PRELIMINARY ECOLOGICAL APPRAISAL

MANOR FARM, BESTHORPE, NOTTINGHAMSHIRE

NOVEMBER 2022

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PRELIMINARY ECOLOGICAL APPRAISAL
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1 INTRODUCTION

CGC Ecology Ltd has been commissioned by Sam Nexus of Nexus Design Solutions Ltd on behalf of Mr & Mrs N. De Vos to undertake a preliminary ecological appraisal of buildings at Manor Farm, Besthorpe in Nottinghamshire. The survey is required in connection with plans to demolish the link extensions and the lean-to extension, and convert the two-storey brick barn and the outbuildings into a residential dwelling.

The purpose of a preliminary ecological appraisal is to identify the likely ecological constraints associated with the development, to make recommendations for mitigation and/or further survey work, and to identify any opportunities to deliver ecological enhancement.

The site was surveyed on 20th October 2022 in heavy rain by Celia Commowick (registered to use Natural England Class Licences WML-CL08 to survey great crested newts and WML-CL18 to survey bats; registration numbers 2016-25124-CLS-CLS and 2018-37729-CLS-CLS respectively, and FISC Level 4).

During the initial appraisal of the site the protected species considered likely to occur on site were identified. These were:

[redacted]
Bats
Common bird species

Certain protected species were scoped out of the survey; in particular it was considered that white-clawed crayfish *Austropotamobius pallipes*, water vole *Arvicola amphibious*, common dormouse *Muscardinus avellanarius* and otter *Lutra lutra* were highly unlikely to occur on the survey site due to lack of suitable habitat. There were no habitats on site considered suitable to support a population of common reptiles or for nesting by Schedule 1 bird species.

Although there is one pond within 500m of the site according to Multi-Agency Geographic Information for the Countryside (MAGIC) website, it is separated from the site by The Fleet. The habitats on the survey site are also sub-optimal for great crested newt *Triturus cristatus*, and it is considered highly unlikely that this species would occur on the site. Great crested newt has therefore been scoped out of the survey.

Any species of principal importance (as set out in the Natural Environment and Rural Communities (NERC) Act, 2006) seen on site were recorded.

This report details the methods used, describes the species found on the site, discusses the results and makes recommendations for further work.

2 METHODS

2.1 Data search

Nottinghamshire Biological and Geological Records Centre (NBGRC) was consulted on 19th October 2022 and commissioned to search for sites with non-statutory designation and records of protected species within 2km of the survey site. Records of protected species more than 20 years old are not referred to in this report. The Multi-Agency Geographic Information for the Countryside (MAGIC) website was also consulted, to search for statutory sites within 2km of the survey area.

[redacted]

2.3 Bats

2.3.1 Preliminary roost assessment

In accordance with Bat Surveys for Professional Ecologists: Good Practice Guidelines 3rd Edition (Collins J, 2016), a preliminary roost assessment was carried out on the buildings to determine whether any features were present that bats could use for entry/exit points and roosting, and to search for signs of bat presence. High-powered torches were used to search for internal and external features including but not limited to;

Gaps around windowsills, door frames and lintels
Lifted rendering, paintwork, shiplap boarding
Soffit boxes, weatherboarding and fascias
Lead flashing, hanging tiles and lifted or missing tiles/slate
Gaps >15mm in brickwork and stonework
Bat specimens (live or dead)
Bat droppings and urine staining

Feeding remains (e.g. moth wings)
Cobweb-free sections of ridge beam

The buildings were then assigned a measure of potential suitability to determine the extent of future survey work needed. The categories of potential suitability and further survey effort required are as follows;

Negligible – Negligible features on site likely to be used by roosting bats – no further survey work
Low – A structure with one or more potential roost sites that could be used by individual bats opportunistically – one survey visit (dusk or dawn)
Moderate – A structure with one or more potential roost sites that could be used by bats on a regular basis – two separate survey visits (one dusk and one dawn)
High – A structure with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a regular basis and for longer periods of time – three separate survey visits (one dusk, one dawn and one dusk or dawn).

The following should be noted: 'The guidelines do not aim to either override or replace knowledge and experience. It is accepted that departures from the guidelines (e.g. either decreasing or increasing the number of surveys carried out or using alternative methods) are often appropriate. However, in this scenario an ecologist should provide documentary evidence of (a) their expertise in making this judgement and (b) the ecological rationale behind the judgement.' (Bat Surveys for Professional Ecologists: Good Practice Guidelines 3rd Edition (Collins J, 2016)).

2.3.2 Assessment of commuting and foraging habitats

In accordance with Bat Surveys for Professional Ecologists: Good Practice Guidelines 3rd Edition (Collins J, 2016), the survey site and adjacent areas were assessed for their potential suitability for commuting and foraging bats and categorised as follows;

Negligible – Negligible habitat features on site or in surrounding area likely to be used by commuting or foraging bats
Low – Habitat features that could be used by small numbers of commuting bats such as a gappy hedgerow or small numbers of foraging bats such as a patch of scrub, but that are isolated from other habitat features
Moderate – Continuous habitat connected to the wider landscape such as lines of trees that could be used by commuting bats or trees, grassland or water features that could be used by foraging bats
High – Continuous, high-quality habitat that is well connected to the wider landscape for use by commuting and foraging bats such as river valleys, woodland, grassland and

parkland.

There are no trees on the survey site.

2.4 Common bird species

All bird species noted on site were recorded. The survey site was searched for signs of use by nesting birds, typically old nests and concentrations of faecal deposits associated with a breeding site.

2.5 Survey constraints and limitations

The information contained in this report was accurate at the time of the survey; however, it should be noted that the status of mobile species such as [redacted]birds and bats can alter in a short period of time and any survey only represents a 'snapshot' of the site at one point in the season. Advice released by CIEEM (Chartered Institute of Ecology and Environmental Management) in April 2019 states that an ecological report remains valid for between 12-18 months depending on the presence of mobile species, after which an update survey should be carried out.

3 SITE ASSESSMENT

3.1 Location and grid reference

The survey site comprises a two-storey brick barn with a number of outbuildings and extensions, set within gravel and hard-standing at Manor Farm, Low Road, Besthorpe in Nottinghamshire - central grid reference SK825648.

The site is described below and representative photographs are included in the text. An aerial view of the site location is provided as Figure 1.

Figure 1: Aerial view of the survey site outlined in red (Apple Maps, 2022)

3.2 The two-storey brick barn

At the south-east of the site is a large, two-storey brick barn with solid brick walls supporting a pitched roof covered in pantiles and underlined with bitumen felt. There are ventilation holes in the brickwork at the apex of the northern gable end and uPVC windows on the ground floor. The ground floor is in use as a motor repair workshop, with the mezzanine upper floor used as storage for a small amount of furniture. Along the western elevation is a single-storey lean-to extension, constructed of a steel frame over corrugated plastic sheeting. This area is also used as a workshop and there are high ambient light levels on the ground floor.

Photograph 1: Exterior view of the brick barn

Photograph 2: Interior view of the first floor

Photograph 3: View of the roof structure

Photograph 4: Interior view of the ground floor workshop

Photograph 5: Exterior view of the lean-to extension

Photograph 6: Interior view of the lean-to extension

3.3 The outbuildings and link extensions

There are four adjoining outbuildings to the north of the brick barn, with link extensions between them and the barn. The link extensions are mainly constructed of corrugated plastic sheeting

laid over supporting timbers with an outer brick wall, with a small link extension of blockwork walls and a flat roof covered in bitumen felt on the eastern side. The outbuildings are constructed of brick and blockwork walls, with roofs of unlined pantiles and corrugated metal sheeting. The link extensions and outbuildings are leaking in many places and have high ambient light levels within. One of the two westernmost outbuildings has been converted into an office space and has been boarded out internally, and the other has a false ceiling.

Photograph 7: Link extension between the brick barn and the outbuildings

Photograph 8: Flat-roofed link extension on the eastern side

Photograph 9: Exterior view of the link extension and the outbuilding at the west

Photograph 10: Interior view of one of the westernmost outbuildings with the roof boarded out

Photograph 11: Interior view of westernmost outbuilding with false ceiling

Photograph 12: Outbuilding with hole in the roof covering

3.4 The building surroundings

Gravelled areas and concrete hard-standing surround the buildings, with areas of amenity grassland and some metal storage containers further to the west and residential dwellings to the north, east and south.

The wider area comprises residential gardens, grassland, wetland, scrub and The Fleet.

Photograph 13: Gravelled areas and storage containers to the west

Photograph 14: Amenity grassland to the west with The Fleet visible

4 RESULTS

4.1 Data search

The results from Nottinghamshire Biological and Geological Records Centre show that the following (non-statutory) Local Wildlife Sites occur within 2km of the site. A map of the locations

of these non-statutory sites is provided in Appendix 1.

Table 1: Details of all Local Wildlife Sites within 2km of the survey site

No.	Name	Area	District	Grid Ref.	Description	Interest
1/100	Besthorpe Gravel Pits	25.785 ha	Newark and Sherwood District	SK 816650	An excellent mixed habitat assemblage of scrub, open-water and emergent communities	Botanical, Water Beetle and/or Water Bug, Moth
2/644	The Fleet, Girton	11.885 ha	Newark and Sherwood District	SK 824653	A large aquatic site with a species-rich emergent and aquatic plant community	Botanical, Odonata
2/646	Girton Grasslands	5.906 ha	Newark and Sherwood District	SK 826661	An excellent sequence of damp species-rich grasslands	Botanical
2/647	Black Pool Grassland, Besthorpe	1.144 ha	Newark and Sherwood District	SK 820641	A well-managed hay meadow with a species-rich sward	Botanical
2/648	Black Pool, Besthorpe	0.598 ha	Newark and Sherwood District	SK 820643	A pool with a locally characteristic aquatic and marginal communities	Botanical, Water Beetle and/or Water Bug
2/649	Ballast Pit, Besthorpe	8.577 ha	Newark and Sherwood District	SK 817642	A pool in a species-rich meadows	Botanical
2/650	Besthorpe Warren	10.907 ha	Newark and Sherwood District	SK 828654	An area of acidic grasslands and scrub developed on Quaternary blown sands with a notable community of calcifuge plants	Botanical
2/816	Trent Meadows, Sutton on Trent	6.353 ha	Newark and Sherwood District	SK 807650	A notable series of hay meadows with a rich alluvial grassland association	Botanical
2/820	Northcroft Lane Meadow	0.532 ha	Newark and Sherwood District	SK 822628	A small herb-rich hay meadow	Botanical
2/822	The Fleet Grassland, Girton	3.463 ha	Newark and Sherwood District	SK 825655	A damp grassland grading into the bankside vegetation of the Fleet	Botanical
2/823	Mons Pool Gravel Pits	31.744 ha	Newark and Sherwood District	SK 816638	Mature deciduous woodland surrounded by large areas of open water formed on gravel workings	Botanical, Water Beetle and/or Water Bug
2/825	Girton Gravel Pits	67.156 ha	Newark and Sherwood District	SK 820670	A large mosaic of semi-natural and successional communities on disused gravel pits	Botanical, Moth, Water Beetle and/or Water Bug
2/826	Primrose Hill	6.854 ha	Newark and Sherwood District	SK 830650	Coarse acidic grassland developed on periglacial drift deposits	Botanical
2/829	Besthorpe Road Verge	0.13 ha	Newark and Sherwood District	SK 832654	A short length of verge with a notable plant association	Botanical

5/191	South Holme Dyke, Sutton on Trent	0.844 ha	Newark and Sherwood District	SK 805659	A dyke flowing through a Trent Holme with rich aquatic and emergent plant communities	Botanical
5/197	Oxpasture Plantation Besthorpe	5.287 ha	Newark and Sherwood District	SK 832632	A partly cleared damp woodland	Botanical
5/201	Green Lane Verges, Girton	0.218 ha	Newark and Sherwood District	SK 823674	Green lane verges supporting a relict grassland characteristic of the blown sand	Botanical
5/320	Moor Lane Verge, South Scarle	1.931 ha	Newark and Sherwood District	SK 839643	A wide roadside verge	Botanical
5/321	Oxpasture Plantation Drain	0.044 ha	Newark and Sherwood District	SK 833632	A shallow drain with a rich diversity of emergent, marginal and fenland species	Botanical
5/2228	Gainsborough Road Gravel Pit, Girton	41.774 ha	Newark and Sherwood District	SK 825670	A former gravel pit of interest for Water Beetles	Water Beetle and/or Water Bug
5/3469	Besthorpe and Collingham Gravel Pits	64.621 ha	Newark and Sherwood District	SK 816628	Gravel pits of ornithological interest	Bird

According to the MAGIC website, there are two statutory sites within 2km of the survey area; Besthorpe Warren SSSI (Site of Special Scientific Interest) and Besthorpe Meadows SSSI, which lie approximately 505m to the north-east and 570m to the south-west of the site, respectively.

The survey site is not within or adjacent to any of the non-statutory sites, although it does lie close to The Fleet LWS, located approximately 80m to the west. Due to the small scale and low impact of the proposals, they are not expected to have any adverse effect on these areas.

Although the site falls within the SSSI Impact Risk Zones for Besthorpe Warren SSSI and Besthorpe Meadows SSSI, the type and scale of the proposed development means that the Local Planning Authority is not required to consult Natural England on the likely risks from this development.

Where applicable, the records of protected species are included within the relevant section of this report.

4.3 Bats

4.3.1 Preliminary roost assessment

There are records of common pipistrelle *Pipistrellus pipistrellus*, noctule *Nyctalus noctula*, Leisler's *Nyctalus leisleri,* brown long-eared bat *Plecotus auritus,* Nathusius's pipistrelle *Pipistrellus nathusii,* soprano pipistrelle *Pipistrellus pygmaeus* and Myotis species *Myotis sp.* from 2018 and barbastelle *Barbastella barbastellus* from 2016, all within 2km of the survey site.

Within the brick barn, c.35 moderately fresh and old droppings recalling those voided by brown long-eared bats were found on the upper floor close to the apex of the northern gable end, with a further c.50 found beneath stored furniture in cobwebs against the wall at the northern gable end, indicating a historic roost (the furniture has been in place for c.20 years according to the client). Urine spotting was evident on stored materials in the area. C.15 old and moderately fresh droppings recalling those voided by brown long-eared bats were also found below a clean gap at the southern verge of the barn. Some gaps were noted within the interior and exterior brickwork of the barn, along with clean gaps at the verges and along the ridge beam.

The two-storey brick barn is considered to offer moderate potential for roosting by bats, although the lean-to extension on the western elevation has no potential roost niches and is considered to offer negligible potential.

No gaps or niches suitable to support roosting bats were found within the fabric of the outbuildings, although the two westernmost outbuildings have areas with low potential to support roosting bats within the roof structure. No niches or gaps were noted within the fabric of the link extensions, with the buildings being light within and damp in many places. The link extensions and the two easternmost outbuildings are considered to have negligible potential for roosting bats, and the two westernmost outbuildings having low potential to support roosting bats. None of the buildings are considered to offer suitable conditions for hibernating bats.

The results of the assessment for the buildings appear in tabular form below;

Table 2: Assessment of survey site to support roosting bats

Building/ Feature	Description	Roost suitability
Two-storey brick barn	Low ambient light levels within on upper floor. Roof underlined with bitumen felt. Niches in the exterior and interior brickwork. Moderately fresh and old bat droppings found at both verges.	Moderate potential to support roosting bats
Lean-to extension on brick barn	High ambient light levels. No suitable niches present. No evidence of bats.	Negligible potential to support roosting bats
Link extensions	High ambient light levels. Damp ingress in some areas. No suitable niches present. No evidence of bats.	Negligible potential to support roosting bats
Two easternmost outbuildings	High ambient light levels. Damp ingress in some areas. No suitable niches present. No evidence of bats.	Negligible potential to support roosting bats
Two westernmost outbuildings	High ambient light levels. Potential gaps within boarded ceiling and false ceiling. No evidence of bats.	Low potential to support roosting bats

Photograph 15: Bat dropping found at the northern end of the brick barn

Photograph 16: Old bat droppings caught in cobwebs beneath stored furniture in the barn

Photograph 17: Urine spotting on stored items in the brick barn

Photograph 18: Clean gap at the verge of the brick barn

4.3.2 Assessment of commuting and foraging habitats

There is moderate connectivity between the site and the wider area, but the survey site itself is unlikely to provide foraging and commuting opportunities for local bat populations.

The results of the assessment of the surrounding habitats appear in tabular form below:

Table 3: Assessment of surrounding habitats to support commuting and foraging bats

Feature	Description	Site value for bats
Site and immediate area (<500m)	Amenity grassland, The Fleet, gardens, grassland and arable fields. Some connectivity via The Fleet. The A1133 may act as a barrier to some bat species.	Moderate potential for foraging and commuting bats

Feature	Description	Site value for bats
Wider surroundings (500m-3km)	Residential gardens, grassland, scrub, wetland and ponds. Connectivity via waterways and woodland edges.	Moderate/high potential for foraging and commuting bats

4.4 Common bird species

A small number of common birds were seen or heard during the survey. These are listed below along with their current status as species of principle importance (NERC, 2006) or Birds of Conservation Concern 5 (Stanbury A. *et al*, 2021):

Table 4: Common bird species seen or heard during the survey

English name	Scientific name	SPI	BoCC5
magpie	*Parus major*		Green
blackbird	*Turdus merula*		Green

No nests were noted during the survey, and the buildings are all considered to have negligible potential for nesting birds, due to the high levels of disturbance. No further work is required in respect of common bird species.

5 DISCUSSION AND RECOMMENDATIONS

5.2 Bats

5.2.1 Legal protection

In England, Scotland and Wales, all bats are strictly protected under the Wildlife and Countryside Act 1981 (and as amended); in England and Wales this legislation has been amended and strengthened by the Countryside and Rights of Way (CRoW) Act 2000. Bats are also protected by The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019. Taken together, all this legislation makes it an offence to:

Deliberately capture (or take), injure or kill a bat

Intentionally or recklessly disturb a group of bats where the disturbance is likely to significantly affect the ability of the animals to survive, breed, or nurture their young or likely to significantly affect the local distribution or abundance of the species whether in a roost or not.

Damage or destroy the breeding or resting place of a bat

Possess a bat (alive or dead) or any part of a bat

Intentionally or recklessly obstruct access to a bat roost

Sell (or offer for sale) or exchange bats (alive or dead) or parts of bats

A roost is defined as being ‘any structure or place that is used for shelter or protection’, and since bats regularly move roost site throughout the year, a roost retains such designation whether or not bats are present at the time.

5.2.2 Recommendations

The preliminary roost assessment indicates that the brick barn has moderate potential to support roosting bats, and the two westernmost outbuildings have low potential.

Further survey work on the brick barn will be required in accordance with the Good Practice Guidelines (Collins, 2016), to ascertain the presence/absence of roosting bats prior to any works on the building. This will involve a minimum of one evening emergence survey and one dawn re-entry survey during the active season for bats (May-September). If infra-red cameras are used during the surveys, then two evening emergence surveys can be carried out rather than one emergence and one dawn survey (as per the recent interim guidance note from the Bat Conservation Trust (May 2022). A single evening emergence survey will also be required on the two westernmost outbuildings. If the presence of bats is confirmed during these surveys, then further work will be required. Following the survey work, advice can be provided to ensure legal compliance during the proposed works.

No further work or mitigation is required in respect of bats prior to the demolition of the link extensions or the lean-to extension of the brick barn, or any conversion works to the two easternmost outbuildings.

Local bats are highly likely to be using the adjacent habitats, and the development of the site may have an impact on the availability of commuting routes and foraging areas for bats within the local landscape. There will be no requirement for bat activity surveys providing strict lighting restrictions are implemented to ensure that bats can continue to use the area for foraging and commuting once the development has been completed.

Any lighting around the dwelling should be kept to an absolute minimum. If it is necessary to include some external lighting, this should be carefully designed to minimise disturbance to bats by using down-lights on low bollards where possible. Any lighting installed on buildings must use shields to limit light spill, be sensor activated and on a timer. There must be no light spill onto the site boundaries. An example of a bat-friendly lighting solution is the Pharola DS bollard (https://www.dwwindsor.com/products/pharola/pharola-ds/).

Any external lighting used should emit minimal ultra-violet light, be narrow-spectrum (avoiding white and blue wavelengths) and should peak higher than 550nm. Ideally, 'warm-white' LED lights with no UV component would be used. It should be remembered that artificial lighting disrupts and disturbs many animals, including birds and invertebrates, as well as bats. More information is available at https://www.theilp.org.uk/documents/guidance-note-8-bats-and-artificial-lighting/.

5.3 Recommendations for ecological enhancement

In addition to the legislation which is in place to safeguard protected species, there is also

legislation and policy which imposes duties to take account of statutorily protected species and to undertake action to prevent loss of biodiversity and species/habitats which have been identified as priorities in the UK. In England and Wales, the Natural Environment and Rural Communities (NERC) Act 2006 imposes a duty on all public bodies (including Local Authorities and statutory bodies) to conserve biodiversity – including restoring and enhancing a population or habitat. In addition, government planning policy guidance throughout the UK, provided in the latest National Planning Policy Framework (July 2021), states that 'plans should promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species; and identify and pursue opportunities for securing measurable net gains for biodiversity' and that '…local planning authorities should apply the following principles'; 'if significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused'.

In order to try and secure a biodiversity net gain on site and fulfil the Local Planning Authorities obligations under the NERC Act 2006, the following measures are recommended;

Any new hedgerows to be planted must comprise native species that provide pollen, nectar and fruit in order to provide a food source for birds and invertebrates. Species should include some of the following; hazel *Corylus avellana*, holly *Ilex aquifolium*, field maple *Acer campestre,* hawthorn *Crataegus monogyna*, blackthorn *Prunus spinosa,* dog rose *Rosa canina*, elder *Sambucus nigra,* wild cherry *Prunus avium*, bird cherry *Prunus padus* and guelder rose *Viburnum opulus*, and should be planted in double rows to ensure a dense hedgerow. All new hedging plants must use biodegradable guards and ties. Hedgerows should ideally be used in place of fencing or walls.

Any new hedgerows should be appropriately managed by hedge-laying or trimming every 2 to 3 years and in sections, so that not all parts of the hedgerow are cut at the same time.

Any new trees to be planted must include native species such as field maple *Acer campestre*, bird cherry *Prunus padus,* pedunculate oak *Quercus robur*, holly *Ilex aquifolium*, small-leaved lime *Tilia cordata*, rowan *Sorbus aucuparia*, hawthorn *Crataegus monogyna*, crab apple *Malus sylvestris* and wild cherry *Prunus avium*, which provide foraging opportunities for various invertebrate and bird species. All planted trees must use biodegradable guards and ties.

Hedgehog highly likely to occur on the site. Hedgehog populations have declined by a third in the last 10 years; they are a species of principle importance (NERC, 2006) and were recently classified as 'vulnerable' on the IUCN red list due to their decline in the

UK. Simple solutions within the proposals will ensure connectivity for this species between the site and adjacent areas. To maintain commuting routes for hedgehogs, any solid fences that are installed must have a small hole at the base measuring 13x13cm, or be raised off the ground. Ideally, hedges should be used instead of fencing.

As swifts *Apus apus* are declining in the UK, 3 x integral or externally mounted swift boxes (Manthorpe Swift Brick, Woodstone, Vivara Pro or Schwegler type) must be installed on the eastern elevation of the new dwelling. These boxes must be situated as high as possible, at a height of between 4-6 metres above ground level, with a clear flight-way for the birds to exit. As swifts are a colonial breeding species, the boxes must be situated together, approximately 1 metre apart. Recent evidence shows that integral swift boxes will also be used by other red-listed cavity nesting species such as starling *Sturnus vulgaris* and house sparrow *Passer domesticus* (Barlow, C., 2020). These nest boxes are available from www.nhbs.co.uk or www.wildcareshop.co.uk.

Manthorpe swift brick (source: www.nhbs.com)

6 SUMMARY

Buildings at Manor Farm, Besthorpe in Nottinghamshire were surveyed in connection with plans to demolish the link extensions and the lean-to extension, and convert the two-storey brick barn and the outbuildings into a residential dwelling.

The brick barn has moderate potential to support roosting bats, and a minimum of two evening emergence surveys are required between May and September, to determine their presence or absence, with a single evening emergence survey required on the two westernmost outbuildings.

Precautionary measures and ecological enhancements are required in order to ensure legal compliance and to ensure no net loss to biodiversity. These are as follows:

Vigilance in respect of [redacted] other ground mammals

Lighting restrictions in respect of bats

Native planting in any soft landscaping

Consideration of hedgehog within the development

Provision of boxes for swift

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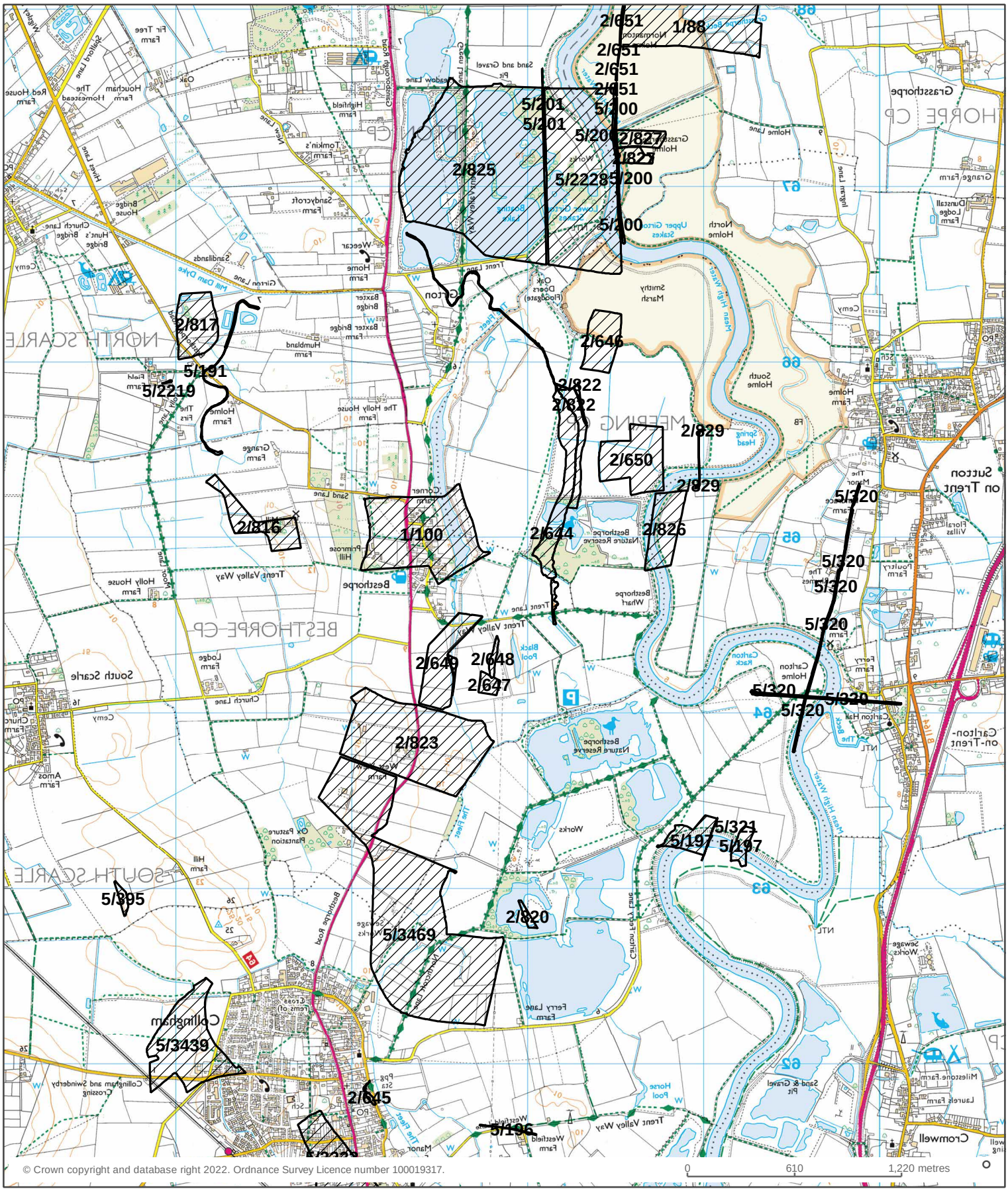
APPENDIX 1

Map of Local Wildlife Sites within 2km

SK 82484 64865



0 610 1,220 metres

Produced by Peter Acton NBGRC Team 20/10/2022

Key

Local Wildlife Site