ranging from 1 – 4 bedrooms houses. The proposal includes two access roads off Harts Lane (one already existing), a community hub and a local equipped area for play (LEAP)..

2. Planning Policy & Legislation

2.1 Legislation

2.1.1 National and international legislation considered in respect of the Proposed Development is summarised below in Table 1.

Table 1. Legislation Considered for this Assessment

Legislation*	Notes	
The Conservation of Habitats and Species Regulations 2017 (HMSO, 2017)	Afford protection to certain species and habitats listed on the relevant schedules	
The Wildlife and Countryside Act 1981 (as amended) (HMSO, 1981)		
The Natural Environment and Rural Communities (NERC) Act 2006 (HMSO, 2006)	Places a duty on planning authorities to consider priority habitats and species in planning applications.	

*Full legislative text should be referred to as table text is a summary only

2.2 Planning Policy

- 2.2.1 The National Planning Policy Framework (NPPF) (Department for Communities and Local Goverment, 2019) and Basingstoke and Deane Local Plan (2011 to 2029) have both been considered in respect of the Proposed Development. In particular Paragraphs 170, 174 and 175 of the NPPF, and Policies EM3, EM4 and EM5 of the Basingstoke and Deane Local Plan (2011 to 2029).
- 2.2.2 The Landscape, Biodiversity and Trees Supplementary Planning Document (Basingstoke and Deane BC, 2018) has also been consulted in relation to the Proposed Development.
- 2.2.3 For exact wording, policy excerpts can be found at Appendix 3.

3. Methods & Methodology

3.1 Desk Study & Consultation

- 3.1.1 A desk study was carried out to gather background ecological data.
- 3.1.2 Biological records have been obtained from Hampshire Biodiversity Information Centre (HBIC) for statutory and non-statutory wildlife sites and protected and notable species within 1km of the centre of the Site.
- 3.1.3 DEFRA's Multi-Agency Geographic Information for the Countryside (MAGIC) map (DEFRA, 2019) was consulted for information on European Protected Species (EPS) licences and priority habitats at the Site, and within 500m of the Site. Please note that EPS licence data is correct as of 23rd August 2018 (DEFRA, 2019).
- 3.1.4 Aerial imagery (Google, 2019) has been consulted to assess connectivity and the extent of green space immediately adjacent to the Site and within the local area.
- 3.1.5 No previous ecological reports have been found via the planning portal.



3.2 Field Survey

- 3.2.1 The field survey (comprising the methods detailed below) was carried out on 14th August 2019 by Matt Wall *BSc (Hons), MSc, ACIEEM* (Senior Ecologist), who currently holds a Class 1 licence from Natural England for great crested newts (*Triturus cristatus*) and Class 2 licence for bats (*Chiroptera* spp.).
- 3.2.2 Weather conditions at the time of survey were sunny and dry. No weather conditions acted as a limitation to the survey.

3.3 Extended Phase 1 Habitat Survey

- 3.3.1 An Extended Phase 1 Habitat Survey was carried out at the Site, this is an extension of the basic survey methodology (JNCC, 2010) and provides further details in relation to the presence of notable or protected habitats and evidence of/suitability for protected/notable species, specifically:
 - Badger (*Meles meles*)
 - Bats (Chiroptera spp.)
 - Great crested newt (Triturus cristatus) and other amphibians
 - Hedgehog (*Erinaceus europaeus*)
 - Invertebrates
 - Hazel dormouse (*Muscardinus avellanarius*)
 - Reptiles
 - Otter (*Lutra lutra*)
 - Water vole (Arvicola amphibius)
 - White clawed crayfish (Austropotamobius pallipes)
 - Wild birds
 - Protected plants
- 3.3.2 The records from the local biological records centre have been reviewed for information on other species/groups not specifically listed above.
- 3.3.3 Habitats at the Site were identified and mapped; they are illustrated on the Extended Phase 1 Habitat Plan in Appendix 2. Where appropriate, target notes have been used to identify areas on the plan that require further detail, and this has been provided in the report.
- 3.3.4 Plant names (common and scientific) within this report follow 'New Flora of the British Isles' (Stace, 2010).



3.4 Preliminary Roost Assessment ('PRA')

- 3.4.1 The PRA and subsequent assessment of suitability of trees at the Site for roosting bats followed current best practice guidance (Collins, 2016).
- 3.4.2 The trees at the Site were inspected by a Class 2 bat licence holder for field evidence of bats including: droppings, individual bats (live or dead), feeding remains, scratch marks, urine staining, grease marks and clean cobweb-free gaps around potential entrance points and roost sites. Trees were inspected at ground level only and with binoculars where required.
- 3.4.3 Trees at the Site were classified according to the criteria set out in Table 2 below in accordance with standard guidance (Collins, 2016). With respect to roost type, the assessments in this report are made irrespective of species conservation status, which is established after presence is confirmed.

Suitability	Description of Roosting Habitats
Confirmed Presence	Presence of roosting bats within the structure/tree confirmed by the survey
High	A structure/tree 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.
Moderate	A structure/tree 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.
Low	A structure/tree with one or more potential roost sites that could be used by individual bats opportunistically. However, these potential roost sites do not provide enough space, shelter, protection, appropriate conditions and/or suitable surrounding habitat to be used on a regular basis or by a larger number of bats (i.e. unlikely to be suitable for maternity or hibernation).
Negligible	Structures/trees that appear unsuitable for roosting bats due to a clear lack of roosting spaces such as voids, small crevices etc. and/or absence of suitable access points such as lifted tiles, gaps in soffits, cracked limbs etc.

Table 2. Bat Roost Suitability Descriptions (taken from Collins, 2016)

3.5 Limitations and Caveats

3.5.1 No limitations were observed at the time of the survey. The entire Site was accessible to survey in detail.



3.6 Evaluation of Ecological Features

- 3.6.1 The potential of the Site to support legally protected or notable species was determined through a review of field observations and desk study information.
- 3.6.2 The likelihood of the occurrence of any protected and/or invasive species is ranked as follows and relies on habitat suitability for the species at the Site as well as an evaluation, in parallel, of desk study data and published guidance/literature which is referenced accordingly:
 - **Negligible** while presence cannot be absolutely discounted, the Site supports very limited or poor-quality habitat for a species or species group. There may be no local records of the species/species group from the data search, and the surrounding habitats are considered unlikely to support wider populations of a species/species group. The Site may also be outside or peripheral to the known natural range of a species/species group;
 - Low habitats within the Site are of poor to moderate quality for a given species/species group. There are few or no returns from the data search, but presence cannot be discounted based on the national distribution of the species/species group, the nature of surrounding habitats, habitat fragmentation or recent on-site disturbance, etc.
 - Medium habitats within the Site are of moderate quality providing some opportunities for a given species/species group. The desk study reveals historic local occurrence of the species/species group and the Site is within the national distribution and with suitable surrounding habitat. Factors limiting the likelihood of occurrence may include small habitat area, habitat isolation, and/or disturbance
 - High habitats within the Site are of high quality for a given species/species group. The desk study provides evidence of local occurrence. The Site may be within/peripheral to a national or regional stronghold and/or has good quality surrounding habitat and good connectivity
 - **Confirmed Presence** presence confirmed from the most recent site survey or by recent, confirmed records.
- 3.6.3 The CIEEM EcIA guidelines (CIEEM, 2018) state that "the importance of an ecological feature should be considered within a defined geographical context. It is recommended that the following frame of reference be used, or adapted to suit local circumstances:
 - International and European;
 - National
 - Regional
 - Metropolitan, County, vice-county or local authority-wide area
 - Local"



4. Ecological Baseline and Assessment

4.1 Statutory and Non-Statutory Wildlife Sites

Statutory Wildlife Sites

- 4.1.1 One statutory wildlife site is present within 1km of the Site and this is Highclere Park Site of Special Scientific Interest (SSSI) which is located c.395m south-southwest of the Site at its closest point.
- 4.1.2 Highclere Park comprises open parkland, pasture woodland, lakes and unimproved grassland. The SSSI supports many regionally uncommon plants and a diverse invertebrate assemblage The SSSI citation for Highclere Park SSSI (Natural England, 1992) is provided at Appendix 4.
- 4.1.3 Given the small number of houses proposed at the Site (18) and the average UK household size in 2018 of 2.4 people (based on the most recent dataset (ONS, 2018) the Proposed Development will result in an increase of approximately 43 people. Given the low number of people likely to inhabit the Proposed Development, it is unlikely that the Proposed Development will result in a significant adverse effect as a result of increased recreational pressure to Highclere Park SSSI. It must also be noted that no other pathways for significant effects to occur have been identified.
- 4.1.4 No significant adverse effects are likely to arise to Highclere Park SSSI as a direct or indirect result of the Proposed Development.

Non-Statutory Wildlife Sites

- 4.1.5 Based on biological records information (HBIC, 2019) and other online information (Hampshire County Council, 2017) no non-statutory wildlife sites are present at or adjacent to the Site. Nonstatutory wildlife sites are present within 1km of the Site, however these are a sufficient distance from the Site that adverse effects to the non-statutory sites as a result of the Proposed Development are unlikely.
- 4.1.6 No significant adverse effects to non-statutory wildlife sites are anticipated as a result of the Proposed Development.

4.2 Habitats - Assessment

4.2.1 A plan of the habitats detailed below is provided at Appendix 2.

Scrub

- 4.2.2 Dense and scattered scrub are present at the Site and this habitat is dominated by bramble (*Rubus fruticosus* agg.). Dense scrub is present adjacent to the hedgerow boundaries where it is encroaching into the Site and forming scattered scrub throughout the Site.
- 4.2.3 The scrub habitat is not ecologically important at or above the local level.

Scattered Semi-Mature Trees

- 4.2.4 Several semi-mature trees are present along the northern boundary of the Site adjacent to the car park and office buildings. Dominant species present include pedunculate oak (*Quercus robur*), ash (*Fraxinus excelsior*) and sycamore (*Acer pseudoplatanus*) with occasional hazel (*Corylus avellana*), silver birch (*Betula pendula*), wild cherry (*Prunus avium*). Younger self-set trees are present in the shrub layer of these trees as well as hawthorn (*Crataegus monogyna*).
- 4.2.5 The semi-mature trees along the northern boundary of the Site are not considered to be ecologically important, with the exception of mature oak trees which are important at the Parish level due to their size and maturity.
- 4.2.6 Only one tree along the northern boundary (a small silver birch) will be felled to facilitate the



Proposed Development. The remainder of the semi-mature trees along this boundary will be retained with appropriate pruning works to ensure longevity.

Intact Species-Poor Hedgerow with Trees

- 4.2.7 One species-poor unmanaged hedgerow with trees is present bordering the eastern, southern and western boundaries of the Site. The dominant species within the hedgerow is hawthorn, though ash and blackthorn are also present. The western extent of the hedgerow supports more species than the southern and eastern extents, though it is still considered to be species-poor. Other species present within the hedgerow include sycamore, pedunculate oak and field maple (*Acer campestre*). The hedgerow at the Site is a priority habitat (HMSO, 2006).
- 4.2.8 The hedgerow at the Site is ecologically important at the Parish level, the majority of the hedgerow will be retained and enhanced through the Proposed Development, with the exception of a small section of the eastern extent to allow access, requiring removal of a small number of trees within the hedgerow also. The impacts of these removals are not considered to be significant but must be compensated for within the landscaping scheme for the Proposed Development.
- 4.2.9 The small section requiring removal for access purposes will be compensated within supplementary planting and additional tree planting throughout the wider Site.
- 4.2.10 There is clear opportunity within the Proposed Development to appropriately manage the hedgerow for biodiversity value, including supplementary planting of the understorey.

Poor Semi-Improved Grassland

- 4.2.11 Pockets of poor semi-improved grassland are present at the Site, with the largest area of the habitat being present in the centre of the Site (peripheral areas of grassland have been lost due to scrub encroachment from the boundaries).
- 4.2.12 The dominant species within the grassland is upright brome (*Bromus erectus*) which has taken over the sward due to a lack of appropriate management. Upright brome can be a vigorous species if left unchecked, and can out compete smaller forbs where this has been allowed to occur; this is the case in the majority of the Site.
- 4.2.13 Species indicative of calcareous soils were observed at the Site, which given the slightly calcareous nature of soils in the area (British Geological Society, 2019) is unsurprising. Species present include upright brome, wild basil (*Clinopodium vulgare*), blue fleabane (*Erigeron acris*), wild carrot (*Daucus carota*) and agrimony (*Agrimonia eupatoria*); these species were only occasional in the sward due to the dominance of upright brome. Whilst calcareous species were present, the neglect in management has significantly reduced the botanical diversity at the Site and allowed scrub and vigorous grass species to dominate, thus significantly reducing botanical diversity.
- 4.2.14 Other species present within the grassland included upright hedge parsley (*Torilis japonica*), tufted vetch (*Vicia cracca*), creeping thistle (*Cirsium arvense*), hawthorn and selfheal (*Prunella vulgaris*).
- 4.2.15 The poor semi-improved grassland is of low ecological importance up to the Parish level, given the significant succession to scrub due to lack of management it is anticipated that the grassland will further continue to degrade in the future.
- 4.2.16 The Proposed Development provides opportunity particularly along the southern boundary to remove encroaching scrub and to create a small area of species-rich grassland that can be managed appropriately through implementation of a management plan. Whilst this habitat is unlikely to be of importance above the Parish level, it will contribute to increasing botanical

diversity at the Site.

4.3 Species Groups

Note on Biological Records

4.3.1 Biological records older than 25 years have been excluded from this assessment as these records are unlikely to be relevant to the Proposed Development due to their age.

Scoping of Species/Species Groups for Consideration within this Report

- 4.3.2 The following species/species groups have been scoped out of further assessment within this document; reasons for scoping out the species/species group is also detailed.
 - Protected Plants The vegetative habitats at the Site are indicative of neglect in management for some time. No evidence of protected or notable plant species was observed during the extended phase 1 habitat survey. Records of protected plants were provided by the Botanical Society of Britain and Ireland's vascular plant database for Hampshire via the biological records centre (HBIC, 2019), but no plants present at or adjacent to the Site.
 - Hazel Dormouse No suitable habitat at or adjacent to the Site will be adversely affected by the Proposed Development. No biological The Site is relatively isolated from the wider area by main roads and no biological records of hazel dormouse within 1km of the Site were provided by the Hampshire Mammal Group via the local biological records centre (HBIC, 2019)
 - Otter and water vole No adverse effects to water vole or otter are anticipated as a result of the Proposed Development as no suitable habitat is present at or adjacent to the Site. No records of either species were provided by the Hampshire Mammal Group via the local biological records centre (HBIC, 2019)
 - Badger No badger setts were observed at the Site, and no evidence of badger (i.e. latrines) was found at the Site. No records of badger at or immediately adjacent to the Site were provided by the Hampshire Mammal Group via the local biological records centre (HBIC, 2019)
 - White-clawed crayfish No suitable habitat for white-clawed crayfish is present at or adjacent to the Site. No records of either species were provided by the Hampshire and Isle of Wight Wildlife Trust via the local biological records centre (HBIC, 2019).

Bats – Biological Records

4.3.3 Records of serotine (*Eptesicus serotinus*), brown long-eared bat (*Plecotus auritus*) and common pipistrelle (*Pipistrellus pipistrellus*) were provided by Hampshire Bat Group via the local records centre (HBIC, 2019). It is not clear from the records whether these were auditory, visual or roost records.

Bats – Roosting Habitat

Trees

4.3.4 A section of the main stem has failed at c.8m and the buckled fibres of this area may support suitable roosting habitat for bats, though this suitability is considered to be low given the nature of the failure and feature. It is understood that this tree will be retained as part of the Proposed Development and no arboricultural works have been recommended in respect of the tree. As such, no impacts to suitable roosting habitat are likely and no further surveys are considered necessary.



4.3.5 No other trees at the Site supported roosting potential for bats.

Bats – Foraging and Commuting Habitat

- 4.3.6 The Site supports very suitable foraging habitat via the grassland, trees and scrub habitat; however given the presence of significant areas of woodland and grassland in the wider area it is highly unlikely that the Site provides a significant foraging resource for bats in the local area and no further surveys for foraging bats are considered to be necessary in respect of the Proposed Development.
- 4.3.7 The scattered trees and hedgerows may provide some cover for commuting bats but are unlikely to contribute to any important corridors in the local area given their lack of connection to other suitable commuting habitats. No further surveys at the Site are required for foraging or commuting bats.
- 4.3.8 Lighting installed as part of the Proposed Development must avoid impact to the mature trees and hedgerows at the boundaries of the Site, in accordance with current guidelines (ILP & BCT, 2018) in order to avoid a reduction in the use of these areas by commuting bats.

Bats – Enhancements

- 4.3.9 The Proposed Development provides ample opportunities to enhance the Site for roosting bats. One integrated bat brick will be installed within 9 buildings at the Site (50%) to provide suitable roosting space for bats within the Proposed Development, which will significantly enhance the availability of suitable roosting space at the Site.
- 4.3.10 The botanical enhancements at the Site in respect of proposed tree planting and grassland creation will indirectly benefit bats via provision of more diverse and abundant invertebrate prey items, as well as stronger linear features for commuting purposes.
- 4.3.11 Overall the Proposed Development has the potential to result in a positive effect to roosting bats (not significant) at the Parish level.

Nesting Birds

- 4.3.12 Many records of bird species within the local area were provided by Hampshire Ornithological Society via the local records centre (HBIC, 2019). Records included yellowhammer (*Emberiza citrinella*), hobby (*Falco subbuteo*), bullfinch (*Pyryhula pyrrhula*), redwing (*Turdus iliacus*) and Mistle thrush (*Turdus viscivorus*).
- 4.3.13 Suitable habitat for nesting birds that may be affected by the Proposed Development includes trees, hedgerow and dense scrub. Where these are proposed for removal there is potential to result in a breach of wildlife legislation in relation to nesting birds (HMSO, 1981).
- 4.3.14 The legislative breach may be avoided by timing the removal of vegetation outside of nesting season (generally March to August inclusive) or if vegetation is to be removed inside nesting season it should be checked for the presence of nesting birds by an ecologist prior to removal, and any nests retained until chicks have fledged and no further nesting is observed.
- 4.3.15 The Proposed Development provides the opportunity to include artificial nesting habitat through provision of bird nest boxes. These should be installed on retained trees at the Site in a north-facing direction to avoid direct sunlight.
- 4.3.16 The planting of trees at the Site will also provide additional nesting habitat for birds.
- 4.3.17 No significant adverse effects to birds are anticipated as a result of the Proposed Development.



Great Crested Newt

- 4.3.18 No records of great crested newt were provided by Hampshire Amphibian and Reptile Recording Network via the local records centre (HBIC, 2019).
- 4.3.19 A MAGIC map (DEFRA, 2019) search for ponds within 500m of the Site revealed the presence of two ponds within 500m of the Site, with the closest pond being c.230m east of the Site and the other being c.470m south-southeast of the Site.
- 4.3.20 No ponds were accessible to undertake a habitat suitability assessment due to being within private ownership.
- 4.3.21 Given the presence of residential housing to the east of the Site (between the pond and the Site), and the presence of suitable terrestrial habitat immediately adjacent to that pond (woodland), it is considered highly unlikely that great crested newt will migrate from this pond to the Site if present. The risk to great crested newt (if present in this pond) in relation to the Proposed Development is considered to be low.
- 4.3.22 The pond south-southeast of the Site is also surrounded by highly suitable terrestrial habitat for great crested newts, and their migration through sub-optimal habitat to the Site is unlikely.
- 4.3.23 On the basis of negligible risk to terrestrial great crested newt in relation to the Proposed Development, no further survey efforts for great crested newt is therefore necessary.

Reptiles

- 4.3.24 The Site is considered to be suitable to support reptiles given the mosaic nature of the scrub and grassland habitat, as well as the presence of anthills which are favoured as a food source by slow worm (*Anguis fragilis*), records of which were provided by Hampshire Amphibian and Reptile Recording Group via the local records centre (HBIC, 2019). Records of grass snake (*Natrix helvetica*) were also provided from the local area.
- 4.3.25 Given the lack of recent management and presence of favourable habitat, a reptile survey to determine the presence or likely absence of reptiles should be undertaken at the Site. The results of the presence/likely absence survey will inform any mitigation considered necessary. A total of eight visits to the Site must be undertaken between March and September (inclusive) in good weather conditions.

Invertebrates

4.3.26 Given the presence of Highclere Park SSSI which is noted for its invertebrate assemblages, its close proximity to the Site, and the presence of a mosaic of scrub, hedgerow and grassland at the Site, a scoping survey for invertebrates should be undertaken at the Site to determine its potential value for invertebrates. The scoping survey should make appropriate recommendations for further survey effort or mitigation measures considered necessary.

Invasive Flora

4.3.27 No evidence of invasive floral species was observed at the Site.

Invasive Fauna

4.3.28 No evidence of invasive faunal species was observed at the Site.



5. Key Ecological Constraints

- 5.1.1 There are not considered to be any significant ecological constraints to the Proposed Development, however further surveys for reptiles and a scoping survey for invertebrates must be undertaken to inform the development layout and any mitigation that may be required. These surveys will be required prior to determination of any subsequent planning application for the Site.
- 5.1.2 Nesting birds may pose a constraint during the nesting season (March to September inclusive) and avoidance measures have been detailed to avoid this impact.

6. Key Ecological Opportunities

- 6.1.1 Habitat interventions at the Site could include the creation of species-rich grassland as well as supplementary hedgerow and tree planting. These enhancements will have resultant benefits on a range of species including:
 - Foraging and nesting birds increased provision of suitable nesting habitat in the longterm, and probable increase in food items as a result of increased provision of berries/fruit and invertebrate prey resulting from an increase in botanical diversity.
 - Foraging bats increased prey availability as a result of increased botanical diversity.
 - Roosting bats nine integrated bat bricks will be installed in buildings at the Site, significantly increasing the availability of suitable roosting habitat for bats.

7. Conclusion

- 7.1.1 The Site supports poor semi-improved grassland, hedgerows, semi-mature trees and scrub. The habitats at the Site are not considered to pose significant ecological constraints to the Proposed Development.
- 7.1.2 Further surveys have been recommended for reptiles and a scoping survey for invertebrates should be undertaken.
- 7.1.3 Nesting birds may pose a constraint if vegetation clearance is undertaken I the nesting season, avoidance and mitigation measures have been detailed to avoid and reduce potential impacts.
- 7.1.4 There are clear opportunities for enhancement of the Site through habitat creation measures and specific enhancements for species/species groups and these have been detailed within this report. Overall the Proposed Development will result in a positive effect likely at the Parish level on botanical diversity and foraging, shelter and commuting habitat for a range of species given that the habitat is likely to continue to decline to a homogenous area of dense scrub over time. It is unlikely that the positive effect will be significant, however it is clearly an enhancement of the current and future ecological value of the Site given its decline due to lack of appropriate management.



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Appendix 1 – Site Location Plan (Google Earth Pro, 2019)



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Appendix 2 – Phase 1 Habitat Plan





Appendix 3: Planning Policy Excerpts (Basingstoke and Deane Borough Council, 2016)

Policy EM4 – Biodiversity, Geodiversity and Nature Conservation

 Development proposals will only be permitted if significant harm to biodiversity and/ or geodiversity resulting from a development can be avoided or, if that is not possible, adequately mitigated and where it can be clearly demonstrated that:

- a) There will be no adverse impact on the conservation status of key species; and
 b) There will be no adverse impact on the integrity of designated and proposed European designated sites; and
- c) There will be no harm to nationally designated sites; and
- d) There will be no harm to locally designated sites including Sites of Importance for Nature Conservation (SINCs) and Local Nature Reserves (LNRs); and
- e) There will be no loss or deterioration of a key habitat type, including
- irreplaceable habitats; and
 f) There will be no harm to the integrity of linkages between designated sites and key habitats.

The weight given to the protection of nature conservation interests will depend on the national or local significance and any designation or protection applying to the site, habitat or species concerned.

2. Where development proposals do not comply with the above they will only be permitted if it has been clearly demonstrated that there is an overriding public need for the proposal which outweighs the need to safeguard biodiversity and/ or geodiversity and there is no satisfactory alternative with less or no harmful impacts. In such cases, as a last resort, compensatory measures will be secured to ensure no net loss of biodiversity and, where possible, provide a net gain.

3. Applications for development must include adequate and proportionate information to enable a proper assessment of the implications for biodiversity and geodiversity.

4. In order to secure opportunities for biodiversity improvement, relevant development proposals will be required to include proportionate measures to contribute, where possible, to a net gain in biodiversity, through creation, restoration, enhancement and management of habitats and features including measures that help to link key habitats.

Approaches to secure improvements could be achieved through:

- A focus on identified Biodiversity Opportunity Areas and Biodiversity Priority Areas as identified in the councils Green Infrastructure Strategy (and subsequent updates) where appropriate; and through
- b) On-site and/ or off-site provision linked to new development in accordance with the council's adopted green space standards.

Policy EM5 – Green Infrastructure

Development proposals will only be permitted where they do not:

- a) Prejudice the delivery of the council's Green Infrastructure Strategy (and
- subsequent updates);
- b) Result in the fragmentation of the green infrastructure network by severing
- important corridors/links; orc) Result in undue pressure on the network which cannot be fully mitigated.

The council will support proposals which seek to improve links and remedy identified deficiencies in the green infrastructure network in accordance with the council's Green Infrastructure Strategy.

The council will seek to protect and enhance the quality and extent of public open space and public rights of way. Proposals for the redevelopment of public and private open spaces will not be permitted unless it can be clearly demonstrated that:

- Replacement areas will be at least equivalent in terms of quality, quantity and accessibility, and there will be no overall negative impact on the provision of green infrastructure; or
- A robust assessment clearly demonstrates that the space is surplus to local requirements and will not be needed in the-long term in accordance with the council's local standards; or

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f)

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The proposal is for alternative recreational provision which meets evidence of local need in such a way as to outweigh the loss.

Development proposals will be permitted where it can be clearly demonstrated that green infrastructure can be provided and phased to support the requirements of proposed development and be in accordance with the council's adopted green space standards. Green space and equipped play will normally be provided on-site.

Consideration will be given to an off-site financial contribution towards the enhancement of existing facilities, in addition to, or instead of, provision of new green space on site but only where:

g) The quantity standard for the number of proposed dwellings does not result in a requirement for green space which meets the minimum size standard for a particular type: or

particular type; or h) It can be demonstrated that the needs of new residents can be met in this way without adversely impacting on the needs of existing residents.



Appendix 4: Highclere Park SSSI Citation (Natural England, 1992)

File ref:

County: Hampshire Site Name: Highclere Park SSI

Status: Site of Special Scientific Interest (SSSI) notified under Section 28 of the Wildlife and Countryside Act, 1981

Local Planning Authority: Hampshire County Council, Basingstoke and Deane Borough Council

National Grid Reference: SU 454603

Ordnance Survey Sheet 1:50,000: 174 1:10,000: SU 45 NE, NW, SU 46 SE, SW

Area: 67.7 (ha) 167.3 (ac)

Date Notified (Under 1949 Act): - Date of Last Revision: -

Date Notified (Under 1981 Act): 14 October 1991 Date of Last Revision: -

Confirmed: 7 May 1992

Other Information:

Reasons for Notification:

Highclere Park comprises an extensive open parkland of unimproved grassland with mature trees, pasture woodland and lakes. It is situated in north-west Hampshire where the Tertiary Clay of the Thames Valley abuts the Chalk and Greensand of the North Wessex Downs. The park is the earliest documented estate in Hampshire (AD 749). It was a Medieval Deer Park and later a Roccoco, then Capability Brown (c.1770) landscaped park. The grassland comprises a combination of calcifugous and calcicolous species which is unique in Hampshire. The mature parkland and wood pasture trees support a rich and diverse lichen and moss flora, with numerous species indicative of its ancient woodland origins. Outside the New Forest, it is one of the two richest sites known in the County for epiphytic lichens. The woodland stand-types are varied and include actively coppiced valley alder. Both the wood and grassland habitats grade into a swamp and fen community fringing two lakes. This matrix of habitats contains may regionally uncommon plants and additionally supports a diverse assemblage of invertebrates, with several notable species.

The woodland to the east of Duns Mere is a remnant of the Park's wood pasture origins, being dominated by mature beech Fagus sylvatica and pedunculate oak Quercus robur. The understorey is confined to low density holly *Îlex aquifolium*, ponticum. hazel Corylus avellana and invasive rhododendron Rhododendron Elsewhere, especially north-east of Milford Lake and in Duns Wood, ash Fraxinus excelsior has regenerated to provide dense stands of ash boles. Sufficient light still reaches the poles of many old, often pollarded oaks to support a rich lichen flora. Of the 85 species recorded, over 20 are indicative of ancient woodland including Arthonia vinosa, Bacidia biatorina, Biatorina atropurpurea, Pachyphiale corneola, Parmelia reddenda and Thelopsis rubella. Polypody Polypodium vulgare also grows in profusion as an epiphyte of many of the oaks. The ground flora includes broadleaved and green-flowered helleborine Epipactis helleborine, E. phyllanthes respectively, lemon-scented fern Oreopteris limbosperma, butcher's-broom Ruscus aculeatus and wood speedwell Veronica montana. Additionally, the alder woods support remote sedge Carex remota, opposite-leaved golden-saxifrage Chrysosplenium oppositifolium and marsh marigold Caltha palustris.

The neutral to slightly acidic grassland on the slopes down from the Temple are notable for the calcifuges and calcicoles growing in close juxtaposition. Bents Agrostis species and fescues Festuca species dominate, with such old grassland indicator species as sneezewort Achillea ptarmica and lousewort Pedicularis sylvatica. Calcifugous species include abundant heather Calluna vulgaris, purple moor-grass Molinia caerulea, mat-grass Nardus stricta and tormentil Potentilla erecta, whilst the calcicoles element comprises dwarf thistle Cirsium acaule, common rock-rose Helianthemum nummularium, salad burnet Sanguisorba minor subsp. minor and large thyme Thymus pulegioides. The slope supports a large populations of field gentian Gentianella campestris in its only north Hampshire location. The marshy grassland south of Duns Mere is unimproved with sneezewort, meadow thistle Cirsium dissectum and devil's-bit scabious Succisa pratensis.

The Temple grasslands grade into swamp and fen vegetation around Duns Mere. This is particularly rich in plant and invertebrate species, with an incipient bog flush community with much *Sphagnum* and such regionally scarce plants as marsh pennywort *Hydrocotyle vulgaris*, marsh violet *Viola palustris* and lesser skullcap *Scutellaria minor*.

Milford Lake and Duns Mere originated from the Bishop of Winchester's fishponds which were enlarged by 18th century landscaping. However, there is written evidence for a pool at Duns Mere dating from 1465. The marginal vegetation of the lakes is well developed and includes excellent examples of the succession from a free-floating vegetation of bogbean *Menyanthes trifoliata* and amphibious bistort *Polygonum amphibium* into rafts dominated by common reed *Phragmites australis*, the reedmaces *Typha angustifolia* and *T. latifolia* and a range of sedges, including bottle sedge *Carex rostrata*.

The invertebrate interest is known to be rich and includes eight notable species which utilise all the habitats represented within the site. For example, of the 15 dragonfly species, two are notable including a strong colony of the ruddy darter Sympetrum sanguineum which favours abundant emergent lakeside vegetation, and the keeled skimmer Orthetrum coerulescens, normally associated with boggy acid pools on the southern heathlands. Other notable species include the hoverfly Anasimyia contracta and the snail-killing flies Psacadina verbekei and Pherbina coryleti. The occurrence of the notable woodland grasshopper Omocestus rufipes, which is typically found on moist scrubby heathland, but occasionally on chalk grassland; the mottled grasshopper Myremeleottatrix maculatus, typical of dry heath; and the marbled white butterfly Melanargia galathea further reflects the range of acid and alkaline habitats represented in the site. The woodland also supports good invertebrate communities with such notable species as the hoverflies *Platycheirus tarsalis* (typically south-eastern in distribution), *Volucella* inflata and Cheilosia antiqua. Dead wood is also important for such species of the two hoverflies Chalsosyrphus nemorum and Sphegina kimakowiczi; the notable robberfly Laphria marginata and the woodland bee Andrena furcata.





Figure 2. Transition from scrub to grassland



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