



ARBOR VITAE

ECOLOGY • FORESTRY • LAND USE



PRELIMINARY ECOLOGICAL APPRAISAL

MOUNT PLEASANT FARM

Project name: Mount Pleasant Farm, Hopton, Nescliffe
SY4 1DJ

Grid Reference: SJ38312077

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1 INTRODUCTION

1.1 BACKGROUND TO DEVELOPMENT

Planning permission will be sought for the conversion of an existing outbuilding.

Arbor Vitae were commissioned by Roger Parry and Partners to undertake a Preliminary Ecological Appraisal in order to assess the impact of the development on habitats and protected species.

1.2 SCOPE OF SURVEY

The survey is primarily designed to:

- Identify and record habitats and important ecological features on site;
- Evaluate the potential of the proposed development site to provide opportunities for protected species;
- Determine any likely impact which the development and landscape proposals may have on these.
- Identify opportunities for the enhancement of habitats and biodiversity features on site.

1.3 KEY PRINCIPLES

All ecological surveys conducted by Arbor Vitae Environment Ltd are underpinned by the following key principles, as outlined by CIEEM (2018):

Avoidance - Seek options that avoid harm to ecological features (for example, by locating on an alternative site).

Mitigation - Adverse effects should be avoided or minimized through mitigation measures, either through the design of the project or subsequent measures that can be guaranteed – for example, through a condition or planning obligation.

Compensation - Where there are significant residual adverse ecological effects despite the mitigation proposed, these should be offset by appropriate compensatory measures.

Enhancements - Seek to provide net benefits for biodiversity over and above requirements for avoidance, mitigation or compensation.

2 SITE DESCRIPTION

2.1 LOCATION, LANDSCAPE, AND BACKGROUND

Mount Pleasant Farm is located between Hopton and Lower Hopton at Nesscliffe, just east of the A5. The farm is accessed via a long private drive from the main highway. The land surrounding the farm is dominated by arable agriculture, with some areas of modified grassland. Several blocks of planted and mixed woodland lie within 2km of the site.

The proposals will include the conversion of an existing sandstone outbuilding.

3 SURVEY METHODOLOGY

3.1 DESK STUDY

An initial desk study was composed to gain background information regarding any protected species or designations within the area. The main sources of information were MagicMap, Shropshire Environmental Network and NBN Atlas.

3.2 SITE SURVEY

A site visit was made on 31/08/2023. The survey was carried out in accordance with CIEEM (2017) best practice guidelines. The objective of the survey was to find and record any signs of use by protected species and to note the habitat features present.

An assessment of the available habitats both on and adjacent to the site led to consideration of the potential of the site for the following protected species:

- Bats
- Breeding birds
- Great Crested Newt

The survey methodology was tailored to evaluate the area for these species in the following ways:

Bats

The objective of the survey was to find and record any signs of use by bats, for example:

- Droppings, sometimes in concentrations below roost sites
- Feeding signs such as butterfly and moth wings
- Staining of timber, brickwork around access points

The general structure of the building was assessed for its potential to provide bats with roosting opportunities.

The site was assessed in terms of its suitability to support bat species. Hedgerow habitat and nearby potential habitat were assessed and recorded and potential impacts from the proposals considered.

Breeding birds

The site was assessed in terms of its suitability to support breeding bird populations. Hedgerow habitat and nearby potential habitat were assessed and recorded.

Great crested newt

A desk study and a ground search were conducted to search for any areas of open water within 250 metres. Waterbodies were then assessed based on the Habitat Suitability Index for great crested newts (Oldham et al., 2000 and ARG UK, 2010).

3.3 PERSONNEL

The survey was carried out by Phillipa Stirling MSc ACIEEM: Ecologist. Natural England bat licence number: 2021-52205-CLS-CLS and GCN licence number: 2019-42631-CLS-CLS.

3.4 CONSTRAINTS

There were no constraints to the survey being carried out.

4 SURVEY RESULTS

4.1 DESK STUDY

The desk study found that within 1km of the site there were the following designations:

Name	Designation	Distance from site
Nesscliff Hill Wood	Ancient replanted woodland Local Wildlife Site	630m
The Cliffe	Local Wildlife Site	850m
Vales Wood	Ancient & Semi-Natural Woodland	1000m
Lin Can Moss	SSSI	760m
Cranberry Moss	Local Wildlife Site	1500m

The search included Ramsar, SSSI, SAC, SPA, LWS, NNR and LNR. ¹

Results from the desk study revealed that within a 1km radius of the proposed development site the following protected species have been recorded:

Species	Distance	Protection
Mammals		
Otter	900m	European Protected Species, Wildlife and Countryside Act 1981.
Badger	500m	Protection of Badgers Act 1992, Wildlife and Countryside Act 1981.
Noctule Common pipistrelle Brown long-eared	700-900m	European Protected Species, Wildlife and Countryside Act 1981.
Birds		
Barn owl Crossbill Brambling Kestrel Redwing Fieldfare	0.3-1km	Wildlife and Countryside Act 1981.

4.2 HABITATS ON SITE

All habitats are classified using JNCC's Phase 1 Habitat Survey Handbook (JNCC, 2010).

Buildings

The barn to be converted is a single storey structure, open at the south elevation. There are several bays, separated by timber pillars at the south elevation. The main structure of the west, east and north walls is sandstone. Parts of the north elevation are made up of timber cladding, fixed to timber studwork.

The roof is pitched and covered with slate, lined with a breathable roofing membrane. The roof appears to be relatively new and all timbers are modern. The ridge is capped with clay tiles which are cemented in place. The verges of the roof have also been sealed with cement.

¹ SSSI: Site of Special Scientific Interest, SAC: Special Area of Conservation, SPA: Special Protection Area, LWS: Local Wildlife Site NNR: National Nature Reserve, LNR: Local Nature Reserve.

Timber barge boards are in place at the east and west gable, with a 3inch gap between them and the external wall of the barn. The rafters of the roof overhang the top of the wall plate by around 2 inches and the eaves of the barn are completely open.

Internally, there are no enclosed cavities or voids present. The floor is gravelled. There are several windows installed at the north elevation.

Hardstanding

Gravelled areas and concrete yards are present to the south, east and west of the barn.

4.3 ADJACENT HABITATS

Standing water

One pond is mapped within 250m of the site. Upon inspection it became clear that the pond is dry and vegetated. Reedmace dominates the area. The soil is damp but there is no open water present. The area is also densely shaded by mature trees including ash and oak.

Modified grassland

There is a field to the north of the barn which comprises agriculturally improved grassland. Species recorded within the sward at the time of the survey include: perennial ryegrass, cock's foot, creeping buttercup, white clover, dandelion, chickweed, common nettle and broad leaved dock.

4.4 PROTECTED SPECIES

Bats

The barn was closely inspected for any evidence of bats and none was found. The structure is very open and there are no enclosed cavities, voids or crevices in which bats could roost. The sandstone walls are well-pointed and the roof is in excellent condition.

Daytime conditions within the barn are very light due to the south elevation being completely open. There are no known records of bats at the site and overall, the barn provides 'negligible' potential as a roosting site.

Breeding birds

No active nests were discovered during the survey. The barn is open and therefore birds could gain access to breed and building nests.

Great Crested Newt

Pond 1 was found to be dry and vegetated at the time of the survey. There are no records of GCN within 1km of the site and it is highly unlikely that the species is present in the local environment of the barn.

5 POTENTIAL ECOLOGICAL IMPACT

5.1 HABITAT ASSESSMENT

The proposals will impact an existing barn which in itself does not provide any habitat of ecological importance. Other habitats which are likely to be impacted include existing hardstanding. The plans are not expected to have any ecological impact.

5.2 PROTECTED SPECIES ASSESSMENT

Bats

The barn provides 'negligible' potential as a roosting site and there is no evidence to suggest that bats have ever used the barn. No further survey work is required. Recommendations for external lighting will be provided given the rural location of the project.

Breeding birds

The barn does not appear to be in use by breeding birds although it is easily accessible. Precautionary measures will be adopted.

Great crested newt

There are no ponds present within 250m of the site and no records of GCN within 1km.

Studies have demonstrated that 95% of all summer refuges of GCN fall within 63m of their summer breeding pond (Jehle, 2000). Subsequent studies also found that capture rates of GCN were at their highest within 50m of a breeding site with a significant reduction in capture rates beyond 100m (Cresswell and Whitworth, 2004).

The proposals will have no impact upon GCN and no further survey work or mitigation is required.

6 AVOIDANCE, MITIGATION AND ENHANCEMENT

6.1 HABITAT MITIGATION

The building is of no ecological interest and mitigation for its conversion will not be required.

6.2 PROTECTED SPECIES MITIGATION

Bats

The following guidance will be incorporated into plans for the site:

- Hedgerows and key habitat features including mature trees on the site will not be illuminated in order to retain dark movement corridors for nocturnal wildlife.
- Security lighting will be set on motion sensors with short timers (<1 minute) and will be LED with a passive infrared trigger.
- External lights will be hooded and directed toward the ground to reduce upward light spill.
- A warm white spectrum will be adopted throughout the scheme to reduce blue light component (<2700Kelvin).

Breeding birds

Ideally, the barn will be sealed off to prevent birds from gaining access during the 2024 breeding season i.e. 1st March 2024-31st August 2024. This could be achieved by installing sheets over the openings at the south elevation and ensuring all windows remain closed.

Before works begin to convert the barn, a thorough internal inspection will be carried out. If breeding birds are found to be present, works will be postponed until such a time that all breeding is complete.

6.3 ECOLOGICAL ENHANCEMENT

Ecological enhancement at the site can be achieved by providing artificial nest/roost opportunities as follows:

- One Woodcrete open-fronted nest box will be installed onto the side of the barn, another building on site or a nearby tree. The box will be at least 2.5m from ground level.
- One Woodcrete bat box will be installed onto the side of the barn, another building on site or a nearby tree. The box will be at least 3m from ground level and face south or south west.

7 SUMMARY

Planning permission will be sought for the conversion of an existing outbuilding. Arbor Vitae were commissioned by Roger Parry and Partners to undertake a Preliminary Ecological Appraisal in order to assess the impact of the development on habitats and protected species.

The proposals will impact an existing barn which in itself does not provide any habitat of ecological importance. Other habitats which are likely to be impacted include existing hardstanding. The plans are not expected to have any ecological impact.

The barn provides 'negligible' potential as a roosting site and there is no evidence to suggest that bats have ever used the barn. No further survey work is required. Recommendations for external lighting will be provided given the rural location of the project.

The barn does not appear to be in use by breeding birds although it is easily accessible. Precautionary measures will be adopted, to include: sealing the building to prevent birds from gaining access to the barn and a pre-commencement check for any sign of breeding birds or nest building.

There are no ponds present within 250m of the site and no records of GCN within 1km. The proposals will have no impact upon GCN and no further survey work or mitigation is required.

Ecological enhancement at the site can be achieved by providing artificial nest/roost opportunities as follows: One Woodcrete open-fronted nest box and One Woodcrete bat box.

8 REFERENCES

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FIGURE 1 LOCATION

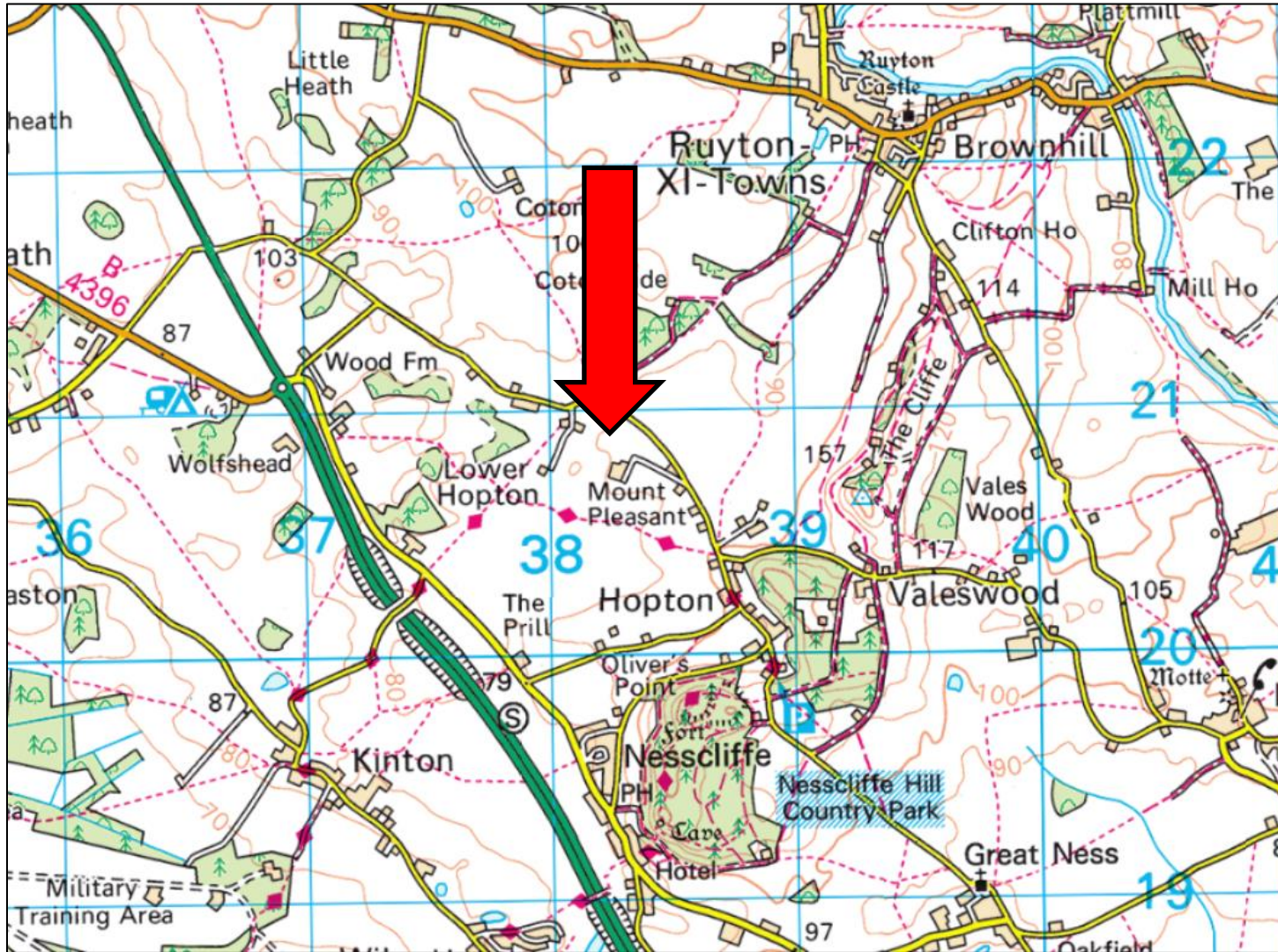
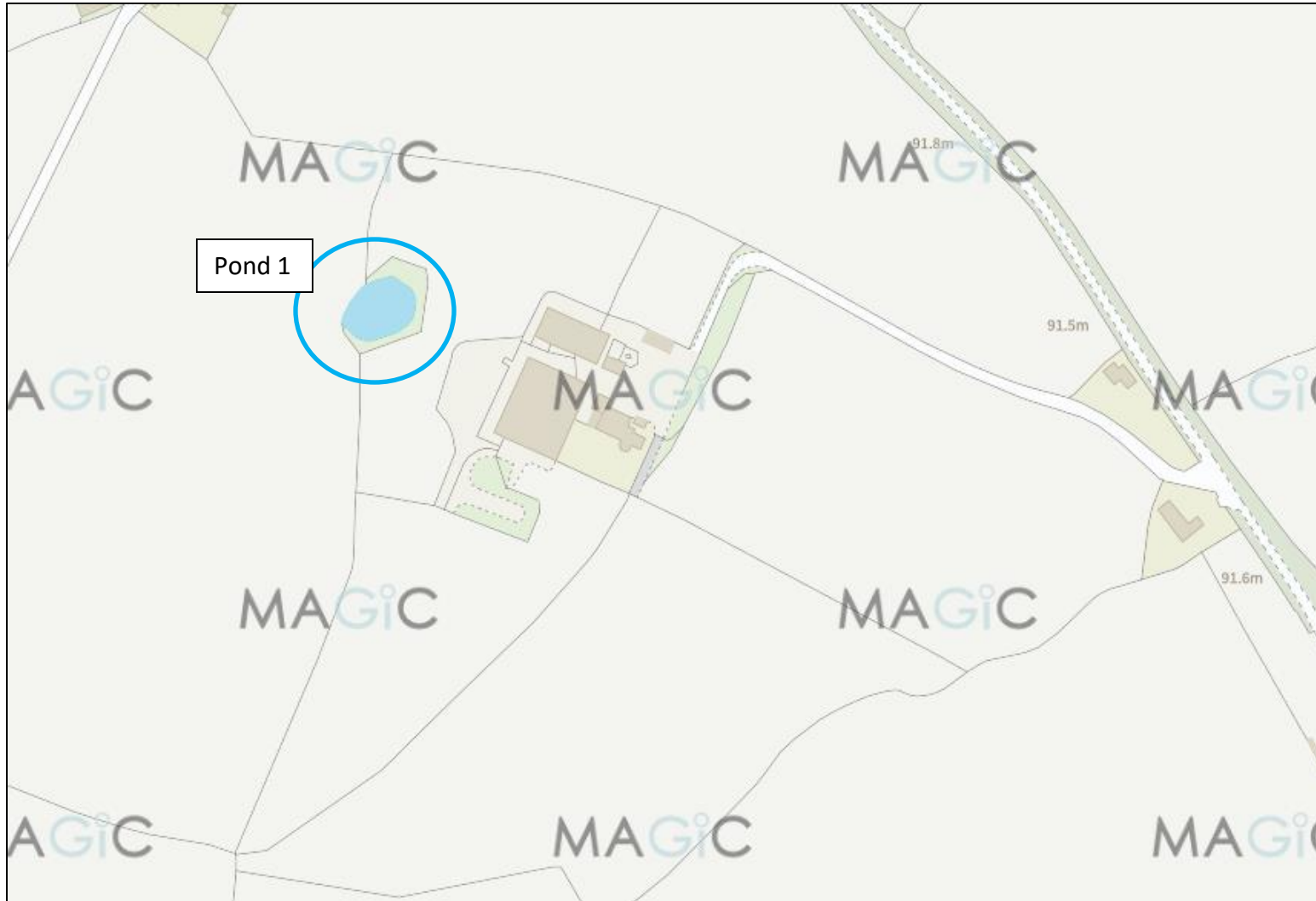


FIGURE 2 AERIAL PHOTOGRAPH



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FIGURE 3 PONDS WITHIN 250M



APPENDIX 1 PHOTOGRAPHS



The barn's south elevation



West gable



Barn interior



Part cladding at north elevation



Internal roof



Pond 1

