

Andy Catton  
Patrick Allen Architects  
Cc Andrew Newman

Date: 21 May 2021

Dear Andy,

**DC/21/02140 Grove Farm Stonham Aspal - Proposed demolition of existing dwelling - Ecological Appraisal assessment**

I am writing to provide a summary of my findings following my site visit to Grove Farm (Figure 1) on the 21 April 2021 to inform the proposed demolition of the existing converted barn (Photos 1 to 4, Figure 1). The purpose of my visit was to 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 Appraisal<sup>1</sup>.

Methodology

A desk study was undertaken for the approved barn conversion (Ref: DC/20/02961) which included the use of MAGiC map, OS Maps, aerial photography, previous ecology surveys at Grove Farm<sup>2</sup> and Natural England open-source data was used to identify the nature of habitats present on or immediately adjacent to the study site, and to identify sites or habitats (and associated species e.g. Great Crested Newts<sup>3</sup> (GCNs) (*Triturus cristatus*) of interest in the wider locality. The same data was used to inform this assessment.

During the field survey notes were made to record e.g. habitats and plant species present. The building was inspected for evidence of nesting birds<sup>4</sup> and potential bat roosts<sup>2</sup> following standard methodology<sup>5</sup>.

Results

**Amphibians:** Two ponds P1 and P2 are located within 250m of the site and one of them is dry (Figure 1; Photo 5) and overgrown with trees and ruderal vegetation, whilst pond P2 (Figure 1; Photo 6) was very shallow (<10cm deep), heavily choked with common bulrush and was assessed as being unsuitable for supporting GCNs or any significant populations of common amphibians. The hard standing that surrounds the existing dwelling and short mown lawn are unsuitable as refuge habitat; the lawn may provide foraging habitat at night during heavy rainfall but the garden is fenced off with close board fencing and is unlikely to support any significant amphibian or reptile populations.

**Bats:** The existing dwelling (Photos 1 to 4) was only converted in the past 5 to 10 years with timber cladding and tin roof in a very good condition with no obvious access points for bats with no evidence recorded on site.

Previous surveys of adjacent disused agricultural barns recorded low numbers of day roosting common pipistrelle (*Pipistrellus pipistrellus*) and Natterer's (*Myotis nattereri*), whilst a brown long-eared (*Plecotus auritus*) feeding perch was recorded in some stables to the west of the barns. No bats were observed flying from the barn by the ecologist or captured on a thermal scope.

**Breeding birds:** No evidence recorded but species such as house martin could nest under the eaves.

**S.41 List habitats and species:** No habitats present and the hard standing dominated gardens are considered unsuitable for small mammals such as hedgehog (*Erinaceus europaeus*) with close board fencing preventing access.

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

<sup>2</sup> MHE Consulting Ltd (2020) Ecology Report – Proposed barn conversion at Grove Farm, Stonham Aspal.

<sup>3</sup> GCNs and all species of bats receive full protection under the WCA 1981 and Habitats Regulations 2017.

<sup>4</sup> All wild birds, their nests and eggs are protected under the WCA 1981 (as amended), level of protection varies per species.

<sup>5</sup> Collins, J. (ed) (2016) Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd Edition), Bat Conservation Trust, London.



Photo 1 North and west elevation of barn proposed for demolition



Photo 2 South elevation of barn and hard standing in garden



Photo 3 North elevation of barn



Photo 4 East elevation



Photo 5 Pond P1



Photo 6 Pond P2

Mitigation

**Bats**

Bats could be impacted by light disturbance and use of modern breathable roof membranes which can result in bats becoming entangled.

### *Light disturbance*

Exterior lighting design should be made with reference to current guidance<sup>67</sup> and consider:

*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 retained habitats including grassland, hedgerows, scrub and the watercourse. This can be achieved by restricting the height of the lighting columns 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' on residential properties (up to 1 minute).

### *Bat friendly roofing membranes*

As the proposed barn conversion will have a pantile roof, if clay pantiles are used then a bat friendly roofing membrane should be used unless interlocking tiles are used.

### **Birds**

Building works should be undertaken outside of the nesting bird season. If this is not feasible for any reason, then checks and supervision will be undertaken by a suitably experienced ecologist immediately prior to building works commencing.

### Discussion

Based on the observations made on the site, it is concluded that the demolition and rebuild of the existing dwelling (barn conversion) will result in no significant ecological impacts or effects, including in relation to bats, breeding birds, small mammals and GCNs.

Based on the results of a search for local planning applications, no cumulative effects are anticipated. To provide a small biodiversity benefit, two woodcrete or woodstone or timber bat boxes<sup>8</sup> and two cedar or recycled plastic<sup>9</sup> sparrow terraces could be erected on the new dwelling and/or the horse arena building to the north. Good practise advice<sup>10</sup> 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).

Yours sincerely

**Christian Whiting** BSc (Hons) MSc MCIEEM

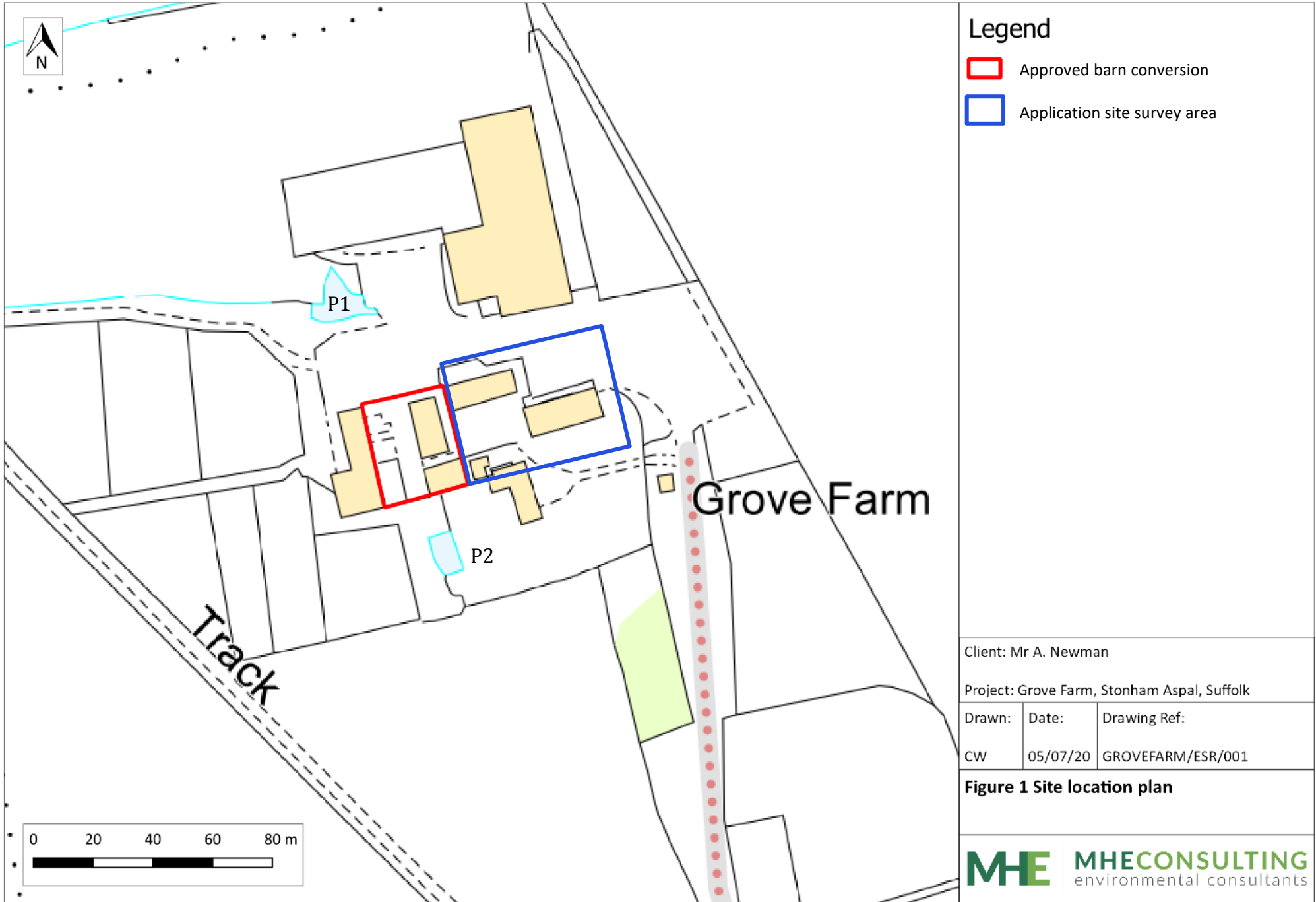
<sup>6</sup> <https://www.theilp.org.uk/documents/guidance-note-8-bats-and-artificial-lighting>

<sup>7</sup> [www.eurobats.org/sites/default/files/documents/publications/publication\\_series/WEB\\_DIN\\_A4\\_EUROBATS\\_08\\_ENGL\\_NVK\\_28022019.pdf](http://www.eurobats.org/sites/default/files/documents/publications/publication_series/WEB_DIN_A4_EUROBATS_08_ENGL_NVK_28022019.pdf)

<sup>8</sup> <https://gardenature.co.uk/product/beaumaris-woodstone-bat-boxes>

<sup>9</sup> <https://www.nhbs.com/eco-sparrow-tower>

<sup>10</sup> <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>



### Legend

- Approved barn conversion
- Application site survey area

Client: Mr A. Newman		
Project: Grove Farm, Stonham Aspal, Suffolk		
Drawn:	Date:	Drawing Ref:
CW	05/07/20	GROVEFARM/ESR/001

**Figure 1 Site location plan**