

1. CONTEXT

1.1 Landscape

1.1.1 The Site is approximately 0.4 ha, located off the B156, Northaw Road East, approximately 750 m south-west of the village of Cuffley, Hertfordshire. It comprises of a number of buildings and hardstanding with off-site ponds, improved grassland, species-poor semi-improved grassland field parcels and hedgerows.

1.1.2 The land adjoining the site is typical of this area. The Site is bounded by agricultural fields connected by hedgerows with trees. The wider landscape is characterised by mixed farmland interspersed with woodland, corridors of trees and hedgerows.

1.2 Proposed development

1.2.1 The proposals for demolition of existing buildings and erection of 14 dwellings with associated landscaping, in respect of Planning Application Reference: 6/2020/3451/MAJ.

1.3 Ecological Context

1.3.1 A number of assessments of the Site have been conducted from 2020-2021:

- Eco Constraints Review, BMD (2020)
- Preliminary Ecological Appraisal, babec (March 2021)
- Reptile Survey, Jones & Sons Environmental – (June 2021)
- Great Crested Newt Survey, Jones & Sons Environmental (September 2021)
- Interim Bat Report, Jones & Sons Environmental (July 2021)
- Bat Report, Jones & Sons Environmental (August 2021)

Habitats:

1.3.2 A Site visit was undertaken on 24th August 2023 with a detailed walkover survey carried out of the Site and the local environment. The following habitats were recorded on Site:

- Buildings – A number of buildings are present on Site, these include warehouses, stables, residential and barns.
- Hardstanding – An area of hardstanding/ gravel surrounded the buildings.

2. VERIFICATION SURVEY RESULTS 2023

2.1 Habitat Focused

2.1.1 A verification survey was undertaken on 24th August 2023 with detail of the findings set out below. Table 3.1 provides a summary of the nature conservation importance of habitats within the Site.

Table 3.1 Summary of the nature conservation importance of habitats within the Site.

Habitat	Meets UK Priority/Local BAP habitat criteria	Condition ¹	Geographical context ²
Hardstanding	No	N/A	Site
Buildings	No	N/A	Site
Modified grassland	No	Poor	Site
Notes: 1. As determined using the Biodiversity Metric 4.0 guidance. Where it is considered that the condition outcome is inappropriate justification is given in the text. See Appendix E for detailed habitat assessments 2. Geographic level at which the habitat is considered important			

2.2 Habitats

Buildings & Hardstanding

2.2.1 There are a total of 8 buildings and associated hardstanding within the Site, comprising buildings B-G, and a shed. Descriptions of these buildings are provided within The Preliminary Ecological Appraisal (Babec, 2020). The conditions and descriptions of these buildings remain the same since the 2021 Assessment.

Modified Grassland

2.2.2 An area of modified grassland was recorded around the stable block and bounding other buildings within the Site. This is well managed by mowing with few species. Dominant species were perennial ryegrass and white clover.

2.3 Invasive species

2.3.1 No invasive species were recorded on Site. It is possible that invasive species are present in the locality.

2.4 Protected and Notable species

Bats

2.4.1 The potential for bat roosts was assessed as part of the Preliminary Ecological Appraisal and further activity surveys carried out by Jones & Sons Environmental Sciences. A number of bat roosts were confirmed in July 2021 (Jones & Sons, Interim Bat Report, July 2021). These include:

- Building C/E - Hibernation roost for a pipistrelle species;
- Building B - Day roosts for common pipistrelles and soprano pipistrelles.
- Building F - Day roost for brown long eared bats.

- 2.4.2 The updated assessment carried out by BMD in August 2023, confirms no change in conditions to the buildings previously surveyed. No new potential roost features were recorded and all buildings were noted to be in the same condition when assessed in 2021.
- 2.4.3 The Preliminary Ecological Appraisal (babec, 2020) also identified some trees with potential as bat roost the majority of these were outside the development boundary but three, namely T4, T3, and T9 as numbered within that report lie within the red line boundary. These were assessed as having low suitability, the updated walkover carried out by BMD confirms they are still categorised as low potential, therefore if removed they will require soft felling with a suitably qualified ecologist watching brief.
- 2.4.4 All works relating to the destruction of the existing bat roosts will require a European Protected Species (EPS) licence from Natural England as previously. Building C, E, B & F will require an EPS licence, updated surveys of these buildings will be undertaken before a licence is applied for to meet the licence requirements with regard to age of survey data for licence applications.

Reptiles

- 2.4.5 A low population of slow worms and grass snakes was identified by Jones & Sons (Reptile Report, June 2021) within a field parcel to the west of the Site.
- 2.4.6 An updated walkover of the site in August 2023 confirmed that these populations are likely to still be utilising the Site at the same population index as previously recorded. Habitats these species were recorded in are in a similar condition as previously assessed.

Great Crested Newts

- 2.4.7 Three ponds are present within the Site. A low population of great crested newts was confirmed by Jones & Sons Environmental Sciences (2021) within the garden pond labelled P2.
- 2.4.8 An updated Habitat Suitability Index was undertaken in August 2023, confirming that conditions within the ponds are the same and it is unlikely that the population of great crested newts has expanded over this period. In summary the results of the HSI are; P1 – Poor (0.38) P2 – Good (0.78) P3 – Poor (0.49).
- 2.4.9 P2 is to be impacted and lost according to the proposals, the clearance work for the development will also impact the terrestrial vegetation used by GCN. Jones and Sons (2021) recommended a method statement to mitigate and an EPS Licence from Natural England.
- 2.4.10 Mitigation and compensation measures proposed by Jones and Sons are recommended and will include:
- Suitable receptor pond to be found and translocation of newts to be undertaken to new receptor pond.
 - Newts to be trapped within terrestrial habitat and pond.
 - Draining of the pond under watching brief by suitably qualified ecologist.
 - Exclusion fencing around development.
 - New ponds to be created.
 - Enhancement to P3 and terrestrial habitat surrounding.

- Hibernacula and tree planting to increase commuting corridors.

2.4.11 An updated population index will be undertaken of P2 before a licence application from Natural England is applied for.

3. CONCLUSION

- 3.1.1 Overall, no changes to the Site or conditions of habitats within the Site were noted. The ecological surveys undertaken to date, and the mitigation measures proposed by Jones and Sons are still suitable for the determination of the planning application. Should the application be granted, further surveys will be required at the next stage when applying for the relocation licence to Natural England.

4. REFERENCES AND BIBLIOGRAPHY

- Babec Ltd (2021). Wells Farm Cuffley, Preliminary Ecological Appraisal
- Baker, J (2016). *Biodiversity Net Gain Good Practice Principles for Development*
- Baker, J., Hoskins, R., Butterworth, T. (2019). *Biodiversity Net Gain. Good Practice Principles for Development. A Practical Guide*. CIRA
- BMD (2019) Ecological Constraints, Wells Farm, Cuffley. Hatton. *BMD.19.004.12.TN.003_A Eco Review* Bradley Murphy Design.
- BRIG (2011). UK Biodiversity Action Plan (BAP) Priority Habitat Descriptions. Ed. Ant Maddock
- British Standards Institute (BSI) (2013). BS42020 – Biodiversity Code of Practice for Planning and Development. BSI, London.
- British Standards Institute (BSI) (2020). BS8683 – Designing and Implementing Biodiversity Net Gain. BSI, London
- CIEEM (2017). Guidelines on Ecological Report Writing (2nd edn). Winchester: CIEEM.
- CIEEM (2018). Guidelines for Ecological Impact Assessment in the United Kingdom and Ireland (2nd edn). Winchester: CIEEM.
- Environment Agency (2012). Working at Construction and Demolition Sites: PPG6 Pollution Prevention Guidelines (2nd edn). Bristol: Environment Agency.
- HM Government (1981). Wildlife and Countryside Act 1981 (as amended).
- HM Government (2000). Countryside and Rights of Way Act, 2000.
- HM Government (2005). ODPM Circular 06/05 Government Circular: Biodiversity and Geological Conservation – Statutory Obligations and their Impact within the Planning System.
- HM Government (2006). Natural Environment and Rural Communities Act 2006.
- HM Government (2021). National Planning Policy Framework. Department for Communities and Local Government.
- HM Government (2021). The Environment Act 2021.
- Jones and Sons Environmental Sciences Ltd. (2021). Bat Report, Wells Farm, Cuffley.
- Jones and Sons Environmental Sciences Ltd. (2021) Great Crested Newt Report, Wells Farm, Cuffley.
- Jones and Sons Environmental Sciences Ltd. (2021). Interim Summarised Bat Report, Wells Farm, Cuffley.
- Jones and Sons Environmental Sciences Ltd. (2021). Reptile Report, Wells Farm, Cuffley.
- Maddock, A (ed.) (2008). UK Biodiversity Action Plan; Priority Habitat Descriptions (Updated Dec 2011).
- Mitchell-Jones, A.J. & McLeish (2004). *Bat Workers' Manual*, 3rd edition, JNCC, Devon.
- Natural England (2010). Higher Level Stewardship Farm Environment Plan Manual (3rd ed).
- The Conservation of Habitats and Species Regulations 2017, as amended.

5. GLOSSARY

5.1 Scientific Terms and Acronyms

CIEEM Chartered Institute of Ecology and Environmental Management, the professional organisation and provider of professional codes of conduct for ecological consultancy.

Non-native invasive species For the purposes of this report: species listed on Schedule 9 of the wildlife and Countryside Act 1981 (as amended). Widely naturalised species, such as grey squirrel, are excluded.

UK Priority Habitat and species A habitat or species identified as a priority for conservation in accordance with Section 40 of the Natural Environment and Rural Communities Act (2006). Section 40 of the Act places a duty on public authorities to have regard for the conservation objectives of these habitats and species.

SECT 41 NERC Section 41 (S41) of the 2006 Natural Environment and Rural Communities (NERC) Act

APPENDICES

A. SITE PHOTOGRAPHS



Photograph 1: View of Building B, with confirmed roost.



Photograph 2: View of Building F, former stable block with confirmed roost.



Photograph 3: View of Building C with confirmed roost.



Photograph 4: View of building E with confirmed roost.



Photograph 5: View of Building D and associated hardstanding.



Photograph 6: View of P3.



Photograph 5: View of P2 within residential garden.



Photograph 6: View of P1 ornamental pond within garden.

B. METADATA, SURVEY CONDITIONS AND LIMITATIONS

B.1 Metadata

Factor	Detail
Data	Ecological verification of Wells Farm, Cuffley
Reason for collection	To identify ecological constraints and to confirm/inform appropriate mitigation in relation to proposed works.
Location	Wells Farm Cuffley, Hertfordshire. Approximately centered on national grid reference: TL 30000201
Date	24 th August 2023
Method of collection	Ecological verification assessment based on JNCC Phase 1 Habitat assessments.
Who collected	Katie Dalton BSc (Hons) MRSB ACIEEM

B.2 Survey Conditions

Date	Start Time	Cloud (%)	Sun	Precipitation
24/08/2023	09:00-11:30	20	Sunny	None

B.3 Limitations Review

Consideration	Comment
Survey & data	
Personal competence, i.e. qualifications, training, skills, understanding, experience	All survey works were undertaken by or directly supervised by personnel experienced in ecological surveying (see meta data). <u>Katie Dalton MRSB ACIEEM</u> has over 5 years' experience in ecological consultancy, including an experience of performing the survey work and assessments undertaken at Site, along with technical reporting. Katie holds Level 2 bat class licence and level 2 great crested newt class licence. <u>James Patmore CEcol CEnv MCIEEM</u> has over 21 years experience in ecological consultancy, including an extensive amount of experience performing and directing the survey work and assessments undertaken at the Site.
Resources (equipment and/or personnel)	Appropriate resources and suitably qualified personnel were used.
Time spent surveying	Sufficient time was spent on site to undertake all surveys. No surveys were 'cut short'.
Data (e.g. arising from incomplete or inappropriate surveys)	The data collected were sufficient for the purpose of the works.
Lack of statistical robustness and higher uncertainties	Statistical analysis of data was not deemed necessary for the purpose of the current works.
Old and out of date data	The data used to complete this Ecological Verification Assessment were current and up to date.
Timing or seasonal constraints and suboptimal survey periods	The survey was conducted in August 2023. This is an appropriate survey period.
Partial use of and/or departures from good practice guidelines	All surveys accorded with the relevant best practice guidelines.
Site conditions & other factors	
Adverse weather conditions	No significantly adverse weather conditions were encountered during the survey work undertaken at the Site that would be considered to have significantly adversely impacted the reliability and/or accuracy of data collected.

Consideration	Comment
Restricted access to site or part of site	All areas of the Site were accessed with no restrictions.
Unrealistic deadlines	No restrictions on survey data collected or analysed to date are as a result of unrealistic deadlines.
Unproven or untested measures for mitigation and compensation	N/A
Evaluation of conservation value and impacts	<p>The evaluation of the conservation value of habitats and species associated (or potentially associated) with the Site and impacts of the development, are based on the current information available.</p> <p>This evaluation will need to be reviewed and updated as necessary should a considerable period of time (24 months) elapse and/or more data from other survey work (on and within 1 km of the Site) becomes available.</p>

C. DETAILED SURVEY RESULTS

C.1 Species Recorded on Site

English Name	Scientific Name
<i>Plants</i>	
Perennial rye-grass	<i>Lolium perenne</i>
White clover	<i>Trifolium repens</i>

C.1 Habitat Suitability Index

Habitat Suitability Index (HSI Assessment)

- C.1.1 Following the desk study, a decision was made as to whether to undertake HSI assessment of all ponds within 250 m of the survey Site following current guidance and professional judgement. The HSI assessment was undertaken in line with best practice guidelines by a suitably experienced ecologist.
- C.1.2 The HSI assessment is a standardised methodology (developed by Oldham *et al.* (2000) and subsequently adapted by Amphibian and Reptile Groups of the UK (2010)). It is used for assessing the potential for waterbodies to support great crested newts based upon various characteristics of the waterbody, see Table B4.1.

Table B4.1 Waterbody characteristics used during HSI assessment

Characteristic	Description
S11 Location	The location of the waterbody within Great Britain
S12 Pond area	The area of the waterbody supporting water
S13 Permanence	How often the waterbody appears to dry out
S14 Water quality	The water quality, indicated largely by invertebrate assemblages
S15 Shade	The percentage of shade along the waterbody's perimeter
S16 Fowl	The presence / absence and intensity of water fowl impacts
S17 Fish	The presence / absence and intensity of fish impacts
S18 Pond count	The number of water bodies within 1 km excluding those separated from the surveyed waterbody by dispersal barriers such as large roads
S19 Terrestrial	The suitability of terrestrial habitat surrounding the waterbody for great crested newt
S10 Macrophytes	The estimated percentage cover of the waterbody by macrophytes between May and end of September

- C.1.3 The overall suitability of the waterbody is then calculated by entering scores for each category into an equation provided within the standardised methodology. The outcome of the calculation determines the suitability of a waterbody as either 'poor', 'below average', 'average', 'good', or 'excellent'.