From:	Richard Cord
Sent:	27/06/2017 16:56:53
To:	Higgins, Michael
Subject:	FW: Sandy Park Hotel
Attachments:	0469-EA-AS - Sandy Park Lodge, Exeter - Ecological Appraisal.pdf

From: Richard Cord
Sent: 27 June 2017 16:50
To: ' (michael.higgins@exeter.gov.uk)' <michael.higgins@exeter.gov.uk>
Subject: Sandy Park Hotel

Hi Michael

Please find attached addendum report finalised by our ecologists after 3no additional bat surveys, this was mentioned in the initial report as submitted.

If you have any queries please call me.

Kind regards

Richard Cord RIBA

Managing Director

Kensington Taylor Limited

Chartered Architects

Kensington Court

Woodwater Park

Pynes Hill

Exeter EX2 5TY

T 01392 360 338

E richard.cord@kensingtontaylor.com

W www.kensingtontaylor.com

Sandy Park Lodge, Exeter

Ecological Appraisal

June 2017

A report on behalf of Exeter Rugby Group PLC

Ref: 0469-EA-AS

www.green-ecology.co.uk - 0845 474 8774 - info@green-ecology.co.uk

Green Ecology is a trading name for GE Consulting Services (UK) Ltd registered number 08435536
Registered office: Unit 11A, Gidleys Meadow, Christow, Devon, EX6 7QB. VAT Number 160595992

Site Details

Site Name	Sandy Park Lodge
Site Location	Exeter
Central OS Grid Reference	SX 9640 9074
Client	Exeter Rugby Group PLC

Quality Assurance

Report Title	Ecological Appraisal
Report Reference	0469-EA-AS
Author	Alex Sams BSc MSc ACIEEM
Checked By	Chris Turner BSc MCIEEM
Revision No.	1
Issue Date	27 June 2017
Summary of Changes	N/A
Revised By	N/A
Approved By	N/A

The content of this report that has been provided by Green Ecology is true, and has been prepared and submitted in accordance with the Chartered Institute of Ecology and Environmental Management's Code of Professional Conduct. Its contents are compliant with British Standard BS42020: 2013 Biodiversity Code of Practice for Planning and Development.

This report has been prepared for the exclusive use of the stated client and unless otherwise agreed in writing by Green Ecology, no other party may use, make use of or rely on the contents of the report. No liability is accepted by Green Ecology for any use of this report, other than for the purposes for which it was originally prepared and provided.

Green Ecology has exercised due care in preparing this report. It has not, unless specifically stated, independently verified information provided by others. No other warranty, express or implied, is made in relation to the content of this report and Green Ecology assumes no liability for any loss resulting from errors, omissions or misrepresentation made by others.

Any recommendation, opinion or finding stated in this report is based on circumstances and facts as they existed at the time that Green Ecology undertook the work. Nothing in this report constitutes legal opinion. If legal opinion is required the advice of a qualified legal professional should be secured.

Executive Summary

This report presents the results of an Ecological Appraisal at Sandy Park Lodge, Exeter (central OS grid reference: SX 9640 9074) in relation to a hotel development.

A desk study, Extended Phase 1 Habitat Survey (including building inspection) and emergence surveys for bats were undertaken in 2017 to provide baseline data for the Site and assess the ecological implications of the development.

The Site is approximately 0.75 hectares (ha) and comprised areas of cleared vegetation and bare ground, improved and amenity grassland with fenced boundaries with limited scrub, a small section of species-poor hedgerow, coniferous trees as well as a bungalow, garage and shed. The Site supported suitable habitat for nesting birds (scrub and trees) and roosting bats (buildings); however, no bats were recorded emerging from the buildings on Site.

The development will include the clearance of all habitats on Site, as well as the creation of amenity grassland and tree and shrub planting.

The following mitigation and compensation measures will be undertaken to minimise impacts on important ecological features:

- Vegetation clearance will be undertaken outside of the bird nesting period to prevent direct impacts on nesting birds.
- New tree, shrub and hedgerow planting will be incorporated into the development to compensate for the loss of nesting bird habitat.
- Due to the presence of bat droppings within the roof void, a precautionary approach to demolition of the buildings will be taken.

Additional recommendations have been provided in order to enhance the Site for biodiversity post-development.

A Devon Wildlife Checklist has been provided in **Appendix 1**.

Contents

Figures

Appendices

1 INTRODUCTION

This report presents the results of an Ecological Appraisal (EA) at Sandy Park Lodge, Exeter (central OS grid reference: SX 9640 9074) in relation to a proposed planning application for a hotel development. The surveys were commissioned by Exeter Rugby Group PLC.

The design will include the clearance of all habitats within the Site boundaries, as well as the creation of grassland, hedgerow, tree and shrub habitat. The area within the application boundary is hereafter referred to as the 'Site'.

This report details the results of a desk study, Extended Phase 1 Habitat Survey (including building inspection) and emergence surveys for bats and aims to:

- Identify and describe the habitats and species likely to be affected by the proposed development and evaluate the significance of any potential effects;
- Assess the ecological value of the Site and identify key ecological constraints to the proposed development such as existing bat roosts and nesting birds within the buildings;
- Provide recommendations for mitigation and enhancement opportunities in accordance with relevant planning policy, legislation and other published guidance. Relevant planning policy is provided in **Appendix 2**.

2 METHODOLOGY

2.1 Desk Study

An internet search was undertaken to identify statutory sites designated for nature conservation value within a 2km radius of the Site boundary, using the Government's mapping website MAGIC (www.magic.gov.uk) as well as the Devon County Council Environment Viewer. A search was also made of MAGIC for European Protected Species licenses issued by Natural England in the surrounding area since 2008.

2.2 Extended Phase 1 Habitat Survey

A site walkover was undertaken in accordance with the Joint Nature Conservation Committee's Phase 1 Habitat Survey methodology (JNCC 2010) on 13 April 2017 by Alex Sams BSc (Hons) MSc ACIEEM when weather conditions were dry with good visibility.

All habitats within the Site were identified, described and mapped during the field survey, and an indicative botanical species list compiled. Plant names follow Stace (2010). The

survey was extended to highlight the potential presence of protected and priority species in accordance with CIEEM's Guidelines for Preliminary Ecological Appraisal (2013). This involved a search to identify the presence or potential presence of notable and protected species such as breeding birds, badger *Meles meles*, dormouse *Muscardinus avellanarius,* bats, reptiles and amphibians. Target Notes (TNs) were used to record any features or habitats of ecological interest.

Where access allowed, adjacent habitats were also considered in order to assess possible impacts of the proposal in a wider context.

A digital map was produced using MapInfo Professional (Pitney Bowes, version 12.0.3). The Phase 1 Habitat map is shown in **Figure 1**. A plant species lists has been provided in **Appendix 3**.

2.3 Building Inspection

All buildings within the Site boundary were assessed for their potential to support roosting bats, as well as to search for signs of nesting birds. A detailed inspection was undertaken on 13 April 2017 by Alex Sams (Natural England level 2 bat licence number 2017-27861-CLS-CLS) in accordance with current best practice methodology (Collins, 2016).

This involved an external and internal inspection using close focusing binoculars and high-powered torches where appropriate. A search was made for features which could provide suitable roosting spaces for bats, including gaps beneath tiles and flashing, gaps around windows, door frames and pipe work and possible access under eaves, soffits and barge/ fascia boards. A systematic search was made of all accessible loft spaces for the presence of bats and evidence such as bat droppings.

Buildings were then prescribed a category based on its potential to support roosting bats:

- Known or confirmed roost – Bats and/or evidence of bats found;
- High – A structure with many areas suitable for roosting with a large number of potential access points obviously suitable for use by larger numbers of bats on a more regular basis. These are normally sheltered locations, subject to low variation in temperature;
- Moderate – A structure with one or more areas suitable for roosting due to the features size, shelter, protection, conditions and surrounding habitat that could be attractive to bats and potentially support maternity roosts;
- Low – A structure with one or more potential roost sites that could be used on a sporadic or occasional basis for feeding or solitary day roosting; or,

- Negligible – The building is not considered suitable for bats.

Figure 1 illustrates the building locations and reference numbers.

2.4 Bat Emergence Survey

Three dusk emergence surveys were conducted in accordance with best practice guidelines (Collins, 2016) on the dates detailed in **Table 1**. The survey team was led by Alex Sams. Surveys involved three experienced bat surveyors positioned around the buildings with a good view of any potential bat access points and roost features. Surveyors used a combination Wildlife Acoustics Echo Meter 3 (EM3) bat detectors and Titley Scientific Anabat Express recorders in conjunction with Elekon Bat Scanners and BatBox Duets.

The dusk surveys commenced 15 minutes before sunset and continued for approximately one and a half hours. All surveys were completed during optimal weather conditions of at least 10°C temperature at the start of the survey, dry and with very little or no wind, as detailed in **Table 1** below.

Table 1: Emergence survey dates, weather and personnel

Date	Sunset/ sunrise	Start time	Survey length after sunset (hr)	Weather	Personnel
25/05/2017	21:10	20:55	01:30	18°C; no rain; 0% cc; wind 0-1	LW, BL, AM
06/06/2017	21:23	21:08	01:30	14°C; no rain; 50% cc; wind 3 (gusting 4)	LW, AM, AS
21/06/2017	21:31	23:01	01:30	22.5°C; no rain; 30% cc; wind 1-2	LW, BL, AM

LW = Louise Wooley BSc (Hons) MCIEEM (NE level 2 bat licence 2015-11776-CLS-CLS)
BL = Becky Ledger PhD
AM = Adam Martin MA MSc (NE level 2 bat licence 2016-23396-CLS-CLS)
AS = Alex Sams BSc (Hons) MSc ACIEEM (NE level 2 bat licence 2017-27861-CLS-CLS)

2.5 Survey Limitations

A data search from Devon Biodiversity Records Centre has not been obtained due to the low ecological value of the habitats on Site.

Care has been taken to ensure that balanced advice is provided on the information available and collected during the study period (s), and within the resources available for the project. However, the possibility of important ecological features being missed due to survey timings, absence during surveys or the year of survey cannot be ruled out. In addition the lack of evidence or records of protected species on Site does not preclude their presence from Site.

3 RESULTS

3.1 Designated Sites

The Site has no ecological designations but is close to the designated sites listed in **Table 1**.

Table 1: Designated sites records

Site Name	Location	Description
Natura 2000 Sites		
Exe Estuary SPA	1.98km south west	2346ha of esturaine habitats of importance to plants and invertebrates. This site qualifies under Article 4.1 of the Directive (79/409/EEC) by supporting important populations of avocet *Recurvirostra avosetta* and slavonian Grebe *Podiceps auritus* and under Article 4.2 of the Directive (79/409/EEC) by regularly supporting at least 20,000 waterfowl.
East Devon Pebblebed Heaths SAC	7.3km south east	1124ha primarily designated for the Annex I habitats: North Atlantic wet heaths with *Erica tetralix* and European dry heaths; and the Annex II species: southern damselfly.
East Devon Pebblebed Heaths SPA	7.3km south east	1120ha of heathland habitat supporting populations of Annex I species of importance on a European level of dartford warbler *Sylvia undata* and nightjar *Caprimulgus europaeus.*
Statutory Designated Sites		
Exe Estuary SSSI	1.98km south west	Estuarine habitats of international importance for wintering wildflowl and waders. Reclaimed land also feature ditch habitats supporting flora and fauna of county importance including nationally uncommon species of dragonfly. The saltmarshes, sandbanks and mudflats also support a wide range of invertebrates and molluscs.
Exe Estuary RAMSAR	1.98km south west	2345ha of estuarine habitats supporting internationally important numbers of wintering and passage waterfowl, breeding birds and rare plants and invertebrates. Qualifying species (for peak winter counts): dark-bellied brent goose *Branta bernicla bernicla*, black-tailed godwit *Limosa limosa islandica.* Supports nationally important levels during the breeding season of: little tern *Egretta garzetta*, whimbrel *Numenius phaeopus*, common greenshank *Tringa nebularia*. Supports nationally important peak winter counts of: red breasted merganser *Mergus serrator*, water rail *Rallus aquaticus*, pied avocet *Recurviro avosetta*, spotted redshank *Tringa erythropus*.
Non-statutory Sites		
Clyst Marshes CWS	250m south east	A series of flood meadows along the river Clyst with areas of unimproved grassland, freshwater, brackish and saltmarsh and small areas of reedbed. Rare plants such as wild celery *Apium graveolens*, bulbous foxtail grass *Alopcurus bulbosus* and horned pondweed *Zannichellia palustris*
Special Verges	375m north west	A379 and Rydon Lane interchange

CWS's are designated as sites of county importance for wildlife identified through the Local Plan as a requirement of NPPF, although they do not have any legal status.

3.2 Habitats and Flora

Figure 1 shows the results of the Extended Phase 1 Habitat Survey.

Immediately adjacent to the M5 motorway, the roughly triangular Site is approximately 0.75ha with habitats including areas of cleared bramble *Rubus fruticosus* scrub and bare ground, scattered scrub, improved and amenity grassland. Fenced boundaries, a 20m section of species-poor hedgerow, coniferous trees as well as a timber shed, and block/concrete bungalow and garage also occurred. Dense highway embankment planting was located adjacent to the eastern boundary, outside of the Site boundary.

Areas of cleared bramble scrub were mostly bare with <5% cover of bramble regrowth and common nettle *Urtica dioica*.

The areas of amenity and improved grassland were rabbit grazed and it was not possible to identify all grass species due to the very low sward height of <2cm. The improved grassland included Yorkshire fog *Holcus lanatus* and cock's-foot *Dactylus glomerata* with isolated areas dominated by forbs including selfheal *Prunella vulgaris*, yarrow *Achillea millefolium*, ribwort plantain *Plantago lanceolata*, ragwort sp. *Senecio jacobaea*, spear thistle *Cirsium vulgare* and primrose *Primula vulgaris*. The amenity grassland appeared to be not only rabbit grazed but also mown and had a very short sward of <1cm.

The 20m hedgerow comprised typical Devon earth banks approximately 0.5m high with shrubs to approximately 5m high and 1m wide. Hazel *Corylus avellana* dominated alongside ornamentals with bank species including ivy *Hedera helix*, lords-and-ladies *Arum maculatum*, cleavers *Galium aparine*, common nettle, daffodil *Narcissus* cultivar, bramble and winter heliotrope *Petasites fragrans*.

Scattered scrub including willow sp. *Salix sp.* and blackthorn *Prunus spinosa* was present to the east of the bungalow.

Ornamental conifers formed a short line of trees within the centre of the Site. These were approximately 6m high and leggy at their base with a fence running the length of the tree line.

3.2.1 Building Descriptions

The timber shed was in a poor state of repair with broken windows and doors and was single skinned with no cavities.

With main ridge running roughly east-west, the rendered blockwork bungalow terminated in gable ends. Roof ridges running north-south terminated in gable ends which were clad with hanging tiles. Boxed soffits occurred at the eaves throughout and a narrow gap was recorded in a number of places between the top of the fascia board and tiles at the eaves. The pitched, concrete tiled roof showed signs of degradation, with a number of cracked or missing tiles throughout. The bungalow was inhabited at the time of survey. Internally, modern roof timbers were visible from within the loft, beneath bituminous felt within the central and western thirds of the bungalow and breathable membrane within the eastern third, which obscured roof tiles.

Of similar construction to the bungalow, the garage was open to the ridge internally and was used for storage. The gutter, soffit and overhanging tiles on the west elevation of the garage were damaged, exposing gaps between corrugated tiles and the felt lining. The garage was in regular use for storage.

3.3 Protected Species

3.3.1 Bats

A single EPS derogation licence for the destruction of a soprano pipistrelle roost had been granted in 2014 and was approximately 860m north east of the Site. The Site is not within the Greater Horseshoe Bat Consultation Zone.

The Site included structurally-poor and low diversity habitats such as the hedgerow fragment, small areas of improved and amenity grassland and scattered scrub which are of low value to foraging bats. The embankment shrub planting and scrub along the northern and eastern boundaries are of low potential value to commuting bats although due to existing light spill from the M5, this is likely to be limited to light tolerant species and is unsuitable for species such as those such as lesser or greater horseshoe bats *Rhinolophus ferrumequinum*. No trees on Site had any potential to support roosting bats.

<u>Buildings Inspection</u>

The shed offered **negligible** potential to support roosting bats due to the lack of crevices, being open, light and draughty. The shed has potential to support a night roost, however no droppings were found, and the Site does not represent good foraging habitat for species such as *Rhinolophus* or *Plecotus* species, making it unlikely to be used as a night roost.

The bungalow and garage offered **moderate/high** potential to support crevice dwelling bats. Gaps behind hanging tiles and potential access to the gap between felt and tiles, ridge tunnel and roof void through a number of broken roof and ridge tiles were recorded.

The building was not suitable for horseshoe species due to a lack of clear fly-in access, although although limited potential for use by bat species such as common pipistrelle *Pipistrellus pipistrellus* was recorded. 10 bat droppings (indicative of those deposited by pipistrelle *Pipistrellus* sp.) were identified scattered throughout the western third of the bungalow roof void during the inspection.

No evidence of bats was recorded within the garage.

In order to establish whether bats were roosting within the buildings, three emergence surveys were undertaken in May and June 2017 as detailed in **Appendix 4**. No bats were emerged from either the bungalow or garage during the surveys. Incidental activity was recorded with a commuting route identified. Common and soprano pipistrelle travelled west to east across the Site. Further activity recorded during the surveys included low levels of common pipistrelle, soprano pipistrelle and noctule foraging on Site.

3.3.2 Dormice

A single granted dormouse *Muscardinus avellanarius* EPS licence from 2014 is within 2km of the Site.

The short section of hedgerow on Site was limited in extent and isolated from the highway embankment planting and was therefore unlikely to be of value to dormice. Although connected to the wider landscape, shrub planting along the northern boundary of the Site was not suitable habitat for dormice as the only food plant present was bramble. It is considered highly unlikely that the species is present on Site although given the locality and known records in the area, their presence cannot be completely ruled out.

3.3.3 Reptiles and Amphibians

The Site was not considered to provide suitable terrestrial habitat for reptiles or amphibians as it had been recently cleared and the grassland had a very short sward, with few areas of potential refuge recorded.

No areas of standing water; suitable breeding habitat for amphibians occurred on Site. Upon consulting aerial photographs and OS maps, a small waterbody was recorded approximately 325m to the west of the Site. This has since been filled in to make way for housing. An outdoor swimming pool occurred approximately 350m to the north of the Site, but this was extremely unlikely to support breeding amphibians.

3.3.4 Badger

A mammal hole was located within an area of cleared scrub, the entrance of which was occupied by a dead fox. Although it was possible that the hole had been dug by a badger, the presence of a fox indicated that it was not in use by badger at the time of survey.

3.3.5 Breeding Birds

Ornamental shrub planting, scattered scrub, hedgerow, coniferous trees and the buildings provided suitable nesting habitats for garden and urban-fringe species. A chaffinch *Fringilla coelebs* was recorded during the initial survey, associated with the adjacent embankment planting (off-Site). No other birds were recorded on Site during the initial survey.

4 IMPACT ASSESSMENT AND MITIGATION STRATEGY

This section evaluates the likely impacts on ecological receptors and outlines the measures required to avoid, minimise or compensate for such impacts by applying the mitigation hierarchy in accordance with the NPPF paragraph 118 which states:

"If significant harm resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused."

4.1 Designated Sites

The Site was not located within or adjacent to any Sites designated for nature conservation interest.

The nearest internationally designated Site, the Exe Estuary Special Protection Area (SPA) and RAMSAR site (also its component SSSI site), designated for its wintering wildfowl and waders, is located approximately 1.98km south west. Other Natura 2000 Sites within 10km include the East Devon Pebblebed Heaths SPA and SAC. The development will not directly impact any qualifying features of these sites however, the development may result in disturbance effects on birds due to an increase in visitor numbers. There is potential for the development to indirectly impact the Exe Estuary SPA, RAMSAR and SSSI during construction due to pollution but is unlikely to cause disturbance to birds from noise.

The development has potential to indirectly impact the Clyst Marshes CWS due to pollution during construction.

To prevent potential impacts from pollution during construction, a CEMP will be produced with pollution prevention measures incorporated.

No impacts will occur on the A379 and Rydon Lane interchange Special Verge due to the distance from the Site and isolation from public access.

The Site was not within the South Hams SAC consultation zone for greater horseshoe bats) but was within a great crested newt (GCN) *Triturus cristatus* consultation zone. Owing to the lack of suitable breeding habitat and relative isolation of the Site from the wider landscape, GCN were not considered to be present.

4.2 Habitats and Flora

The cleared scrub, improved and amenity grassland habitats will be lost as part of the proposal. Whilst this will be an adverse impact, it was not considered significant given that the habitats are limited on site, common and widespread in the area and lacked any rare or notable plant species.

The hedgerow and some shrub planting along the northern boundary will be retained as part of the development but may be impacted during construction through soil compaction and physical disturbance. The adjacent embankment planting will also be subject to these pressures. The hedgerow and retained shrubs (including adjacent embankment planting) will

be protected from these impacts during construction by incorporating root protection zones using weld mesh fencing in accordance with BS5837: 2012. New hedgerow creation is proposed to provide a boundary to the remainder of the Site which will provide 125m species-rich Devon hedgerow, adequate compensation for any loss of scrub/shrub habitats and will result in a biodiversity gain.

Further proposed native tree and shrub planting will provide an overall net gain.

No other habitats on Site have any ecological value and their loss will not constitute an adverse impact.

To enhance the Site for wildlife, incorporate wildlife friendly features as part of a SuDS design. A wildlife friendly pond and other elements such as rain gardens may be incorporated as SuDS to retain water from the roof where possible. A filter strip and small area of wetland may precede a retention pond to filter run-off from the car park and pedestrian walkways.

4.3 Bats

Whilst the Site may be used for occasional commuting and foraging for a low number of common species such as common pipistrelle, given its size and location it was not considered likely to provide a particularly important foraging area or commuting route for bats. The creation of new hedgerow habitats around the Site's boundaries as well as tree and shrub planting will enhance the Site for bats by increasing foraging value and connectivity.

Lighting during construction and operation has the potential to prevent/ reduce bat numbers commuting and foraging within the Site during the active bat season, and as such avoiding the use of construction lighting and designing lighting to avoid illumination of boundaries should be undertaken.

Although the buildings are not considered to be in use by roosting bats, it is recommended that a precautionary approach to demolition is taken, involving dismantling the roof tiles, gable hanging tiles and soffits by hand under a method statement. In the unlikely event that bats are found, works must stop and a licence from Natural England obtained before any further works may continue.

4.4 Dormice

Dormice are European Protected Species, Species of Principal Importance under the NERC Act 2006 and a Devon BAP species. In the absence of mitigation there is a very low risk of impact to this species during the removal of hedgerow and shrub habitat.

To prevent impacts to dormice, the hedgerow will be removed under the supervision of a licensed ecologist.

4.5 Reptiles

Reptiles are not considered likely to be present on Site, however they are considered to potentially be present within areas adjacent to the Site.

Although the habitats on Site are currently unsuitable for reptiles, if allowed to regrow prior to enabling works, then these habitats may become favourable resulting in them moving onto the Site. All reptiles are protected under the W&CA 1981 (as amended) and there is a risk of short term impacts of injury and mortality to slow worms during vegetation removal if unmitigated. Long-term adverse impacts to the local population are considered unlikely to be significant due to the inclusion of proposed grassland, shrub and hedgerow planting.

During enabling/ construction, retained suitable habitats should be protected using weld mesh fencing, and a finger-tip search of suitable habitat should be undertaken by an ecologist.

4.6 Badger

Badgers and their setts are protected by the Protection of Badgers Act 1992. No active setts or other evidence of badger was recorded on Site however the mammal hole with a dead fox in the entrance may become used by badgers between the time of survey and the commencement of works.

A check of the hole should be undertaken prior to demolition to confirm the sett remains inactive. If the sett is found to be active, it will need to be monitored for 21 days to establish its use. If active, then a licence will need to be obtained from Natural England to destroy the sett.

4.7 Breeding Birds

The W&CA 1981 (as amended) provides protection for all active birds' nests. There is a risk of an offence by damaging/ destroying active birds' nests during the breeding season during scrub removal and building demolition. There will also be a loss of limited nesting habitat, however, given the creation of hedger, tree and shrub planting, the small area to be lost and the availability of other suitable nesting habitat, this is considered unlikely to be of significance in the short term.

Hedgerow and scrub removal should take place outside the breeding bird season, which runs March to August inclusive, or with a pre-works check by an ecologist to search for active bird nests. Any active nests will need to be protected until all chicks have fledged.

Incorporate bird nesting opportunities into the fabric of the building on an easterly aspect, for suitable species such as starling, swifts, house sparrows and possibly raptors such as kestrel and/or peregrine.

4.8 Other Species

Significant adverse impacts on other notable species (such as invertebrates or hedgehog) are not anticipated given the small size of the Site and common nature of the habitats present.

Although the Site is within a GCN consultation zone, no habitats on Site were suitable for GCN during their terrestrial phase, however adjacent embankment scrub was. No GCN breeding habitat such as ditches and ponds were present on or adjacent to the Site. The Site is therefore not deemed to be suitable for use by great crested newts.

5 ENHANCEMENTS

In addition to the mitigation requirements above, enhancements should be incorporated into the design where feasible, in order to create a net gain for biodiversity in accordance with the NPPF and Exeter Local Plan:

- The new hedgerows which are proposed will provide enhanced connectivity around the Site; these should comprise a mixture of at least 5 native woody species including hazel, blackthorn *Sambucus nigra*, hawthorn *Crataegus monogyna*, pedunculate oak *Quercus robur* and field maple *Acer campestre*. The hedgerow should be allowed to

develop into a bushy structure a minimum of 3m tall and 1.5m wide to benefit bats, birds and invertebrates;

- Species-rich grassland or flowering lawns should be created to provide shelter and nectar sources for a range of species, for example at hedgerow edges, communal areas and amenity areas;
- Incorporate wildlife friendly features as part of a SuDS design. A wildlife friendly pond and other elements such as rain gardens may be incorporated as SuDS to retain water from the roof where possible. A filter strip and small area of wetland may precede a retention pond to filter run-off from the car park and pedestrian walkways.
- A minimum 1m wide buffer strip managed as tall, tussocky grassland could be created adjacent to existing and proposed hedgerows to habitat for reptiles;
- Sheltering and basking habitat could be provided for reptiles and invertebrates e.g. log/ habitat piles within potential buffer strips or near SuDS features such as wetland and retention ponds adjacent to hedgerows; and
- Consider the inclusion of a green roof / rooftop garden as part of SuDS. Significant potential for enhancement.

6 CONCLUSIONS

In summary the Site was considered to be of relatively low ecological interest, with some adverse impacts predicted on foraging bats and breeding birds in the short term, whilst having potential to provide a net gain in biodiversity if enhancements have been incorporated.

Avoidance measures and careful timing of works have been incorporated into the design to eliminate these impacts and further mitigation and compensation will be required in order to minimise impacts on reptiles, bats and breeding birds.

Provided the avoidance, timing of works and mitigation measures are carried out, the proposal is considered unlikely to have significant adverse effects on ecological receptors.

A number of enhancement measures have been recommended with the aim of providing a net biodiversity gain, contributing to the aims of National Planning Policy Framework and local policy. This includes incorporating wildlife friendly features as part of SuDS, creating a new native hedgerow, tree and shrub planting, wildflower meadow and flowering lawn as well as the provision of nesting and roosting opportunities for birds and bats.

7 REFERENCES

CIEEM (2013) *Technical Guidance Series: Guidelines for Preliminary Ecological Appraisal.* Chartered Institute of Ecology and Environmental Management, Winchester.

Collins, J. (ed.) (2016) *Bat Survey for Professional Ecologists: Good Practice Guidelines (3rd edition).* The Bat Conservation Trust, London.

Joint Nature Conservation Committee (2010) *Handbook for Phase 1 Habitat Survey - a Technique for Environmental Audit.* Reprinted by JNCC, Peterborough.

Stace, C. (2010) *New Flora of the British Isles (3rd Edition)*. Cambridge University.

Map Legend

- Site Boundary
- Fence
- Tree Line
- Earth Bund
- Building
- Wall
- Dense Scrub
- Bare Ground
- Cleared Dense Scrub
- Hard Standing
- Amenity Grassland
- Improved Grassland
- Shrub Planting
- Native Hedgerow
- Inactive Badger Sett Entrance

N

Figure 1: Phase 1 Habitat Survey Map

Project: Sandy Park Lodge, Exeter

Client: Exeter Rugby Group PLC

26/06/2017	Version: 1	Ref: 0469-F1	Drawn by: AS

greenecology

Appendix 1 – Devon Wildlife Checklist

Species - terrestrial, intertidal, marine	Walkover shows that suitable habitat present and reasonably likely that the species will be found?	Detailed survey needed to clarify impacts and mitigation requirements?	Detailed survey carried out and included?	Species Present or Assumed to be present on site?	Impact on species?	Detailed Conservation Action Statement included?	EPS offence committed ? Three tests met?	Grid reference for specific location of species (for large sites)
Bats (roost)	√	√	√	X	X	√	X	X
Bats (flight line / foraging habitat)	√	X						
Dormice	X							
Otters	X							
Great crested newts	X							
Cirl buntings	X							
Barn owls	X							
Other Schedule 1 birds	X							
Breeding birds	√	X						
Reptiles	X							
Native crayfish	X							
Water voles	X							
Badgers	X							
Other protected species	X							
UK BAP priority species	√	*X*						
Devon BAP key species	√	X						
Invasive species	X							

Designation Terrestrial, intertidal, marine	Within site or potential impact.	Name of site / habitat	Detailed Conservation Action Statement inc. in report ?	Habitat balance sheet included (showing area of habitats lost, gained & overall net gain)	Relevant organisation consulted & response included in the application?
Statutory designations					
European designations - Special Area of Conservation (SAC), Special Protection Area (SPA) and RAMSAR site or within Greater Horseshoe consultation zone	X (if mitigation is adopted)				
Site of Special Scientific Interest (SSSIs)	As above	As above			
Marine Conservation Zone (MCZ)	X				
Local Nature Reserve (LNR)	X				
Non statutory wildlife designations					
County Wildlife Site (CWS)	X (if mitigation is adopted)				
Ancient woodland	X				
Special Verge	X				
UK BAP Priority habitat	√	**20m hedgerow**	Y	no loss of existing; 125m gain	N/A
Local Biodiversity Network (mapped by Devon Wildlife Trust / through Green Infrastructure work)	X				
Non statutory geological designation					
County Geological Site (CGS or RIGS)	X				

Appendix 2 – Legislation and Planning Policy

Habitat and Species Legislation

Species and habitats receive legal protection in the UK under various legislation, including:

- The Wildlife and Countryside Act (WCA) 1981 (as amended);
- The Conservation of Habitats and Species Regulation 2010 (also known as the Habitat Regulations, it implements the EU Habitats Directive in England and Wales);
- The Countryside Rights of Way (CRoW) Act 2000;
- The Hedgerows Regulations 1997;
- The Protection of Badgers Act 1992; and
- The Natural Environment and Rural Communities (NERC) Act 2006.

Where relevant, this report takes into account the legislative protection afforded to specific habitats and species.

National Planning Policy Framework

The National Planning Policy Framework (NPPF) sets out the Governments planning policies for England and how local planning authorities should incorporate them into their own policies and plans. Section 11 of the NPPF contains several policies targeted at enhancing the natural environment and requires local authorities to consider how impacts on biodiversity can be minimised and provide net gains in biodiversity. Additional Planning Practice Guidance (PPGs) supports the NPPF and includes guidance on:

- Landscape;
- Biodiversity, ecosystems and green infrastructure; and
- Brownfield land, soils and agricultural land.

Regional/ Local Planning Policy

The Exeter Local Plan guides planning and development in the area until 2026. CP16 relates to biological diversity and green infrastructure as well as a number of statutory designated sites and was considered as part of this report.

UK Post-2010 Biodiversity Framework

The UK Biodiversity Action Plan (UK BAP) was succeeded in 2012 by the 'UK Post-2010 Biodiversity Framework' which demonstrates a whole-environment strategy on how the UK contributes to achieving the Convention on Biological Diversity's (CBD) 20 Aichi Biodiversity Targets. In England, 'Biodiversity 2020: A strategy for England's wildlife and ecosystem services' (Defra, 2011) sets out the strategic direction for biodiversity policy in the future. The former UK BAP was used to draw up lists of species and habitats of 'principal importance' which continue to be regarded as priorities

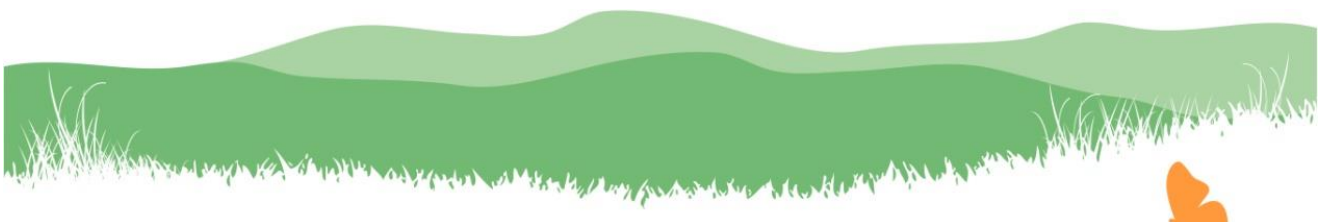
under the Post-2010 Biodiversity Framework and are identified under Section 41 of the NERC Act 2006; these species have been considered throughout this report.

Devon Biodiversity Action Plan

The Nature of Devon – A Biodiversity and Geodiversity Action Plan was revised by the Devon Biodiversity Partnership in 2005. The document takes into account the objectives and targets of the former UK BAP and translates these within a local context. The Plan contains action plans for five common themes, 20 key habitats and 20 key species, which are a consideration in planning decisions.

Appendix 3 – Botanical Species List

Scientific Name	Common Name
Achillea millefolium	Yarrow
Arum maculatum	Lords-and-ladies
Cirsium vulgare	Spear thistle
Corylus avellana	Hazel
Dactylus glomerata	Cock's-foot
Galium aparine	Cleavers
Holcus lanatus	Yorkshire fog
Hedera helix	*Ivy*
Narcissus cultivar	Daffodil cultivar
Petasites fragrans	Winter heliotrope
Primula vulgaris	Primrose
Plantago lanceolata	Ribwort plantain
Prunella vulgaris	Selfheal
Prunus spinosa	Blackthorn
Rubus fruticosus	Bramble agg.
Salix sp.	Willow sp.
Senecio jacobaea	Ragwort sp.
Urtica dioica	Common nettle



greenecology