

Mr Jake Berridge
Sent by email

Date: 6 March 2023

Dear Jake

Ecological assessment of proposed works at the Bull Auberge, Yaxley, Suffolk IP23 8ES

I am writing to provide a summary of the findings following a survey of the site on the 28 February 2023 (TM 11508 72539; Figure 1), where it is proposed to erect an arbour in the rear garden for use with weddings. An area will be levelled so a marquee can be erected as required for weddings and other special events, whilst an outdoor kitchen will be constructed, and fencing erected around an existing sewage treatment plant. A small shed will require demolition.

The purpose of the visit was to inspect the identify potential ecological features of relevance to the scheme, to enable an assessment of potential impacts where appropriate. The desk and field assessment completed were made with reference to the CIEEM Guidelines for Preliminary Ecological Appraisal¹.

Methodology

A desk study was undertaken, which included the use of SBIS historical biological records (Appendix A1), MAGiC Map, OS Maps, aerial photography. The Mid Suffolk District Council planning pages were accessed to assess if other local schemes and/or surveys were relevant. During the field survey notes were made and photos are provided in Appendix A2. The site was inspected for evidence of nesting birds² and potential bat roosts² by Christian Whiting BSc MSc MCIEEM a licensed bat surveyor (Natural England Level 2 licence 2015-14745-CLS-CLS), and experienced GCN surveyor (Class A licence 2015-17633-CLS-CLS) following standard methodology³.

Results

Designated sites

i) Locally designated sites

The Pennings Local Nature Reserves (LNR) is located c. 3.5km to the east of the site. The application site is not located close to this site or of a type (e.g., industrial process which causes air or water pollution) such that the development could not cause a direct impact or indirect impact.

There are 3 County Wildlife Sites (CWS) located within 1km of the application site as follows:

- Thornham Estate Woods (Lady Henniker Wood/Bottom Plantation/Braiseworth Wood/Steggall's Wood/Duchess Wood/Howe Plantation/Victoria Wood): The site comprises a number of woods including Duchess Wood which is listed in the Suffolk Ancient Woodland Inventory compiled by English Nature. The remaining woodland is considered to be recent secondary woodland, planted 100-200 years ago. Dr. Oliver Rackham identified a large woodbank running through Bottom Plantation which he believes was the boundary of Duchess Wood. Victoria and Steggall's Woods, situated to the east of the A140 in the parish of Braiseworth, are typical oak, ash and hazel woods. Extensive areas of oak and ash woodland to the west of the A140 include Great Belt, Lady Henniker Wood, Dock Plantation and Duchess Wood. Many of the clearings and rides still support a species-rich flora including ragged-robin, cowslip and common spotted-orchid. Plants strongly associated with ancient woods occur in a few places on the Estate, for example herb-Paris, wild service-tree and wood anemone are evidence of the antiquity of the woods. In addition, a good range of butterflies and moths have been recorded.

Of particular conservation value is Birdshedge Grove, situated between grazing meadows in the Dove valley and arable land to the south. The waterlogged areas at the base of the slope support a particularly diverse range of plants and birds. Furthermore, three rare species of moss have been recorded here. A survey of the Estate ponds has shown that a number of them provide a valuable refuge for wetland plants and aquatic invertebrates. In addition, great crested newts, a specially protected species (Wildlife and Countryside Act, 1981) have been recorded in several ponds. Management work to improve

¹ CIEEM (2017) Guidelines for Preliminary Ecological Appraisal, 2nd edition. Chartered Institute of Ecology and Environmental Management, Winchester

² All wild birds, their nests and eggs are protected under the WCA 1981 (as amended), level of protection varies per species.

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

the amenity value and public access to the Estate is carried out by the countryside warden based here.

- Thornham Parva Meadow: This meadow is a good example of an unimproved herb-rich grassland (priority habitat). Typical species include cowslip, ox-eye, meadow vetchling, tufted vetch, pyramidal orchid and knapweed. The meadow is surrounded by native ancient hedges (priority habitat). The plant and structural diversity of the meadow means it is a good pollen and nectar source for many insects.

The nearest CWS to the site is Thornham Parva Meadow CWS c. 350m to the west. The road to Thornham Parva passes right past the CWS but there is no public access so no impacts are predicted from people that might visit the Bull Auberge and then go for a walk. Formal Public Rights of Way and permissive paths exist on the Thornham Estate such that visitors to the application site could then access parts of the Thornham Estate Woods CWS, but visitors are encouraged to the estate and paths are maintained to allow access in areas where damage to sensitive fauna and flora would not occur. **Therefore, the proposed development is not likely to significantly impact any of the CWSs.**

ii) Nationally and internationally designated sites

Major Farm Braisworth SSSI is located c. 0.4km to the east of the site and Burgate Wood SSSI is 4.7km to the northwest of the site. The SSSI Impact Risk Zones identify developments which require Natural England to be consulted by the LPA. The proposals for the Bull Auberge are not listed and therefore it can be concluded that no impacts on the SSSIs would occur.

Redgrave and Lopham Fen SSSI, SAC is located c. 9.1km to the northwest of the application site. Potential impacts on SSSIs and Natura 2000 sites can occur because of human disturbance (e.g., trampling of sensitive vegetation and disturbance of wildlife such as overwintering/breeding birds from humans and/or their dogs).

Habitats Regulations Assessment

Where a development or project may, alone or in combination, have a 'likely significant effect' upon the features of Natura 2000 or Ramsar sites, the Habitats Regulations 2017 require a Habitats Regulations Assessment (HRA) to be undertaken. Advice from NE states that increased housing located within 1km by foot and 13km by car of Natura 2000 sites may potentially cause disturbance to the interest features due to walkers (and dogs). Disturbance to bird species that breed and/or overwinter within the sites is considered to cause the greatest impact. **As the proposed development site is not located within 13km of a Natura**

Protected and notable species

No protected or notable species records exist within the application site boundary. Table 1 identifies relevant protected or notable species records for within 2km of the application site boundary.

Table 1 Protected/notable species

Common name	Scientific name	Legal/conservation status
Amphibians and reptiles		
<i>Anguis fragilis</i>	Slow worm	WCA5; S. 41
<i>Bufo bufo</i>	Common toad	WCA5; S. 41
<i>Lissotriton vulgaris</i>	Smooth newt	WCA5
<i>Natrix helvetica</i>	Grass snake	WCA5; S. 41
<i>Rana temporaria</i>	Common frog	WCA5
<i>Triturus cristatus</i>	Great-crested newt	EPS; WCA5; S. 41
Bats		
<i>Barbastella barbastellus</i>	Barbastelle	EPS; WCA5; S. 41
<i>Eptesicus serotinus</i>	Serotine	EPS; WCA5
<i>Myotis daubentonii</i>	Daubenton's	EPS; WCA5
<i>Nyctalus noctula</i>	Noctule	EPS; WCA5; S. 41
<i>Pipistrellus pipistrellus</i>	Common pipistrelle	EPS; WCA5
<i>P. pygmaeus</i>	Soprano pipistrelle	EPS; WCA5; S. 41
<i>Plecotus auritus</i>	Brown long-eared	EPS; WCA5; S. 41
Birds		

<i>Chloris choris</i>	Greenfinch	Red Status
<i>Apus apus</i>	Swift	Red Status
<i>Delichon urbicum</i>	House martin	Red Status
<i>Muscicapa striata</i>	Spotted flycatcher	Red Status; S. 41
<i>Passer domesticus</i>	House sparrow	Red Status; S. 41
<i>Prunella vulgaris</i>	Dunnock	Amber Status
<i>Pyrrhula pyrrhula</i>	Bullfinch	Amber Status; S. 41
<i>Streptopelia turtur</i>	Turtle dove	Red Status; S. 41
<i>Sturnus vulgaris</i>	Starling	Red Status
<i>Troglodytes troglodytes</i>	Wren	Amber Status
<i>Turdus philomelos</i>	Song thrush	Red Status
<i>Turdus viscivorus</i>	Mistle thrush	Red Status
<i>Tyto alba</i>	Barn owl	WCA1
Other mammals		
<i>Arvicola amphibius</i>	Water vole	WCA5; S. 41
<i>Erinaceus europaeus</i>	Hedgehog	S. 41
<i>Lepus europaeus</i>	Brown hare	S. 41
<i>Lutra lutra</i>	Otter	EPS; WCA5; S. 41
<i>Meles meles</i>	Badger	PBA 1992
Vascular plants		
<i>Populus nigra</i> subsp. <i>betulifolia</i>	Black poplar	
<i>Trifolium ochroleucon</i>	Sulphur clover	RLENG.VU
Invertebrates		
<i>Satyrrium w-album</i>	White-letter hairstreak	RLGB.EN; S.41; WCA5/9.5a

Other species records

NE open source GCN records (eDNA and class survey returns) show a positive record for a pond 520m to the north close to the A140.

Habitat descriptions

The application site (Figure 2) comprises an area of species-poor lawn with some scattered trees including some mature fruit trees and a pedunculate oak (*Quercus robur*) and a tall hedgerow/line of trees along the south-west site boundary (Photos 1 and 2). Tree species present include field maple (*Acer campestre*), plum (*Prunus* sp.), hazel (*Corylus avellana*), beech (*Fagus sylvatica*) and elder (*Sambucus nigra*). A conifer (*Thuja plicata*) hedgerow exists adjacent to the road to Thornham Parva. A small shed (Photos 3 and 4) is located close to a line of mature Leyland hedgerow (*Cupressocyparis x leylandii*) with a sewage treatment (Photo 5).

Amphibians and reptiles

A pond P1 (Photo 6) comprising a widened ditch is located 30m to the west of the application site and supports average suitability for GCNs due to shading, presence of some ducks, and low macrophyte cover. Two other ponds are located within 250m of the application site but are located to the east of the A140 which will form a partial barrier to the movement of amphibians as it is busy road.

The application site is unlikely to support any resident populations of common amphibians as it comprises predominantly of mown lawn with few potential refuge areas during daylight hours and for overwintering. Common frog records exist for within 50m of the application site.

Bats

A thorough internal inspection of the shed (Photos 3 and 4) found no evidence of roosting bats and was assessed as supporting negligible bat roosting potential (BRP). The gardens, hedgerows and scattered trees provide moderate value bat commuting and foraging habitat for common species such as pipistrelles.

Nesting birds

No evidence of nesting birds were found in the shed to be demolished, but the adjacent line of mature Leyland cypress provides potential nesting habitat for a range of common bird species. The fruit trees provide seasonal food for resident and migrant bird species such as fieldfare (*Turdus pilaris*).

Other mammals

Hedgehogs (*Erinaceus europaeus*) may occasionally enter the gardens and forage over the lawn area where the arbour and any temporary seating would be located.

Discussion

General good working practices

Impacts likely to arise from the proposed works will be limited, subject to good housekeeping and working practices. The following measures are suggested to minimise the risk of incidental harm to amphibians, breeding birds and hedgehogs:

- The lawn should be kept short through repeated mowing ground should be kept bare/unvegetated to ensure cover for animals is minimal ahead of works;
- Retained trees and hedgerows should not be physically disturbed during the works. Temporary (e.g., Heras) fencing should be erected for protection, with hand digging of holes for the pergola to avoid damage to tree roots on the retained fruit trees;

Species specific

Amphibians

- Any trenches required should be filled on the same day as excavation where possible. Trenches left overnight should be covered with ply/OSB sheets and any gaps filled with damp sharp sand to prevent animals becoming trapped. If this is not possible then amphibian/mammal ladders must be installed (wide planks, laid at shallow angles to allow animals safe egress) and they should be maintained until the excavations are filled;
- Trenches should be inspected immediately prior to infill and any animals present relocated to suitable nearby habitats (e.g. base of roadside hedgerow);
- Footings or concrete slabs for the outdoor kitchen should be poured during the morning to ensure they have hardened off prior to evening to reduce the risk of animals encountering wet concrete;
- Any hand mixing of mortar or concrete should be on ply boarding over a tarpaulin which is folded over the boarding at the end of each day to prevent animals coming into contact;
- Any excess cement/concrete should be covered and removed from site as promptly as possible to avoid animals coming into contact;
- All building materials will be stored on bare ground or hard standing, or stored off the ground on pallets;
- Any waste or spoil stored on site temporarily will be stored on bare/hard ground or in skips to prevent amphibians from seeking refuge; and
- Should any animals be encountered, they should be allowed carefully relocated to suitable nearby habitat (e.g., at the base of a nearby hedgerow).

Bats

a) Lighting

Any lighting required for the office/annex should be positioned to avoid any direct illumination of adjacent trees and shrubs which may be used by commuting and foraging bats.

Exterior lighting design must minimise lighting impacts upon adjacent natural habitats such as hedgerows and should follow current guidance as necessary^{4,5}:

⁴ <https://www.theilp.org.uk/documents/guidance-note-8-bats-and-artificial-lighting>

⁵ www.eurobats.org/sites/default/files/documents/publications/publication_series/WEB_DIN_A4_EUROBATS_08_ENGL_NVK_28022019.pdf

- *Type of lamp (light source)*: Light levels should be as low as possible as required to fulfil the lighting need. Lamps should have a maximum of 7.5 to 10 lux and LED lights should be used using the warm white (or amber) spectrum, with peak wavelengths >550nm (2700 or 3000°K) and no UV component; and
- *Lighting design*: Lighting should be directed to where it is needed, with minimal horizontal spillage towards adjacent habitats. This can be achieved by restricting the height of the lighting columns/fixtures and the design of the luminaire, including the following measure:
 - ❖ Light columns/fixtures in general should be as short as possible as light at a low level reduces the ecological impact.
 - ❖ Luminaires with an upward light ratio of 0% should be mounted on the horizontal i.e., with no upward tilt.
 - ❖ If taller lights are required, and as a last resort, accessories such as baffles, hoods or louvres can be used to reduce light spill; and
 - ❖ PIR movement sensors and timers should be used to minimise the 'lit time'.

Breeding birds

If demolition works of the shed are proposed to commence during the bird breeding season (e.g., March to August inclusive for most species) a nesting bird check is required prior to works commencing. If any nests are found, exclusion zones must be established until young have fledged.

Cumulative effects

The Babergh and Mid Suffolk planning portal was searched for relevant applications within 2km, dating back two years. The search returned a small number of householder applications for alterations and/or extensions to existing dwellings including a proposal to split a dwelling into two properties (Ref: DC/23/00437). **Due to the limited nature of the scheme and planning search results, no significant cumulative effects are anticipated.**

Biodiversity enhancements

The following biodiversity enhancements are recommended:

- Two cedar or recycled plastic⁶ sparrow terraces could be erected on the east or north elevations of the adjacent accommodation building;
- Two hole-entrance bird nest boxes⁷ could be mounted on suitable trees within the applicant's garden; and
- Two bat boxes (e.g., x1 Kent bat box and x1 Vincent Pro bat box) could be erected on mature trees on site.

Good practice advice⁸ should be followed in relation to the positioning of boxes.

It is generally advised that subject to no significant change in site management regimes, and dependent on the species present, baseline survey results typically remain valid for approximately 12 – 18 months (CIEEM, 2019).

Kind regards,

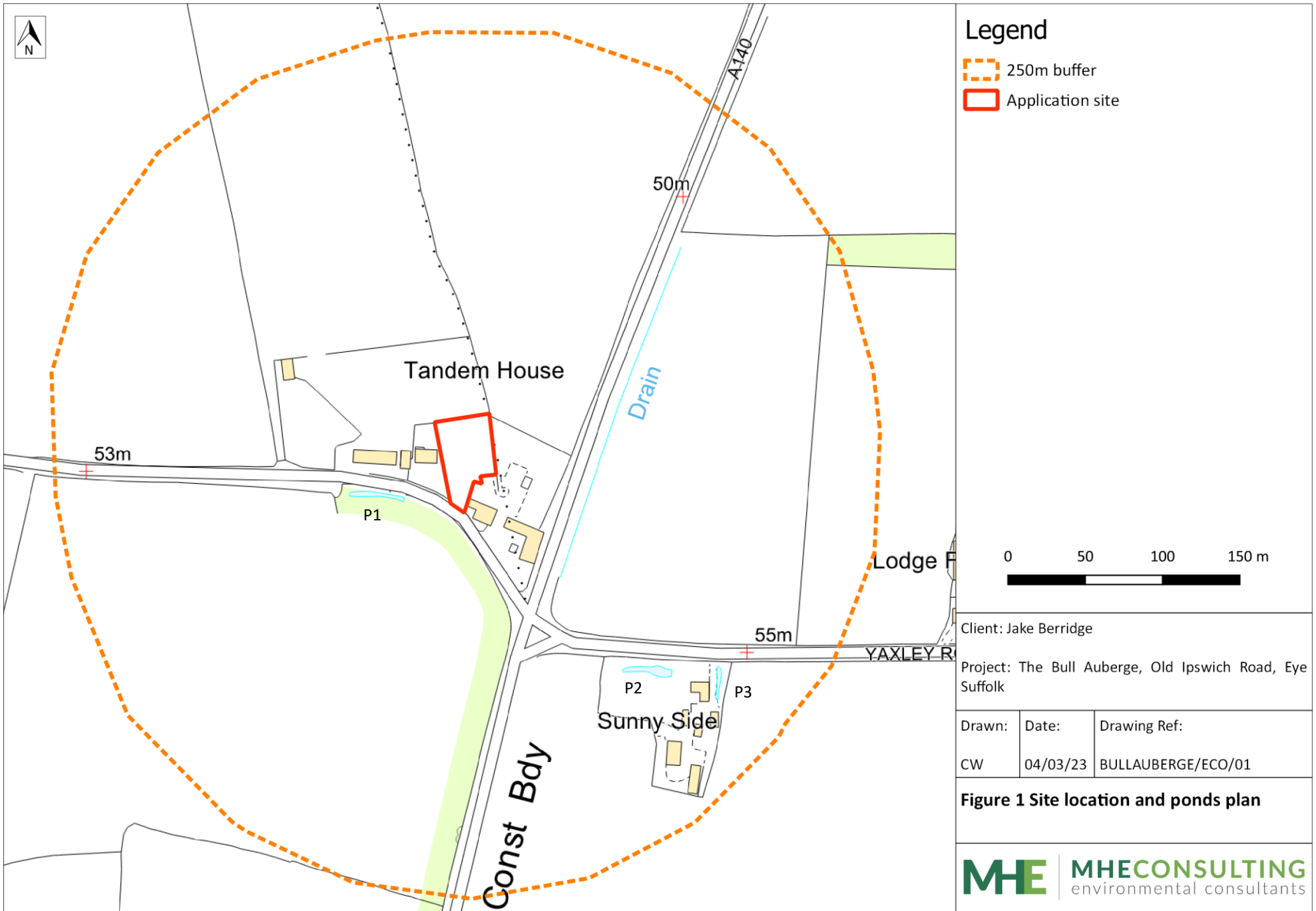
Christian Whiting BSc (Hons) MSc MCIEEM
Director and Principal Ecologist, MHE Consulting Ltd

⁶ <https://www.nhbs.com/1sp-schwegler-sparrow-terrace?bkfno=185100>

⁷ E.g. <https://www.nhbs.com/vivara-pro-seville-32mm-woodstone-nest-box> or <https://www.nhbs.com/1b-schwegler-nest-box>

⁸ <https://www.nhbs.com/blog/nhbs-guide-where-to-hang-and-how-to-maintain-your-bat-box> and <https://www.rspb.org.uk/birds-and-wildlife/advice/how-you-can-help-birds/nestboxes/nestboxes-for-small-birds/making-and-placing-a-bird-box>

Figures



Client: Jake Berridge

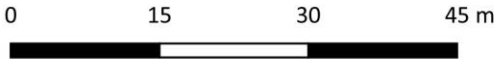
Project: The Bull Auberge, Old Ipswich Road, Eye Suffolk

Drawn:	Date:	Drawing Ref:
CW	04/03/23	BULLAUBERGE/ECO/01

Figure 1 Site location and ponds plan



Legend



Client: Jake Berridge

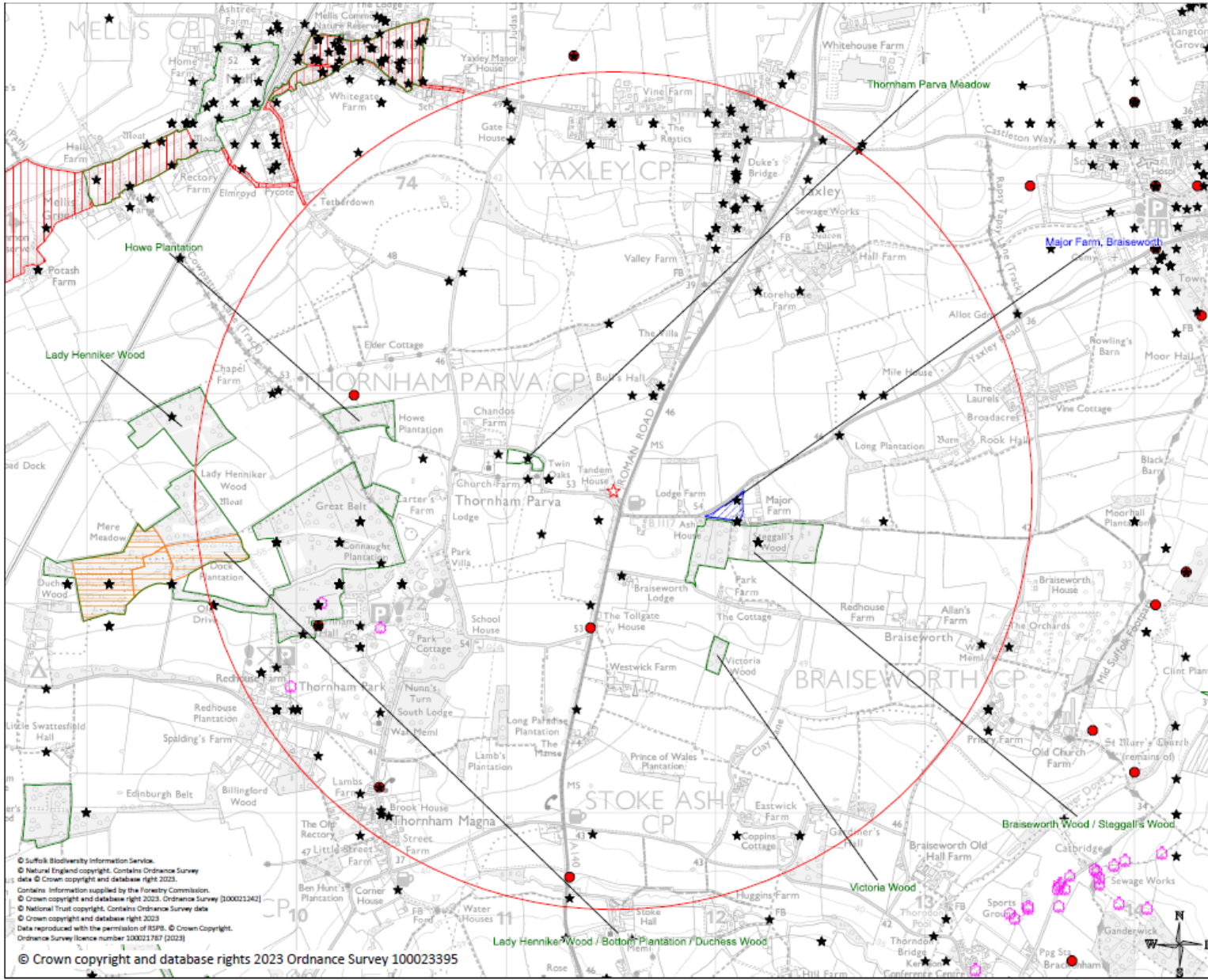
Project: The Bull Auberge, Old Ipswich Road, Eye Suffolk

Drawn:	Date:	Drawing Ref:
CW	04/03/23	BULLAUBERGE/ECO/02

Figure 2 Habitats plan

Appendices

Appendix A1 SBIS data search



- Data Enquiry**
- ☆ Search Point
 - Search Area
- Protected, Locally Scarce and Rare Species**
- ★ Record Locations (for grids of 6 fig. or greater)
- Schedule 9 Species**
- Record Locations (for grids of 6 fig. or greater)
- Ancient/Veteran/Notable Trees**
- ☆ Record Locations
- Roadside Nature Reserve**
-
- County Wildlife Sites**
-
- County GeoSites**
-
- SSSI**
-
- LNR**
-
- SPA**
-
- SAC**
-
- RAMSAR**
-
- NNR**
-
- SWT Reserve**
-
- Ancient Woodland Inventory**
-
- Other Public or Conservation Ownership/Management**
- Forestry Commission, National Trust (public access)
 - RSPB (public access)
- National Park**
- The Broads
- AONB**
- Suffolk Coast and Heaths or Dedham Vale

© Suffolk Biodiversity Information Service.
 © Natural England copyright. Contains Ordnance Survey data © Crown copyright and database right 2023.
 Contains information supplied by the Forestry Commission.
 © Crown copyright and database right 2023. Ordnance Survey 100021242
 © National Trust copyright. Contains Ordnance Survey data © Crown copyright and database right 2023.
 Data reproduced with the permission of RSPB. © Crown Copyright. Ordnance Survey licence number 100021787 (2023)

© Crown copyright and database rights 2023 Ordnance Survey 100023395

Scale report: 1:18,000



Date: 06/03/2023 | Drawn by: Andy Mercer

MHE Consulting (Bull Auberge Yaxley TM 11510 72544) 2km Data Enquiry

Appendix A2 Photos



Photo 1 Area where the pergola is to be located



Photo 2 Area of lawn to be levelled to allow the use of a temporary marquee



Photo 3 Shed with Leylandii hedge behind



Photo 4 Internal view of the shed



Photo 5 Sewage treatment plant to be fenced off



Photo 6 Pond P1