

Land West Of Little Place, Blisland, Cornwall

Preliminary Ecological Appraisal

Ref: BE710

Date:

28th May 2021

Prepared by: Dr Janine Bright CMIEEM CEnv

James Hill





CONTENTS

1.	Introduction	3
2.	Aim	3
3.	Methodology	3
3.1	Desk study	3
3.2	Site survey	3
3.3	Baseline evaluation	4
3.4	Identification of impacts and mitigation	4
3.5	Personnel	4
3.6	Limitations	4
4.	Ecological Baseline	4
4.1	Designated sites of nature conservation value	4
4.2	Habitat Description and Evaluation	5
4.3	Floral Species Description and Evaluation	8
4.4	Faunal Species Description and Evaluation	8
4.5	Overall Site Evaluation	.10
5.	Ecological Impacts, Mitigation and Monitoring	.10
5.1	Details of proposed works	.10
5.2	Impacts to designated sites	.10
5.3	Loss of Habitats	.11
5.4	Habitat gain	.11
5.5	Disturbance/degradation to habitats	.11
5.6	Disturbance to Species	.11
5.7	Further Surveys	.12
5.8	Monitoring	.12
5.9	Residual Impacts	.12
6.	References and bibliography	.13



1. INTRODUCTION

Bright Environment was commissioned by James Hill in May 2021 to undertake a preliminary ecological appraisal of land to the west of Little Place, Blisland, Bodmin, Cornwall, PL30 4JF (OS Grid Ref: SX 10155 73286). The appraisal is to inform a planning application to construct two residential dwellings on the land.

The location of the site is shown in Figure 1, the survey area is defined in Figure 2 and the proposed site plan is included as Figure 3.

Access will be via an existing driveway/yard and there will be no removal of buildings, trees or hedgerows.

2. AIM

The aim of the report is to undertake a Preliminary Ecological Appraisal of the proposed development. This involves the following:

Describe and evaluate the ecological baseline of the site.

Identify ecological impacts of the development.

Design mitigation measures for adverse impacts and identify any requirements for further survey.

Identify any residual impacts following mitigation.

Identify opportunities for enhancement of biodiversity.

3. METHODOLOGY

The assessment has been carried in accordance with:

the 'Guidelines for Preliminary Ecological Appraisal' and 'Guidelines for Ecological Impact Assessment in the UK and Ireland' produced by the Institute of Ecology and Environmental Management (CIEEM 2018 & 2017). However due to the small extent of the development and its minimal ecological impacts a reduced desk study has been undertaken (see section 3.1).

BS42020-2013 Biodiversity - Code of Practice for Planning and Development (British Standard, 2013)

Cornwall Planning for Biodiversity Guide (Cornwall Council, 2018)

The assessment is informed by UK and EU legislation, National and local planning policies.

The ecological baseline of the site was assessed through a desk study and site survey.

3.1 Desk study

A desk study to identify whether the site lies within a statutory designated site of nature conservation importance was undertaken. This involved the use of Magic Map (www.magic.gov.uk) and Cornwall Council Interactive Map (map.cornwall.gov.uk). Ecological records from the biological records centre were not obtained as the site is a cultivated garden CIEEM (2017).

3.2 Site survey

A walk-over survey of the site was carried out on 21st May 2021 to:

- identify the habitats present within the site according to the Phase 1 Habitat Survey methodology (JNCC, 1993) and compile a list of dominant and rare vascular plants. A full species lists was not compiled.
- undertake a preliminary faunal survey / habitat assessment to identify the presence or the potential of the site to support legally protected species or species of conservation importance.



- assess the ecological 'importance' of any hedges using the criteria in the Hedgerows Regulations 1997 (if applicable).

The weather during the survey was overcast, rain, breezy (10C). The survey area is indicated on Figure 2.

3.3 Baseline evaluation

Evaluation of the ecological baseline for the site was undertaken following the framework provided by CIEEM (2018). The biodiversity value of ecological features is assessed according to various characteristics; including non-statutory designations, rarity, threat, diversity (species-richness), connectivity and size of populations. Each ecological feature is assigned a biodiversity value at the following geographical scales:

International or European

National (England)

Regional (South West)

County

Local

3.4 Identification of impacts and mitigation

Assessment of impacts was undertaken following the framework provided by CIEEM (2018). The impacts magnitude, duration, reversibility, likelihood and nature (positive or negative) are described. Consideration to cumulative impacts is also given. Impacts are then assessed as being significant or not significant upon each valued ecological feature.

Mitigation measures to avoid or reduce impacts are included. To ensure proposed mitigation measures are adopted; Bright Environment consulted with the owner to agree achievable measures. Recommendations follow the mitigation hierarchy approach (CIEEM, 2018 and British Standard, 2013). The mitigation hierarchy seeks to avoid impacts, then to mitigate unavoidable impacts, and as a last resort, to compensate for residual impacts. Where possible mitigation has been designed with the aim of the development resulting in net gain (as specified in Cornwall Council, 2018). An assessment of residual impacts and whether net gain has been achieved is given at the end of this report.

3.5 Personnel

Author: This report was prepared by Dr Janine Bright. Dr Bright has been a full member of the Chartered Institute of Ecology and Environmental Management (CIEEM) since 2001 and has been a Chartered Environmentalist (CEnv) since 2005. Dr Bright has a BSc in Environmental Science and a PhD in Ecology. She has worked as an ecological consultant since 1999.

Surveyors: Dr Bright. Protected species licenses: dormice (2016-21698-CLS-CLS), bats (2020-49235-CLS-CLS survey level 2) and Schedule 1 birds (20130998).

3.6 Limitations

The survey was carried out in May, which is within the optimum season for carrying out this type of survey. Access within the site was good and there are no limitations to report.

As ecological features can change over time it is recommended that this report is valid until June 2022. This ecological appraisal does not include a search for Conservation Area status.

4. ECOLOGICAL BASELINE

4.1 Designated sites of nature conservation value

The site is not a designated site of nature conservation importance. There are two designated sites within 1km of the site as follows (designated sites are shown on Figure 1):



Bodmin Moor North Site of Special Scientific Interest (SSSI) is located 650m northeast of the site

Blisland Wood County Wildlife Site (CWS) is located 250m south of the site.

SSSI's are designated under s.28 of the Wildlife and Countryside Act 1981 to safeguard and enhance the characteristic plants, animals and physical features of our natural heritage (HM Government, 1981). They are also protected under the Countryside and Rights of Way Act 2000 (HM Government, 2000). As part of the planning process, Natural England is consulted over any proposed developments that may impact upon a SSSI. Natural England specify a list of operations likely to damage (OLDS) the special interest of a SSSI. Under the Acts, Natural England has to give written consent before any of these operations, or any other activities which may affect the SSSI, can be carried out.

CWT's are designated by the Cornwall Wildlife Trust and Cornwall County Council. They are designated in accordance with a set of criteria (ERCCIS & CWT, 2010). Although not statutory designations, they are given greater protection through the planning process with respect to development. They are prime sites for wildlife in Cornwall, having been identified as supporting species, groups of species or habitats of at least county importance.

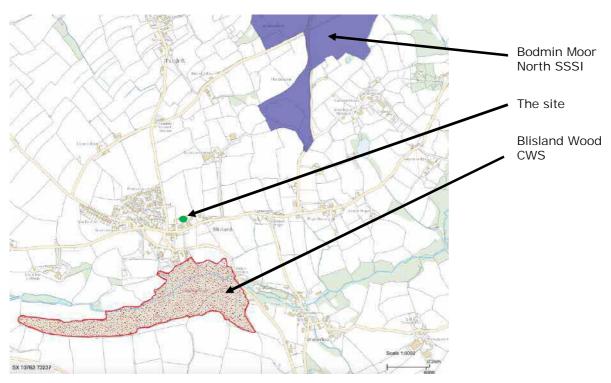


Figure 1. Designated sites of nature conservation importance within 1km of the site.

The River Camel Special Area of Conservation (SAC) is more than 1km away.

4.2 Habitat Description and Evaluation

This section describes the habitats present, according to the standard Phase 1 notation (JNCC, 2010). Phase 1 habitat distribution is shown on Figure 1.

The site includes a small improved grassland enclosure and an agricultural farmyard area of hard standing. The southern and eastern boundaries of the site adjoining residential properties and are marked by garden wooden fencing. The north boundary is marked by a native Cornish hedge and adjoins a semi-improved grassland field grazed by sheep. To the west is a concrete farm yard area/parking/driveway. There is an agricultural barn adjacent to the site; this is not within the survey area and will be retained and unaffected by the proposals.



Each of the habitats recorded during the Phase 1 Habitat Survey are described below and their distribution is shown on Figure 2. The dominant species recorded within each habitat are given together with any notable floral species observed.

4.2.1 Improved grassland with tall ruderal

The main part of the site is a small improved grassland enclosure. This adjoins an agricultural barn and the enclosure is occasionally used for temporary grazing for animals using the barn. The grassland is dominated by perennial ryegrass and there are patched of common nettle throughout. Other species include common bent grass, white clover, buttercup, dandelion and broad-leaved dock. The enclosure has many stored farm machinery items. Near the northern boundary are two manure heaps, a heap of topsoil/earth and a pile of hedging stones (target note 2).

The grassland is commonplace and not floristically rich. This habitat is not considered to be of notable biodiversity value.



Photographs 1. Improved grassland enclosure.

4.2.2 Native species-rich hedge

The northern boundary of the site is marked by a Cornish hedge (of earth and stone) with native shrubs. Species include hazel, blackthorn, hawthorn, bramble, common nettle, foxglove, red campion, wall pennywort, ivy, herb Robert, stitchwort, bluebell, common sorrel, germander speedwell and Yorkshire fog. The hedgerow qualifies as 'ecologically important' according to the criteria specified in the Hedgerows Regulations 1997 due to the present of bluebell.

Hedgerows are listed as a priority habitat for conservation in the county and UK (Biodiversity Action Plans) BAPs. They can provide valuable habitat for wildlife including birds, reptiles, invertebrates and mammals; and provide corridors via which wildlife can travel through agricultural landscapes, linking larger areas of semi-natural habitat. The hedge in the northern part of the site qualifies as BAP habitat and is considered to be of biodiversity value at the local level.



Photograph 2. Native species-rich Cornish hedge in northern part of the site (qualifying as native species-rich BAP habitat).



4.2.3 Bare ground

The western enclosure of the proposed development site is a farmyard area. It has compacted gravel/hardcore. The area is used to store farm machinery and equipment. There are small pockets of improved grassland around the stored items. This habitat is not of biodiversity value.



Photograph 3. Bare ground in farmyard enclosure.

4.2.4 Fence

Wooden garden fencing marks the east and south boundaries of the site where the site adjoins neighbouring residential properties. The fences are of mixed construction (see photographs 4 and 5). In the western end of the southern boundary the fence sits on top of a low concrete block wall. Leylandii hedge is present in a short section of the east boundary as indicated on Photograph 5.





Photograph 4. Wooden fence on south boundary. Photograph 5. Wooden fence on east boundary.

4.2.5 Target notes

Target note 1 – Mature conifer tree in neighbouring property. This is outside of the survey area but the roots of the tree will be within the site and, as such, should be considered within the assessment. The tree itself is not considered to be of notable biodiversity value.

Target note 2 - Manure, earth and stone heaps.

Target note 3 - Fam machinery stored throughout the site.



4.3 Floral Species Description and Evaluation

Section 4.3 and 4.4 describes and evaluates the species of plants and animals found within the site based on the results of the field survey.

4.3.1 Higher Plants

Bluebell is present within the hedgerows onsite. This species is protected under the Wildlife and Countryside Act 1981, as amended. The site is considered unlikely to be of value for higher plants.

4.3.2 Lower Plants

Exposed granite stones on the Cornish hedge may offer good habitat for lichens, but this hedge will be retained and no impacts are anticipated. The parts of the site impacted by the proposals do not have the potential to support notable assemblages of lower plants a specialised survey for non-vascular plants, bryophytes and lichens is not required.

4.3.3 Invasive non-native species

No invasive weeds were encountered.

4.4 Faunal Species Description and Evaluation

4.4.1 Badgers

No evidence of badgers was observed and it is unlikely that any evidence was overlooked. There are animal tracks over the hedgerow but these have been made by lambs.

Although relatively common in Cornwall, the badger is afforded a high degree of legal protection. Badgers and their setts are protected under the Protection of Badgers Act 1992 (HM Government, 1992), and are also listed in Schedule 6 of the Wildlife & Countryside Act 1981 (as amended).

4.4.2 Bats

There are no features within the development footprint that could harbour roosting bats.

It is possible that bats use the hedgerow within the site for foraging.

All British bat are European protected species (EPS). EPS are protected by national law under Conservation of Habitats Regulations 2017, the Wildlife and Countryside Act 1981 (as amended) and the Countryside and Rights of Way Act 2000. As a result of this legislation it is an offence to:

Deliberately capture, injure or kill an EPS;

Intentionally or recklessly disturb an EPS in its place of rest/ breeding site;

Intentionally or recklessly damage, destroy or obstruct access to a EPS place of rest/breeding site (even if the EPS is not occupying the resting / breeding place at the time);

Possess or sell or exchange an EPS (dead or alive) or part of an EPS.

Barbastelle, Bechstein's, noctule, soprano pipistrelle, brown long-eared, greater horseshoe and lesser horseshoe bats are priority species for conservation on the UK BAP and protected under the NERC Act 2006. Barbastelle, pipistrelle, greater and lesser horseshoe bats are county priority BAP species (CBI, 2004).

4.4.3 Otters

There are no watercourses or water bodies within the site and the site does not offer suitable habitat for otter. No evidence of otter or otters 'places of rest' were found during the survey and the site is not considered to be of value for otter.

Otter is a European protected species. Otter is also UK and Cornwall BAP priority species and protected under the NERC Act 2006.



4.4.4 Dormice

The hedgerow along the northern boundary of the site provides suitable habitat for dormouse and the site has good ecological connectivity with large areas of suitable woodland. It is possible that dormouse is present within the hedgerow onsite.

Dormouse is a European protected species (EPS). EPS are protected by national law under Conservation of Habitats Regulations 2017, the Wildlife and Countryside Act 1981 (as amended) and the Countryside and Rights of Way Act 2000. As a result of this legislation it is an offence to:

Deliberately capture, injure or kill an EPS;

Intentionally or recklessly disturb an EPS in its place of rest/ breeding site;

Intentionally or recklessly damage, destroy or obstruct access to a EPS place of rest/breeding site (even if the EPS is not occupying the resting / breeding place at the time);

Possess or sell or exchange an EPS (dead or alive) or part of an EPS.

Dormouse is also UK and Cornwall BAP priority species and protected under the NERC Act 2006.

4.4.5 Hedgehog

Hedgehogs are associated with garden habitats with dense leaf cover and log piles. The hedgerow within the site offers suitable habitat and it is possible that this species is present.

Hedgehogs are listed as a priority species for conservation on the UK BAP and are protected under the NERC Act 2006. They hibernate in log / leaf / rubble piles, at the base of Cornish hedges and under tree roots from October to March inclusive. They are listed on Schedule 6 of Wildlife & Countryside Act 1981 (as amended), which protects them from being killed or taken by certain methods under Section 11(1) of the Wildlife and Countryside Act 1981.

4.4.6 Invertebrates

The native hedgerow may support good invertebrate assemblages but notable populations are not expected. The internal habitats of the site do not have the potential to support notable invertebrate populations.

4.4.7 Birds

The native hedgerow and small area of leylandii hedge on the eastern boundary may support nesting birds but notable populations are not expected.

The nests (while in use or being built) and eggs of all wild birds are protected against taking, damage and destruction under the Wildlife and Countryside Act 1981 (as amended). It is also an offence to kill, injure or take any wild bird. The birds listed under Schedule 1 of the Wildlife and Countryside Act are afforded additional protection against intentional or reckless disturbance whilst building a nest or in or near a nest containing eggs or dependent young.

4.4.8 Reptiles

The grassland is tightly grazed and unlikely to support reptiles, however the manure and earth heaps and the stone pile at target note 2 provide suitable habitat for reptiles. Reptile may also utilise the Cornish hedge habitat.

The common reptiles that occur in Cornwall (adder, slow worm, grass snake and common lizard) are UK BAP priority species and are partially protected under Schedule 5 (section 9(1) and 9(5)) of the Wildlife and Countryside Act 1981 (as amended) and protected under the NERC Act 2006. Cornwall is considered a UK stronghold for adder. This legislation makes it an offence to kill and/or injure reptiles and puts a duty on local authorities to have regard to list group of principle species.

4.4.9 Amphibians

The site does not offer any breeding habitat for amphibians. However, it is possible that these species could use the site during the terrestrial stages of their life cycle. It is unlikely that notable populations are present.

The common amphibians that occur in Cornwall (common toad, common frog and smooth newt) are protected under Schedule 5 (section 9(1) and 9(5)) of the Wildlife and Countryside Act 1981 (as amended). This legislation makes it an offence to kill and/or injure reptiles.



Common toad is listed as a UK BAP Priority species due to its nationally declining population, which puts a duty on local authorities to have regard to this principal species.

4.5 Overall Site Evaluation

The site is to the west of Little Place, Blisland, Bodmin, Cornwall, PL30 4JF and includes a small improved grassland enclosure and an agricultural farmyard area of hard standing. The southern and eastern boundaries of the site adjoining residential properties and are marked by garden wooden fencing. The north boundary is marked by a native Cornish hedge and adjoins a semi-improved grassland field grazed by sheep. To the west is a concrete farm yard area/parking/driveway. There is an agricultural barn adjacent to the site; this is not within the survey area and will be retained and unaffected by the proposals. There are piles of manure, earth and stone within the grassland enclosure.

The site is not a designated site of nature conservation importance. There are two designated sites within 1km of the site as follows:

Bodmin Moor North Site of Special Scientific Interest (SSSI) is located 650m northeast of the site.

Blisland Wood County Wildlife Site (CWS) is located 250m south of the site.

The River Camel Special Area of Conservation (SAC) is more than 1km away.

Of the habitats present only the native Cornish hedge on the northern boundary is of notable biodiversity value. The hedgerow qualifies as 'ecologically important' according to the criteria specified in the Hedgerows Regulations 1997 and qualifies as priority habitat for conservation in the county and UK (Biodiversity Action Plans) BAPs. The hedge is considered to be of biodiversity value at the local level.

The potential of the site to support notable or legally protected species was assessed and is summarised as follows. The protection afforded to these species is detailed in section 4.4.

The hedgerow within the site has the potential to support dormouse, nesting birds, hedgehog and reptiles.

Nesting birds may also be present in the short section of leylandii hedge near the eastern boundary.

There are no features within the development footprint that could harbour roosting bats. It is possible that bats use the hedgerow within the site for foraging.

The grassland is tightly grazed and unlikely to support reptiles, however the manure and earth heaps and the stone pile at target note 2 provide suitable habitat for reptiles.

5. ECOLOGICAL IMPACTS, MITIGATION AND MONITORING

5.1 Details of proposed works

The appraisal is to inform a planning application to construct two residential dwellings on the land. The proposed site plan is included as Figure 3. Access will be via an existing driveway/yard and there will be no removal of buildings, trees or hedgerows.

The likely ecological impacts of the proposed development are considered below, along with suitable mitigation and requirements for further survey and monitoring. An assessment of the residual impacts is given at the end of this section.

5.2 Impacts to designated sites

The proposed development will not impact upon any designated sites of nature conservation importance or the features for which they were designated.



5.3 Loss of Habitats

The development will lead to loss of all internal habitats. This includes improved grassland with nettles and areas of hardstanding. These habitats are not of biodiversity value and their loss does not require mitigation.

There will be no loss of hedgerow habitat.

5.4 Habitat gain

In an desire to result in biodiversity net gain the following habitat creation is proposed and shown on Figure 3.

Loss of habitats detailed in section 5.3 will be mitigated by habitat creation as follows.

- 50m of new Cornish hedge will be created to mark the new garden boundaries as detailed on Figure 3. The new hedge will be construted of earth and stone and coursed in a similar style as that existing (see photograph 2), to retain landscape character. The top of the hedge will be planted with native shrubs including a diverse mix of the following hazel, holly, hawthorn, European gorse and honeysuckle. Planting will avoid periods of drought.
- 75m linear strip 1m wide of native shrub planting along the southern and eastern boundary fence line. This will create wildlife habitat but also act as a visual screen. Suggested species include a diverse mix and random planting of hazel, holly, hawthorn, European gorse, field maple, elder, quelder rose, spindle, dogwood and honeysuckle. Planting will avoid periods of drought.
- In compliance with the Biodiversity Supplementary Planning Document (SPD) the new dwellings will each include one bee brick and one bat tube/box. The bee brick will be installed on the south-facing walls 1-2m above ground level. Bee bricks contain multiple cavities for bees to lay their eggs and are integral to a building (see photograph 6). The bat tube/box will be installed flush with the wall surface (as shown in Photograph 7) and sited near the roof in a dark location.







Photograph 6. Example bee brick. Photograph 7. 'Green and Blue' bat block.

5.5 Disturbance/degradation to habitats

Excavation of foundations has the potential to damage roots of a neighbouring tree at target note 1. A tree protection zone will be established around this tree to avoid this impact.

The Cornish hedge (of biodiversity value) on the north boundary may be damaged by vehicle movements and inappropriate storage of materials during construction. To avoid this impact protective fencing will be placed at the foot of hedgerow before construction activities commence.

5.6 Disturbance to Species

The hedgerow within the site has the potential to support dormouse, nesting birds, hedgehog and reptiles. No impacts on species using the hedge are anticipated as the hedge will be protected as detailed in section 5.5.



Removal of the short section of leylandii on the east boundary has the potential to disturb nesting birds. Any vegetation clearance will be informed by a search for nesting birds. If active nests are found works near the nest will be delayed until dependant young have fledged.

The manure, earth and stone heaps at target note 2 have the potential to support reptiles. Potential habitat for reptiles will be greater post development due to Cornish hedge creation. Therefore, so long as measures to avoid injury are be implemented there will be no adverse population impacts. The heaps will be removed during April and October when temperatures are above 10C. At this time reptiles are active and able to retreat to safety.

Habitat creation (hedgerow and native shrub planting) will increase the potential of the site for invertebrates, nesting birds and foraging bats.

To minimise light pollution and potential impacts on foraging bats, external lights will be avoided if possible. If installed they should feature peak wavelengths higher than 550nm (to avoid the component of light most disturbing to bats) and be bollard or low-level downward directional lights on short timers.

5.7 Further Surveys

No further surveys are required.

5.8 Monitoring

No monitoring is required.

5.9 Residual Impacts

If all of the mitigation discussed above is implemented successfully, then it is considered likely that the residual impacts of the development will be minor long term positive due to the net gain of 50m of Cornish Hedge planted with native shrubs, 75m linear strip of native shrub planting and integral bat and bee features.



6. REFERENCES AND BIBLIOGRAPHY

Baker, J., Hoskin, R. and Butterworth, T. (2019). Biodiversity net gain. Good practice Principles for development. A practical Guide, CIRIA, 2019. ISBN 978-0-86017-791-3.

Bat Conservation Trust (2018) Bats and artificial light in the UK – bats and the built environment. Guidance note 08/18. Bat Conservation Trust, London.

BSI 42020 (2013). Biodiversity. Code of practice for planning and development. British Standards Institute, London.

Burns F, Eaton MA, Balmer DE, Banks A, Caldow R, Donelan JL, Douse A, Duigan C, Foster S, Frost T, Grice PV, Hall C, Hanmer HJ, Harris SJ, Johnstone I, Lindley P, McCulloch N, Noble DG, Risely K, Robinson RA, Wotton S (2020) The state of the UK's birds 2020. The RSPB, BTO, WWT, DAERA, JNCC, NatureScot, NE and NRW, Sandy, Bedfordshire.

CBI [Cornwall Biodiversity Initiative] (1997-2004) Cornwall's Biodiversity Volumes 1, 2 & 3. Cornwall Wildlife Trust, Truro.

CEC [Council of the European Communities] (1979) Council Directive 79/409/EEC on the Conservation of Wild Birds [Referred to as EC Birds Directive]. Official Journal of the European Communities: L103.

CEC [Council of the European Communities] (1992) Council Directive 92/43/EEC of 21 May 1992 on the Conservation of Natural Habitats and of Wild Fauna and Flora [Referred to as EC Habitats Directive]. Official Journal of the European Communities: L206.

CIEEM [Chartered Institute of Ecology and Environmental Management] (2017) Guidelines for Ecological Report Writing. 2nd Edition. CIEEM, Winchester.

CIEEM (2018) Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine version 1.1. Chartered Institute of Ecology and Environmental Management, Winchester.

CIEEM [Chartered Institute of Ecology and Environmental Management] (2017) Guidelines for Preliminary Ecological Appraisal Second Edition.

Collins, J. (ed.) (2016) Bat Surveys for Professional Ecologists – Good Practice Guidelines (3rd Edition). The Bat Conservation Trust, London.

Cornwall Council (2015) Cornwall's Environmental Growth Strategy. Cornwall Council, Truro.

Cornwall Council (2016) Cornwall's Local Plan Strategic Policies 2010-2015. Cornwall Council, Truro.

Cornwall Council (2018) Cornwall Planning for Biodiversity Guide. Cornwall Council, Truro.

Cornwall Wildlife Trust (CWT) (2007) Biodiversity and Geological Conservation: Planning Good Practice Guidance for Cornwall. CWT.

Department for Communities and Local Government, (2012). National Planning Policy Framework. London ISBN: 978-1-4098-3413-7

Eaton et al. (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.

EN [English Nature] (2006). The Dormouse Conservation Handbook. Second Edition. English Nature, Peterborough.

EN [English Nature] (2004) Reptiles: Guidelines for Developers. English Nature, Peterborough.

ERCCIS [Environmental Records Centre for Cornwall and the Isles of Scilly] (to 2014) Erecords computer database. Cornwall Wildlife Trust. Unpublished.

Froglife, 1999. Reptile survey: an introduction to planning, conducting and interpreting surveys for snake and lizard conservation. Froglife Advice Sheet 10. Froglife.

Harris, S., Cresswell, P. & Jefferies, D. 1989. Surveying badgers. Mammal Society Publication No 9.

HM Government (1981 as amended) The Wildlife and Countryside Act 1981. HMSO, London.

HM Government (1992) Protection of Badgers Act 1992. HMSO, London.

HM Government (1997) The Hedgerow Regulations 1997. HMSO, London.



HM Government (2000) The Countryside and Rights of Way Act 2000. HMSO, London.

HM Government (2006) The Natural Environment and Rural Communities Act 2006. HMSO, London.

HM Government (2010) The Conservation of Habitats and Species Regulations 2010. HMSO, London.

JNCC [Joint Nature Conservation Committee] (2010) Handbook for Phase 1 Habitat Survey. JNCC, Peterborough.

JNCC [Joint Nature Conservation Committee] (2011) UK BAP Priority Species and Habitats. Available at http://jncc.defra.gov.uk.

Natural England (2019) The Biodiversity Metric 2.0.

http://publications.naturalengland.org.uk/publication/5850908674228224

Office of the Deputy Prime Minister (ODPM) (2005). Government Circular: Biodiversity and Geological Conservation – Statutory Obligations and their Impacts within the Planning System. The Stationery Office Ltd. London.

Shawyer, C. R. (2011) Barn owl survey methodology and techniques for ise in ecological assessment – Developing best practice in survey and reporting. IEEM, Winchester (updated 2012).

Spalding, A. (Ed.) (1997) Red Data Book for Cornwall and the Isles of Scilly. Croceago Press, Camborne.

Stace, C. (1991) New Flora of the British Isles. Cambridge University Press, Cambridge.

Stewart, A., Pearman, D.A. & Preston, C.D. (Eds.) (1994) Scarce Plants in Britain. JNCC, Peterborough

Williams, C. (2010) Biodiversity for Low and Zero Carbon Buildings: A Technical Guide for New Build. RIBA, London.



Figure 2 Phase 1 habitat distribution

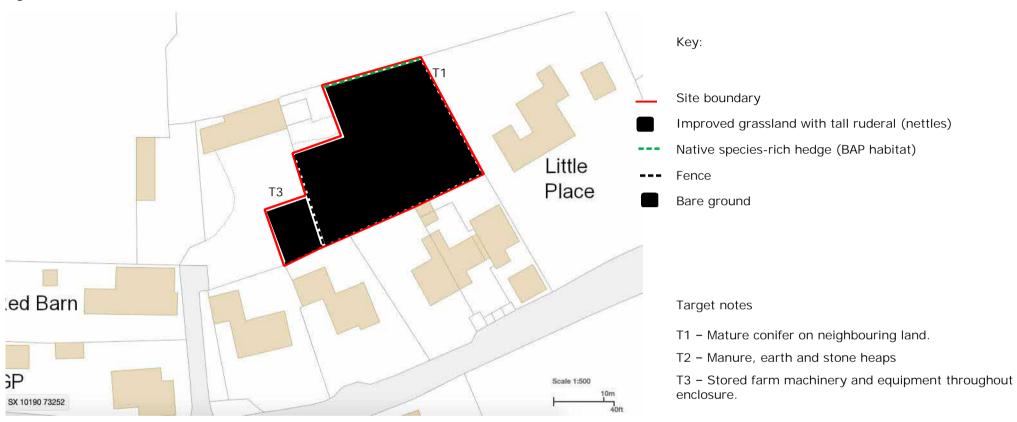
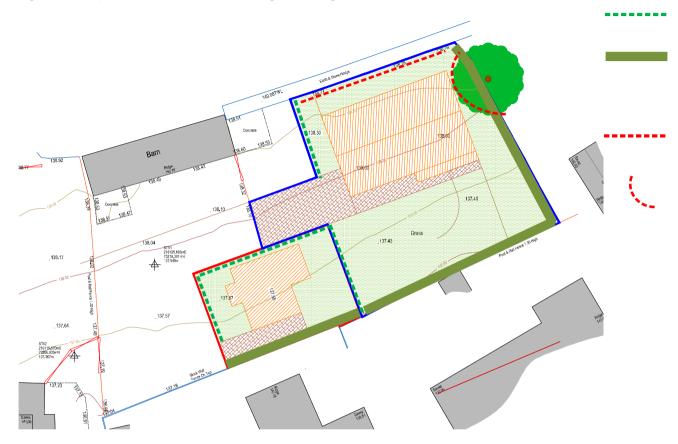




Figure 3 Proposed site plan and ecological mitigation measures



New Cornish hedge with native planting.

New native shrub planting along fence line to create habitat and provide a visual screen.

New dwellings to include a bee brick and a bat block.

Existing hedgerows to be retained and protected with fencing during construction.

Tree protection measures to be put in place around neighbouring tree (T1 on Figure 1).

Avoid external lights or employ bat sensitive lighting.

Remove earth and stone heaps and manure between April and October when temperatures are above 10C.



Appendix 1 Summary of relevant legislation and policies

Protection of Badgers Act (1992)

Badgers are protected by the Protection of Badgers Act (1992) and the Wildlife and Countryside Act 1981 (as amended), Schedule 6. It is an offence to intentionally kill, capture, injure or ill-treat any badger and to obstruct, destroy or damage a badger sett or disturb badgers within a sett.

Hedgerow Regulations 1997

Any hedgerows classified as 'important' under the 1997 Hedgerows Regulations cannot be removed without a Hedgerow Removal Notice issued by the relevant Local Authority unless previously approved as part of a planning permission.

National Planning Policy Framework 2012

The National Planning Policy Framework (NPPF) sets out national planning policy that is committed to minimising impacts on biodiversity and providing net gains in biodiversity where possible. Under NPPF, local planning authorities have an obligation to promote the preservation, restoration and recreation of Priority habitats, ecological networks and the protection and recovery of Priority species as identified under the Natural Environment and Rural Communities Act (2006). Section 118 of the NPPF also requires enhancements for biodiversity. The NPPF also recognises the wider benefits of ecosystem services.

Natural Environment and Rural Communities Act (NERC) 2006

The Natural Environment and Rural Communities Act (NERC) requires all public authorities, including planning authorities to have regard to the purpose of conserving biodiversity whilst carrying out their normal functions. The NERC Act includes lists of Habitats and Species of Principal Importance (HPIs and SPIs) to the conservation of biodiversity (Section 41) that should be considered in the implementation of duties under the NERC Act. In line with government circular 06/2005 (ODPM, 2005) which provides supplementary guidance, the presence of a Priority species may be a material consideration when a planning authority is considering a development proposal.

The HPI and SPI listed under the NERC Act are largely also UK BAP Priority habitats and species. The UK Post-2010 Biodiversity Framework succeeds the UK BAP partnership; though its list of Priority species and habitats agreed under the UK BAP still form the basis of much biodiversity work in the UK. The current strategy for England is 'Biodiversity 2020: A Strategy for England's wildlife and ecosystem services'.

The Wildlife and Countryside Act 1981 (as amended) (WCA)

The Wildlife and Countryside Act 1981 (as amended) is the primary legislation for England and Wales for the protection of flora, fauna and the countryside. Part 1 of the Act deals with the protection of wildlife.

Amended by the Countryside and Rights of Way (CRoW) Act 2000

Most European Protected Species are now covered under the Conservation of Habitats and Species Regulations (see below) but some activities are still covered by the WCA such as obstructing access to a bat roost.

The WCA prohibits the release into the wild of non-native animal species listed on Schedule 9. It is also an offence to 'cause the spread' of plants listed on Schedule 9.

All British birds, their nests and eggs are protected in law. It is an offence to deliberately take, kill or injure any wild bird or to take, damage, or destroy any nest or egg of any wild bird. The birds listed under Schedule 1 of the Wildlife and Countryside Act are afforded additional protection against intentional or reckless disturbance whilst building a nest or in or near a nest containing eggs or dependent young.

All species of reptile and amphibian are protected by the WCA. Under Schedule 5, Reptiles such as adder, common lizard, slow worm and grass snake are protected against intentional killing, injuring or selling, and smooth newt, palmate newt, common frog and common toad are protected only against sale. Species such as the smooth snake, sand lizard and great crested newt are afforded additional protection by European legislation as described below. These species are thought to be absent from Cornwall (apart from one site in north Cornwall where sand lizard has been reintroduced).

A number of invertebrates, including the white-clawed crayfish, are protected under Schedule 5 of the Act.

The CRoW Act also specifies the duty of Local Authorities to further the conservation of listed (UK BAP priority) habitats and species.

Conservation of Habitats and Species Regulations 2010 (as amended)

The Conservation of Habitats and Species Regulations 2010 (as amended) are the means by which the EC Habitats and Species Directive (92/43/EC) is transposed in England and Wales and update the legislation and consolidate many amendments which have been made to the Regulations since they were first made in 1994.

These Regulations provide protection for European Protected Species (animals and plants listed in Annex IV Habitats Directive which are resident in the wild in Great Britain) including bats, dormice, great crested newts and otters. The Conservation of Habitats and Species (Amendment) Regulations 2012 placed new duties on public bodies to help "preserve, maintain and re-establish habitat for wild birds".

The designation and protection of domestic and European Sites e.g. Sites of Special Scientific Interest and Special Areas of Conservation (SAC) also falls within these Regulations.

Public bodies (including the Local Planning Authority) have a duty to have regard to the requirements of the Habitats Directive in carrying out their duties i.e. when determining a planning application.

European Protected Species (EPS) occurring in Cornwall: Bats, Dormice and Otter are protected under both the Conservation Regulations 2010 and the Wildlife and Countryside Act 1981 (as amended), it is an offence to:

Intentionally kill, injure or capture an EPS;

Intentionally or recklessly disturb an EPS;

Intentionally or recklessly damage, destroy or obstruct access to a place of shelter or breeding (for example, bat roosts, hedgerows used by dormice), and this applies regardless of whether the species is actually present at the time (for example, a bat roost used in the winter for hibernation is protected throughout the year, even during the summer when it is not occupied).

Possess or transport a bat or any part of an EPS, unless acquired legally;

Sell, barter or exchange bats, or parts of an EPS.

Intentionally handle a wild EPS or disturb an EPS whilst using a place of shelter/ breeding unless licensed to do so by the statutory conservation agency (Natural England).

Town and Country Planning Environmental Impact Assessment Regulations 2017

These regulations apply the amended EU directive "on the assessment of the effects of certain public and private projects on the environment" (usually referred to as the 'Environmental Impact Assessment Directive') to the planning system in England.

Case Law

There are several case laws in Britain relating to the duty of developers and planning authorities with respect to wildlife, resulting in several key principles summarised in the table below:

Case / Appeal	Providing support for			
Morge v Hampshire County Council (2011)	'Disturbance' under the Conservation Regulations 2010 applies to an activity likely to impact negatively on the local population of a European Protected Species.			
R v Cheshire East Council 'The Woolley Case' (2009)	Regarding European Protected Species, Local Authorities must apply the 'three tests' under the Conservation Regulations 2010 when deciding on planning applications: that there is no satisfactory alternative, there is an appropriate reason for the development, and that the development will not affect the favourable conservation status of protected species present.			
APP/P9502/A/08/2070105 (Appeal decision, Brecon, 2008)	Para 18: Local Planning Authorities cannot condition provision of a mitigation scheme; detailed mitigation must be provided prior to determination.			

APP/C0820/A/07/2046271 (Appeal decision, Padstow, 2007) Para 18: Full survey information must be provided prior to determination; not just for protected species, but also for BAP species (in this case corn buntings).

R v London Borough Council Bromley (2006) Para 30: Environmental Impact Assessment required at outline planning stage.

R v Cornwall County Council 'The Cornwall Case' (2001) Surveys for protected species cannot be conditioned; must be undertaken prior to determination.