

kite ecology

**Ecological Survey including Test for Likely
Significant Impacts**

**Proposed Campsite, Parke Farm, Merrion,
Pembrokeshire**

Mr Goldsworthy

Draft Report

August 2022

kite ecology

Chelston Narberth Road Tenby Pembrokeshire SA70 8JD

01834 842851 07867 805055

enquiries@kiteecology.co.uk

Contents

1	Executive summary	3
2	Introduction and site description	4
3	Desk study and survey methodology	4
4	Baseline (results and findings)	6
5	Limitations to survey	14
6	Legislation and planning	14
7	Discussion and key recommendations	16
8	References	20

Copyright kite ecology. All rights reserved.

No part of the report may be altered or extracted without the prior written consent of kite ecology as to the form and context in which it may appear. Ownership of the report remains with kite ecology until full payment has been received.

kite ecology have prepared this report for the sole use of client and no other party may use or copy (either in part or whole) any part of the report without the written confirmation of kite ecology. Any part of the report cannot be altered or extracted without the prior written consent of kite ecology as to the form and context in which it may appear. kite ecology accepts no responsibility for any use of or reliance on the contents of this report by any third party.

This report, and the information contained in it, is intended to be valid for a maximum of 12 months from the date of the survey, providing no significant baseline changes have occurred.

Project number	Report number	Revision number	Date of issue
1677	001	Draft	22082022
1677	001	Final based on client approval	

1 Executive Summary

1.1 An ecological survey and impact assessment was commissioned by Steve Hole Architects LLP on behalf of the owner, Mr Goldsworthy, in relation to the proposed development of campsite and associated facilities at the site known as Parke Farm, Merrion, Pembrokeshire.

1.2 A walkover ecological survey of the site was undertaken on 13th September 2021 and 19th August 2022 when it was surveyed for protected species including badgers, bats, dormice and birds. No time was expended surveying for amphibians, dormice, otters or water voles due to the lack of suitable habitat on the site. Habitats on site were also recorded and the potential impacts of the proposed development on the nearby designated sites were also assessed.

1.3 At its closest point, the site is 2.2km to the south west of Orierton Stable Block and Cellar Site of Special Scientific Interest and 3.3km north west of Park House Outbuildings SSSI and Stackpole Courtyard Flats and Walled Garden SSSI. All of these form part of the Pembrokeshire Bat Sites and Bosherton Lakes Special Area of Conservation. The proposed development is improved grassland of uniform sward height which is maintained at a relatively short sward height, with the fields separated by relatively species poor hedgerows. It is likely that the hedgerows on site would be used by foraging and commuting bats.

1.4 Bats

1.4.1 *Flight lines*

Flight lines are important to bats as they allow the bats to commute between roosting sites and foraging areas. The woodland to the south of the walled garden is likely to be used by foraging bats. The woodland is currently unlit, so it is vital that this remains the case post development. There is already an existing access track through the woodland and except for an upgrading of the surface (from rough gravel to tarmac), the track will remain in its current position. The track will remain unlit with the only lighting from cars accessing the properties. With regard to the development itself, the property will utilise hooded, downward facing external lighting which will be positioned to avoid light spilling out onto the surrounding habitat.

1.4.2 *Lighting*

A lighting plan has been designed with minimal external security lighting. All external lights have been positioned to ensure they shine downwards and are motion sensitive only to larger movement.

1.5 Birds

All vegetation removal will avoid the bird nesting season between late March and August in any year.

2 Introduction and site description

2.1 An ecological survey and impact assessment was commissioned by Steve Hole Architects LLP on behalf of the owner, Mr Goldsworthy, in relation to the proposed development of campsite and associated facilities at the site known as Parke Farm, Merrion, Pembrokeshire. The centre of the site is located at OSGR SR94529711.

2.2 The survey relates to five fields to the north and west of the farmhouse. The survey area is highlighted on Figure 1.

Google Earth was used to identify any important landscape features surrounding the site.

3.2.3 Designated sites

The Multi-Agency Geographic Information website (www.magic.gov.uk) was used to identify the presence of any protected sites within 2km of the survey area.

3.3 On site surveys

3.3.1 Phase 1

A Phase 1 habitat survey was carried out following the standard field methodology set out in the *Handbook for Phase 1 Habitat Survey – A Technique for Environmental Audit*, Joint Nature Conservation Committee 1990 (2003 edition).

3.3.2 Badgers

The site, and where possible, a radius of 30 metres from the site boundary was searched for badger setts. Sett entrances are recognised by entrances c.300mm wide and c.200mm high and tend to have large accumulations of earth outside. Other signs searched for included 'snuffle holes' (holes dug by badgers when searching for invertebrates), 'dung pits' (small pits in which badgers deposit their faeces) and 'day nests' (nests of bedding material made by badgers for sleeping above ground).

3.3.3 Bats

3.3.3.1 Trees

All trees were surveyed and assessed for their potential use by bats. Trees were designated as being of low, medium or high potential use by bats. Features recorded included cracks or splits, peeling bark, woodpecker holes or dense coverings of ivy. Where possible, any suitable roosting features were surveyed using an endoscope.

3.3.3.2 Other habitats

The habitat surrounding the site was assessed for its potential use for foraging and commuting bats.

3.3.4 Dormice

The habitat was assessed for its potential use by dormice.

3.3.5 Birds

Any birds seen or heard on site during the survey were recorded.

3.3.6 Other species

Incidental records of any other species seen or heard on site during the survey were also recorded.

4 Results

4.1 General

The proposed development is situated to the north of the existing farmhouse. The farmhouse itself is Grade II listed and has recently been extensively renovated and extended. Bat surveys were commissioned as part of the work and

as bats were recorded, work was completed under a Natural Resources Wales bat development licence, with mitigation and enhancement measures included.

4.2 Desk study

4.2.1 Local Records Centre

There are 2797 individual records within the 2km search area. Over 95% of the records relate to the well documented and recorded Ranges at Castlemartin. The records are summarised on Figure 3, with habitats summarised on Figure 4 and known areas of ancient woodland on Figure 5.

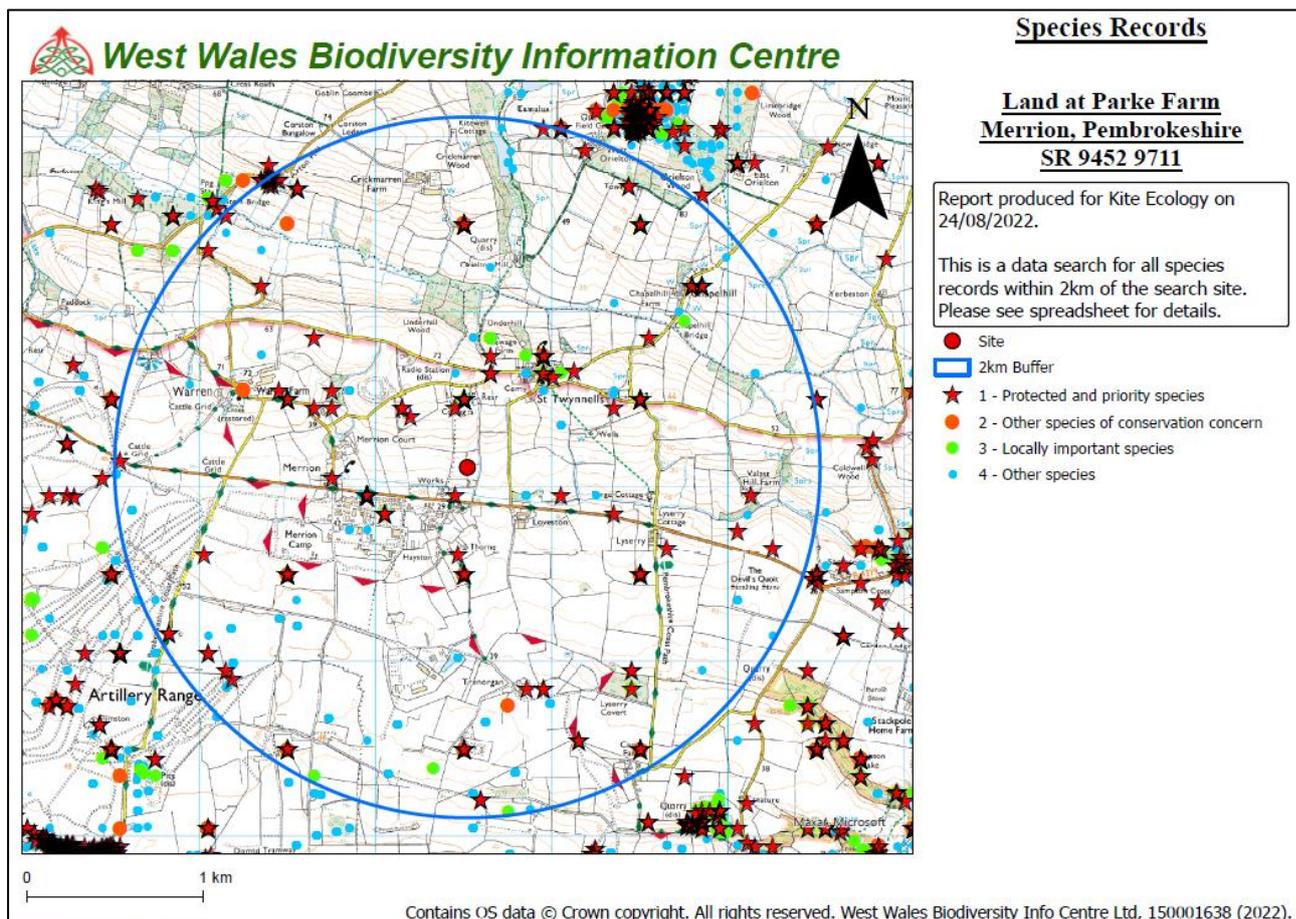


Figure 3. Summary of species records within a 2km radius of the site.

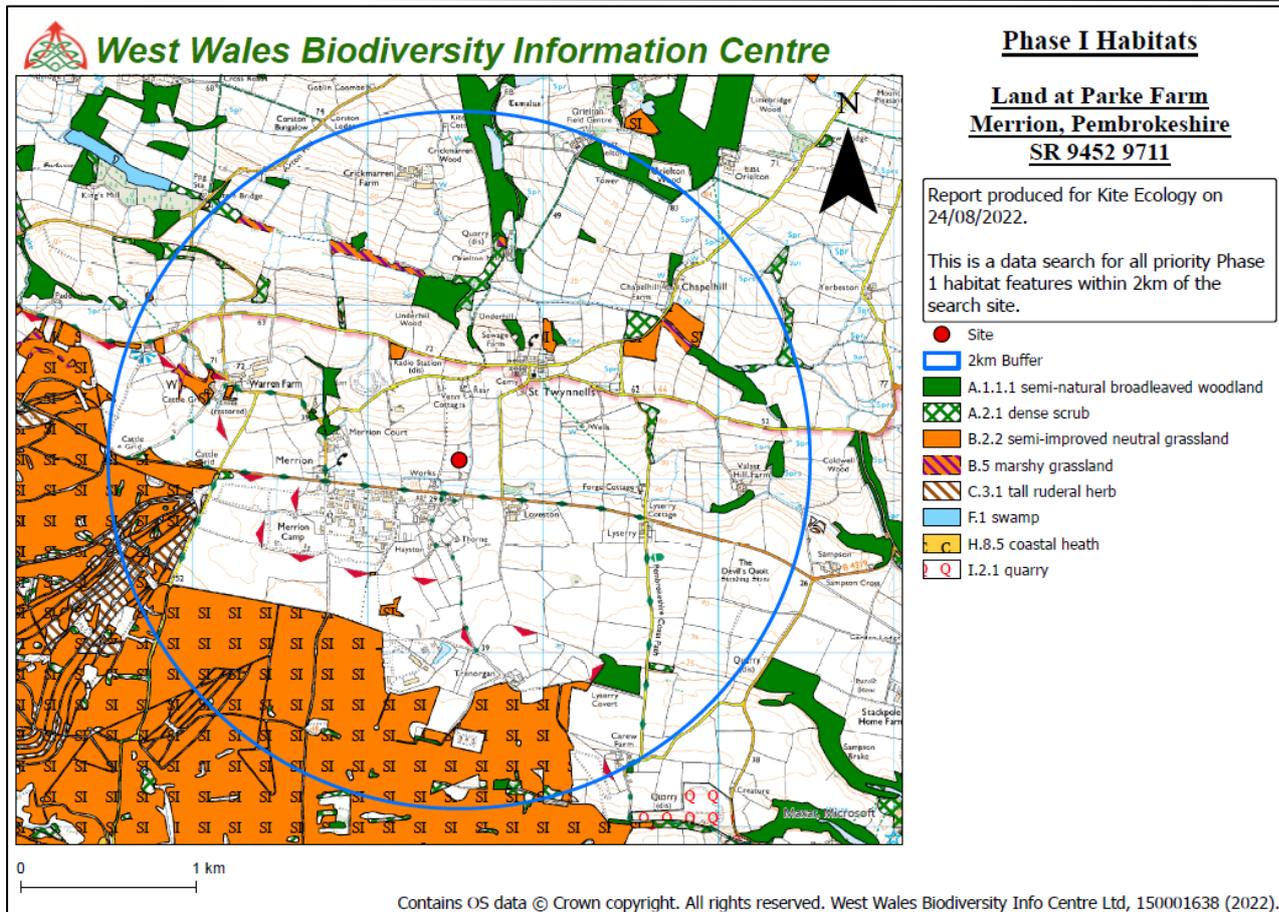


Figure 4. Summary of known habitats within a 2km radius of the site.

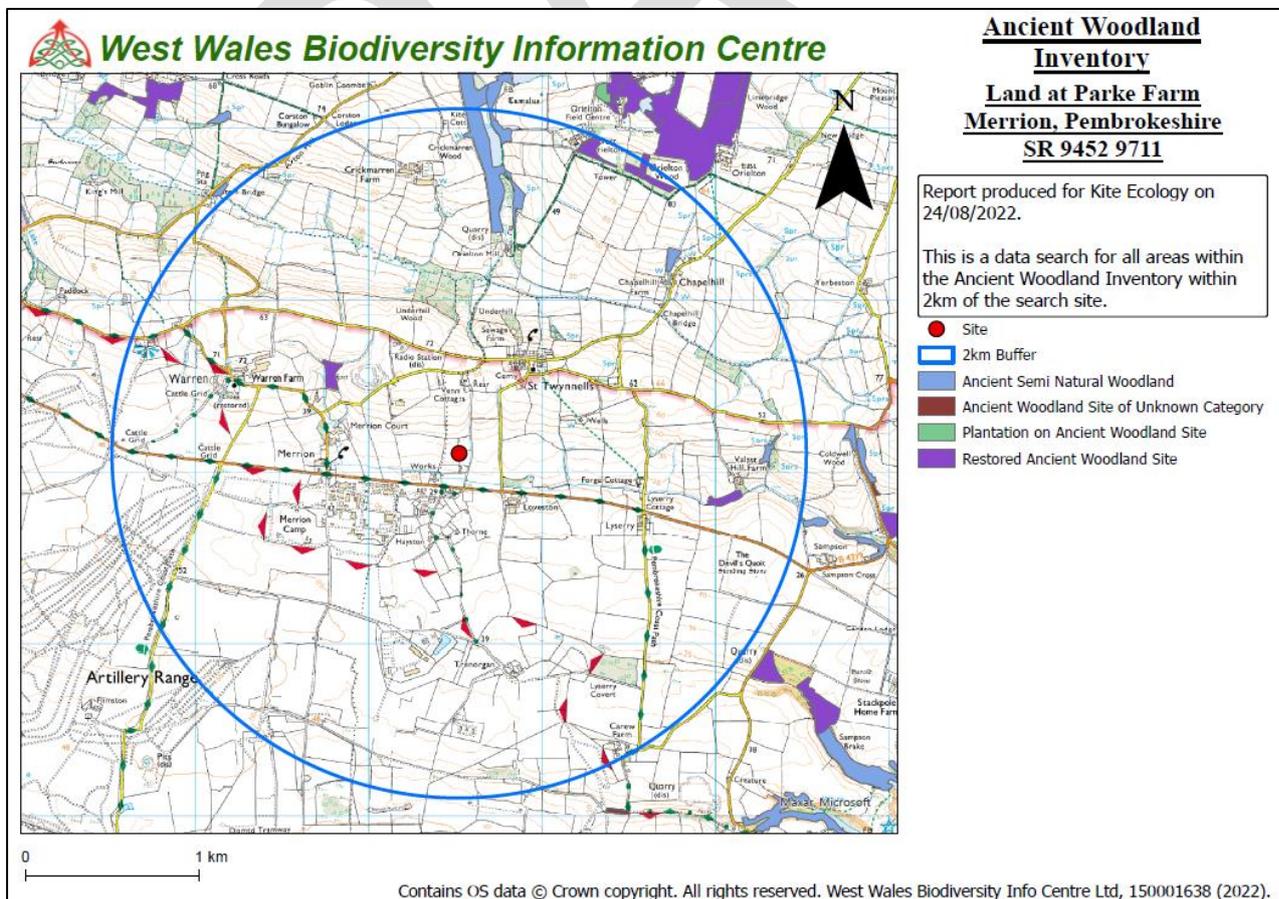


Figure 5. Ancient woodland within a 2km radius of the site.

4.2.2 Aerial photographs

Situated to the north of the small village of Merrion, Parke Farm is an established agricultural small holding of 10 acres. The farmhouse is surrounded to the north and west by five paddocks of an ancient field pattern and are named on the Tithe map as The Green, Upper Parke East, Parke West, Chancel Green and Lower Parke. The fields are separated and surrounded by hedgerows which provide links to the surrounding landscape, as visible in Figure 6.



Figure 6. Aerial photograph of the site in relation to the surrounding habitat.

4.2.3 Designated sites

At its closest point, the site is 2.2km to the south west of Orielson Stable Block and Cellars Site of Special Scientific Interest. The site is also 3.1km to the north east of Park House Outbuildings SSSI, Stackpole SSSI and Stackpole Courtyard Flats and Walled Garden SSSI. All these SSSI's also form part of the Pembrokeshire Bat Sites and Bosherton Lakes Special Area of Conservation. The designated sites are summarised on Figure 7.

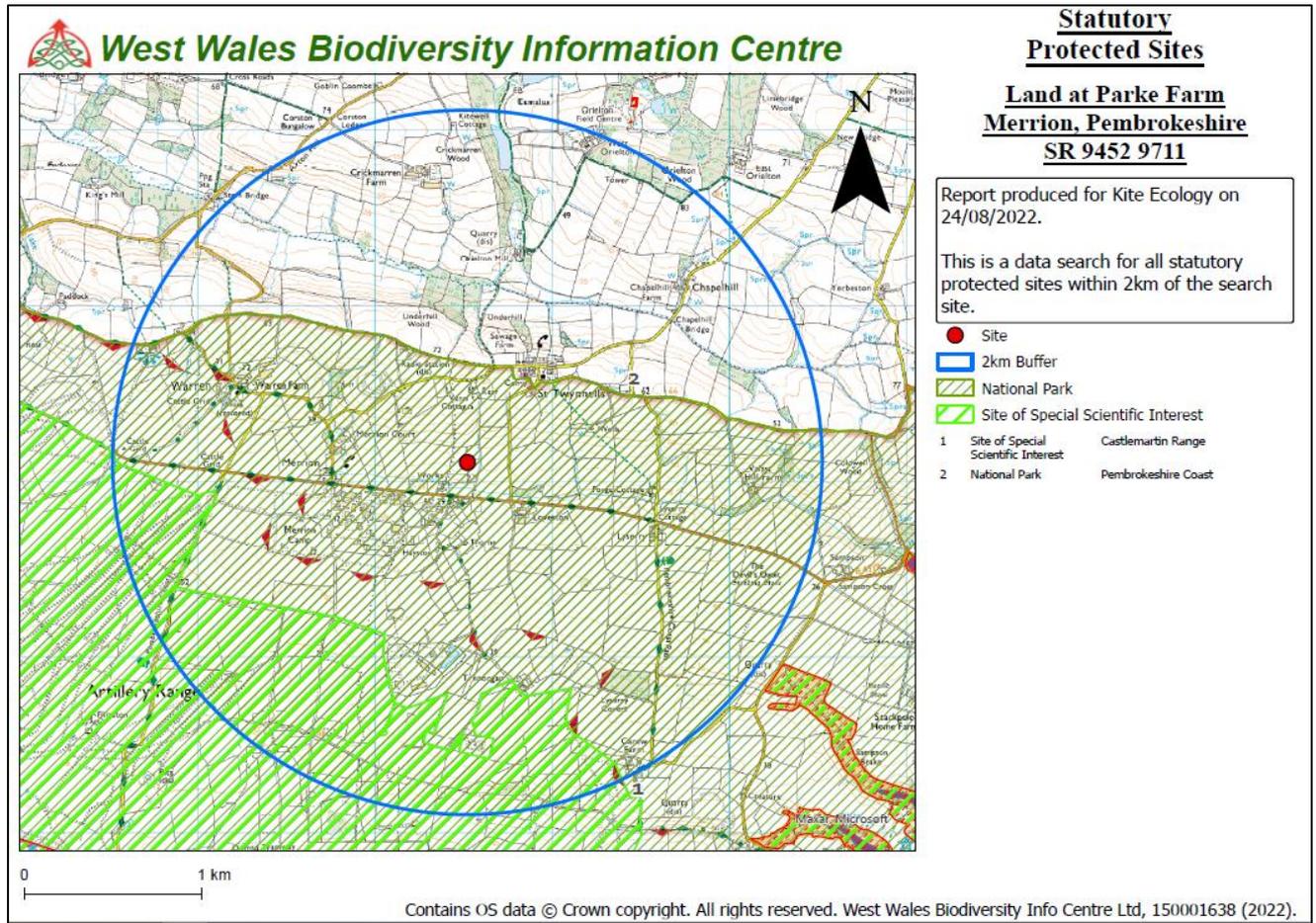


Figure 7. Designated sites within a 2km radius of the site.

4.3 On site surveys

4.3.1 Phase 1

4.3.1.1 Fields

All fields are improved grassland maintained at a uniformly short sward height as the fields are used as a summer camping site under the 28 day exemption. Portable sanitary facilities and electrical connections were also provided.



Figure 8. Example of one of the fields at Parke Farm.

4.3.1.2 Hedgerows

The hedgerows are all dominated by hawthorn and blackthorn. The hedgerows average 2.5m in height and approximately 1.5m in width.



Figure 9. Example of one of the central hedgerows at Parke Farm.

4.3.2 Badgers

No evidence of badgers was found within the survey area or within a 30m radius of the survey area.

4.3.3 Bats

4.3.3.1 Trees

There are no trees large enough or with any features suitable for use by roosting bats.

4.3.3.2 Flight lines and commuting routes

Prior to works to restore the farmhouse at Parke Farm commencing, bat surveys were completed. These surveys identified the buildings being used by small numbers of soprano pipistrelle *Pipistrellus pygmaeus* and lesser horseshoe *Rhinolophus hipposideros* bats. Mitigation and enhancement measures were included as Parke Farm as part of the renovation works under a Natural Resources Wales bat development licence (reference 76822:OTH:EPS:2017). It is therefore considered likely that the hedgerows around the site would be used by foraging and commuting bats.

4.3.4 Dormice

There are no records of dormouse within a 2km radius of the site. The hedgerows are very species poor and lack the variety of species usually required to support this species.

4.3.5 Birds

Robin *Erithacus rubecula*, blackbird *Turdus merula*, great tit *Parus major*, blue tit *Cyanistes caeruleus*, wren *Troglodytes troglodytes*, chiffchaff *Phylloscopus collybita*, magpie *Pica pica* and crow *Corvus corone* recorded on site during the survey. The hedgerows offer nesting opportunities at appropriate times of year.

4.3.6 Other species

No other species were recorded.

5 Limitations to surveys

- 5.1 The results and recommendations of the report are based on findings as they were at the time of the survey. Kite Ecology cannot be held responsible for any base line changes to the site that have occurred since the survey was carried out that may have any effect on the results and recommendations.

6 Legislation and planning policy

6.1 Designated sites

Special Areas of Conservation and Sites of Special Scientific Interest are strictly protected through both European Directives and UK legislation including the conservation and Habitats and Species Regulations 2010.

6.2 Badgers

The Protection of Badgers Act 1992 fully protects badgers and their setts and makes it an offence to either intentionally or recklessly kill, injure or take a badger, to cruelly ill-treat a badger or to interfere with a badger sett. Under section 10(1)(d) of the Protection of Badgers Act 1992, Natural Resources Wales has the authority to issue licences to interfere with a badger sett for the purpose of development, as defined by Section 55(1) of the Town and Country Planning Act 1990.

6.4 Bats

All species of bat and their breeding sites or resting places (roosts) are protected under the Conservation and Habitats and Species Regulations 2010 and Section 9 of the Wildlife and Countryside Act 1981 (as amended). It is an offence for anyone intentionally to kill, injure or handle a bat, to possess a bat (whether 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.

6.5 Birds

All birds, their nests and eggs are protected under Part 1 of the Wildlife and Countryside Act 1981 (as amended).

6.6 Well Being of Future Generations (Wales) Act 2015

The Well-being of Future Generations (Wales) Act is about improving the social, economic, environmental and cultural well-being of Wales. The Act places a duty on public bodies listed in the Act to carry out sustainable development.

6.7 Environment (Wales) Act 2016

The Environment (Wales) Act has been designed to complement the Wellbeing of Future Generations (Wales) Act by applying the principles of sustainable development to the management of Wales' natural resources. The Act puts the ecosystem approach into statute through a set of Sustainable Management of Natural Resources (SMNR) principles, which are based on the 12 principles (Ecosystem Approach principles) contained in the UN Convention on Biological Diversity (CBD).

6.8 Nature Recovery Plan for Wales

The Nature Recovery Plan for Wales is aimed at addressing the underlying causes of biodiversity loss. It sets out how Wales will deliver the commitments of the UN Convention on Biological Diversity and the EU Biodiversity Strategy to halt the decline in our biodiversity by 2020 and then reverse that decline.

6.9 The Planning (Wales) Act 2015

The Act sets out a series of legislative changes to deliver reform of the planning system in Wales, to ensure that it is fair, resilient and enables development. Taken together with proposed changes to secondary legislation, policy and guidance, one of the objectives of the act is to provide opportunities to protect and enhance our most important built and natural environments

6.10 Technical Advice Notes 5

TAN 5 gives advice to local authorities on development control issues for Special Protection Areas (SPAs), Special Areas of Conservation (SACs), and Sites of Special Scientific Interest (SSSIs). It also covers the selection and designation of non-statutory nature conservation sites, such as local nature reserves, and the protection of species, commons and greens.

6.11 Local Development Plan

Policy GN.37 (Protection and Enhancement of Biodiversity) from the Pembrokeshire Local Development Plan states:

'All development should demonstrate a positive approach to maintaining and, where ever possible, enhancing biodiversity. Development that would disturb or otherwise harm protected species or their habitats, or the integrity of other habitats, sites or features of importance to wildlife and individual species, will only be permitted in exceptional circumstances where the effects are minimised or mitigated through careful design, work scheduling or other appropriate measures.'

6.12 Additional Regulations

Local Authorities also have a duty under Regulation 9 (Parts 1 and 5) of the Habitat Regulations to have regard for the requirements of the Habitat Directive which includes a requirement to maintain the populations of Protected Species in a 'favourable Conservation Status'.

7 Discussion and key recommendations

7.1 Designated sites – Test for Likely Significant Impacts

7.1.1 Pembrokeshire Bat Sites and Bosherton Lakes Special Area of Conservation

Bats are a primary feature of the Pembrokeshire Bat Sites and Bosherton Lakes SAC, and, as a mobile feature of the designation are included in it, even when away from the site itself. It is very likely that the bats use the hedgerows around the site to forage and commute along, so careful consideration must be given to the design of the scheme to ensure that it does not impact on the designations. In the absence of mitigation such an impact is likely to be of medium significance at a local level.

7.2 Habitats

7.2.1 The development of the site will inevitably lead to the loss of the existing habitat. To mitigation for these losses, all new planting and landscaping will utilise locally sourced native species, as shown on Figure 10. Access on and around the fields is via existing gateways and field openings so the hedgerows themselves will be unaffected.

7.2.2 To improve hedgerows in the future;

- only cut each hedge every 2 years; this reduces maintenance and labour costs, creates a bushier hedge for wildlife and allows flower and berry production in the intervening years.
- hedges with slow growing species, such as hawthorn, can be cut on a 3 year cycle.
- do not cut back to the same height repeatedly, raising the cutting height each time will avoid placing the hedge under stress and allow it to regenerate more vigorously.
- cut hedges to a variety of shapes and sizes; "A" shaped hedges provide good stock proofing and shelter, create song posts for birds and enable hedgerow trees to develop if left untopped.
- leaving 1-2 metre (or wider) verges of tall grass by hedges provides nesting habitat for birds and protects hedgerows from pesticide or fertiliser spray drift.
- hedges can be trimmed, laid and coppiced from September to February but try and cut as late in the winter as possible so wildlife can take advantage of the nuts and berries produced in the autumn.



Figure 10. Proposed site layout with new planting included.

7.3 Bats

7.3.1 Foraging areas and flight lines

7.3.3.1 Foraging

The loss of the fields is an inevitable consequence of the proposed development. However, the habitat to be lost is improved grassland which in itself has limited foraging potential. The proposed development is approximately 5 hectares, so the loss of the area of land is considered to have a negligible impact on potential foraging areas given that the site is surrounded by farmland and woodland which are of much higher importance.

7.3.3.2 Mitigation for loss of foraging

The landscaping around the development will incorporate species attractive to insects on which bats feed. Such species include honeysuckle *Lonicera periclymenum*, common jasmine *Jasminum officinale*, ivy *Hedra helix*, apple *Malnus sp.*, evening primrose species *Oenothera spp.*, wild cherry *Prunus avium* and elder *Sambucus nigra*. The inclusion of such species will enhance the foraging potential of the site, so reducing any potential impacts to negligible.

7.3.3.3 Flight lines

Flight lines are important to bats as they allow the bats to commute between roosting sites and foraging areas. The existing hedgerows are likely to be used by foraging bats. The site is currently unlit, so it is vital that this remains the case post development. Regarding security lighting, all external lights have been positioned to ensure they shine downwards and are motion sensitive only to larger movement. Examples of suitable lighting are shown on Figure 11. The inclusion of sympathetic lighting, retention of existing hedgerows and new planting will ensure any potential impacts are negligible.



Figure 11. Example of different PIR LED lighting.

7.4 Birds

Any site clearance should be carried out between late August and early March in any year which will avoid the bird nesting season, so preventing the potential killing or injuring of birds or destruction of their eggs or active nests. If it is unavoidable to carry out site clearance during the bird nesting season, then it should be conducted carefully and the presence of birds and/or their nests checked for throughout the clearance. Should a nest be encountered during such works, then clearance in that area should cease immediately with the nest being protected until the young have fledged or the nest is no longer in use.

8 References

Bat Conservation Trust (2016). Bat Surveys for Professional Ecologists: Good Practice Guidelines. 3rd Edition. Bat Conservation Trust, London.

Gent, A.H and Gibson, S.D eds (1998) Herpetofauna Workers Manual. Joint Nature Conservation Committee, Peterborough.

Gunnell, K., Grant, G. And Williams, C. (2012). Landscape and urban design for bats and biodiversity. Bat Conservation Trust

JNCC (1993) Handbook for Phase 1 habitat survey: A technique for environmental audit. Joint Nature Conservancy Committee, Peterborough.

Harris, S and Yalden, D.W. eds (2008). Mammals of the British Isles (4th Edition). The Mammal Society.

Mitchell-Jones, A.J. & McLeish, A.P. (2004). Bat Workers' Manual (3rd Edition). Joint Nature Conservancy Committee, Peterborough

Mitchell- Jones, A.J. (2004). Bat Mitigation Guidelines. English Nature, Peterborough.

Rose, F. (2006). The Wildflower Key – How to Identify wild flowers, trees and shrubs in Britain and Ireland.

Schofield, H.W. (2008). The Lesser Horseshoe Bat Conservation Handbook. The Vincent Wildlife Trust.

Steve Hole Architect LLP. Proposed Campsite, Parke Farm, Merrion, Pembroke, Pembrokeshire. Pre-application Statement.

Welsh Assembly Government (2009) Technical Advice Note 5, Nature Conservation and Planning