

Preliminary Ecological Appraisal – *Final report*

47 Main Street, Yaxley

October 2024

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Report Overview	
Scheme reference	47 Main Street, Yaxley
Works extent	Dismantling and rebuilding two outbuildings and elevating and reconfiguring the rear garden.
Revision	Version 1 (Final)
Issued	02.10.2024
Prepared by	[redacted] Helen Archer BSc (Hons) MCIEEM – Principal Ecologist
Reviewed by	[redacted] Dr Robert Coles – Associate Ecologist

Acknowledgements

Archer Ecology Ltd would like to thank Cambridgeshire and Peterborough Environmental Records Centre (CPERC) for the provision of historical ecological records and details of non-statutory designated sites to supplement the findings of this report.

EXECUTIVE SUMMARY

Archer Ecology Ltd was commissioned by Jon Richards Architectural Design to complete a Preliminary Ecological Appraisal (PEA) with respect to proposals to dismantle and rebuild two outbuildings within the curtilage of 47 Main Street in the village of Yaxley, Cambridgeshire. The proposals also include elevating and reconfiguring the rear garden at the existing premises. The application site is situated within a principally residential setting and is located south of Main Street.

As part of the commission, an Extended Phase 1 Habitat Survey of the application site was carried out by Principal Ecologist Helen Archer BSc (Hons) MCIEEM of Archer Ecology Ltd on 5th September 2024. The walkover was supplemented by historical records of protected species, priority habitats and statutory/non-statutory designated nature conservation sites falling within 2–10km of the application site. These were obtained through consultation with Cambridgeshire and Peterborough Environmental Records Centre.

A summary of mitigation advice, pertaining to ecological receptors, is given in Table 1, below. This advice would require revising should details of the location, nature and/or extent of the works be altered from those stipulated in this report.

Table 1 – Overview of findings and recommendations

Nesting birds
Works proposed to the existing outbuildings should be completed outside of the main nesting bird season (nesting season runs March-August, inclusive), where practicable. Should the works be scheduled during the main nesting bird season, all suitable opportunities for nesting activity should be firstly checked by a suitably experienced ecologist in advance. If active nests are found, these must be fully safeguarded and left undisturbed until all chicks have fledged.
Roosting bats
In order to establish the presence or likely absence of bat roosts on the site, and in accordance with the *Bat Conservation Trust's Good Practice Guidelines 4th edition* (Collins, 2023), it is recommended that one dusk emergence survey is conducted of Building 2 (B2) which has 'low' bat roosting potential. The survey should be completed by suitably experienced ecologists during the main bat activity season (i.e., May to August, inclusive).
Badger
No open trenches, pits, holes or any other excavation which has the capacity to entrap badgers or other wildlife will be left open overnight. All excavations will be backfilled or completely covered at the end of each day. If it is not possible to backfill or cover any excavations, a means of escape must be provided to allow any animals which may fall in to escape on their own. This can be achieved by

placing a suitably sized plank of wood in the hole, ensuring that the top of the plank extends out of the hole, which will allow animals to climb out of. This recommendation would also extend to protecting priority species, including hedgehogs and brown hare.

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1.0 INTRODUCTION

1.1 Background

1.1.1 Archer Ecology Ltd was commissioned by Jon Richards Architectural Design to complete a Preliminary Ecological Appraisal (PEA) with respect to proposals to dismantle and rebuild two outbuildings within the curtilage of 47 Main Street in the village of Yaxley, Cambridgeshire - hereafter referred to as 'the application site'. The proposals also include elevating and reconfiguring the rear garden at the existing premises. The *Existing Plans and Layout Drawing* (No. MS-EX-PL-1) is included under Appendix I.

1.1.2 The application site is situated within a principally residential setting and is located south of Main Street. The location of the application site – centred at Ordnance Survey Grid Reference (OSGR) TL 18616 92103 – is shown in Figure 1, below.

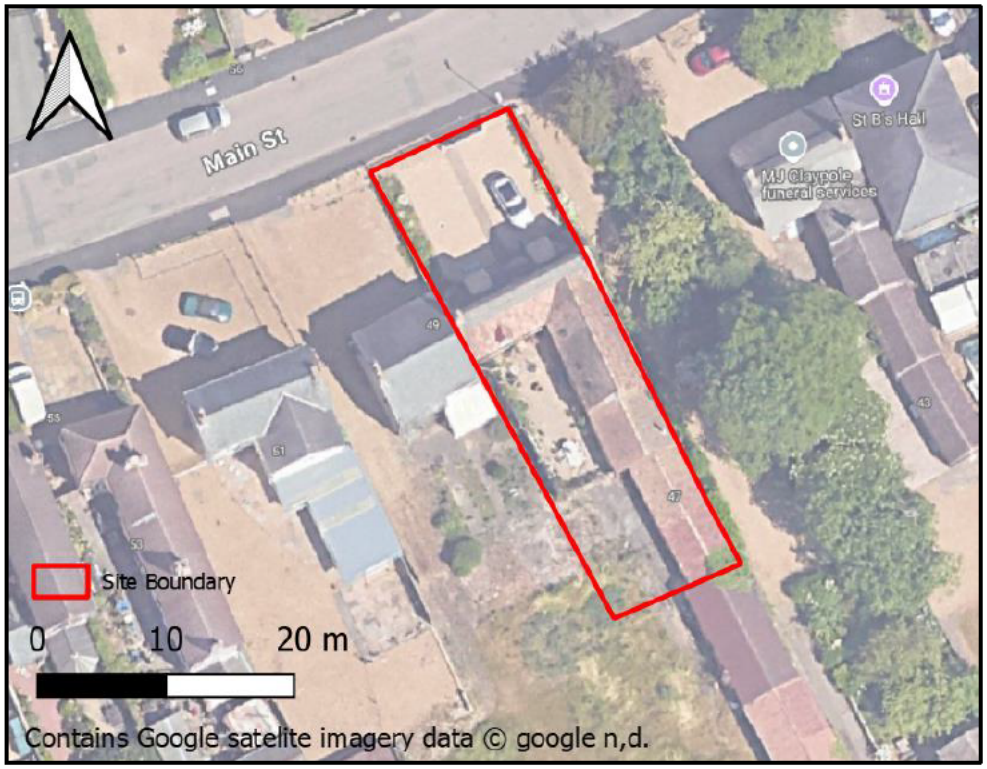


Figure 1 – Location of the site in context with the local landscape

1.2 Objectives

The purpose of this report is to identify any potential ecological receptors occurring within or adjacent to the proposed works area. These include protected species, habitats and designated nature conservation sites. This report also details any potential ecological constraints to the works (e.g., invasive plants), the requirement for any further ecological survey and/or monitoring works and provides details of proportionate mitigation measures, where appropriate.

2.0 POLICY AND LEGISLATION

2.1 Natural Environment and Rural Communities Act

2.1.1 There is a requirement under Section 40(1) and (2) for each Secretary of State to take steps '*to be reasonably practicable to further the conservation of the living organisms and types of habitat*' included in the list and there is a legal obligation on public bodies in England to have regard to these organisms and habitats whilst carrying out their functions.

2.1.2 Currently, there are 56 habitats and 943 species of principal importance included on the S41 list.

2.2 Biodiversity Compliance

2.2.1 The United Nations Conference on Environment and Development (UNCED), also known as the Earth Summit, was held in Rio de Janeiro in 1992 and produced the 'Biodiversity: The UK Biodiversity Action Plan (BAP) (UK Biodiversity Partnership, 2007[1]) which lists priority species and habitats in the UK requiring conservation action.

2.2.2 The goal of the UK BAP is to '*Conserve and enhance biological diversity within the UK and contribute to the conservation of global biodiversity through all appropriate mechanisms*.' The UK BAP now includes 1,150 species and 65 habitats; these are allocated individual action plans for conservation known as Species Action Plans (SAPs) and Habitat Action Plans (HAPs).

2.2.3 As a signatory to the Convention on Biological Diversity (CBD) which was opened at the Earth Summit and entered into force in 1993, Local Biodiversity Action Plans (LBAPs) were developed by local authorities and counties to conserve fauna, flora and habitats at a local level.

2.3 National Planning Policy Framework

2.3.1 National Planning Policy Framework (NPPF) is the top tier of planning policy and sets out the government planning policies for England and how these should be applied. NPPF also sets guidance to local authorities on planning policy within the planning system.

2.3.2 Section 15 relates to 'Conserving and enhancing the natural environment'. Relevant policies in relation to planning applications include:

Paragraph 174. Planning policies and decisions should contribute to and enhance the natural and local environment by:

[1] UK BAP. UK Biodiversity Action Plan – Priority Species and Habitats [online]. Available at: https://webarchive.nationalarchives.gov.uk/20110303145245/http://www.ukbap.org.uk/newprioritylist.aspx [Accessed January 2024].

a) *protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory status or identified quality in the development plan);*

b) *recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services – including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland;*

c) *maintaining the character of the undeveloped coast, while improving public access to it where appropriate;*

d) *minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures;*

e) *preventing new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of soil, air, water or noise pollution or land instability. Development should, wherever possible, help to improve local environmental conditions such as air and water quality, taking into account relevant information such as river basin management plans; and*

f) *remediating and mitigating despoiled, degraded, derelict, contaminated and unstable land, where appropriate*

Paragraph 179. To protect and enhance biodiversity and geodiversity, plans should:

a) *Identify, map and safeguard components of local wildlife-rich habitats and wider ecological networks, including the hierarchy of international, national and locally designated sites of importance for biodiversity[61]; wildlife corridors and stepping stones that connect them; and areas identified by national and local partnerships for habitat management, enhancement, restoration or creation[62]; and*

b) *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.*

Paragraph 180. "When determining planning applications, 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;

a) *development on land within or outside a Site of Special Scientific Interest, and which is likely to have an adverse effect on it (either individually or in combination with other developments), should not normally be permitted. The only exception is where the benefits of the development in the location proposed clearly outweigh both its likely impact on the features of the site that make it of special scientific interest, and any broader impacts on the national network of Sites of Special Scientific Interest;*

b) *development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons[63] and a suitable compensation strategy exists; and*

c) *development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to improve biodiversity in and around developments should be integrated as part of their design, especially where this can secure measurable net gains for biodiversity or enhance public access to nature where this is appropriate.*

Paragraph 181. The following should be given the same protection as habitats sites:

a) *potential Special Protection Areas and possible Special Areas of Conservation;*

b) *listed or proposed Ramsar sites[64]; and*

c) *sites identified, or required, as compensatory measures for adverse effects on habitats sites, potential Special Protection Areas, possible Special Areas of Conservation, and listed or proposed Ramsar sites.*

Paragraph 182. The presumption in favour of sustainable development does not apply where the plan or project is likely to have a significant effect on a habitats site (either alone or in combination with other plans or projects), unless an appropriate assessment has concluded that the plan or project will not adversely affect the integrity of the habitats site.

2.4 Huntingdonshire Local Plan

2.4.1 The Huntingdonshire Local Plan is a suite of Development Plan Documents (DPDs) which set out the local planning policy for the area. Relevant policies in relation to this planning application include:

LP 30: Biodiversity and Geodiversity

A proposal will be required to demonstrate that all potential adverse impacts on biodiversity and geodiversity have been investigated.

A proposal that is likely to have an impact, either direct or indirect, on biodiversity or geodiversity will need to be accompanied by an appropriate appraisal, such as a Preliminary Ecological Appraisal, identifying all individual and cumulative potential impacts on biodiversity and geodiversity. Any further research that is identified as necessary by this appraisal will need to have been carried out and submitted with the proposal. Where a proposal has potential to affect an internationally important site (28) an 'appropriate assessment' in accordance with the Habitats Directive will be required and sufficient information to enable such an assessment to be completed must be submitted with the proposal.

All possible efforts must be taken to avoid adverse impacts. If it is demonstrated that adverse impacts are unavoidable they must be minimised as far as possible and then mitigated. Only where this process of avoidance, minimisation and then mitigation is insufficient to fully address adverse impacts will consideration be given to compensation measures. Following this process a proposal will only be supported subject to a hierarchy where:

a. a site of international importance, being a Special Area of Conservation (SAC), Special Protection Area (SPA) or Ramsar site would be affected there has to be exceptional overriding reasons of human health, public safety or environmental benefit;

b. a site of national importance, such as a Site of Special Scientific Interest (SSSI) or National Nature Reserve (NNR) would be affected there has to be exceptional circumstances where the need for, and the benefits of, the proposal significantly outweigh both the potential impacts on the features of the site that make it of national importance and any broader impacts on the national network of such sites; and,

c. a protected species, a priority habitat or species, a site of local or regional importance, the achievement of water body good ecological potential, or the biodiversity value of the proposed development site as part of the wider network would be affected, the need for and the benefits of the proposal must clearly outweigh the assessed impacts.

A proposal will not be supported if potential impacts would lead to the deterioration of water body ecological status/ potential. A proposal will ensure no net loss in biodiversity and provide a net gain where possible, through the planned retention, enhancement and creation of habitats

and wildlife features, appropriate to the scale, type and location of development. Large scale development proposals should provide an audit of losses and gains in biodiversity produced according to a recognised methodology. In seeking to provide net gains for biodiversity reference should be had to the Natural Cambridgeshire publication 'Developing with Nature Toolkit' and the proposal should prioritise measures that:

d. complement or enhance existing features of biodiversity value within the design and layout of development;

e. provide new biodiversity features within the development;

f. help reverse the decline of species;

g. assist in achieving local targets for priority habitats and species including those set out in Habitat Action Plans;

h. improve public access to nature;

i. ensure the effective management of biodiversity or geological features;

j. contribute to the provision of multi-functional green infrastructure to enhance ecological networks and the Green Infrastructure Priority Areas;

k. contribute towards the achievement of good ecological status in water bodies (or not compromise achievement of good ecological potential) in accordance with the Anglian River Basin Management Plan (RBMP) and accompanying catchment action plans; or

l. will help species adapt to climate change.

LP 31: Trees, Woodland, Hedges and Hedgerows

A proposal will be required to demonstrate that the potential for adverse impacts on trees, woodland, hedges and hedgerows has been investigated. Where investigations show that such adverse impacts are possible a statement will be required that:

a. assesses all trees, woodland, hedges and hedgerows that would be affected by the proposal, describing and assessing their value; and,

b. sets out how the details of the proposal have been decided upon in terms of their impact on the value of trees, woodland, hedges and hedgerows and how adverse impacts will be avoided as far as possible, or if unavoidable how they will be minimised as far as possible.

A proposal will only be supported where it seeks to conserve and enhance any existing tree, woodland, hedge or hedgerow of value that would be affected by the proposed development. In such cases the proposal will be expected to make reference to and follow the guidance contained in the Council's A Tree Strategy for Huntingdonshire (2015) or successor documents.

Loss, threat or damage to any tree, woodland, hedge or hedgerow of visual, heritage or nature conservation value will only be acceptable where:

c. *it is addressed firstly by seeking to avoid the impact, then to minimise the impact and finally where appropriate to include mitigation measures; or*

d. *there are sound arboricultural reasons to support the proposal.*

Where impacts remain the need for, and benefits of, the development in that location must clearly outweigh the loss, threat or damage.

Where loss, threat or damage cannot be fully addressed through minimisation and/ or mitigation measures the proposal may be supported if alternative measures such as reinstatement of features, additional landscaping, habitat creation or tree planting will compensate for the harm and can be implemented and established before development starts.

A proposal for major scale development will be required to include additional new trees to form part of landscaping for the proposal, the form of which will be determined by negotiation.

EN2: Protecting Biodiversity and Geodiversity

The council, working in partnership with all relevant stakeholders, will facilitate the conservation, enhancement and promotion of the district's biodiversity and geological interest of the natural environment. This includes seeking to enhance ecological networks and seeking to deliver a net gain on all proposals, where possible.

Proposals that are likely to have a significant impact on sites designated internationally, nationally or locally for their biodiversity and geodiversity importance, species populations and habitats identified in the Lincolnshire Biodiversity Action Plan, Geodiversity Strategy and the Natural Environment and Rural Communities (NERC) Act 2006 will only be permitted in exceptional circumstances:

- *In the case of internationally designated sites (alone or in combination), where there is no alternative solution and there are overriding reasons of public interest for the development;*

- *In the case of National Sites (alone or in combination) where the benefits of development in that location clearly outweigh both the impact on the site and any broader impacts on the wider network of National Sites; and,*

- *In the case of Local Sites (e.g. Local Wildlife Sites) or sites which meet the designation criteria for Local Sites, the reasons for development must clearly outweigh the long term need to protect the site.*

In exceptional circumstances where detrimental impacts of development cannot be avoided (through locating an alternative site) the council will require appropriate mitigation to be undertaken by the developers or as a final resort compensation. Where none of these can be achieved then planning permission will be refused. Where any mitigation and compensation measures are required, they should be in place before development activities start that may disturb protected or important species.

Planning permission will be refused for development resulting in the loss, deterioration or fragmentation of irreplaceable habitats, including ancient woodland and aged or veteran trees, unless the need for, and benefits of, the development in that location clearly outweigh the loss or harm.

Development proposals that are likely to result in a significant adverse effect, either alone or in combination, on any internationally designated site, must satisfy the requirements of the Habitats Regulations. Development requiring Appropriate Assessment will only be allowed where it can be determined, taking into account mitigation, that the proposal would not result in significant adverse effects on the site's integrity.

3.0 METHODOLOGY

NB: Detailed methodologies pertaining to individual protected species are included under Appendix II of this report.

3.1 Overview

3.1.1 A PEA was undertaken of the site following guidance produced by the Chartered Institute of Ecology and Environment Management (CIEEM)[2]. The assessment included:

- A desk-based search for historic records of protected, notable and invasive non-native species on the site and local vicinity. Data for locally and nationally designated nature conservation sites were obtained;
- An ecological walkover survey of the proposed works area (shown in Figure 1). The study area was extended beyond the works area, where appropriate, e.g., to undertake species-specific surveys;
- Identification of invasive non-native species; and
- Assessment of the potential impacts of the proposed works on habitat and floral/faunal receptors, as well as designated sites.

3.2 Desk study

3.2.1 To supplement the ecological walkover, a desktop study was undertaken in September 2024. This included a search of data, including historic records for protected species and statutory and non-statutory designated nature conservation sites from the following the sources:

- Cambridgeshire and Peterborough Environmental Records Centre (CPERC);
- Multi Agency Geographic Information for the Countryside (MAGIC)[3]; and
- Aerial imagery.

3.2.2 The following geographical extents of the search area for potential zones of influence for nature conservation sites were considered to be appropriate:

- 10km from the site for sites of International Importance (e.g., Special Area of Conservation (SAC));
- 2km from the site for sites of National or Regional Importance (e.g., Sites of Special Scientific Interest (SSSI)); and

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

[3] www.magic.gov.uk accessed September 2024

- 2km from the site for protected/notable species (including biological records, post-2000) and non-statutory designated sites (e.g., Local Wildlife Sites (LWS)).

3.3 Field survey

3.3.1 A site walkover was completed on 5th September 2024 by Principal Ecologist Helen Archer BSc (Hons). Helen is a full member of CIEEM and has 14 years' of experience undertaking ecological surveys.

3.3.2 The survey was completed in accordance with the UK Habitat Classification[4] (UKHabs) system and involved identifying notable/protected habitats and evidence of protected species on or adjacent to the site as well as determining the potential of the site for protected species inhabitancy, based on habitat quality and known historic presence.

3.3.3 Photographs taken during the survey, referenced within Section 4.2 of this report, are shown under Appendix III. A detailed UKHabs Survey Map is included under Appendix IV.

3.4 Survey limitations

3.4.1 An absence of desk study records cannot be relied upon to infer the absence of a species/habitat as a lack of records may be a result of under-recording within a given search area.

3.4.2 UK Habs survey aims to characterise the habitat on site and is not intended to give a complete list of plant species present.

3.5 Scoped out

3.5.1 Given a lack of suitable habitat opportunities for white-clawed crayfish *Austropotamobius pallipes*, otter *Lutra lutra* and water vole *Arvicola amphibius*, these protected faunae have been scoped out of the assessment.

[4] UKHab Ltd (2023). *UK Habitat Classification Version 2.0* (available at https://www.ukhab.org). UKHab Ltd

4.0 RESULTS

4.1 Statutory Designated Nature Conservation Sites

European / International designated sites for nature conservation

4.1.1 The application site does not fall within the boundary of any European or internationally statutory designated sites. However, the data search identified a number of such sites within a 10km radius of the application site. Details of the location, interest features and proximity of these statutory designated sites, relative to the application site, are given in Table 2, below.

Table 2 – European/Internationally designated nature conservation sites

SAC/SPA/ Ramsar site	Interest features	Proximity to site
Orton Pit SAC	Supports the Annexe I habitat H3140 Hard oligo-mesotrophic waters with benthic veg of *Chara spp.* [5] And S1166 Great crested newt *Triturus cristatus*	2km north
Nene Washes Ramsar[6]	Designated as it meets Ramsar criteria 2 and 6: Criterion 2 – supports and important assemblage of nationally rare breeding birds, several nationally scarce plants, and four invertebrate species within the British Red Data Book. Criterion 6 – Supports internationally important populations of tundra swan *Cygnus columbianus,* black-tailed godwit *Limosa limosa* and northern pintail *Anas acuta.*	5.5km north-east
Nene Washes SPA[7]	Designated as it regularly supports internationally important wintering populations of Bewicks swan *Cygnus columbarius bewickii.* Supports nationally important breeding populations of gadwall *Anas strepera,* garganey *Anas querquedula,* shoveler *Anas clypeata* and black-tailed godwit. Nationally important wintering populations of wigeon *Anas penelope,* teal *Anas crecca,* gadwall, northern pintail *Anas acuta*, and shoveler.	5.5km north-east

[5] Natural England – *Orton Pit SAC (Online)* Available at: Designated Sites View (naturalengland.org.uk) (Accessed 29th August 2024).

[6] JNCC (2015). Information Sheet on Ramsar Wetlands (RIS). Available at https://jncc.gov.uk/jncc-assets/RIS/UK11046.pdf. Accessed 27/07/2024.

[7] Natural England (1992). EC Directive 79/409 on the conservation of wild birds: Special Protection Area Nene Washes (Cambridgeshire). Available at: https://publications.naturalengland.org.uk/publication/4894064390438912. Accessed 15/02/2024.

SAC/SPA/ Ramsar site	Interest features	Proximity to site
	The site is also of importance for breeding birds and wintering waterfowl.	
Nene Washes SAC[8]	Designated as it supports the Annexe II species 1149 Spined loach *Cobitis taenia*	5.5km north-east
Fenland SAC[9]	Primary reason for site selection is the presence of 6410 Molinia measdows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae) and 7210 Calcareous fens with Cladium mariscus and species of the Caricion davallianae. The site also features the qualifying species spined loach *Cobitis taenia* and great crested newt *Triturus cristatus*.	7.5km south
Woodwalton Fen Ramsar	The site is known for its areas of calcareous fens. There is a full range from species-poor great fen-sedge *Cladium mariscus*-dominated fen to species-rich fen with a lower proportion of great fen-sedge and containing such species as black bog-rush *Schoenus nigricans*, tormentil *Potentilla erecta* and meadow thistle *Cirsium dissectum*. The site supports tall herb-rich East Anglian type of purple moor-grass *Molinia caerulea* – meadow thistle fen-meadow and rush pastures within reedbeds and wet pastures.[10]	7.5km south

4.1.2 Given the localised nature and modest scale of the proposed works, and considering the wide distance and level of separation between the application site and these designated sites, the works are predicted to result in neutral impacts upon interest features forming these sites. The application site also lacks aquatic/riparian and other habitat types of potential value to avifauna associated with the Nene Washes SPA and Ramsar and Woodwalton Fen Ramsar. Furthermore, it is not anticipated that any aquatic habitats, with the potential to retain hydrological connectivity to these statutory designated sites, will be impacted by the development proposals. European/internationally designated sites are, therefore, not considered to be potential receptors with respect to the proposed redevelopment works.

[8] JNCC (2015). Nene Washes Designated Special Area of Conservation. Available at: https://sac.jncc.gov.uk/site/UK0030222. Accessed 26/09/2024.

[9] JNCC (2024). Fenland SAC. Available at: Fenland - Special Areas of Conservation (jncc.gov.uk). Accessed 01/10/2024.

[10] Natural England (2014) European Site Conservation Objectives for Fenland SAC (UK0014782) (Online) Available at: http://publications.naturalengland.org.uk/publication/6712672527581184 Accessed 12/08/2024.

Nationally designated sites for nature conservation

4.1.3 The application site does not fall within the boundary of any nationally statutory designated sites for nature conservation, nor do any such sites exist within a 2km radius. Subsequently, statutory designated sites for nature conservation are not considered to be potential receptors with regards to the proposed works.

Non-statutory designated sites for nature conservation

4.1.4 The site does not form any locally designated sites for nature conservation although data returned by CPERC identified the presence of two County Wildlife Sites (CWSs) within a 2km radius of the application site. Details on the interest feature forming these non-statutory designated sites are summarised in Table 2, below.

Table 2 – LWSs occurring within 2km of the application site

CWS	Interest features	Proximity to site
Norman Cross Brickpits	The site qualifies because it supports a population of a Nationally Scarce vascular plant species.	1.9km south-west
Crown Lakes	Is a type 10A standing water body with five submerged and floating species; supports at least 3 species of Potamogeton, including one Nationally Scarce; part of a Grade C site in the ISR; at least 3 strong neutral grassland indicators; habitat mosaic.	1.9km north-east

4.1.5 The proposed works will be restricted to within the site boundary (as shown in Figure 1). Due to the wide distance between the application site and these non-statutory sites, taken together with the small-scale and localised nature of the proposed works, it is considered unlikely that these designated sites (or the inherent interest features) will be affected by the proposals. Furthermore, it is not anticipated that any aquatic habitats, with the potential to retain hydrological connectivity to the CWSs, will be impacted by the development proposals.

4.1.6 Therefore, non-statutory designated sites for nature conservation are not considered to be potential receptors with respect to the proposed works.

Priority Habitats

4.1.7 No priority habitats occur on or within significant proximity to the application site. Priority habitats are, therefore, not considered to be potential receptors with respect to the proposed works.

4.2 UK Habitat Classification

4.2.1 The application site comprises a rectangular shaped parcel of land which forms a residency. It is situated within a principally residential setting and is located immediately south of Main Street, beyond which are further residencies. The site is flanked to the east and west by residencies. It also abuts agricultural buildings which extend beyond the southern site periphery.

4.2.2 All habitats established within the boundary of the application site are described under the following sub-headings, with the Polygon (P), Linear (L) and Building (B) references corresponding to the locations shown in the UKHabs map under Appendix IV.

Polygon reference	**-**	**P1 and P4**
Habitat type	**-**	**Artificial unvegetated - unsealed surface**
UKHabs code	**-**	**u1c**
Habitat value	**-**	**Of no value**

4.2.3 Habitat parcel P1 comprises an expanse of gravel bordered by block paving (see Photograph 1, Appendix III). An area of compacted soil and hardcore/aggregate also occurs at the southernmost portion of the site (see Photograph 2, Appendix III) at the location of P4. This appeared to have possibly once sustained vegetation but has since been disturbed.

4.2.4 Polygons P1 and P4 do not inherently sustain any notable assemblages of vegetation or standing water. Subsequently, these areas are appraised as being of 'negligible' nature conservation value.

Polygon reference	**-**	**P2 and P3**
Habitat type	**-**	**Built up area - garden**
UKHabs code	**-**	**u1827**
Habitat value	**-**	**Of site value**

4.2.5 Linear parcels of introduced planting occur at the front of the dwelling and border the gravelled area forming habitat parcel P1 (see Photograph 3, Appendix III). These include predominantly non-native shrubs and flowering plants, such as elephant's ear *ColocasiaIn sp*., geranium *Geranium sp*. and lavender *Lavendula sp*.

4.2.6 In view of the small footprint and predominance of non-native flora, this habitat type is appraised as having 'low' nature conservation value on a site scale.

Polygon reference	**-**	**P5**
Habitat type	**-**	**Developed land - sealed surface**
UKHabs code	**-**	**u1b**
Habitat value	**-**	**Of no value**

4.2.7 Habitat parcel P5 comprises an area of block paving which is bordered by potted flowering plants, trees and shrubs (see Photograph 4, Appendix III). This area did not inherently sustain any notable assemblages of vegetation or standing water. Subsequently, parcel P5 is appraised as being of 'negligible' nature conservation value.

Polygon reference	**-**	**B1**
Habitat type	**-**	**Buildings**
UKHabs code	**-**	**u1b5**
Habitat value	**-**	**Of site value**

4.2.8 The site features a semi-detached dwelling which is currently inhabited and is of mid-18th century construction; see Photograph 5, Appendix III, hereafter referred to as Building 1 (B1). The dwelling is in an L-shaped configuration and is located within the central extent of the site. It comprises a double-storey, brick constructed building with stone plinths and a multi-pitched, gabled roof. The roof is thatched and constructed from a traditional timber framework.

4.2.9 The building features windows across both floors, including dormer windows on the first floor, whilst brick chimney stacks occur within the eastern, western and central extents. A newer extension to the original building occurs at the southern extent.

4.2.10 Overall, the building was appraised as having 'low' nature conservation site on a site scale.

Polygon reference	**-**	**B2**
Habitat type	**-**	**Buildings**
UKHabs code	**-**	**u1b5**
Habitat value	**-**	**Of site value**

4.2.11 Building 2 (B2) comprises a former stable which adjoins the southern elevation of the main dwelling (see Photograph 6, Appendix III). The building is single-storey and brick constructed with a concrete floor. It features a single-pitched roof which is clad with pantiles and clay ridge tiles over timber boards. The western elevation features a timber stable door and wooden slatted windows.

4.2.12 In view of the availability of potential bat roosting and bird nesting features, B2 was appraised as having nature conservation value, albeit the exact value would be determined upon the confirmed inhabitation of the building by roosting bats and/or nesting birds.

Polygon reference	**-**	**B3**
Habitat type	**-**	**Buildings**
UKHabs code	**-**	**u1b5**
Habitat value	**-**	**Of site value**

4.2.13 Building 3 (B3) comprises a single-storey shed which is currently used for storage (see Photograph 7, Appendix III). The building is of similar construction and dimension to the adjoining B2 and is single-storey and brick constructed. It also features a single-pitched roof, constructed from a timber framework, which is clad with pantiles and clay ridge tiles. These are affixed directly over the rafters and ridge beam. Internally, the shed features two rooms divided by a partitioning wall. The western elevation of the building is composed of corrugated metal panels, over timber beams, and features a dilapidated wooden door. A small, rectangular window also occurs on this elevation and, with the exception of a single intact pane, is predominantly devoid of glass.

4.2.14 In view of the availability of potential bat foraging and bird nesting features, B3 was appraised as having nature conservation value, albeit the exact value would be determined upon the confirmed inhabitation of the building by bats and/or nesting birds.

4.3 Species

Amphibians

4.3.1 The data returned by CPERC included a large volume of great crested newt *Triturus cristatus* records originating from Hampton Water at >1.2km north of the application site. Considering the wide distance and level of separation between the location of these records and the application site, and given that continuous roads and residencies occur in between the two, the works are not expected to impact upon any populations of great crested newt that could be utilising aquatic habitats at Hampton Water for breeding.

4.3.2 The site is devoid of standing waterbodies. A search using online sources identified that the site does not retain hydrological connectivity to any identifiable standing water bodies within the locality, with Main Street and Yards End Dyke presenting potential barriers to newt dispersal.

4.3.3 With the exception of discrete parcels of ornamental planting, the application site does not support any terrestrial habitats of sufficient density to harbour sheltering newts. Furthermore, the works are expected to be limited to the footprint of the existing buildings, and hardstanding forming the rear garden, and are not expected to incur disturbances to any vegetated habitats. The lower courses of the brickwork pertaining to the outbuildings are also intact and do not present any opportunities for newts to shelter. Taken together, amphibians are not considered to be potential receptors with respect to the works.

Reptiles

4.3.4 The CPERC returned a number of reptile records from within a 2km radius of the application site. With the exception of discrete parcels of ornamental planting, the application site does not support any terrestrial habitats of sufficient density to harbour sheltering reptiles. The works are expected to be limited to the footprint of the existing buildings, and hardstanding forming the rear garden, and are not expected to incur disturbances to any vegetated habitats. The lower courses of the brickwork pertaining to the outbuildings are also intact and do not present any opportunities for reptiles to shelter. Taken together, reptiles are not considered to be potential receptors with respect to the works.

Birds

4.3.5 The CPERC returned records of a number of bird species from within 2km of the application site, including species listed under Schedule 1 of the Wildlife and Countryside Act (1981, as amended). These include kingfisher *Alcedo atthis*, little ringed plover *Charadrius dubius*, black tern *Chlidonias niger*, marsh harrier *Circus aeruginosus*, hen harrier *Circus cyaneus*, whooper swan *Cygnus cygnus*, barn owl *Tyto alba*, merlin *Falco columbarius*, brambling *Fringilla montifringilla*, little gull *Hydrocoloeus minutus*, black-tailed godwit *Limosa limosa*, crossbill *Loxia curvirostra*, hobby *Falco Subbuteo*, ruff *Calidris pugnax*, brambling *Fringilla montifringilla*, red kite *Milvus milvus*, honey buzzard *Pernis apivorus*, redwing *Turdus pilaris*, barn owl *Tyto alba* and fieldfare *Turdus pilaris.* The site offers unsuitable and/or sub-optimal habitat conditions for the majority of these species to nest and no evidence of these species was recorded on the site during the walkover. In the case of barn owls, some opportunities for nesting activity were recorded on the site, in the form of exposed timber beams/ledges within B2 and B3. However, no associated evidence of this species was identified.

4.3.6 No evidence of nesting activity was observed during the walkover although passerine activity (general and territorial behaviour) was observed, including blackbird *Turdus merula*, and wood pigeon *Columba palumbus*. There is a potential for apertures and horizontal surfaces associated with the on-site buildings to provide nesting opportunities.

4.3.7 In the absence of mitigation, nesting birds could be inadvertently impacted by the proposed building modifications.

Bats

4.3.8 The CPERC returned a small number of historic bat records from within a 2km radius of the application site. In view of the wide distance between these records and the application site, no interactions between the works and any confirmed roost sites are expected.

Roosting bats – B2

4.3.9 The external brickwork of B2 appeared to be reasonably intact throughout, with no associated potential roosting features identified. However, the roof of B2 comprises pantiles over wooden boarding. Occasional slipped and lifted pantiles were observed, together with openings at eaves height. These presented openings and apertures which have the potential to harbour single and small numbers of crevice-dwelling bats.

4.3.10 Internally, a large structural crack occurs in the partitioning wall which divides B2 and B3. Detailed inspections of the crack determined that this continues through the width of the wall and is, therefore, largely exposed to ambient light. Subsequently, the crack was considered unsuitable to be utilised by roosting bats (see Photograph 8, Appendix III).

4.3.11 In view of the availability and quality of potential roosting features, B2 was appraised as having 'low' potential to support roosting bats in line with roosting categories given within BCT guidelines.

Roosting bats – B3

4.3.12 With the exception of corrugated panelling along the western elevation, the external fabric of B3 appeared to be largely intact. The southern room void is subjected to high levels of ambient light and, subsequently, was considered to provide unsuitable conditions for day roosting. Two degraded bat droppings (likely preceding the activity season in 2023) were identified on and close to floor level (see Photograph 9, Appendix III). Furthermore, it is apparent that the northernmost room is regularly used by dormant butterflies (see Photograph 10, Appendix III) and may be utilised by foraging bats. However, no evidence to suggest roosting activity was identified (such as the remains of a feeding perch) and the rooms were considered to be provide unsuitable conditions for day roosting. Subsequently, B3 was appraised as having 'negligible' potential to support roosting bats in line with roosting categories given within BCT guidelines, whereby *'no obvious habitat features on site likely to be used by roosting bats; however, a small element of uncertainty remains as bats can use small and apparently unsuitable features on occasion.'.*

Foraging/commuting bats

4.3.13 The site lacks ample opportunities for roosting bats. The site does, however, retain a good level of connectivity to other habitats of equivalent/increased value to nocturnal bat activity, including tree lines and gardens which are established beyond the site peripheries. Taken together, the application site is assessed as having potentially 'low' value for nocturnal bat activity in line with

categories contained within BCT guidelines. However, the proposals are expected to result in neutral impacts to foraging and commuting bats.

Badger

4.3.14 Multiple records of badger *Meles meles* were returned by CPERC from within a 2km radius of the application site. The site lacks suitable foraging opportunities for badgers and no evidence of badger or badger inhabitancy was identified during the survey. Nonetheless, the possibility that local badger clans may forage and/or commute onto the site at night should not be discounted.

Invasive non-native species

4.3.15 No evidence of invasive non-native species (INNS) was identified during the walkover and so no interactions with such species are expected during the proposed works. INNS are not considered to be a constraint at the site and not considered further within this report.

5.0 CONCLUSION AND RECOMMENDATIONS

5.1 Habitats

5.1.1 The application site does not support any habitats of nature conservation value on a county or national scale. The majority of habitats were appraised as having 'negligible' or 'low' nature conservation value on a site scale. Given that the development proposals will be limited to the footprint of the existing outbuildings and garden, no adverse impacts upon these habitats are expected.

5.1 Species

Birds

5.1.1 All nesting birds and active nests are protected under the Wildlife and Countryside Act (1981, as amended) which makes it an offence to take, damage or destroy the nest of any wild bird while it is in use or being built, and to take or destroy the egg of any wild bird. Certain birds, listed under Schedule 1 of the Act, are also protected against disturbance whilst building a nest, or when on or near a nest containing eggs/unfledged young.

5.1.2 **Works proposed to the existing outbuildings should be completed outside of the main nesting bird season (nesting season runs March-August, inclusive), where practicable. Should the works be scheduled during the main nesting bird season, all suitable opportunities for nesting activity should be firstly checked by a suitably experienced ecologist in advance. If active nests are found, these must be fully safeguarded and left undisturbed until all chicks have fledged.**

Bats

5.1.3 Bats receive protection under the Conservation of Habitats and Species Regulations 2017 and the Wildlife and Countryside Act 1981 (as amended). It is an offence to take, kill or injure a bat, damage or destroy a resting place of a bat, or disturb a bat whilst it is occupying a place of shelter.

5.1.4 **In order to establish the presence or likely absence of bat roosts on the site, and in accordance with the *Bat Conservation Trust's Good Practice Guidelines 4th edition* (Collins, 2023), it is recommended that one dusk emergence survey is conducted of Building 2 (B2) which has 'low' bat roosting potential. The survey should be completed by suitably experienced ecologists during the main bat activity season (i.e., May to August, inclusive).**

Badger

5.1.5 Badgers are protected and so are the setts (burrows) they live in under the Protection of Badgers Act 1992 making it is an offence to; wilfully kill, injure or take a badger (or attempt to do so), cruelly ill-treat a badger, dig for a badger, intentionally or recklessly damage or destroy a badger sett, or obstruct access to it, cause a dog to enter a badger sett or disturb a badger when it is occupying a sett. Badgers are highly mobile and could commute onto and through the site during night.

5.1.6 **No open trenches, pits, holes or any other excavation which has the capacity to entrap badgers or other wildlife will be left open overnight. All excavations will be backfilled or completely covered at the end of each day. If it is not possible to backfill or cover any excavations, a means of escape must be provided to allow any animals which may fall in to escape on their own. This can be achieved by placing a suitably sized plank of wood in the hole, ensuring that the top of the plank extends out of the hole, which will allow animals to climb out. This recommendation would also extend to protecting priority species, including hedgehog *Erinaceus europaeus* and brown hare *Lepus europaeus*.**

APPENDIX I – PROPOSED DEVELOPMENT PLAN



APPENDIX II – SPECIES METHODOLOGIES

The fauna included within this assessment is based on the habitats present, data from the desk-based searches, and the following legislation[11]:

- Wildlife and Countryside Act 1981 (as amended);
- The Protection of Badgers Act 1992;
- The Conservation of Habitats and Species Regulations 2017, and
- The NERC Act 2006 – S41 Species of Principal Importance (SPI) for the conservation of biodiversity.

Amphibians

Where accessible, waterbodies within 500m of the site boundary were identified using online Ordnance Survey maps and aerial imagery[12] and were assessed for their suitability to support great-crested newts using a Habitat Suitability Index (HSI). The HSI is a numerical index, between 0 and 1. Values close to 0 indicate unsuitable habitat, 1 represents optimal habitat (Oldham et al., 2000) [13].

Reptiles

An assessment of the suitability of the habitats present to support common reptile species was undertaken[14]. In accordance with current guidance this assessment involved a review of habitats and habitat structure for suitable shelter for reptiles such as areas of scrub and woodpiles, grassland with well-developed and varied structure, areas suitable for basking and large tussocks etc.

Birds

Based upon vegetation maturity, structure and density, an assessment of habitats was undertaken to determine the likely value to breeding and foraging birds.

Bats

Where accessible, a detailed internal and external inspection of on-site buildings was completed. The buildings were subjected to a detailed inspection from ground level with the use of a Cluson Clulite torch (1 million candle power).

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11 See www.legislation.gov.uk

12 www.bing.com/maps accessed July 2024

13 Oldham et al., (2000). *Evaluating the suitability of habitat for the Great Crested Newt* (*Triturus cristatus*). Herpetological Journal 10, 143-155

14 Froglife (1999). *Froglife Advice Sheet 10: reptile survey*. Froglife, London.

Tree assessments were undertaken from ground level with the aid of a torch and binoculars, where required. During the survey Potential Roosting Features (PRF) for bats following current best practice[15],[16],[17] were recorded. The potential for the site and immediate surrounds to support foraging and commuting bats was also assessed, with particular regard given to the presence of continuous tree lines, watercourses and hedgerows providing good connectivity in the landscape, and the presence of varied habitat such as scrub, woodland, grassland and hedgerows in the vicinity.

Badger

Areas of suitable habitat were surveyed for evidence of badger activity, such as mammal paths, setts, snuffle holes or latrines[18].

Legally controlled species

Evidence of species listed on Schedule 9 of the Wildlife and Countryside Act (1981) as amended was recorded as seen.

[15] Collins (2023). *Bat Surveys for Professional Ecologists, Good Practice Guidelines, 4th Edition.* BCT

[16] Mitchell-Jones, A.J, & McLeish, A.P. Ed. (2004). Bat *Workers' Manual 3rd Edition*

[17] BCT (2015) *Surveying for Bats in Trees and Woodland – Guide. BCT*

[18] Natural England (2015) *Badgers: surveys and mitigation for development projects*. Natural England

APPENDIX III – PHOTOGRAPHS



Photograph 1 – Gravel within parcel P1



Photograph 2 – Compacted soil and hardcore/aggregate at P4



Photograph 3 – Introduced planting



Photograph 4 – Block paving



Photograph 5 – Main dwelling



Photograph 6 – Former stable at B2



Photograph 7 – Shed at B3



Photograph 8 – Crevice within partitioning wall



Photograph 9 – Degraded bat droppings



Photograph 10 – Dormant butterflies in the northernmost room

APPENDIX IV – UKHABS HABITAT MAP

