



Padel Shift Ltd C/O: Lorelie Davies, Brodie Planning Associates (by email)

3rd November 2022

Dear Lorelie,

C3040-1: ELKSTONE STUDIOS, ELKSTONE - ECOLOGICAL ASSESSMENT

1. INTRODUCTION

The following letter report provides details of an ecological walkover survey of a site at Elkstone Studios, Elkstone in Gloucestershire in relation to the proposed creation of two padel courts with associated lighting and soft landscaping. The site is located at approximate Ordnance Survey grid reference SO 9679 1110.

A site visit was undertaken by Catherine Coton of Swift Ecology Ltd on 25th October 2022. The site was surveyed to assess the habitats present and the potential for presence of protected or priority species that could be affected by the proposals. Immediately adjacent habitats were also briefly assessed with regard to potential impacts of lighting.

Personnel

The assessment and reporting were carried out by Catherine Coton ACIEEM of Swift Ecology Ltd. Catherine is employed as a Senior Ecologist with Swift Ecology Ltd and is an experienced habitat surveyor and holder of Natural England survey licences for bats (CL18 reference: 2017-31902-CLS-CLS) and great crested newt (CL08 reference: 2015-18289-CLS-CLS). Catherine has over eight years' experience working as an ecologist and has undertaken numerous habitat and protected species surveys and has prepared subsequent reports with appropriate recommendations.

Ecological context

The site is located in a rural area approximately 1 km south of the small village of Elkstone and 250 m east of the A417 Gloucester to Cirencester major trunk road, in Gloucestershire. It lies on the east edge of a group of agricultural and commercial buildings with associated car parking areas and soft landscaping, which is immediately surrounded by agricultural land (mostly arable fields). Semi-natural habitats in the local area are limited to areas of woodland to the north, south, and further afield to the west, the closest of which is 500 m south-east of the site at its closest point; the site is relatively isolated from such habitats by large arable fields with few boundary hedgerows.

The site location and surrounding habitats are illustrated in Figure 1.



Figure 1: Approximate boundary for new padel courts (red outline) and adjacent habitats. Note: aerial photo dated April 2021, prior to commencement of adjacent consented development.

2. METHODS

Data search

A background data search was undertaken in October 2022 by Gloucestershire Environmental Records Centre (GCER) for records of designated sites and protected/priority species and invasive alien (non-native) species within a 1 km radius, with the search for bat records extended to 2 km.

Field survey

A Preliminary Ecological Appraisal, comprising a habitat survey, protected/priority species assessment and check for invasive, non-native species, was undertaken following standard methods as described in the Guidelines for Preliminary Ecological Appraisal (CIEEM, 2017), and the UK Habitat Classification System Professional edition (Butcher et al., 2020).

The survey area comprised the site for the proposed padel courts (outlined in red in Figure 1). In order to assess potential impacts of lighting on surrounding habitats, a brief walkover was made of the wooded area to the immediate south and the closest hedge/tree line to the south-east.

The survey was undertaken at 10:15 am on 25th October 2022 by Catherine Coton of Swift Ecology Ltd. Weather conditions were suitable (12°C, little wind and no rain); long-distance visibility was limited by foggy conditions, but the site and immediately surrounding habitats were fully accessible so this is not considered to be a significant constraint to the assessment.

Limitations

The site and immediately surrounding habitats were fully accessible, and there were no significant constraints to the assessment.

3. RESULTS

Designated sites

The records search from GCER identified no statutory or non-statutory designated sites within a 1 km radius of the site. The site falls within a Site of Special Scientific Interest (SSSI) Impact Risk Zone for several SSSIs in the local area, but the proposals do not fall into any of the categories considered to pose a risk to these sites. Due to the isolation of the site and small scale of the proposals, no impacts on designated sites are considered likely, so they are not considered further in this report.

<u>Habitats</u>

The area proposed for the padel courts is currently being used as the working area for a consented development to the immediate west (Plates 1 and 2). The ground is bare earth and rubble, with an area of recently laid gravel in the northern part. There are no formal boundaries but a bare earth bund, approximately 2-2.5 m high and 2-3 m wide, borders the site to the immediate east. A search of recent aerial photos (Figure 1) suggests that prior to its current use as the working area for the consented development, the land appears to have been part arable land and part storage yard.

To the immediate south of the site for the proposed padel courts is a small area of tree planting in a deep depression (Plate 3). The canopy is dominated by beech Fagus sylvatica with a few specimens of horse chestnut Aesculus hippocastanum and ash Fraxinus excelsior. The trees range from young poles (c. 5 cm diameter at breast height (DBH)) through to early mature standards (c. 60 cm DBH). The understorey is limited to a few holly llex aquifolium and hawthorn Crataegus monogyna shrubs along the southern edge, and the ground flora is mostly patchy and bare, with areas of ivy Hedera helix and bramble Rubus fruticosus agg. and a small patch of dog's mercury Mercurialis perennis along the southern edge. Security lighting is installed on trees facing the car parking areas, so there is likely to be some light spill into the wooded area at night time.

To the immediate east there is a large arable field, with a line of cypress Cupressus sp. trees at its southern boundary, approximately 40 m south-east of the proposed padel courts at its closest point (Plate 4), connecting to a line of broad-leaved trees and hedgerow along a track leading north-east away from the site.

Protected and priority species

GCER provided the following records within the 1 km search area (2 km search area for bats):

10 records of bats (6 species) between 1992 and 2017, including a known roost of lesser horseshoe bat Rhinolophus hipposideros (a rare species which is particularly sensitive to artificial light) 1.9 km north-west in 2017.

80 records of birds (29 species) between 1996 and 2019; none of the records relate directly to the site.

A single record of badger from 2019, with an approximate location provided; no further details given.

The site for the proposed padel courts is currently bare earth and gravel, and provides negligible opportunities for wildlife to shelter or forage.

The nearby wooded area and tree line offer some value for foraging and commuting for species such as bats, birds, badger and hedgehog, which could occasionally pass through or close to the padel court site. In addition, there are at least two bat boxes and a few potential bat roost features in beech trees to the south of the padel courts site, although no evidence of current use was found in accessible features during the survey.

There are no ponds either on site or mapped within 250 m of the site, and it appears to fall within a 'white zone', meaning it has 'low habitat suitability' for great crested newts, under the NatureSpace Partnership's

District Level Licensing scheme¹. The likelihood of great crested newts being present on site is low, but the wooded area and tree line offer some potential refuge opportunities if this species is present in the local area. Similarly, the proposed padel courts site offers negligible habitat suitability for other amphibian species and reptiles, but the wooded area and tree line offer some potential shelter if these species are present locally.

Invasive, non-native species

GCER provided no records of invasive, non-native species within the search area, and no such species were found during the survey. This group is not considered further within this report.



Plate 1: Bare earth and rubble at southern end of area for proposed padel courts, with boundary earth bund.



Plate 3: Wooded area in depression to immediate south of proposed padel courts location.



Plate 2: New gravel at northern end of area proposed for padel courts.



Plate 4: Line of cypress trees approximately 40 m south-east of proposed padel courts location.

4. IMPACT ASSESSMENT AND RECOMMENDATIONS

Proposed works

The proposed works involve creation of two padel courts with associated lighting and soft landscaping. The following proposed plans prepared by Brodie Planning Associates were used to inform the impact assessment:

'Proposed Floor Plan, elevations & details', drawing number 2024-01-200, dated October 2022. 'Site Plan', drawing number 2024-01-150, dated October 2022. 'Contextual Elevation', drawing number 2024-01-201, dated October 2022.

¹ <u>https://naturespaceuk.com/the-scheme/impact-map/</u>

Potential impacts

Construction

The proposed padel courts site comprises bare earth, rubble and gravel and has very limited ecological value; the loss of such habitats will not result in any significant ecological effects. No direct impacts on trees in the wider site are anticipated as a result of the proposals, but precautionary mitigation measures will be required to prevent accidental damage. The site itself offers negligible value for wildlife, but species such as badger, bats and birds may be present in the wider site and local area, and may occasionally pass through the working area. No significant impacts on such species are anticipated as a result of the proposals, but precautionary mitigation measures must be implemented to ensure compliance with protected species legislation.

Lighting

The site is already open and generally isolated from semi-natural habitats in the wider area (e.g. woodland to the east and south-east), but the small block of woodland immediately south of the new padel courts, and tree line along the field boundary to the south-east, provide some commuting and foraging value for wildlife, including nocturnal wildlife such as bats and invertebrates. Any increase in lighting at the site therefore has the potential to impact on foraging, commuting and roosting behaviour of wildlife in the absence of mitigation.

Mitigation measures

Construction

It is recommended that a precautionary approach is adopted during the works as follows:

Trees in close proximity to the development will be protected in accordance with British Standard BS 5837:2012: Trees in relation to design, demolition and construction. Recommendations. The protection will be installed prior to the commencement of the proposed works.

During the construction works any deep excavations or pipework will either be covered at night or ramps provided so that should animals (such as badger or hedgehog) fall in, they can escape. To minimise the impact on bats and other nocturnal wildlife during development, night-time working will be avoided, and the site will not be illuminated at night during the construction phase. If at any point a protected species (such as great crested newt or reptile) is discovered, works will temporarily stop while an ecologist is contacted for advice on how to proceed. Telephone numbers of such will be held on site.

A copy of these recommendations will be available to site workers and displayed on site.

Lighting

The lighting scheme for the proposed padel courts must be designed sensitively, following the principles of the ILP and BCT guidance note 8 for bats and lighting (Miles et al., 2018) available at https://theilp.org.uk/publication/guidance-note-8-bats-and-artificial-lighting/:

A "lighting design strategy" should be completed for the development. This strategy should show how and where lighting will be installed (through the provision of appropriate lighting contour plans and technical specifications of lighting fixtures/fittings) so that it can be clearly demonstrated that lighting for the proposed padel courts will not adversely impact upon nearby habitats, including the wooded area and line of trees to the south and south-east, which provide potential bat roosting, foraging and commuting features. This will also reduce impacts on other nocturnal fauna, such as birds and invertebrates.

5. BIODIVERSITY ENHANCEMENT

The Environment Act (2021), Natural Environment White Paper (2011) and National Planning Policy Framework (2021) require that development results in net gains for biodiversity, with the Environment Act requiring a minimum of a 10% net gain in biodiversity value of the site post-development. There are no significant losses of habitat on site, so it is not considered necessary to employ a biodiversity offsetting metric calculator for this project; however, the following biodiversity enhancements should be incorporated into the project design to ensure that the development results in net gain:

- Bird boxes could be installed on retained trees in the wider site to provide new opportunities for nesting by a range of species. Boxes should target species of conservation concern known to be present in the local area, such as starling and house sparrow (both red-listed² species).
- Wildlife-friendly planting³, using a range of native and wildlife-friendly ornamental plants, should be implemented as part of any soft landscaping scheme to provide opportunities for local wildlife including bats, birds and invertebrates.

6. CONCLUSIONS

There are no significant ecological constraints to the proposed works subject to sensitive lighting design; the above-listed precautionary working measures and biodiversity enhancements should be implemented to ensure there are no breaches of protected species legislation and that the development results in net gains for biodiversity.

The results of this assessment are considered valid for up to two years from the date of the survey (October 2022). Should the works be delayed or the proposed development details change, advice from an ecologist should be sought and the survey and assessment may need to be updated.

If you have any further queries I would be pleased to help, and can be contacted by email at <u>catherine.coton@swiftecology.co.uk</u> or on the phone number provided.

Yours sincerely



Senior Ecologist 07833 233347



7. REFERENCES

British Standards Institute (2013). BS 42020:2013: Biodiversity. Code of practice for planning and development.

British Standards Institute (2021). *BS 8683:2021. Process for designing and implementing Biodiversity Net Gain – Specification.* BSI Standards Ltd., London.

Chartered Institute of Ecology and Environmental Management (2017). *Guidelines for Ecological Report Writing*. CIEEM, Winchester.

² <u>https://www.bto.org/our-science/publications/birds-conservation-concern</u>

³ <u>https://www.rhs.org.uk/science/pdf/conservation-and-biodiversity/wildlife/plants-for-pollinators-garden-plants.pdf</u>

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

Miles, J., Ferguson, J., Smith, N., and Fox, H. (2018). Guidance Note 08/18 Bats and artificial lighting in the UK. Bats and the Built Environment Series.

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APPENDIX 1: LEGISLATION

Protected Species

Great crested newt and all species of British bat

The great crested newt Triturus cristatus and all species of British bat (Vespertilionidae and Rhinolophidae) are listed on Schedule 5 of the Wildlife and Countryside Act 1981 (as amended), and receive some limited protection under Section 9. These species are also all listed as European Protected Species in Schedule 2 of The Conservation of Habitats and Species Regulations 2017 (which implements the EC Directive 92/43/EEC in the United Kingdom) which gives them full protection under Regulation 43.

It is also an offence to set and use articles capable of catching, injuring or killing such species (for example a trap or poison), or knowingly cause or permit such an action.

Common reptiles

Common lizard Zootoca vivipara, grass snake Natrix helvetica, slow worm Anguis fragilis, and adder Vipera berus are listed under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended), in respect of Section 9(5) and part of Section 9(1). These species are included as species of principal importance for the purpose of conserving biodiversity in England under Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006.

<u>Birds</u>

All species of bird are protected under Section 1 (1) of the Wildlife and Countryside Act 1981 (as amended). Certain species are listed on Schedule 1 of the Wildlife and Countryside Act 1981 (as amended) and receive protection under Section 1(5). There are special penalties where offences are committed for any Schedule 1 species.

Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006 includes 49 bird species which are of principal importance for the purpose of conserving biodiversity in England.

Badger

The badger Meles meles is protected in Britain under the Protection of Badgers Act 1992. The legislation protects badgers and their setts. The badger is also protected under Schedule 6 of the Wildlife and Countryside Act 1981 (as amended) relating specifically to trapping and direct pursuit.