SMALL ECOLOGY LIMITED

Preliminary Ecological Assessment
27 Clements Lane, Haverhill, CB9 8JR

Report completed by: Chris Smith, CEnv, MIEMA
December 2020

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Non-technical summary

This report is a Preliminary Ecological Assessment that assesses 27 Clements Lane, Haverhill, CB9 8JR , based on available desktop information and a site visit carried ou on 15/12/2020. Chris Smith CEnv, MIEMA, who has a Level 2 (CL18) licence to survey bats from Natural England and a Level 1 licence (CL08) to survey for newts, carried out the field work and report writing.

Survey findings

The site consists of a domestic property and garage, now unused, surrounded by an overgrown garden with bramble thickets, fruit trees and hazel amenity grassland. None of the boundaries appear to have hedgerows, although there is often thick scrub regeneration. Grassland appears species-poor.

There is an overgrown lane to the south of site. Between the site's access lane and the main road is a hedgerow that appears significant.

There were no identified signs of bats and the buildings are assessed as of "negligible" potential. The site will support breeding birds and hedgehogs. There are no other species of significance likely.

Potential effects

There will be be the loss of the overgrown garden as well as trees and scrub, which are not regarded as significant. Lighting may increase light levels in nearby hedge and affect nocturnal species, in particular bats. Construction may affect adjacent areas. Detailed of required works to the bank of the overgrown lane are not yet confirmed.

Avoidance and mitigation

Nesting birds should be protected during any site clearance. Retained trees and the adjacent hedgerows on the lane should be protected during construction. The site should have hedgehog highways installed to allow continued access for this species.

Additional surveys and assessments

No additional surveys or assessments are viewed as required.

Proposed enhancements

To enhance the site for wildlife, planting a native hedge along the eastern boundary and reseeding of the bank adjacent to the lane with wild flowers are suggested.

Requirements for licencing

There is no identified requirement for licencing.

1. Background

Small Ecology was commissioned by the client to carry out an assessment of buildings and grounds at 27 Old Clements Lane, Haverhill, CB9 8JR.

The site is located at TL66734507.

The following were carried out :

- A Preliminary Roost Assessment
- A Phase 1 walkover of external areas

The report is to support a planning application to St Edmundbury Borough Council.

2. Methods for desktop and field survey

Using the protocols as given in this document's appendices for Protocol for Preliminary Ecological Assessment and Protocol for Preliminary Bat Roost Assessment of buildings and structures, the site was surveyed on 15/12/2020 between 12:30 and 14:15.

A search was made of MAGIC on 15/12/2020.

Weather conditions were dry, sunny and calm with a temperature of 12°C.

Chris Smith CEnv, MIEMA, who has a Level 2 (CL18) licence to survey bats from Natural England (Ref 2015-13304-CLS-CLS) and a Level 1 licence (CL08) to survey for newts (ref 2015-18961-CLS-CLS), carried out the field work and report writing.

Checks were made of buildings on site and the grounds surrounding these.

There were no loft voids or spaces that were accessible.

3. Results

3.1 Site context

The site context is shown in Figure 1 : Site location and features.

3.2 Designated sites

The designated sites within 1km are summarised in the following table.

There is one designated sites within 1km, which is Haverhill Railway Walks LNR, located north of the town centre. The site is too distant to be connected to the development.

The relationship of the site to these designated sites is shown in Figure 3 : Results of MAGIC search (© MAGIC 2019) and in Figure 4 : Project proposal.

Table 3.1: Designated sites

Designated site	Statutory protection?	Summary of key features	Distance to site ?	Further consideration
Terrestrial sites				
Haverhill Railway Walks LNR	Yes	14.1 hectare Local Nature Reserve in Haverhill in Suffolk. It is owned and managed by St Edmundsbury Borough Council. This is a footpath along a three mile stretch of a closed section of the Stour Valley Railway. Much of it is covered with scrub and large trees, and it provides a wildlife corridor for a diverse range of fauna and flora through the centre of Haverhill. https://designatedsites.naturalengland.org.uk/SiteLNRDetail.aspx?SiteCode=L1082982	900m N	No

3.3 Habitats present

Features are target noted [Tx] in Figure 1 : Site location and features and photographs are presented in section 9. Photographs.

Buildings

The feature is assessed as being of "negligible" interest as habitat, but are discussed further within the Preliminary Roost Appraisal for Bats .

Grassland and ruderal areas

The garden of the site appears to have been unmanaged for some time. Coarse grass such as cock's-foot *Dactylis glomerata* and false oat-grass Arrh*enartherum elatius* dominate mixed with red fescue *Festuca rubra* and infrequent forbs such as speedwells *Veronica*, creeping buttercup *Ranunculus repens* and cow parsley *Anthriscus sylvestris*.

Within the garden, there are localised patches of sweet violet *Viola odorata* and primroses *Primula veris.* These may be naturalised from nearby hedgerows or be of cultivated origin. Some coloured primroses cultivars were noted. Neither species was frequent.

The rockery and southern garden have naturalised *Aubretia* and white stonecrop *Sedum album* as well as other garden plants such as Japanese anemones *Anemone x hybrida*.

The feature is assessed as being of "negligible" interest as habitat.

Scattered scrub and trees

The garden includes several large mature fruit trees, noted as plums, pears on apples on the topological survey and some large stools of hazel.

Self-seeded hazel, plum and blackthorn saplings are frequent in the grassland as are dense thickets of bramble. The areas close to the house have naturalised privet cultivars.

The edge of the garden has self-sown trees and shrubs but no indication of a hedgerow boundary. On the southern boundary, holly is particularly common.

The scattered scrub is assessed as being of "negligible" interest as habitat.

Hedgerows

The western edge of Old St Clements Lane has a hedgerow on a bank that appears significant. Whilst hazel dominates, the hedge also contains field maple, blackthorn, dog rose, and buckthorn as well as limited numbers of elder, elm and hawthorn. The hedge thins going southwards and opens into dense scrub on the banktop.

The feature is a S41 habitat and assessed as being of "local" interest as habitat.

3.4 Preliminary roost assessment for bats

Previous surveys

No previous surveys were available. There are no EPS licenced projects within 1km.

Preliminary roost assessment

Details of the buildings are given in Appendix 5 : Detailed descriptions of buildings. There are two buildings on the site:

- the house, which is a two-storey detached dwelling with an undercroft.
- the garage, which is steel frame with concrete fibre-board sides and roof, open on one side by windows.

None of the fruit trees within the garden have suitable cavities for roosting bats.

No signs of bats were found on the site. Although relatively high numbers of trees are present in and around the site, few of these are mature and the site is isolated within the urban centre of Haverhill.

Assessment

The house assessed as having "negligible" potential for roosting bats, based on the lack evidence but also the lack of any internal roof voids; the fully sealed walls; the low angle and limited size of the roofs (which also appear potentially accessible to cats); the lack of access to an apparent wall cavity; the urban location; and the high levels of lighting from nearby street lights. roosting spots for bats.

The garage is concrete fibre board and is also of "negligible" potential for roosting bats with poor thermal stability.

The site and adjacent overgrown St Clements Lane may be used for commuting and foraging bats, but its significance seems limited.

3.5 Screening assessment for other species

Great crested newts

On MAGIC within 1km, there were no Granted European Protected Species Applications (England), Great Crested Newt Class Survey Licence Returns (England), or results from Great Crested Newt Pond Surveys 2017 – 2019.

There are no ponds within the site or identifiable within 500m of the site.

The site is isolated within the urban matrix.

Great crested newts are felt as highly unlikely to be present and are not a relevant consideration for planning.

Reptiles

The site is overgrown with many anthills and some basking spots. The site though is small and isolated within Haverhill, being surrounded by roads and gardens on all sides. The site is seen as unlikely to support a population of reptiles, based on its size.

Reptiles are not seen as significant for planning.

Birds

The site has good potential for common breeding birds, especially within scrub and overgrown bushes.

House sparrow and robin were noted on the visit.

There is no signs of or potential for Schedule 1 species to be present.

Breeding birds are a relevant consideration for planning.

Badgers

The site does not contain any obvious setts or signs of badgers. Their presence in adjacent gardens seems unlikely.

The species is concluded as not being of significance in context of development.

Other species of interest

Hedgehogs: The site is highly suitable for hedgehogs and has suitable habitat for hibernation as well. The hedgerow provides good connectivity to nearby gardens. This species may use the site.

3.6 Summary of scoping assessment

Table 3.2: Scoping assessment for site features: Designated sites

Designated site	Statutory protection?	Details	Potential linkage ?	Further consideration
Haverhill Railway Walks LNR	Yes	14.1 hectare owned and managed by St Edmundsbury Borough Council along a three mile stretch of a closed section of the Stour Valley Railway. Much of it is covered with scrub and large trees; provides a wildlife corridor through Haverhill. https://designatedsites.naturalengland.org.uk/SiteLNRDetail.aspx?SiteCode=L1082982	900m N	No

Table 3.3: Scoping assessment for site features: Habitats

Habitat	Potential priority habitat?	Local significance?	Details	Further consideration?
Buildings	No	No	House and garage; driveway	No
Species-poor grassland	No	No	Species-poor grassland overgrown garden with limited diversity noted. Naturalised plants. Localised patches of sweet violet and primroses, may be garden escapes or naturalised from nearby hedgerows.	No
Scattered scrub and trees	No	No	Self-seeded hazel, apples and blackthorn saplings ; naturalised privet. Several large mature fruit trees, including apples, pears and plums and some large stools of hazel. No indication of a hedgerow boundary.	No
Hedgerows	Yes	Yes	Western edge of Old St Clements Lane: hazel with field maple, blackthorn, dog rose, and buckthorn as well as limited numbers of elder, elm and hawthorn. Thins to south and opens into dense scrub on the banktop. S41 habitat	Yes

Table 3.4 Scoping assessment for site features: Species

Species	Statutory protection?	Evidence of presence?	Potentially present ?[l]	Details	Further consideration?
Rare and scarce plants	No	No	No	Concluded as absent, based on habitats and urban location	No
Great crested newts	Yes	No	No	Concluded as absent based on lack of nearby ponds.	No
Reptiles	Yes	No	No	Lack of suitable habitat	No
Breeding birds	Yes	Yes	Yes	Protected under W&C Act. No	Yes
- Barn owls	Yes	No	No	Protected under W&C Act. No indications of presence.	No
- Other Schedule 1	Yes	No	No	Protected under W&C Act. No indications of presence.	No
Bats					No
- Roosts within site	Yes	No	No	Main house of “negligible” potential, based upon lack of internal spaces, pebble dashed walls, urban location and likely high light levels.	No
- Foraging/commuting	Yes	No	Yes	Limited mature trees and the site is isolated within the urban centre of Haverhill. May use adjacent sunken lane.	Yes
Badger	Yes	No	No	No signs; within urban area.	No
Hedgehog	No	No	Yes	S41 species; likely to be present, and may use adjacent gardens.	Yes

4. Assessment of effects

4.1 Description of project

The project will consist of development of three houses on land at 27, Old Clements Lane, Haverhill with associated access. No highways work on the road are required to widen it. Details of the project are given in 8. Details of project proposal, including a proposed layout.

Some trees will be retained within the site. Foul drainage is to mains sewer.

There is a steep drop to the adjacent lane. Detailed of required works to the bank on the boundary of this lane are not yet confirmed.

Boundary treatments are to be confirmed by condition.

Lighting levels

The site is within the edge of Haverhill within its urban matrix, but away from the town centre. No increases in light levels seem likely.

As per ILP(2020) [1] the site appears to correspond to Zone E3 "Rural: Low district brightness ". A baseline for external lighting would be required to confirm this technically.

Table 4.1: Lighting zones as per ILP Guidance Note 01/20

Zone	Surrounding Lighting	Environment Examples	Sky Quality Measurements
E0	Protected Dark	Astronomical Observable dark skies, UNESCO starlight reserves, IDA dark sky places	(SQM 20.5+)
E1	Natural Dark	Intrinsically dark National Parks, Areas of Outstanding Natural Beauty etc	(SQM 20 to 20.5)
E2	Rural Low district brightness	Sparsely inhabited rural areas, village or relatively dark outer suburban locations	(SQM ~15 to 20)
E3	Suburban Medium district brightness	Well inhabited rural and urban settlements, small town centres of suburban locations	
E4	Urban High district brightness	Town/city centres with high levels of night-time activity	

[1] ILP(2020) Guidance Note 01/20: Guidance notes for the reduction of obtrusive light.

4.2 Effects of project

Designated sites

"Impact Risk Zones"[2] are a spatial tool used by Natural England to screen planning applications for potential impacts on designated sites such as SSSIs/SACs/SPAs & Ramsar sites. The tool can be accessed freely via the MAGIC website.

The site is not within an impact zone.

Habitats

The construction will involve the loss of the grassland areas within the gardens and some fruit trees, which are not seen as being of significance. There is no identified loss of hedgerow.

The site is adjacent to an overgrown lane of unknown habitat value, that may be impacted during construction.

Birds

Birds are nesting within holes in the walls of the buildings and probably within scrub on the site.

Any removal of trees or demolition during the bird nesting season may affect nests.

Other species

Hedgehogs are unlikely to be significantly impacted by construction or the loss of the overgrown garden.

Boarded fences may reduce access to the site and hence permeability of the urban habitat.

[2]See https://magic.defra.gov.uk/Metadata_for_magic/SSSI%20IRZ%20User%20Guidance%20MAGIC.pdf

5. Recommendations

5.1 Further surveys

As per Collins (2016) as buildings and trees are of "negligible" potential, no further surveys for bats or other species are presently recommended.

5.2 Additional assessments

No additional assessments are required.

5.3 Avoidance and mitigation

Any scrub clearance should either be carried out outside of the bird breeding season between 1st March and 31st August or be carefully checked for breeding birds.

Any demolition should have the building checked for breeding birds if carried out between 1st March and 31st August.

Hedgehog highways should be installed in external and internal fences where boarded.

Works may be required on the steep bank down to the adjacent lane. Prior to commencement, the extent of these works and their impacts on the hedges should be confirmed as well as any need for restoration afterwards. Fencing should be used to protect the adjacent hedgerow along St Clements Lane and the trees that are to be retained from construction operations.

The site have a lighting plan as per Zone E3.

Environmental Zone	Sky Glow ULR [Max %](1)	Light Intrusion (into Windows) E_v [lux] (2)		Luminaire Intensity I [candelas] (3)		Building Luminance Pre-curfew (4)
		Pre-curfew	Post-curfew	Pre-curfew	Post-curfew	Average, L [cd/m^2]
E0	0	0	0	0	0	0
E1	0	2	0 (1*)	2,500	0	0
E2	2.5	5	1	7,500	500	5
E3	5.0	10	2	10,000	1,000	10
E4	15	25	5	25,000	2,500	25

Table 5.1: Obtrusive Light Limitations for Exterior Lighting Installations – General Observers

5.4 Enhancement

The client should consider planting of a native species hedgerow along the rear (eastern side) of the site.

Where reseeding of any banks is required, reseeding by use of wildflower seeds should be considered.

5.5 Requirement for licencing

Based on the approach set out within this report, no requirement for statutory licencing is identifiable. Should bats be identified as roosting within buildings then a licence may be required and specialist advice should be sought from Small Ecology.

6. References

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

Natural England (2018) Presence only records for great crested newts determined through Natural England class licence surveys. Available online.

Natural England (2020) Great Crested Newt eDNA and Habitat Suitability Index Survey results for Ponds surveyed for District Level Licensing 2017,2018,2019

7. Figures

Figure 1 : Site location and features

Target notes for site

TN#	Description	
T1	House	
T2	Garage	
T3	Northern boundary	
T4	Fruit trees and hazel trees	Within overgrown garden
T5	Eastern boundary	
T6	Southern boundary	
T7	Hedge along St Clements Lane	
T8	Overgrown lane to rear	

Figure 2: Site context (Copyright Google 2020)

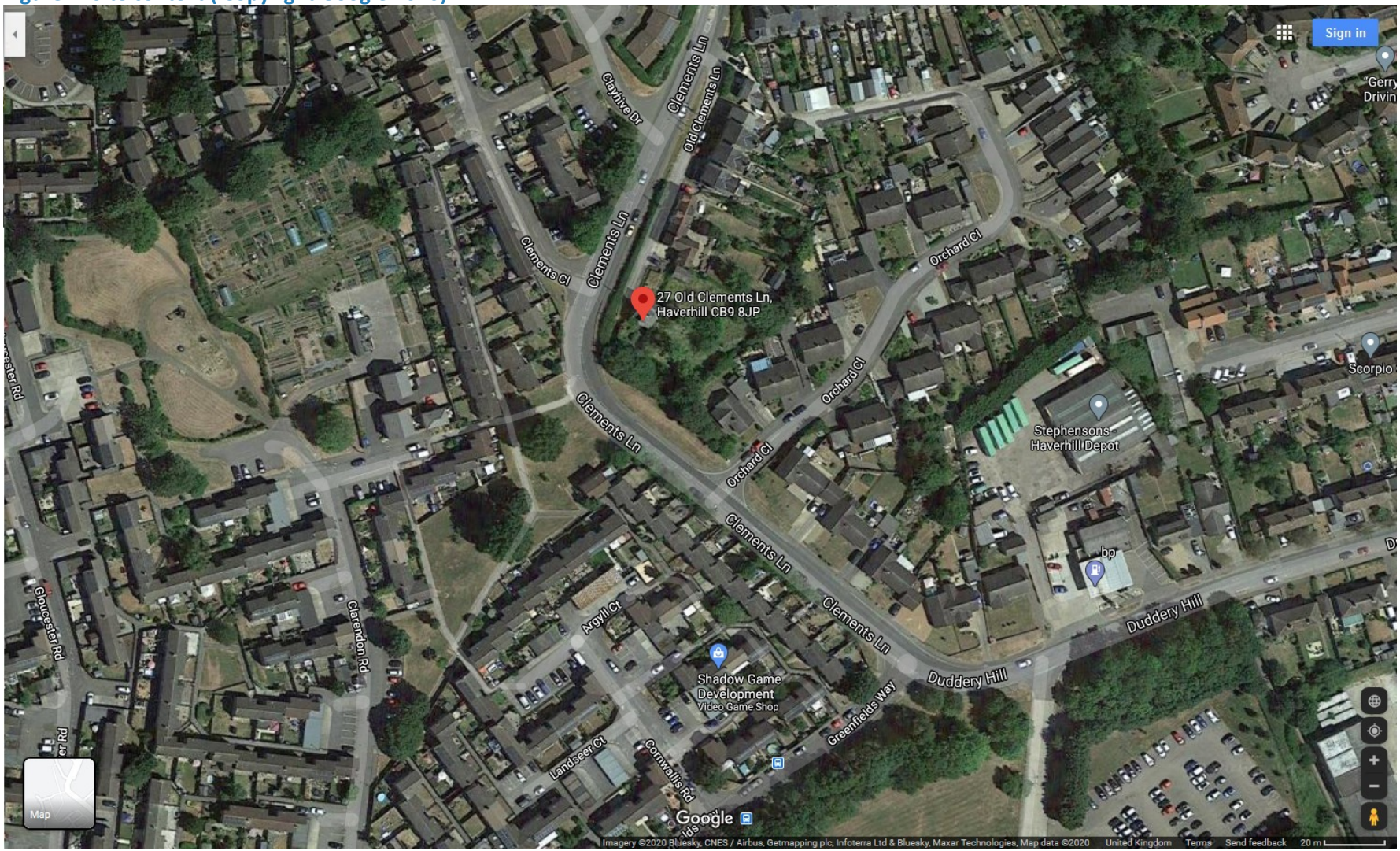
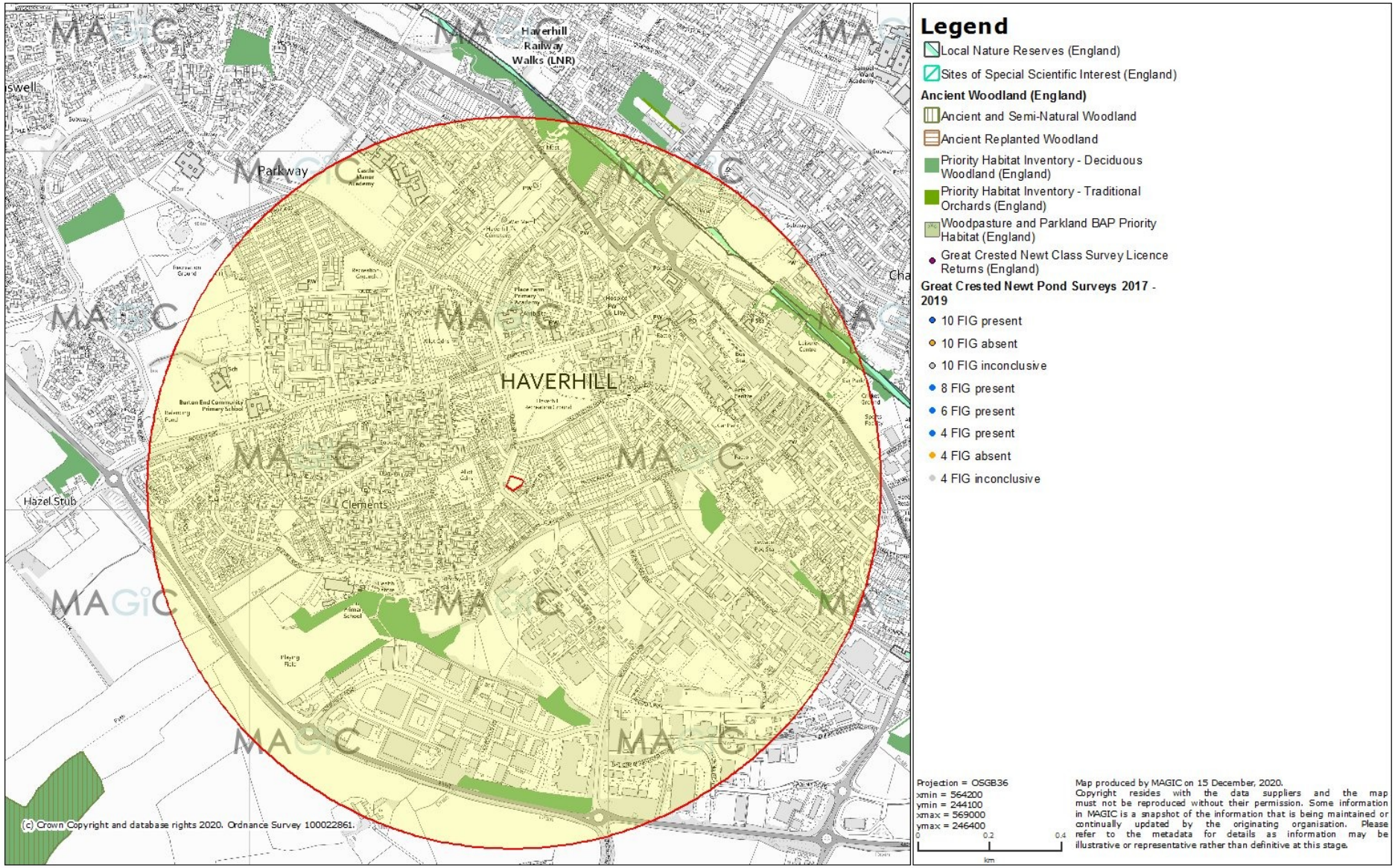
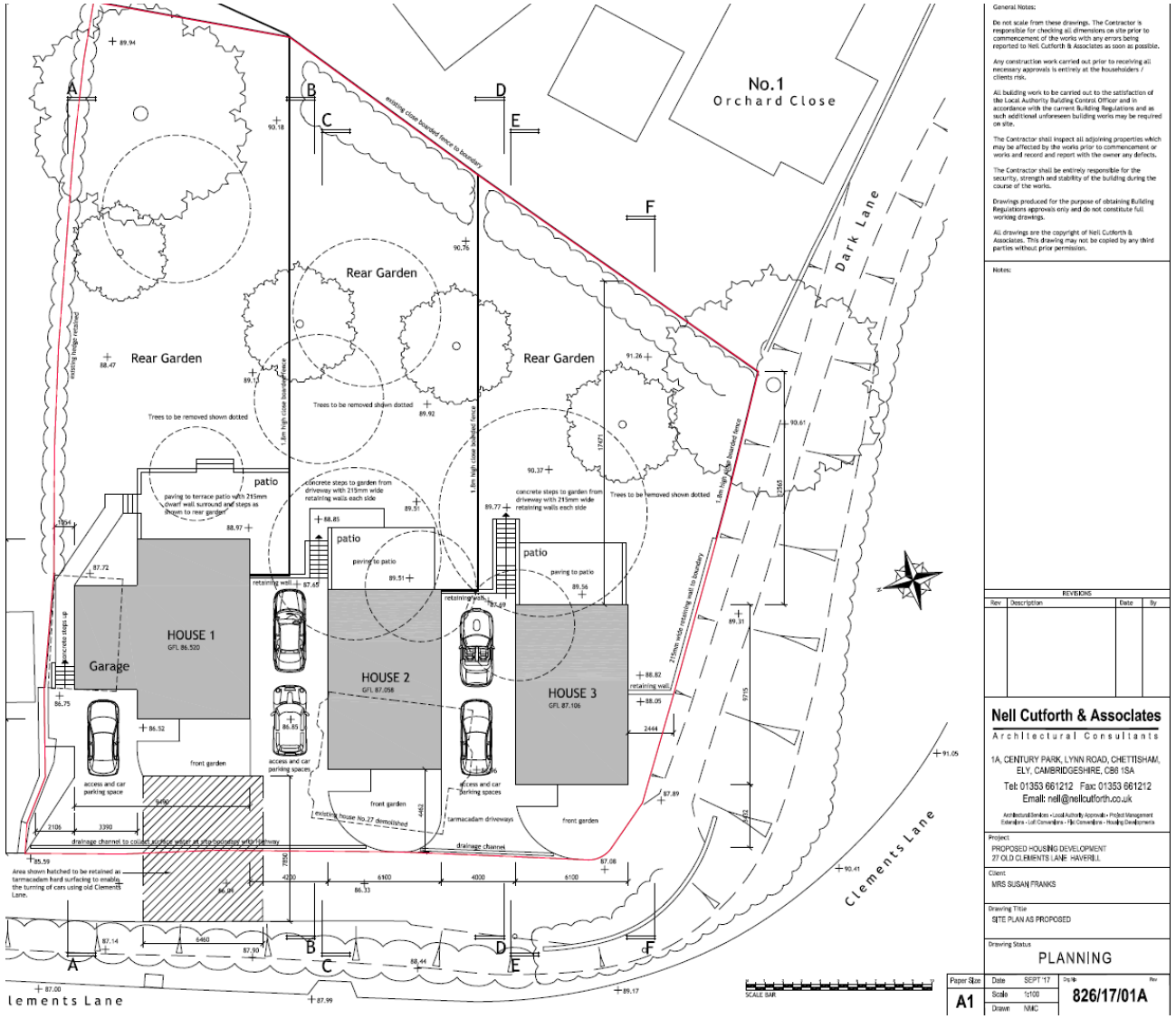


Figure 3 : Results of MAGIC search (© **MAGIC 2019**)



8. Details of project proposal

Figure 4 : Project proposal



9. Photographs

9.1 External views of main buildings

Figure 5: View from front of house

Figure 6: View of western aspect from lane, showing rear "roof box" with flat roof

Figure 7: View of eastern aspect from garden, showing low angled roof

Figure 8: Exterior of garage/workshop

Figure 9: Interior of garage/workshop

9.2 Internal views of main buildings

Figure 10: Internal view of bathroom windows, showing thickness of walls

Figure 11: View of North-east corner of undercroft with window

Figure 12: View of south-east corner of undercroft showing well pointed flint wall

9.3 Other site features

Figure 13: Fruit trees within garden

Figure 14: Garden boundary to south with Old Clements Lane

Figure 15: Hazel stool within garden

9.4 Adjacent habitats

Figure 16: Old St Clements Lane to south of site with site boundary to left

Figure 17: View from top of hill looking north towards site with Old St Clements Lane inbetween

Figure 18: Hedge between Old and New St Clements Lane and nearby lamp

Appendix 1 : Plant list for site

Not available.

Appendix 2 : Protocol for Preliminary Ecological Assessment

Relevant guidelines

CIEEM (2017) Guidelines for Preliminary Ecological Appraisal, 2nd edition. Chartered Institute of Ecology and Environmental Management, Winchester[3]

JNCC (2010) Handbook for Phase 1 habitat survey - a technique for environmental audit[4]

Weather conditions/timing constraints

Can be undertaken under any weather conditions; no timing constraints; no optimum timing.

Process Overview

The survey will comprise both a desk study and walkover survey.

The appropriate "area of search" (AOS) for the study will be based on the nature of the proposals and will be determined on a case-by-case basis following an assessment of the "zone of influence" (ZOI) of the project.

Desk Study

A desk study will be carried out of the AOS to collate available information about the site and surrounding area from following sources:

- Accessible aerial photos and maps to identify the habitats and species potentially present, and context of the site within wider landscape;
- Public databases within MAGIC to identify any relevant nature conservation sites and their designated features;
- Where agreed, a search by the Local Environmental Records Centre of the AOS for any relevant records of species, habitats or locally designated sites (e.g. Local Wildlife Sites);
- Any other easily available records.

The sources searched will be recorded within any report.

Field survey

As far as safely or physically accessible, the footprint of the proposed development and accessible surrounding areas will be walked over.

The habitats present will be described and where appropriate classified according to the guidance within JNCC (2010). Field notes will be taken on plant species present and the extent and structure of habitats.

[3] https://cieem.net/wp-content/uploads/2019/02/Guidelines-for-Preliminary-Ecological-Appraisal-Jan2018-1.pdf
[4] http://jncc.defra.gov.uk/page-2468

Where appropriate, target notes will be used as per JNCC(2010) to map any features of additional ecological interest.

Photographs will be taken of general site and where possible any features of especial ecological interest.

Any incidental sightings of priority or protected species, or field signs of such species will be recorded.

Any incidental records of non-native invasive plant species will be recorded.

Assessment

Identification of features

Based on the results of the desktop and field surveys, a list will be compiled of those ecological features relevant for consideration within planning to include:

- designated sites;
- protected or priority species;
- priority habitats;
- ecological features of local significance.

Potential for protected or priority species

An assessment will be made of the potential for presence of protected or priority species.

Where protected species are confirmed as present, their presence, known species and any other additional information on type of usage will be noted.

Otherwise the potential for species within the AOS will be evaluated and recorded.

Buildings, trees and other structures will be subject to appraisal via relevant other protocols.

Further consideration

An assessment will be made as to whether a feature requires further consideration, based on the desktop information, field results and potential of the site to support such a feature

Equipment used

Binoculars.

Licence requirements

None, unless additional considerations due to presence of protected species or protected sites

Appendix 3 : Protocol for Preliminary Bat Roost Assessment of buildings and structures

Relevant guidelines

English Nature (2004) Bat Mitigation Guidelines

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

Weather conditions/timing constraints

Can be undertaken under any weather conditions; no timing constraints; no optimum timing. Periods of heavy rain prior may reduce visibility of signs of roosting bats.

Field survey

A systematic search will be made of any buildings for signs of roosting bats by trained personnel, based on external and internal inspection where safety allows.

A visual assessment will be undertaken during daylight hours as far as the building or structure is accessible to identify any Potential Roost Features (PRFs) present.

Ladders will be used to access any PRFs under 3.5 m to allow a detailed inspection.

Where appropriate binoculars, a torch and/or endoscope will also be used to assist the search for evidence of bats.

Field notes will be made of the context of the site, including the suitability of the surrounding habitat for foraging and commuting.

Assessment

If no confirmed bat roosts are found, based on the field survey results, the buildings or other structures will be assessed and assigned to the suitability classes of Collins (2016) as: "negligible", "low", "medium", "high" and "unclear".

An assessment will be made also of the potential for use as hibernation.

Where bats or roosts are present, the presence of the roost, known species and any other additional information on type of usage will be noted.

Equipment used

Binoculars; torch; ladders; endoscope.

Licencing requirements

Requires Natural England licence where there is potential for disturbance of bats.

Appendix 4 : Records search results

Not applicable

Appendix 5 : Detailed descriptions of buildings

Name or # for building	Cottage
Site:	Old St Clements
Date:	15/12/20
Surveyor:	Chris Smith
Description of age and use	Not known. Clients former home, now derelict and unused, but generally water tight and well secured.
Pictures	Yes
EXTERNAL FEATURES	
Wall construction and materials	Not clear. Externally pebble dashed and well sealed. Wall appears thin and to lack a central cavity. Materials to be confirmed.
Roof construction and materials	Low angled hipped slate with felted flat roof on “roof box” to rear. Internally there are no joists and no loft cavity with ceiling slopped under roof
Windows, door and other openings	Mixed: uPVC, metal and wooden sash windows. Appears well sealed apart from one broken window that is partly boarded up.
Chimneys and other roof features	Chimneys well pointed, Some lifting on flashings
INTERNAL FEATURES	
Access points	The building is well sealed, although one window was broken.
Cracks and crevices	The undercroft had well-sealed walls and was relatively well-lit by the window. There was no visible way of access due to a well-fitting door and it lack hibernating butterflies and cave spiders which are typical of bat hibernaculum. Rest of building is fully decorated domestic property
Roof and ridge	Generally close tiled; ridge and angles sealed by “flashings” rather than ridge tiles
Cobwebbing	In some places;
Evidence of presence	None identified on window sills or externally on walls
Overall potential for bats?	Negligible
Constraints	None

Name or # for building	Garage
Site:	Old St Clements
Date:	15/12/20
Surveyor:	Chris Smith
Description of age and use	Pre-fab garage of cement fibre board with steel frame

Pictures	Yes
EXTERNAL FEATURES	
Wall construction and materials	Fibre board without lining
Roof construction and materials	Fibre board without lining
Windows, door and other openings	Yes – on south side mutiple windows several broken
Chimneys and other roof features	N/A
INTERNAL FEATURES	
Access points	Through windows
Cracks and crevices	None
Roof and ridge	No suitable features
Cobwebbing	None, but not expected given exposed nature
Evidence of presence	None
Overall potential for bats?	Negligible
Constraints	No internal access, but clearly visible through open window that was broken