

Ecological Impact Assessment Land at Street End Lane, Sidlesham Version 1 –29th October 2023

Document Reference: GS239.StreetEndLane.EcIA.v1

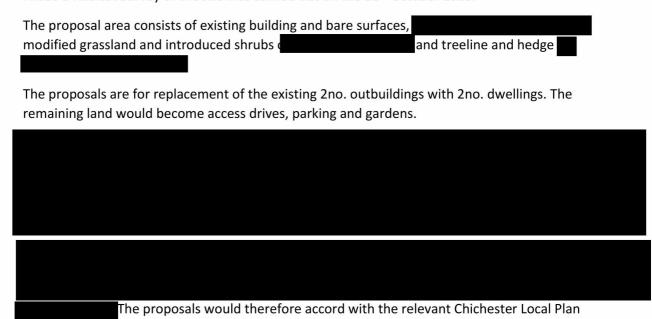
Contents

1.0	Introduction	4
2.0	Scope of Appraisal	5
3.0	Planning Policy and Legislation	6
4.0	Methodology	10
5.0	Baseline Ecological Conditions and Protected Species Assessment	12
6.0	Protected Species Assessment	15
7.0	Evaluation of Impacts and Mitigation	18
8.0	Ecological Enhancements	22
9.0	Conclusions	23
10.0	References	24
11.0	Appendix 1 –Site Photos	25
12.0	Appendix 2 –EcoType Genetics DNA Report	30
13.0	Site Habitat Plan	31
14.0	Site Aerial	32

Summary

Policies.

The applicant has commissioned a Preliminary Ecological Appraisal, Preliminary Bat Roost Assessment and Ecological Impact Assessment of proposals for replacement of 2no. outbuildings with dwellings at Street End Lane, Sidlesham (*SZ 85396 99445*, hereafter referred to as 'the site'). A Preliminary Ecological Appraisal, Preliminary Bat Roost Assessment and Phase 1 Habitat Survey of the site was carried out on the 11th October 2023.



1.0 Introduction

- 1.1 The applicant has commissioned a Preliminary Ecological Appraisal, Preliminary Bat Roost Assessment and Ecological Impact Assessment of proposals for replacement of 2no. outbuildings with dwellings at Street End Lane, Sidlesham (SZ 85396 99445, hereafter referred to as 'the site'). A Preliminary Ecological Appraisal, Preliminary Bat Roost Assessment and Phase 1 Habitat Survey of the site was carried out on the 11th October 2023.
- 1.2 The following ecological impact assessment report has been completed by George Sayer (*BSc (Hons)* Environmental *Sciences, PgDip Endangered Species Recovery, MArborA, MCIEEM, NE Licence Holder–Bats Level 2 and GCN Ecologist*). This appraisal consisted of a site visit to identify existing habitats on site; the habitats have been categorised broadly following the UK Habitats Classification Guidance V2.01 (*UKHab Ltd 2023*). In addition, an assessment of habitats and structures on the site was made to determine their potential for protected species. Following this an on-site and desktop assessment was undertaken, of the likelihood of National or European Protected Species being present on or near site, and the constraints these may pose on the development proposals.
- 1.3 Based on the results of the appraisal, recommendations for potential ecological enhancements have been provided.

Site Description and Surrounding Area

- 1.4 The site consists of an area of land given over to grassland, and a pair of old outbuildings previously used for smallholding or similar. The buildings are some of the last undeveloped outbuildings present along Street End Lane, with the others having been converted to residential units already. The site covers 0.12Ha. An access drive comes from Street End Lane to the south-east and runs past the southern aspects of the buildings. The site is bounded by Street End Lane to the east and north-east; the gardens of a residential dwelling to the south; the access drive of a dwelling to the north-west, and an area of grass and trees separating the site from a redundant nursery.
- 1.5 Street End is a linear part of the dispersed village of Sidlesham, within the Manhood Peninsula south of Chichester. The surroundings are largely arable land, residential dwellings and largely redundant glasshouse nurseries.

Proposals

1.6 The proposals are for demolition of the 2no existing outbuildings and their replacement with 2no. dwellings. The existing access to the south would be re-used and the new dwellings would occupy the locations of the existing buildings. The grassland and other habitats to the north would be retained as gardens.

2.0 Scope of Appraisal

- 1. Identify the habitats and vegetation on site and display this in a habitat plan;
- 2. Identify habitat which may have potential for protected species;
- 3. Identify whether any signs of protected species are present on-site;
- 4. Recommend whether further surveys are required, or whether there are any relevant constraints with regards to protected species;
- 5. Identify impacts of the proposed development and set out appropriate avoidance, mitigation and compensation measures;
- 6. Provide suggestions as to how the site and proposals could be enhanced with regards to protected species and habitats.
- 2.1 This appraisal and assessment is deemed to be relevant for a maximum of 18 months due to the possibility of changes in the habitats on-site. Should the site or proposals alter, the ecologist should be consulted to confirm that the appraisal is still valid.

3.0 Planning Policy and Legislation

National Planning Policy

- 3.1 The National Planning Policy Framework (NPPF) 2023 sets out the government planning policies for England and how they should be applied. 'Chapter 15: Conserving and Enhancing the Natural Environment' states that development should be 'minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures.'
- 3.2 The Government Circular 06/2005, which is referred to by the NPPF, provides further guidance in respect of statutory obligations for biodiversity and geological conservation and their impact within the planning system.

Local Planning Policy

- 3.3 The site is within the Chichester District; the Chichester Local Plan 2021 –2039 is currently at Regulation 19 and as such, proposals shall be assessed against the currently adopted *Chichester District Local Plan Key Policies 2014-2029.*
- 3.4 Policy 49 covers Biodiversity; the following criteria must be met for planning applications to be supported:
 - 1. The biodiversity value of the site is safeguarded;
 - 2. Demonstrable harm to habitats or species which are protected or which are of importance to biodiversity is avoided or mitigated;
 - 3. The proposal has incorporated features that enhance biodiversity as part of good design and sustainable development;
 - 4. The proposal protects, manages and enhances the District's network of ecology, biodiversity and geological sites, including the international, national and local designated sites (statutory and non-statutory), priority habitats, wildlife corridors and stepping stones that connect them;
 - 5. Any individual or cumulative adverse impacts on sites are avoided;
 - 6. The benefits of development outweigh any adverse impact on the biodiversity on the site. Exceptions will only be made where no reasonable alternatives are available; and planning conditions and/or planning obligations may be imposed to mitigate or compensate for the harmful effects of the development.

- 3.5 Policy 50 covers Development and Disturbance of Birds in Chichester and Langstone Harbours Special Protection Areas. It states that "It is Natural England's advice that all net increases in residential development within the 5.6km 'Zone of Influence' are likely to have a significant effect on the Chichester and Langstone Harbours SPA either alone or in-combination with other developments and will need to be subject to the provisions of Regulation 61 of the Conservation of Habitats and Species Regulations 2017. In the absence of appropriate avoidance and/or mitigation measures that will enable the planning authority to ascertain that the development would not adversely affect the integrity of the SPA, planning permission will not be granted because the tests for derogations in Regulation 62 are unlikely to be met. Furthermore, such development would not have the benefit of the presumption in favour of sustainable development in the National Planning Policy Framework.
- 3.6 Net increases in residential development, which incorporates appropriate avoidance/mitigation measures, which would avoid any likelihood of a significant effect on the SPA, will not require an 'appropriate assessment'. Appropriate avoidance/mitigation measures will comprise:
 - a) A contribution in accordance with the joint mitigation strategy outlined in Phase III of the Solent Disturbance and Mitigation Project; or
 - b) A developer provided package of measures associated with the proposed development designed to avoid any significant effect on the SPA; or
 - c) A combination of measures in (a) and (b) above.
- 3.7 Avoidance/mitigation measures will need to be phased with development and shall be maintained in perpetuity. All mitigation measures in (a), (b) and (c) above must be agreed to be appropriate by Natural England. They should also have regard to the Chichester Harbour AONB Management Plan. The provisions of this policy do not exclude the possibility that some residential schemes either within or outside the Zone of Influence might require further assessment under the Habitats Regulations. For example, large schemes, schemes proposing bespoke avoidance/mitigation measures, or schemes proposing an alternative approach to the protection of the SPAs. Such schemes will be assessed on their own merits, and subject to advice from Natural England."
- 3.8 The emerging Chichester Local Plan 2021-2039: Proposed Submission (Regulation 19) includes the following policies; these should be given appropriate weight.
 - Policy NE4 Strategic Wildlife Corridors
 - Policy NE5 Biodiversity and Biodiversity Net Gain
 - Policy NE6 Chichester's Internationally and Nationally Designated Habitats
 - Policy NE7 Development and Disturbance of Birds in Chichester and Langstone Harbours, Pagham Harbour, Solent and Dorset Coast Special Protection Areas and Medmerry Compensatory Habitat
 - Policy NE8 Trees, Hedgerows and Woodlands

Legislation

- 3.9 Legislation relating to wildlife and biodiversity of particular relevance to this EcIA includes:
 - The Conservation of Habitats and Species Regulations 2017;
 - The Wildlife and Countryside Act 1981 (as amended);
 - The Natural Environment and Rural Communities (NERC) Act 2006;
 - The Hedgerow Regulations 1997;
 - The Protection of Badgers Act 1992;
 - The Protection of Mammals Act 1996.
- 3.10 All species of bat and their roosts are protected under The Conservation of Habitats and Species Regulations 2017 and The Wildlife and Countryside Act 1981. It is an offence to intentionally kill, injure or handle a bat, to possess a bat (live or dead), disturb a roosting bat, or sell or offer a bat for sale without a licence. It is also an offence to damage, destroy or obstruct access to any place used by bats for shelter, whether they are present or not.
- 3.11 All UK bird species are protected against disturbance whilst occupying a nest under the Wildlife and Countryside Act 1981. Developments that could predictably disturb, kill or injure nesting birds could result in an offence. Furthermore, a number of bird species are targets of UK and Local Biodiversity Action Plans and listed as Species of Principle Importance under Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006. This obligates local authorities to have regard to the purpose of conserving biodiversity with particular emphasis on targeted species.
- 3.12 All other mammals receive general protection against cruelty, inhumane killing or injuring under the Protection of Mammals Act 1996.
- 3.13 All widespread reptiles are protected against killing and injury under the Wildlife and Countryside Act 1981, with rarer reptiles receiving further protection under EU regulation. Reptiles must also be given consideration under the NERC Act 2006 as part of the planning process.
- 3.14 Great crested newts (GCN) are protected under The Conservation of Habitats and Species Regulations 2017. It is an offence for anyone to intentionally kill, injure or disturb a GCN or to damage, destroy or block access to areas of suitable habitat.
- 3.15 Badgers are protected under the Protection of Badgers Act 1992. It is an offence to harm badgers or disturb badgers and their setts.
- 3.16 Water voles are fully protected under Schedule 5 of the Wildlife and Countryside Act 1981 and is a priority conservation species. It is an offence to intentionally capture, kill or injure water voles, damage, destroy or block access to their places of shelter or protection (on purpose or by not taking enough care), disturb them in a place of shelter or protection (on purpose or by not taking enough care), possess, sell, control or transport live or dead water voles or parts of them (not water voles bred in captivity).

- 3.17 In the UK, dormice are legally protected under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) and have significant further protection as a European Protected Species under the Conservation of Habitats and Species Regulations 2017 (as amended). Dormice are also a 'Species of Principal Importance for the conservation of biodiversity' listed under section 41 of the Natural Environment and Rural Communities Act 2006 (NERC). It is an offence for anyone to intentionally kill, injure or disturb a dormouse or to damage, destroy or block access to areas of suitable habitat.
- 3.18 All other mammals receive general protection against cruelty, inhumane killing or injuring under the Protection of Mammals Act 1996.

4.0 Methodology

Desktop Study

4.1 A desktop study was conducted using the government 'MAGIC' Map GIS tool; a search was carried out for all international statutory designated sites (Ramsar, SAC, SPA) within 12.0 km of the site; national statutory designated sites (SSSI, NNR, LNR) within 2.0 km of the site; and non-statutory designated sites (SNCI) and priority habitats within 2.0 km of the site. These have been summarized below and their significance considered in the context of the development proposals. A search was also carried out to identify features of ecological interest in the area, such as water bodies and ancient woodland. Given the overall scale and nature of the site and the proposals, a full data search from SxBRC was not considered appropriate. This is in accordance with CIEEM current guidance for such projects (CIEEM, 2020).

Site Visit

- 4.2 A site visit was conducted on 11th October, during suitable weather (16 degrees, wind force 1; 6/8 cloud, dry). Habitats were recorded according to the UK-Habs Classification System as described within the UK Habitats Manual, Version 2.01 (UKHab Ltd. 2023). All habitats present on-site were recorded on a UKHab map (Figure No. 01 Site Habitat Plan).
- 4.3 During the survey any constraints with regard to protected species were considered; the site was considered for their potential for protected species even when signs of these species were not noted at the time of survey.
- 4.4 Points of interest for protected species have been plotted into the Site Habitat Plan and within target notes.
- 4.5 Trees were inspected for features conducive to bat and bird roosting, including knot holes, limb failures, cavities and heavy ivy cover; any identified bird nests have been recorded.
- 4.6 The buildings were assessed internally and externally by an experienced, licenced bat surveyor (George Sayer 2018-34434-CLS) for their potential to hold roosting bats; roof spaces were assessed where possible, and access points identified. Any evidence of bats such as grease marks, bat droppings, urine splashes were noted. The bat roost assessment was conducted following the recently-published Bat Conservation Trust Bat Surveys for Professional Ecologists: Good Practice Guidelines (2023).

4.8 Due to the site visit being carried out over one day, it is possible that some signs of protected species may not be apparent within this short timeframe. This is a constraint recognised within best practice guidelines and all reasonable effort has been made to identify evidence of protected species.

Ecological Impact Assessment

- 4.9 The methodology for Ecological Impact Assessment (EcIA) follows best practice guidelines set by the Chartered Institute of Ecology & Environmental Management (CIEEM): 'Guidelines for Ecological Impact Assessment' (CIEEM, 2018). This includes identifying the baseline conditions on the site and subsequently rating the potential effects of the development based on the sensitivity and value of the resource affected, combined with the magnitude, duration and scale of the impact (or change). This is initially assessed without mitigation measures, and then assessed again after allowing for the proposed mitigation measures; this provides the residual effects. The assessment is divided into construction effects and longer-term operational effects.
- 4.10 Each ecological feature within the site has been considered within a defined Geographic context such as:
 - International and European;
 - National;
 - · Regional;
 - County;
 - District;
 - Local;
 - Site Level;
 - Negligible.
- 4.11 Based upon CIEEM guidance, value was determined with reference to the following factors:
 - Its inclusion as a Designated Site or other protected area;
 - The presence of habitat types of conservation significance, e.g. Habitats of Principal Importance (NERC 2006);
 - The presence (or potential presence) of species of conservation significance e.g. Species of Principal Importance (NERC 2006);
 - The presence of other protected species e.g. those protected under The Wildlife and Countryside Act 1981;
 - The sites social and economic value.

5.0 Baseline Ecological Conditions and Protected Species Assessment

Desktop Study

Designated Sites and Habitats

- 5.1 The following is a summary of all protected and notable wildlife sites, with sites of local and national importance recorded within 2.0km of the site and sites of international importance within 12.0 km. These are divided into statutory and non-statutory; those with full legal protection and those without, but which the Local Planning Authority should still consider when deciding on planning policy and applications. These sites are summarized in tables 1 and 2 below. A description of locally designated sites is also made below.
- 5.2 This information is included so that the site can be considered within the ecological context of the surrounding area, guiding decisions related to habitat change and protected species; these sites are not necessarily representative of the habitat on or surrounding the site and may not be influenced by the proposals.
- 5.3 The site is within the Impact Risk Zone (IRZ) of Pagham Harbour and the Solent Suite of Sites, whereby residential proposals within this location that increase overnight accommodation would increase recreational disturbance of the site. Such impacts would be dealt with through contributions to the Solent Bird Aware Scheme.
- 5.4 The site is not within 12.0 km of the 'South Downs Bat SACs' (*namely Singleton and Cocking Tunnels SAC, Ebernoe Common SAC and The Mens SAC*) and therefore not within their wider conservation area.
- 5.5 The MAGIC Mapping shows the site to be outside the Nutrient Impact Areas, likely discharging to Pagham's wastewater treatment works. The proposals to not have to demonstrate nitrate neutrality.

Table 1: Statutory Protected Designated Sites

Site Nar.	Reason for designal	Distance from site
Pagham Habour SPA, RAMSAR (also LNR, SSSI)	Areas of coastal and harbour habitat noted for its importance for over wintering birds. Designated an SPA for Common tern, Dark-bellied brent goose; Little tern and ruff.	1.07 km E
Solent Suite of Sites - Chichester and Langstone Harbours SPA / Ramsar / Solent Maritime SAC, Solent and Isle of Wight Lagoons SAC / Chichester Harbour SSSI	Chichester Harbour is a large estuarine basin in which at low water extensive mud and sandflats are exposed, drained by channels which unite to make a common exit to the sea. The site is of particular significance for wintering wildfowl and waders and also breeding birds both within the Harbour and in the surrounding permanent pasture fields and woodlands. There is a wide range of habitats which have important plant communities.	3.0 km NW
Kingley Vale SSSI, NNR, SAC	The largest area of yew woodland in Britain, with areas of chalk grassland also present.	10.7 km NW

5.6 No non-statutory designated sites are within 2.0 km of the proposal site. Below is the closest site:

Table 2: Non-statutory Protected Designated Sites

Site Nar.	Reason for designat	Distance from site
Chichester District	Areas designated as significant for foraging and	200.0 m N and
Council Bat	commuting bats within the district	SE
Movement Network		

Habitats

Desk Study

5.7 Within 2.0km of the site there are Priority Habitats of, Coastal and Floodplain Grazing Marsh, Reedbed, Deciduous Woodland, Ancient Woodland, and Traditional Orchard. There are several ponds and hedges locally, also Priority Habitats.

Site Assessment

5.8 The site is given over to the habitats discussed further below.

	u1b5 - Buildings
5.9	The site contains 2no. 20 th century outbuildings, believed to be used for smallholding. The buildings are in poor condition in a broader sense. The
	U1c - Developed Land; Sealed Surface
5.10	The access drive to the south is formed of concrete hardstanding, which eventually becomes relatively impervious gravel.
	U1d 10 82 847 — Suburban Mosaic of Developed and Natural Surface — Abandoned/Derelict Land with Introduced Shrubs and Scattered Scrub
5.11	Surrounding the buildings are patches of derelict land, formed of overgrown gravel and concrete, sparse sprawling bramble <i>Rubus fruticosus</i> , and patches of introduced planting including a cabbage palm <i>Cordyline australis</i> and a stand of variegated elephant grass <i>Arundo donax variegata</i> .
	G4 32 106 847 – Modified Grassland (Mown) with Introduced Shrub and Scattered Trees
5.12 	The site contains a modified grassland lawn. The lawn has recently been mown, but appears consists largely of perennial rye-grass <i>Lolium perenne</i> very few forbs. Whilst not being subject to regular use the grassland appears homogenous and heavily modified.
5.13	A large bay laurel <i>Laurus nobilis</i> is present to the eastern edge of the grassland, and a semi-mature Norway maple <i>Acer platanoides</i> is present to the south of the grassland, just north of the buildings.
	h216 Other Native Hedgerow (Priority Habitat)
5.14	The east boundary is lined with a neat hedge of hawthorn Crataegus monogyna.
	w1g 33 – Line of Trees
5.15	The northern boundary is lined with semi-mature trees such as sycamore <i>Acer</i> psuedoplatanus, willow <i>Salix sp.</i> and ash <i>Fraxinus excelsior</i> . The treeline is a connective corridor connecting to further trees to the west and north, but is not particularly mature and

6.0 Protected Species Assessment

<u>Bats</u>

Desk Study



Site Assessment

- 6.2 The western outbuilding (B1) consists of an old outbuilding formed of block and timber frame walls with a timber roof supporting corrugated panels, and a small lean-to. The roof panels and walls are all single-skinned with no significant crevices noted. The building has large windows and clear plastic rooflights which allow lots of light in. Ample access opportunities are present with the door missing and numerous other gaps.
- 6.3 The eastern outbuilding (B2) consists of an old outbuilding formed of timber frame walls with a timber roof supporting corrugated panels, with timber sarking beneath. The walls are all single-skinned and it appears that internal boarding to the walls has historically been removed. The building has large windows and clear plastic rooflights which allow lots of light in. Ample access opportunities are present with doors fitting loosely, a small hole in a window being noted and a gap to the western aspect where electrical cables run into the building. Several wing cases were noted on the floor but these were more likely to be a result of spiders or pygmy shrew.



_	٠		7	
ы	1	r	~	c
-13	1		u	1.5

Desk Study

6.6 Numerous bird species are present in the local area, including a number of woodland, wetland and farmland species. Birds relevant to the proposals which are present locally include swallow (Hirundo rustica) and house sparrow (Passer domesticus).

Site Assessment

6.7 Several nests were noted inside the buildings; however, these appeared to be old and out of use. Common garden birds likely nest in the hedges and trees. The grassland is mown and unsuitable for ground nesting birds. The habitats on the site are of **site value** to birds.

Reptiles

Desk Study

Site Assessment

Amphibians

Desk Study

6.10 There are There are no licence return records of great crested newt *Triturus cristatus* (GCN) within 2.0 km. Positive licence returns for GCN are present in Almodington c.3.4 km southwest.

Site Assessment



Desk Study

6.12 Badger records are confidential;

Site Assessment

_						
D	\cap	r	n	าเ	r	Δ
$\boldsymbol{-}$	v				·	L

Desk Study

Site Assessment

<u>Other</u>

6.16 No potential for or evidence of any other protected species such as water vole was recorded. Water vole are heavily recorded locally but no ditches or streams were present on or adjacent site. The site offers good potential for hedgehogs with grassland and hedge offering the habitats they require. The grassland sward is too lacking in sward diversity to support significant invertebrate communities.

7.0 Evaluation of Impacts and Mitigation

Designated Sites

Potential Impacts

7.1 Given the intervening distances, and the nature of the proposals, any impacts upon local designated sites would be of minor magnitude and highly unlikely to occur. Indirect impacts from traffic pollution during construction might cause degradation of the protected sites. This increase in pollution would be minimal, with no increase in such impacts arising in the future.



Mitigation and Compensation

7.2 The proposals would have to contribute to the Solent Bird Aware Scheme to mitigate the potential impacts of increased recreational disturbance. The proposals do not have to demonstrate nitrate neutrality.

Residual Impacts

7.3 The impacts will be negligible and non-significant.

<u>Habitats</u>

Potential Impacts

7.4 The proposals would remove existing building, sparse urban habitats, individual trees and small areas of modified grassland. In the absence of mitigation, the proposals would include dust, noise and light pollution of adjacent grassland, treeline and hedges.

Mitigation and Compensation

7.5 All construction will be undertaken in accordance with best practice advice with regards to control of dust, noise and emissions. Any chemicals or fuel shall be stored appropriately and on existing surfaces. All storage will be undertaken outside tree and hedge RPAs. Any grassland and planting beds lost or damaged will be replaced post-construction. The majority of the habitats on-site shall be retained as part of the gardens.

Residual Impacts

7.6

<u>Bats</u>
Potential Impact

Mitigation and Compensation



Nesting Birds

Potential Impacts

7.11 No evidence of active nesting birds was noted within the building, but old nests were noted. In the absence of mitigation, proposals may disturb a bird's nest in the hedge by incautious construction works. Severakl shrubs and small trees would require removal, and these might harbour nesting birds. The potential risk is deemed to be low.

Mitigation and Compensation

7.12 The works shall be undertaken with due regard to the hedges and treeline, which must be protected using tree protection measures. Any vegetation removal must occur outside of nesting season (season: March-August inclusive) or following a check by an ecologist for active birds' nests. Any active nests must be left undisturbed until any chicks have fledged.

Residual Impacts

Reptiles

Potential Impacts

Mitigation and Compensation

7.15 The grassland shall be kept well-maintained prior to construction.

Residual Impacts

Amphibians

Potential Impacts

7.17 Common amphibians might be injured through inappropriate storage and excavations.

Mitigation and Compensation

7.18 Works to the building shall be aware of the possibility of amphibians, providing ramps or covers to any excavations or pipework, and keeping materials storage away from the garden boundaries. The grass shall be kept well cut to ensure amphibians would not be sheltering within the construction zone.

Residual Impacts

Dormice

Potential Impacts

7.20 No impact.

Mitigation and Compensation

7.21 Non required.

Residual Impacts

Badgers



Hedgehogs

Potential Impacts

7.26 Individual hedgehogs and other small mammals may use the site and be injured during works.

Mitigation and Compensation

7.27 Works to the building shall be aware of the possibility of small mammals, providing ramps or covers to any excavations or pipework, to accord with the Protection of Mammals Act 1996. The grass shall be kept well cut to ensure hedgehogs would not be sheltering within the construction zone. Any piles of timber, blocks etc. shall be checked before removal to ensure no hedgehogs are sheltering within.

Residual Impacts

7.28 The overall impact of the scheme will be negligible.

8.0 Ecological Enhancements

8.1 As the proposals only affect the building and immediate surroundings, development proposals will be expected to demonstrate an overall positive impact on the natural environment as set out in CDC Local Plan Policy 49. The following ecological enhancements have been proposed

accordance with Local and National Policy.

- Incorporation of integrated bird boxes into the new buildings and into the hedge/treeline at appropriate heights and orientations, such as a house sparrow terrace on the building (with the house being too low generally for swifts) and open nestboxes in the hedge;
- Incorporation of bat boxes into the new dwellings; at least one small crevice-style or cavity-style box per dwelling;
- Addition of a hedgehog house to the garden;
- Planting of a native hedge such as hornbeam between gardens;
- Planting of new native trees such as crab apple in the gardens;
- Addition of log piles to the corners of the site for insects, reptiles and hedgehogs.

9.0 Conclusions



10.0 References

Bat Conservation Trust (2023). Bat Surveys for Professional Ecologists: Good Practice Guidelines. Fourth Edition. Available online:

http://www.bats.org.uk/pages/batsurveyguide.html

Bat Conservation Trust and Institution for Lighting Professionals (BCT/ILP, 2018). Bats and artificial lighting guidance note. Available online: https://www.bats.org.uk/our-work/buildings-planning-and-development/lighting

British Standards Institution. (2012). BS 5837:2012 Trees in relation to design, demolition and construction: Recommendations. London: BSI

British Standards Institution. (2013). BS 42020:2013 Biodiversity –Code of practice for planning and development. London: BSI

Joint Nature Conservation Committee (JNCC 2010). Handbook for Phase 1 habitat survey - a technique for environmental audit. Available online: http://jncc.defra.gov.uk/page-2468

Butcher, B., Carey, P., Edmonds, R., Norton, L. and Treweek, J. (2020). The UK Habitat Classification User Manual Version 1.1 at http://www.ukhab.org/

Chichester District Council (2015) Chichester Local Plan: Key Policies 2014-2029

CIEEM (2017) Guidelines for Preliminary Ecological Appraisal, 2nd edition. Chartered Institute of Ecology and Environmental Management, Winchester.

CIEEM (2018) Guidelines for Ecological Impact Assessment, 1st edition. Chartered Institute of Ecology and Environmental Management, Winchester.

CIEEM (2020) Guidelines for Accessing, Using and Sharing Biodiversity Data in the UK. 2nd Edition. Chartered Institute of Ecology and Environmental Management. Winchester, UK.

Department for Levelling Up, Housing and Communities, 2023. National Planning Policy Framework. [Online] Available at: https://www.gov.uk/government/publications/national-planningpolicy-framework--2

Eaton, M.A., Aebischer, N.J., Brown, A., Hearn, R.D., Lock, L., Musgrove, A.J., Noble, D.G., Stroud, D.S., & Gregory, R.D. (2015) Birds of Conservation Concern 4: the population status of birds in the UK, Channel Islands and Isle of Man. British Birds, 108: 708-746.

MAGIC Interactive Map Tool (Accessed 19th July 2023): www.magic.gov.uk

South Downs National Park Authority / Natural England (2018). Sussex Bat Special Area of Conservation Planning and Landscape Scale Enhancement Protocol. Available online: https://www.southdowns.gov.uk/wpcontent/uploads/2018/04/TLL-15-Draft-Sussex-Bat-SAC-Protocol.pdf

Streeter, D. (2010). The Most Complete Guide to the Flowers of Britain and Ireland; Harper Collins, London.

UKHab Ltd (2023). The UK Habitat Classification User Manual Version 2.01 at http://www.ukhab.org/

11.0 Appendix 1 –Site Photos

Photo 1 –B1 as seen from the north.



Photo 2 –View inside B1.



Photo 3 –B2 from the south-east.



Photo 4 –View inside B2.





Photo 5 –Pile of droppings subsequently DNA identified as pygmy shrew.

Photo 6 — Hawthorn hedge and bay laurel shrub at frontage to south-east.



Photo 7 – Access drive and abandoned land to south, looking east.



Photo 8 – abandoned land with scrub and introduced shrubs surrounding buildings.



Photo 9 – Remainder of site looking north-east from B2. Norway maple to right.

12.0 Appendix 2 – EcoType Genetics DNA Report



Results

Sample ID: EG-1236-1

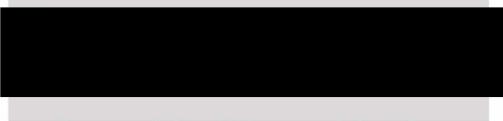
Sample information:

Sample type: Faecal

Comments: Outbuilding

Laboratory information:

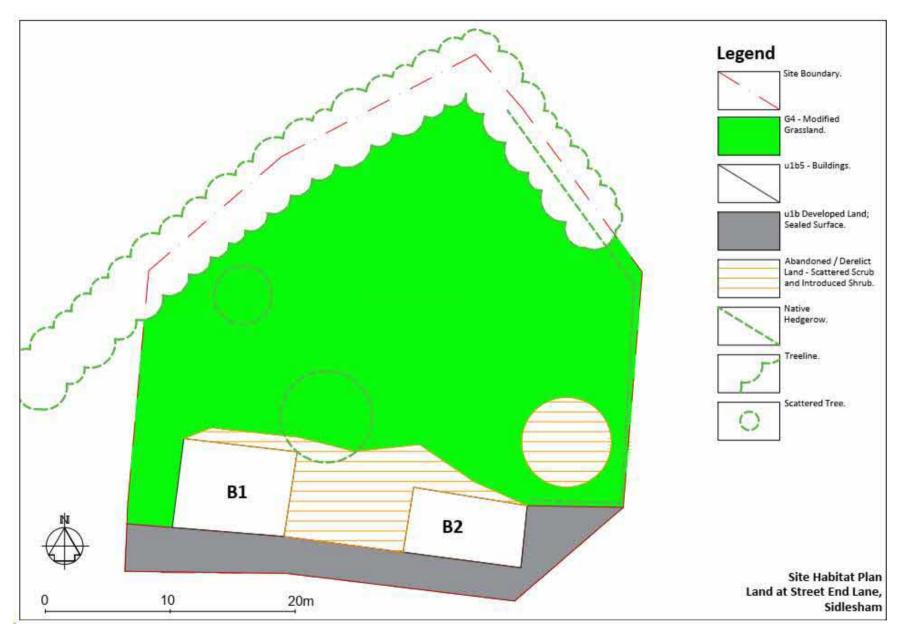
DNA Extraction Code: EG-2023-1598 Identification method: qPCR



Species Identified:

Species 1: Sorex minutus (Pygmy shrew) qPCR Ct Value: 23

13.0 Site Habitat Plan



14.0 Site Aerial

