ASTUTE ECOLOGY

Ecological Consultants

PRELIMINARY BAT ASSESSMENT

1 OUZELWELL LANE, DEWSBURY, WF12 9EP

Report Reference: AE17.216

November 2017

Client:	Zed Hyder of Hyder Living Ltd	
Site:	1 Ouzelwell Lane, Dewsbury, WF12 9EP	
Grid Ref:	SE235196	
Report Ref:	AE17.216	
Prepared by:	David Gibbs BSc. (Hons)	26/11/2017
Checked by:	Andrew Bird BSc. (Hons)	30/11/2017

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1 Summary

1.1 Astute Ecology were commissioned by Zed Hyder of Hyder Living Ltd to undertake a Preliminary Bat Assessment pertaining to a building located at 1 Ouzelwell Lane, Dewsbury, WF12 9EP. The purpose of this assessment was to identify the suitability of the building to support bats, identify any evidence of bats having used or using the building, and to identify key ecological constraints to the proposed development. The survey was undertaken on the 23rd November 2017.

1.2 **Key Messages**

- No evidence or signs of bats was found during the survey. However, the building contained low and moderate potential roost features that will be destroyed during the proposed works. To avoid potential infringement of legislation and impacts to bats, the building will require 1x Dusk emergence survey and 1x dawn Re-entry survey between May and September in accordance with Bat Conservation Trust Guidelines to either; prove likely absence and allow works to proceed, or in the event bats are found using the building, to provide information for specific mitigation.

- It is an offence to damage or destroy any bat roost, intentionally or recklessly obstruct a bat roost, deliberately, intentionally or recklessly disturb a bat or intentionally kill, injure or take any bat.

- The building was assessed to have low potential to support breeding birds. A check for breeding birds should be undertaken immediately before any works to the building. In the unlikely event breeding birds are found using the building; no works can take place until the young have fledged.

- It is an offence to intentionally kill, injure, or take any wild bird whilst nesting, or take, damage or destroy the nest of any such bird while in use or being built.

2 Introduction

2.1 Astute Ecology were commissioned by Zed Hyder of Hyder Living Ltd to undertake a Preliminary Bat Assessment pertaining to a two-storey detached residential property located at 1 Ouzelwell Lane, Dewsbury, WF12 9EP, herein referred to as the 'site'. The purpose of this assessment was to identify the suitability of the building to support bats, identify any evidence of bats having used or using the building, and to identify key ecological constraints to the proposed development. A breeding bird assessment is included within this report as per standard industry guidelines.

2.2 The site is the subject of an application for the proposed demolition of the existing building and the construction of four three-storey residential dwellings with associated parking and gardens. The existing two-storey brick-built building featured a pitched slate roof with two chimney stacks, and a one-storey brick extension adjoining the main building at the northern elevation. Existing and proposed site plans are included with Appendix 4.

2.3 The application site is located (see Appendix 5) within an urban area, bounded by residential properties with gardens and associated access roads. Beyond the residential areas, scattered trees and scrub are present approximately 125m north-east of the site, and the Calder and Hebble Navigation canal is located approximately 350m to the north of the site.

2.4 The legislation relevant to protected species within the United Kingdom is summarised within Appendix 1.

2.5 Results and recommendations contained within this report have been prepared by an experienced ecologist and are therefore the view of Astute Ecology. The survey is based on information provided by our client, the development proposals, and the results of the desk study and our survey of the site. This report pertains to this information only.

3 Methodology

3.1 Desk Study

Data regarding any known statutory or non-statutory sites in addition to any European Protected Species License (EPSL) Application records within 2km of the site were searched for using The Multi-Agency Geographic Information for the Countryside (Magic Maps) on 26/11/17.

3.2 Surveyors

Survey carried out by David Gibbs BSc. (Hons) Assistant Ecological Consultant, Bat Licence Number: 2017-32478-CLS-CLS, and supported by Andrew Bird BSc. (Hons.) Head of Ecology: Astute Ecology, Bat Licence Number: 2017-27866-CLS-CLS, who has over 10 years of experience undertaking bat surveys.

3.3 Reporting

This report was prepared in accordance with the Chartered Institute of Ecology and Environmental Management; Guidelines on Ecological Report Writing CIEEM (2015).

3.4 Survey Conditions

The survey was undertaken at 12:30pm on the 23rd November 2017.

The outside temperature was recorded as 6ºC, with 6/8 cloud cover, no rain, light wind and good visibility.

3.5 Protected Species

3.5.1 Roosting Bats

Structures on site were assessed for their suitability to support roosting bats in accordance with Collins (2016) *Bat Surveys for Professional Ecologists: Good Practice Guidelines*, (3rd edition), Bat Conservation Trust, London.

During the external and internal assessment of the structure, features including suitable enclosed spaces such as slipped or missing roof tiles, gaps and cracks in brickwork, enclosed roof voids, gaps along ridge rafters and joints in roof beams were assessed to evaluate the potential suitability of the structure to support roosting bats. Evidence of bat presence was also searched for including feeding remains, bat droppings and staining around potential access points. Bats often use different roosting sites at different times of the year, and the absence of evidence does not always equate to the absence, or lower suitability of a structure to support a bat roost. The potential suitability of each structure was categorised following Collins (2016), and the resulting survey effort to establish confidence in a result is summarised within Appendix 2.

3.5.2 **Foraging and Commuting bats**

Habitat features on site were assessed for their suitability to support foraging and commuting bat populations. This assessment was independent from the suitability of the site to support roosting bats, and provides information on the likeness of bat foraging activity within the local environment, and the dependence of individuals on these features for commuting to alternative roosting sites, foraging and migration. The suitability of the sites' commuting and foraging habitat was assessed and evaluated against the proposed impacts to the site, to allow categorisation of the habitat (See Appendix 2).

3.5.3 **Breeding Birds**

The building to be impacted from the proposed development was the subject of a search for evidence of breeding birds, active or previously used nests including the recording of any droppings, feathers, pellets (barn owl), down and chick remains Following standard techniques, as recommended within Gilbert, Gibbons, and Evans (1998) *Bird Monitoring Methods: Breeding Bird Survey* (pages 389-393) and RSPB and Shawyer (2011) and Barn Owl (*Tyto alba*) *Survey Methodology and Techniques for use in Ecological Assessment: Developing Best Practice in Survey and Reporting*, IEEM, Winchester.

3.6 **Limitations**

It should be noted that whilst every effort has been made to provide a comprehensive description of the site, no investigation could ensure the complete characterisation and prediction of the natural environment. The protected and notable species assessment provides a preliminary view of the likelihood of these species occurring on site, based upon the suitability of the habitats, know distribution of the species in the local area and any direct evidence on site. It should not be taken as providing a full and definitive survey of any protected species group.

3.7 **Report Lifespan**

Given the transient nature of the subject we would consider the survey results contained to be accurate for 12 months.

4 Results

4.1 Desk Study Results

4.1.1 Designated Sites

Two statutory designated sites were located (See Appendix 3) within 2km of the site:

- Sparrow Wood LNR, 1km north-east from the site
- Lower Spen Wildlife Area LNR, 1.4km north-west of the site

4.1.1.2 Species Records

Magic maps returned no records of EPSL applications within 2km of the site (Appendix 3).

4.2 Protected Species results

4.2.1 Roosting Bats

The building was found to have multiple low and moderate Potential Roost Features (PRFs), and was deemed capable of potentially supporting roosting bats. As such, the building was overall assessed to have Moderate Potential for roosting bats. No evidence of bats using or having previously used the building was found. An assessment of the buildings features and inspection is described below. Associated photographs can be found within Section 4.3

4.2.1.1 Bat Building Assessment

- **External walls**: The external walls were built from brick and in good condition. The northern elevation featured a hole in the brickwork, due to missing pipework, assessed as a low PRF's. No evidence or signs of bats were observed on the external walls.

- **External Roofs**: The southern and northern roof elevations of the main house were in a poor condition, both exhibiting numerous gaps due to broken, lifted, and missing slate tiles. Several of the gaps provided access to the loft interior and were assessed as low and moderate PRFs. The two chimney stacks were in relatively good condition, though a section of missing pointing on the northern aspect of the eastern chimney stack was located and assessed as a low PRF. The eastern and western roof elevations of the one-storey extension (located at the northern elevation of the property) featured several gaps, due to lifted slate tiles, assessed as low PRFs. No actual evidence or signs of bats were recorded on the external roofs or chimney stacks.

- **Barge Boards**: The barge boards at the northern and southern elevations were in good condition and free of any obvious PRFs. No evidence or signs of bats were recorded on or around the barge boards.

- **Interior of building**: The building was well-sealed and occupied at the time of assessment. No evidence or signs of bats were observed within the building interior.

- **Internal Roofs**: The loft was largely without lining and heavily cobwebbed. Access gaps from missing and broken tiles were recorded. A draft was also noted within the loft space coming from the slipped tile areas. No evidence or signs of bats was recorded during the inspection. The heavy cobwebbing throughout indicated that bats have not been recently present within the loft space. The internal roof space above the extension was not accessible at the time of assessment.

- **Cellar:** The cellar was well-sealed and in use as storage space. No evidence or signs of bats were observed within the cellar.

4.2.2 **Foraging and commuting habitat for bats**

The building was bounded by a front and rear garden comprising mown amenity grassland, occasional common ruderal herbs and also a single semi-mature ash tree (*Fraxinus excelsior*) present at the south-western corner of the rear garden. A ground-level assessment of the tree found it to have no potential to support roosting bats, due to the absence of suitable crevices, sheltered voids or hollows. The gardens were assessed as providing negligible to low potential foraging habitat for a low number of potential bats. The surrounding area was also considered to have low potential foraging and commuting habitat. The building itself was considered as negligible potential for foraging and commuting habitat.

4.2.3 **Breeding Birds**

The building was assessed to be of low potential to support breeding birds, no evidence of breeding birds using or having used the building, or any of the habitats on site, was found.

4.3 Site Photographs

Southern Elevation Several missing, lifted, and broken tiles were observed on the southern elevation roof, assessed as Low and Moderate PRFs.	
Southern Elevation Close-up of lifted and missing slate tiles, assessed as Moderate PRFs, at the western end of the southern roof elevation.	
Southern Elevation Example of broken and lifted roof tiles at the eastern end of the southern roof elevation.	

Eastern Elevation The eastern elevation walls were in good condition with no obvious PRFs.	
Western Elevation The external walls at the western elevation were in good condition with no obvious PRFs.	
Northern elevation The northern elevation featured a one storey extension.	

Northern Elevation A hole was present between brickwork at the northern elevation, assessed as a Low PRF.	
Northern elevation Close-up of gaps between roof tiles at the eastern end of the northern roof elevation, assessed as moderate PRFs.	
Northern elevation Example of large gaps due to missing tiles and cracks in ridge tiles on the northern elevation roof.	

Northern elevation A Low PRF gap was present on the eastern chimney stack at the northern elevation.	
Internal Roof The loft was heavily cobwebbed and featured several access holes from broken and missing roof tiles. The loft floor had lagging covering. No signs or evidence of bats was found.	
Internal Roof Examples of access holes within the northern roof elevation.	

Extension The roof of the one-storey extension featured several lifted tiles at both elevations, presenting Low PRFs. Pictured here at the western elevation. The internal roof of the extension was not accessible.	

5 Evaluation and Recommendations

5.1 **Desk Study Impacts**

The proposed development site is not designated for its wildlife interest at an International, national or local level. There will be no impacts to designated sites as a result of the proposed plans, due to the distance of the site from designated areas, and that the site will continue to be used for residential purposes.

5.2. **Roosting bats**

- The building was overall assessed to have 'Moderate Potential' to support roosting bats. The proposed plans indicate that the low and moderate potential roosting areas will be destroyed. To avoid potential infringement of legislation (see below) and impacts to bats, 1x Dusk Emergence survey and 1x Dawn Re-entry survey are required between May and September (inclusive) in accordance with Bat Conservation Trust Guidelines to either; prove likely absence and allow works to proceed, or in the event bats are found using the building, to provide information for specific mitigation.

- All bats in the United Kingdom and their habitats are fully protected under the Wildlife and Countryside Act 1981 (as amended), and the Conservation of Habitats and Species Regulations 2010 (as amended). It is an offence to damage or destroy any bat roost, intentionally or recklessly obstruct a bat roost, deliberately, intentionally or recklessly disturb a bat or intentionally kill, injure or take any bat.

5.3 **Foraging and Commuting Bats**

- Direct impacts to foraging and commuting bats are considered highly unlikely. To enhance the site both for biodiversity and bats, native trees, shrubs, and/or hedgerows could be planted at the eastern boundary, linking the site with neighbouring gardens.

- To prevent potential indirect disturbance to foraging and commuting bats, any new lighting should be sympathetic to reduce and/or avoid light spill towards any vegetation or boundary features.

    - Where any new lighting is used on site, they should be:
        - Fully shielded (enclosed in full glass cut-off fitments)
        - Directed downwards (mounted horizontally to the ground and not tilted
        - upwards)
        - Switched on only when needed (no dusk to dawn lamps)
        - White light low energy lamps (Philips Cosmopolis or fluorescent)

5.4 **Breeding Birds**

- The building was assessed to be of low potential for breeding birds. Therefore, if demolition works are undertaken during the breeding bird season (March to August inclusive), then they should be preceded by a breeding bird check (within 24 hours prior to commencement of works) to avoid infringing legislation which protects all nesting birds.
    - In the event that breeding birds are found to be using any of the habitats on site, no work should be undertaken within 5m of the breeding bird nest and a 5m buffer shall be maintained until the young have fledged and the adult birds are no longer using the nests.

- All wild birds, their eggs and nests are protected under the Wildlife and Countryside Act 1981 (as amended) which makes it an offence to intentionally kill, injure, or take any wild bird whilst nesting, or take, damage or destroy the nest of any such bird while in use or being built.

- The provision of X2 Generalist Schwegler 1B nest box with a 32mm entrance would have a positive effect on nesting birds at the site.

    - Bird boxes should be fixed two to five metres high, out of the reach of predators such as domestic cats.
    - Boxes are best mounted facing between north and east, thus avoiding strong sunlight and the wettest winds.
    - Boxes should also be tilted forward slightly to minimise the effect of any driving rain.

Appendix 1. References

Bat Conservation Trust's '*Good Practice Survey Guidelines*' (Rev 2012).

Bell, S. McGillivary, D. (2006) *Environmental Law*. 6th ed. Oxford University Press.

Byron, H (2000) *Biodiversity and Environmental Impact Assessment: A Good Practice Guide for Road Schemes*. The RSPB, WWF-UK, English Nature and the Wildlife Trusts, Sandy.

CIEEM (2015) Guidelines on Ecological Report Writing. Chartered Institute of Ecology and Environmental Management, Winchester

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

Gilbert G, Gibbons DW, Evans J. (1998) *Bird Monitoring Methods: Breeding Bird Survey* (pages 389-393). RSPB.

Harris S, Cresswell P and Jefferies D (1989). *Surveying Badgers*.

Mitchell-Jones A.J. McLeish, A.P. (2004) *Bat Workers Manual* (3rd Edition). Joint Nature Conservation Committee.

Mitchell-Jones A.J. *Bat Mitigation Guidelines* 2004. English Nature.

Sutherland, W.J. (1996) *Ecological Census Techniques*. Cambridge University Press.

Treweek, J. (1999) *Ecological Impact Assessment*. Blackwell Science.

Williams, C. (2010) *Biodiversity for Low and Zero Carbon Buildings, A Technical Guide for New Build*. Riba Publishing.

Appendix 2. Legislation, Guidance and Methodology

Roosting Bats
All bats in the United Kingdom and their habitats are fully protected under the Wildlife and Countryside Act 1981 (as amended), and the Conservation of Habitats and Species Regulations 2010 (as amended).
It is an offence to damage or destroy any bat roost, intentionally or recklessly obstruct a bat roost, deliberately, intentionally or recklessly disturb a bat or intentionally kill, injure or take any bat.
Areas of concern; can be encountered in many types of structure and care should therefore be taken when undertaking maintenance or demolition of suitable structures and trees.

Site assessments of buildings, commuting and foraging habitat and trees are undertaken in accordance with:

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

Preliminary Ecological Surveys look for evidence of bat presence such as feeding remains, bat droppings, roosting individuals and staining around potential access points.

The suitability of site features was also assessed because absence of bat evidence, is not confirmation of a negative result. Within buildings these features include suitable enclosed spaces such as slipped or missing roof tiles, gaps and cracks in brickwork, enclosed roof voids, accessibility into wall spaces, gaps along ridge rafters, joints in roof beams and the presence of suitable soffits and fascia's.

Within tree features searched for include; natural holes, woodpecker holes, cracks/splits in major limbs, loose bark, hollows, and dense cover of ivy over the tree.

If evidence is found, or a building supports features conducive to supporting roosting bats then further presence / absence bat surveys and/or roost characterisation surveys are recommended.

The following tables are only to be used as a basic indication as to how potential is judged. They are not to be used as a complete definitive source of guidance. The final result is based upon the surveyor's professional opinion, experience and knowledge from various in depth sources.

Category	Description of roosting habitat	Number of presence / absence surveys required
No Potential	The building is wholly unsuitable for a bat roost.	None
Negligible Potential	Suitable cavities may exist but these are open to wind, rain or disturbance.	None
Low Potential	This category describes a structure with one or more potential roost sites that could be used by individual bats opportunistically, that less than ideal in some way. For example, the feature may be subject to intermittent disturbance, and does not provide enough shelter, conditions* space and/or suitable surrounding habitat (e.g. unlikely to support a maternity or hibernation roost).	One survey between May and August

	This category described a tree of sufficient size and age to support rooting bats, but with no features observed from the ground, or the features only have a limited potential to support roosting bats.	Trees – No further surveys required
Moderate Potential	This category describes a structure or tree considered to have one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions* and surrounding habitat but are unlikely to support a roost of high conservation status (With regard to roost type only – assessments are made irrespective of species conservation status, which is established after presence is confirmed) Features considered to have adequate potential would include cavities of appropriate dimensions that are generally free from disturbance and free from fluctuations in the weather.	Two surveys between May and September (with at least one survey undertaken between May and August) One Dusk emergence and One Dawn re-entry survey to be ideally undertaken at least two weeks apart.
High Potential	A structure or tree with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions* and surrounding habitat.	Three surveys between May and September (with at least two surveys undertaken between May and August) One Dusk emergence and One Dawn re-entry survey to be undertaken. The third survey can be either Dusk or Dawn. The surveys should ideally be undertaken at least two weeks apart.
Confirmed	This category is where positive evidence of bats has been recorded. For example, bats are found; bat droppings may be present at a suitable location for roosting bats; existing bat records may be associated with the structure.	Three surveys between May and September (with at least two surveys undertaken between May and August) One Dusk emergence and One Dawn re-entry survey to be undertaken. The third survey can be either Dusk or Dawn. The surveys should be undertaken at least two weeks apart.

If bats are discovered emerging or re-entering any structure, the survey schedule should be appropriately adjusted to increase the survey effort so that sufficient information for roost characterisation can be collected to advise the planning application or EPS development license.

Foraging and Commuting bats
Habitat features on site were assessed for their suitability to support foraging and commuting bat populations. This assessment was independent from the suitability of the site to support roosting bats, and provides information on the likeness of bat foraging activity within the local environment, and the dependence of individuals on these features for commuting to alternative roosting sites, foraging and migration.

Potential suitability of foraging and commuting habitat within an application boundary. Features should be assessed following this guide and professional judgement. Adapted from Collins (2016). The following tables are only to be used as a basic indication as to how potential is judged. They are not to be used as a complete definitive source of guidance. The final result is based upon the surveyors' professional opinion, experience and knowledge from various in-depth sources.

Category	Description of commuting and foraging habitat	Survey effort to establish the value of commuting and foraging habitat**
Negligible Potential	Negligible habitat features on site likely to be used by commuting or foraging bats.	None
Low Potential	Habitat which could be used by low numbers of commuting bats such as an isolated hedgerow with gaps, or an unvegetated stream unconnected to suitable habitat in the wider environment. Suitable, yet isolated habitat that could be used by foraging bats such as individual trees, or a patch of scrub.	**Transect /spot count/ timed search survey:** One survey visit per season: Spring- April/ May Summer- June/July/ Aug Autumn – Sept/ Oct In weather conditions conducive to finding bats **AND** **Static automated surveys:** One location per transect, over a five-night period, per season: Spring- April/ May Summer- June/July/ Aug Autumn – Sept/ Oct In weather conditions conducive to finding bats *Further surveys may be required if surveys reveal higher activity than predicted from habitat alone*
Moderate Potential	Continuous habitat connected to the wider landscape that could be used by commuting bats, notably tree lines, hedgerows or linked back gardens. Habitat that is connected to the wider landscape which could be used by bats for foraging such as trees, open water, scrub or grassland.	**Transect /spot count/ timed search survey** One survey visit per month (April to October) In weather conditions conducive to finding bats At least one survey should comprise dusk and pre-dawn (or dusk to dawn) within one 24-hour period.

		AND **Static automated surveys:** Two locations per transect, over a five-night period, per month (April to October) In weather conditions conducive to finding bats
High Potential	Continuous, High-quality habitat that is well connected to the wider landscape which is considered to be highly conducive to commuting bats including river valleys, stream, hedgerows, and woodland edge High-quality habitat that is well connected to the wider landscape, that is likely to be used regularly by foraging bats such as broadleaved woodland, tree lined watercourses, and grazed parkland. Site is close to and connected to known roosts.	Transect /spot count/ timed search survey Up to two survey visit per month (April to October) In weather conditions conducive to finding bats At least one survey should comprise dusk and pre-dawn (or dusk to dawn) within one 24-hour period. **AND** **Static automated surveys:** Three locations per transect, over a five-night period, per month (April to October) In weather conditions conducive to finding bats

Breeding Birds

All nesting birds are protected under the Wildlife and Countryside Act 1981, which makes it an offence to intentionally kill, injure or take any wild bird or take, damage or destroy its nest whilst in use or being built, or take or destroy its eggs. In addition, for species listed on Schedule 1 of the Wildlife and Countryside Act 1981 it is an offence to intentionally or recklessly cause disturbance at, on or near an 'active' nest.

The bird breeding season is typically accepted to start in February and continue through until August, however breeding birds can be found all year round depending on the given species and climatic conditions.

A sites' habitat composition, locality, association to designated sites as well as current usage and management are all considered in the decision as to whether further bird-related surveys are required. In addition, surveys may be recommended based on incidental bird records collected during a Preliminary Ecological Appraisal, species identified within an ecological data search or target species listed within a local biodiversity action plan.

Bird surveys are carried out in accordance with:
Gilbert, Gibbons, and Evans (1998) *Bird Monitoring Methods*, RSPB.

Barn Owls are included in Schedule 1 of the Wildlife & Countryside Act 1981 which affords them protection against disturbance whilst nesting. Specifically, under Part 1, Section 1 (5) it is an offence to intentionally or recklessly:

- Disturb any wild bird included in Schedule 1 while it is building a nest or is in, on or near a nest containing eggs or young.
- Disturb dependent young of such a bird.

Ecological Enhancement

In March 2012 the Department for Communities and Local Government published the National Planning Policy Framework. This sets out planning policies on protection of biodiversity through the planning system. The document states - *opportunities to incorporate biodiversity in and around developments should be encouraged*.

Usually when reviewing how ecological enhancements can be implemented the Local Biodiversity Action Plan for the area is considered.

For new buildings guidance such as in the following will be used:

Williams (2010) *Biodiversity for Low and Zero Carbon Buildings, A Technical Guide for New Build*, Riba Publishing.

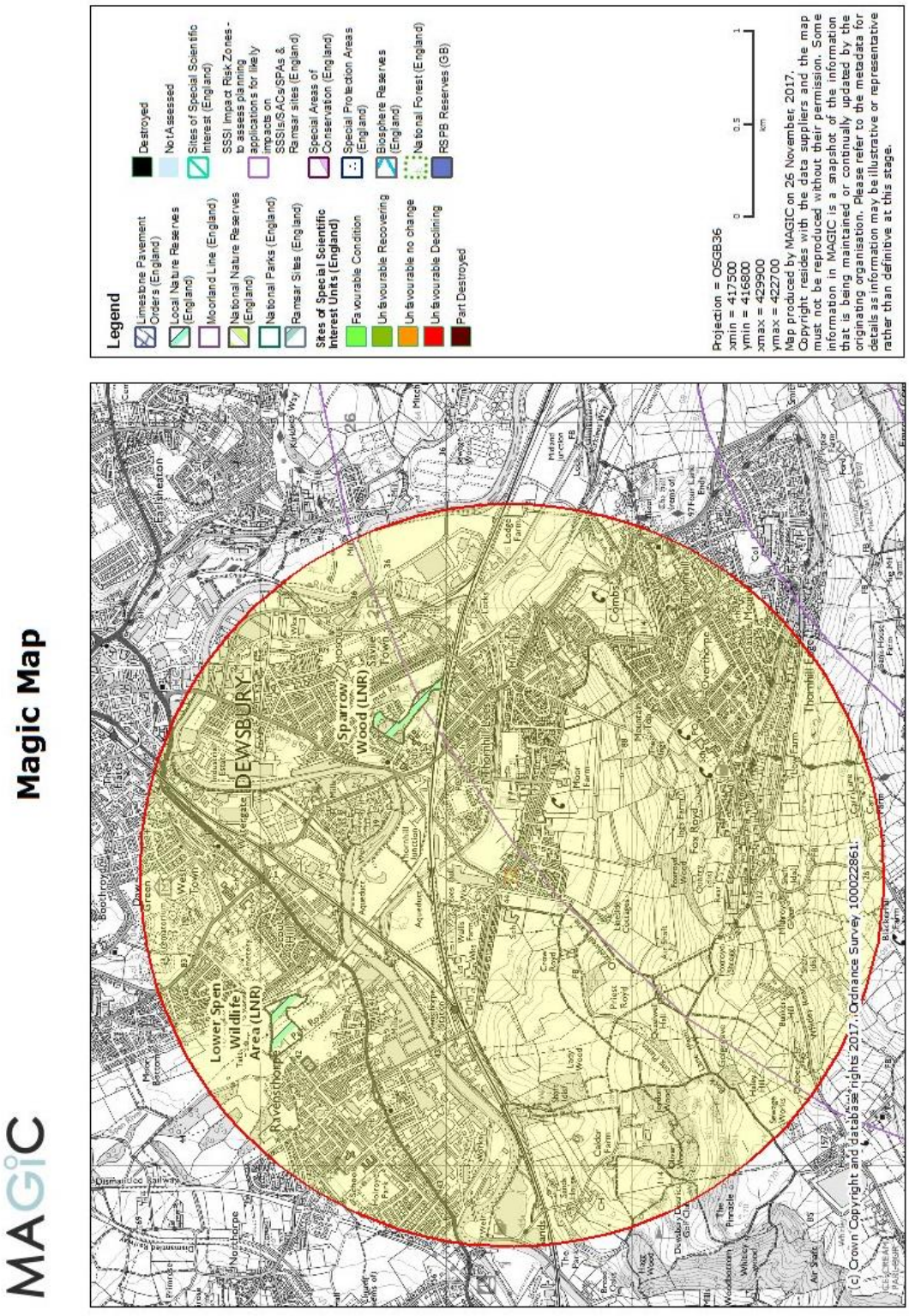
Designated Protected Areas

Designated areas are Sites of Special Scientific Interest (SSSI) while others have been designated as having European protection status. Local authorities can also designate areas for nature conservation and in doing so may impose local authority byelaws to support local nature conservation objectives.

European designated status includes Special Protection Areas (SPAs) that preserve areas for birds and Special Areas of Conservation (SACs) which provides protection for habitats and the species which these habitats supports. Laws stipulate that SSSIs, SPAs and SACs have to be maintained in a 'favourable condition' which requires efforts to preventing any potential impacts to these sites.

Information of Designated Protected Areas is received through Ecological Data Searches and Magic Map searches.

Appendix 3. Magic Maps



MAGIC

Magic Map

Legend

Granted European Protected Species Applications (England)

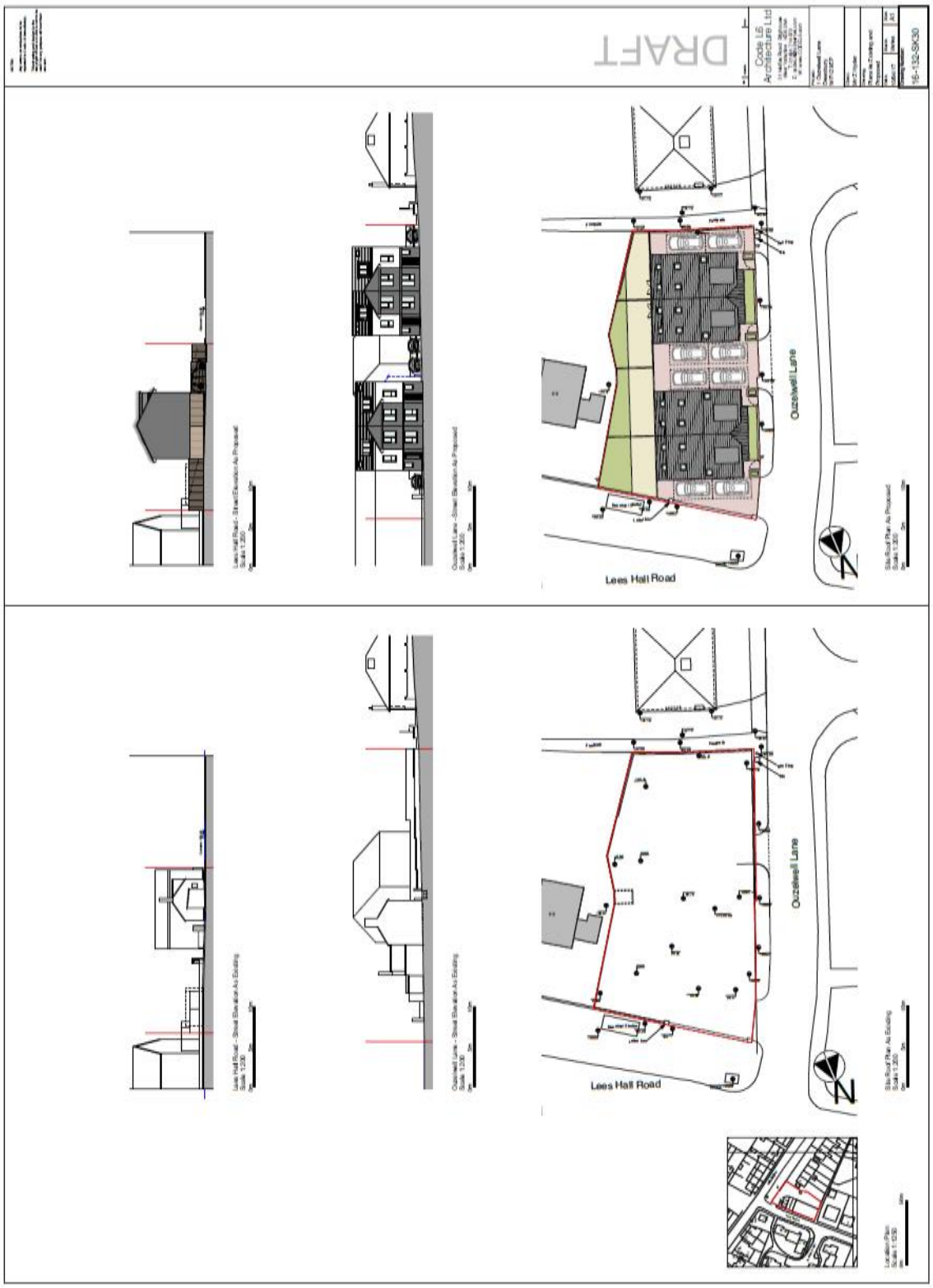
- Amphibian
- Bat
- Cetacean
- Invertebrate
- Other Mammal
- Plant
- Reptile

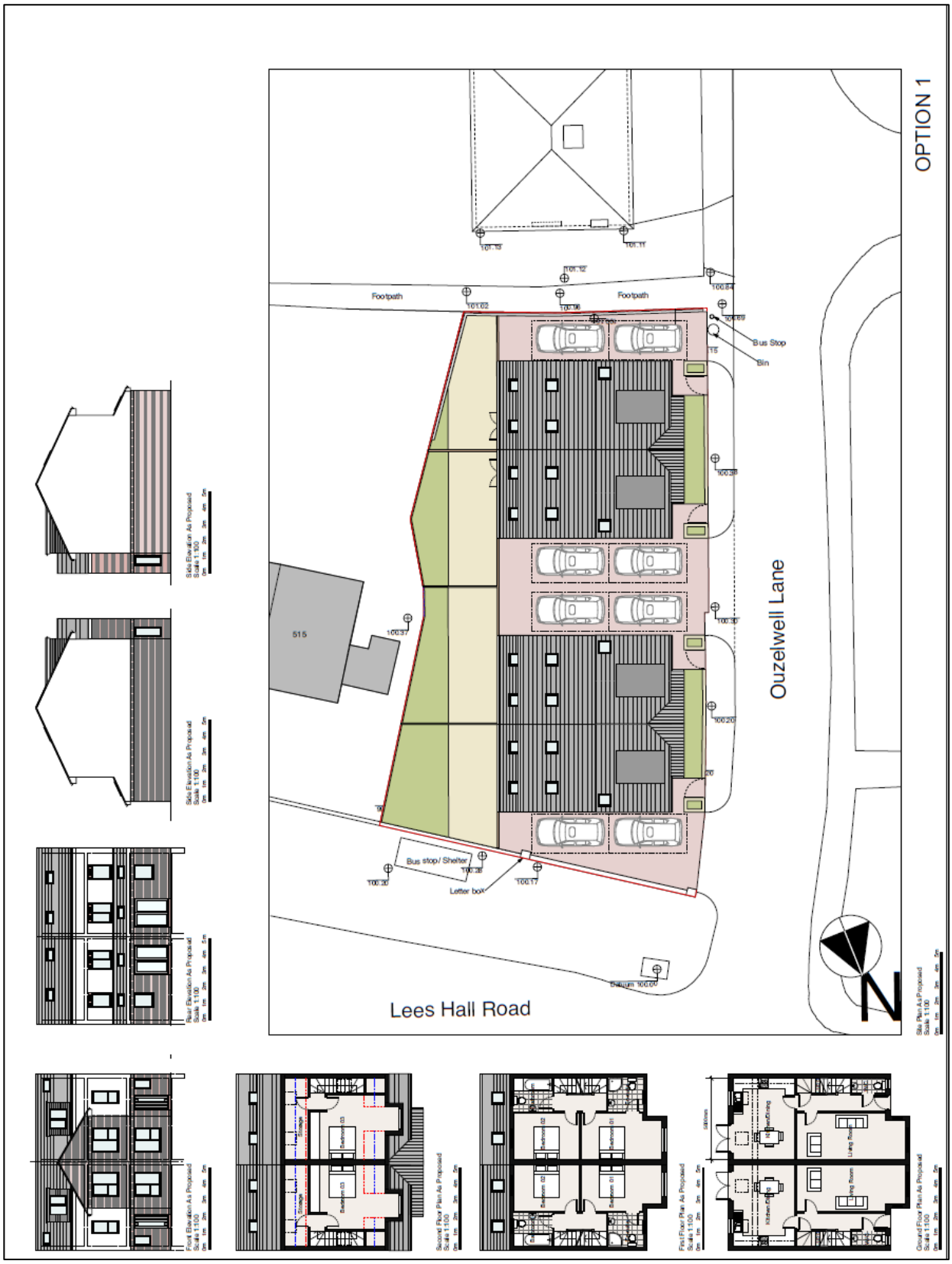
Projection = OSGB36
xmin = 417100
ymin = 416700
xmax = 429500
ymax = 422600

0 0.5 1
km

Map produced by MAGIC on 26 November, 2017.

Appendix 4 Existing and Proposed Plans




OPTION 1
Footpath
Footpath
Bus Stop
Bin
Ouzelwell Lane
515
Bus stop/ Shelter
Letter box
Lees Hall Road
N

Appendix 5 Location Plan