Bat Survey Report: Presence / Absence Survey

Thurnscoe Hotel

Houghton Road, Thurnscoe, Rotherham

May 2021

Prepared for: Darwen Investments Ltd

Report prepared by: Verity Webster BSc (Hons) MSc CEcol CMIEEM

EXECUTIVE SUMMARY

- On 5th March 2021, a Preliminary Roost Assessment was undertaken at Thurnscoe Hotel, Thurnscoe, Rotherham.
- The building was assessed to determine its suitability for bats. The building is considered to have low suitability for bats.
- It was recommended that a single bat emergence survey is undertaken in mid-late May – August to determine the presence/absence of a bat roost.
- This survey work was undertaken on 2nd May 2021.
- No bats were seen or heard emerging from the building.
- Given the lack of bat activity associated with the structure, the evening survey is considered sufficient to give confidence in a negative result (likely absence of a roost within the building).
- On the basis of the survey findings, there is a likely absence of bat roosts within the Thurnscoe Hotel building.
- The proposals to demolish the building will have no foreseen negative impact upon bats roosting in the area.
- Due to the fact it was not possible to enter the building, precautionary methods of work are proposed to reduce the risk of harm to itinerant bats to negligible.

Biodiversity Net Gain

- The existing Thurnscoe Hotel site comprises an area of hard standing and a building with no substantial green space and only occasional individuals of ruderal plant species.
- Although there is likely to be no significant net loss (that is, the sparse vegetation present is unlikely to be register on the biodiversity calculator), recommendations have been made to incorporate biodiversity enhancement within the site and the new structure.
- If adopted this will ensure a net gain in biodiversity.

1. Introduction

1.1 Application Site

1.1.1. This report details bat survey work at Thurnscoe Hotel, Houghton Road, Thurnscoe, Rotherham, S63 0JX. National grid reference SE 4546 0572.

1.1.2. Darwen Investments Ltd commissioned Verity Webster Ltd to undertake the bat survey work to inform the planning application.

1.2 Objectives

1.2.1 The objectives of the Presence/Absence surveys are to determine:

- Whether bats are currently using the building and how bats are utilising the surrounding site.
- The potential status of any roost present.
- The potential impacts of the proposals on any potential roost present or on bats using the site.
- The requirement for further survey work and/or mitigation.
- How any impacts might be avoided, mitigated and/or ameliorated, including advice on European Protected Species Mitigation (EPSM) application if required.

1.2.2 The format and content of this report follow that required by the European Protected Species Mitigation (EPSM) licence application where appropriate.

1.3 Proposals

1.3.1 The proposals comprise the demolition of the existing building and construction of a new petrol station and jet washes including hot food takeaway.

1.4 Ecologist

1.4.1 The Preliminary Roost Assessment was undertaken by Verity Webster. Verity is a licensed bat surveyor (Bat Survey Class Licence WML CL18 (Class 2) Registration number: 2015-13858-CLS-CLS).

1.4.2 Verity has worked as an ecological consultant since 2007. She has undertaken preliminary bat assessments and further bat emergence/activity surveys for a large variety of projects and schemes, producing the required impact assessment and subsequent mitigation schemes/method statements when necessary.

2. Site Location

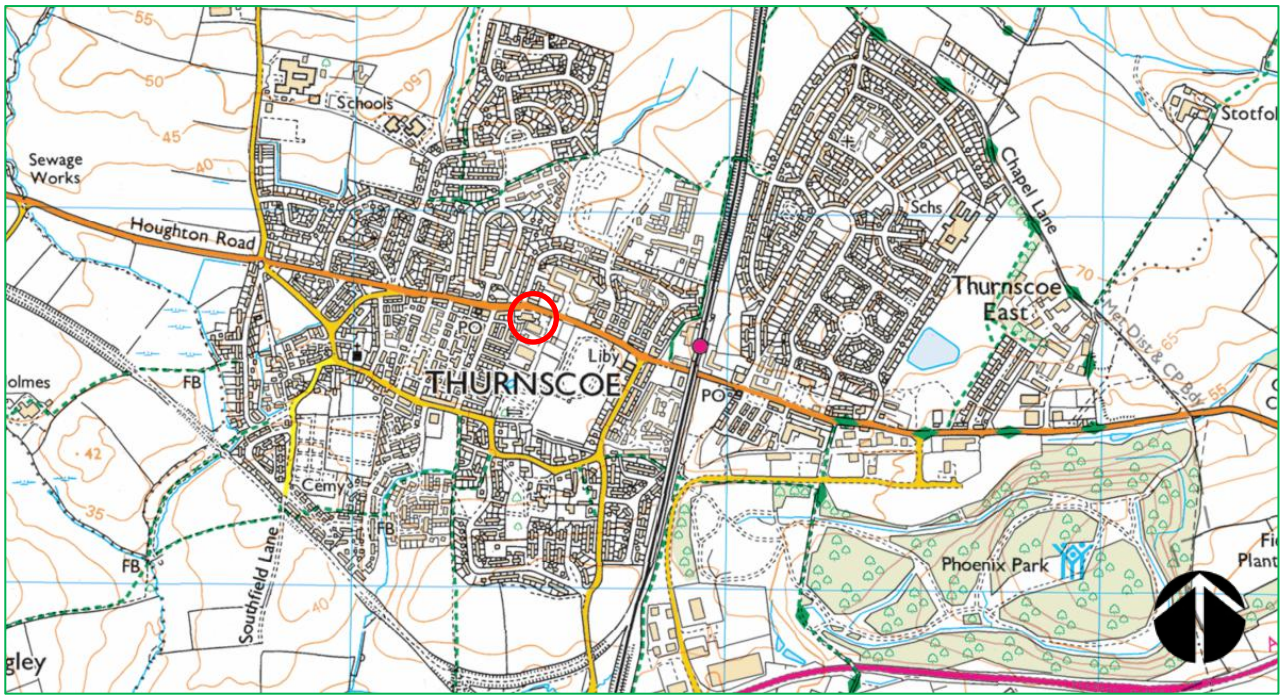
2.0.1 The survey site lies in a built-up residential location in Thurnscoe, Rotherham.

2.0.2 Open countryside lies beyond the town, approximately 800m to the south, west and north. This open land comprises arable and grazing land divided by a matrix of tree lines and hedgerows. There are scattered waterbodies and small, scattered plots of woodland.

2.0.3 Thurnscoe East extends to the east; a built-up area situated beyond the railway line which divides the two residential areas. Phoenix Park, an area of grassland with trees lies approximately 700m to the southeast of the survey site.

2.0.4 Overall, the site is considered to be in a location with moderate suitability for bats.

Figure 1: Ordnance survey map showing the location of the proposed development site.



Ordnance survey 1:25000

Key

Survey site

Figure 2: Aerial image showing the proposed development site and immediate surroundings

From BING Maps

250m

Key

Survey site

3. The Survey Site

3.0.1 The survey site comprises a former hotel and restaurant set within hard standing. The site is located to the south of Houghton Road (B6411). There is no soft landscape. The only vegetation present comprises scattered ruderal species colonising the accumulated soil in crevices around the site boundaries. Species include nipplewort (*Lapsanna communis*) and willowherb sp. (*Epilobium* sp.).

The Building

3.0.2 The building is a 'C' shaped structure constructed of brick with a hipped, pitched roof supporting slates. The building is two-storey with UVPC windows. There is a stone cornice around the top of the wall. There are single-storey extensions on the east and west elevations, both with flat roofs.

3.0.3 The windows and doors are boarded.

3.0.4 A recent fire in the building has damaged the interior and the roof making it unsafe to enter. Much of the roof on the south side of the building has fallen in.

3.0.5 Photographs of the interior show that the roof was lined.

The north and west elevation of the building

The east elevation of the building

Showing the interior of the building

Showing the interior of the building

4. Legislation

Full details of relevant legislation and planning policy can be found in Appendix A.

4.1 UK and EU Legislation

4.1.1 Key legislation regarding the protection of bats:

- Wildlife and Countryside Act 1981 (as amended)
- The Countryside and Rights of Way Act (CROW), 2000
- The Natural Environment and Rural Communities Act (NERC, 2006)
- Conservation of Habitats and Species and Planning (Various Amendments) (England and Wales) Regulations (2018)

4.1.2 Under the Wildlife and Countryside Act 1981 (as amended) and the Conservation of Habitats and Species and Planning Regulations 2018,it is a criminal offence to:

- Deliberately capture, injure or kill a bat
- Intentionally or recklessly disturb a bat in its roost or deliberately disturb a group of bats
- Damage or destroy a bat roosting place (even if bats are not occupying the roost at the time)
- Possess or advertise/sell/exchange a bat (dead or alive) or any part of a bat
- Intentionally or recklessly obstruct access to a bat roost.

4.2 Planning Policy and Legislation

4.2.1 Under the NERC Act 2006, planning authorities are obliged to make sure that they have all the information on the presence of protected species on site before they make a decision on the planning permission.

4.2.2 The National Planning Policy Framework (NPPF) encourages Local Planning Authorities to conserve and enhance biodiversity.

4.2.3 Under the NERC Act 2006, planning authorities are obliged to make sure that they have all the information on the presence of protected species on site before they make a decision on the planning permission.

4.2.4 The National Planning Policy Framework (NPPF) encourages Local Planning Authorities to conserve and enhance biodiversity.

Chapter 15, Para 170 of NPPF states: *"The planning system should contribute to and enhance the natural and local environment by:*

a) ***protecting and enhancing valued landscapes, sites of biodiversity*** *or geological value and soils….*

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***".

Para 171 states: "*Plans should: distinguish between the hierarchy of international, national and locally designated sites; allocate land with the least environmental or amenity value, where consistent with other policies in this Framework; take a strategic approach to maintaining and enhancing networks of habitats and green infrastructure; and plan for the enhancement of natural capital at a catchment or landscape scale across local authority boundaries."*

Para 174 identifies that plans should do the following to protect and enhance biodiversity and geodiversity:

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; wildlife corridors and stepping stones that connect them; and areas identified by national and local partnerships for habitat management, enhancement, restoration or creation; and***

b) ***Promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species; and identify and peruse opportunities for securing measurable net gains for biodiversity.***"

4.2.5 Para 175 states that "*when determining planning applications, local authorities should apply the following principles:*

a) ***if significant harm to biodiversity from a development cannot be avoided…,adequately mitigated, or, as a last resort compensated for, then planning permission should be refused***''

4.2.6 The local planning authority has a responsibility, therefore, to obtain all information regarding the potential for protected species on a site prior to making a decision about a proposal.

5. Survey Methodology

5.0.1 The Preliminary Roost Assessment was undertaken in accordance with currently accepted guidance: Collins, J. (ed.) (2016) Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd Edn). The Bat Conservation Trust, London.

5.1 Desk Study

5.1.1 Data sources used to establish background information about bats and their likely presence in the locality:

- Magic Map, Natural England (2016)
- Bing Maps (2017)
- Biological records data of bats from Barnsley Biological Records Centre (2021)

5.1.2 Satellite mapping, Ordnance survey, road map, habitat and designated site data from Magic Map (Natural England, 2014) was used to assess the value of the surrounding habitat for bats in the area at a landscape scale (5km), including any potentially important habitat corridors (linear habitat features), feeding grounds or potential roost opportunities, such as large expanses of woodland. The features and habitats immediately surrounding the site (local area) were also assessed at a finer scale as these influence the likely presence of bats within the survey site.

5.1.3 The records data from Barnsley Records Centre includes records of bats and bat roosts within 1.5km of the survey site. A small area of the radius (approximately 400m to the northwest) was not encompassed within the search as it falls outside the Barnsley Metropolitan Borough Council. See Appendix B. However, considering all records were available within 1km, and due to the low number of records, the data obtained, along with the current survey data, is considered sufficient to inform this assessment.

5.2 Preliminary Roost Assessment

5.2.1 An internal and external inspection of the building was undertaken during daylight to determine the suitability for bats and establish, if possible, whether bats are using the building or have been in the

past.

5.2.2 All accessible parts of the buildings were inspected to look for bats and signs of the presence of bats, including:

- Droppings.
- Feeding remains including moth and butterfly wings.
- Staining from urine or oils near crevices or holes or on timber (such as roof beams), walls, chimney breasts etc.
- Scratch marks on walls and timber.
- Squeaking or chattering calls.

5.2.3 The systematic search inside the building where access was possible included inspection of beams, floors, surfaces of stored materials, loose roof insulation or felt covering, junctions between roof timbers and timbers and the walls, and crevices within brickwork. Potential access into the building was also inspected by searching for holes in insulation and any light penetration into the interior from the outside.

5.2.4 The assessment outside the buildings included inspection of all walls, windows, window sills, fascias, soffits, eaves and tiles, including a search for any crevices under tiles, under lifted lead flashing or lifted roofing felt, missing mortar, gaps in the ridge or gable end of the roofs, crevices in brickwork or under flaking paintwork or render, gaps in cladding or hanging tiles and any other potential bat roost opportunities.

5.2.5 Equipment: During the survey, a strong torch with directional beam was used to inspect the buildings.

5.2.6 As a result of the preliminary roost assessment, the structure on site was characterised as having 'negligible', 'low', 'medium' or 'high' suitability for bats. It may also be possible to confirm the presence of a roost.

5.2.7 Buildings or structures typically characterised as having:

- **Negligible** suitability for bats will lack features with any potential to support roosting bats. Modern or newly-built well-sealed structures may fall into this category. Structures that are metal clad with metal internal beams might have negligible potential if there are no favourable roosting spaces. Structures may also be unfavourable due to the level of disrepair, being subject to poor weather conditions.

- **Low** suitability for bats will have sub-optimal roost features with limited potential for roosting bats. Features may be used by single bats opportunistically, but do not provide enough space, shelter, protection, appropriate conditions and/or suitable surrounding habitat to be used on a regular basis by large numbers of bats.

- **Medium** suitability for bats may have few features with potential for bats, that provide enough space, shelter, protection and other suitable conditions, or several features with limited potential for bats. It may also be that a potentially suitable structure is situated in an area with habitat that has an only low potential for foraging and commuting bats.

- **High** suitability for bats will support at least one or more features that provide opportunities for roosting bats such that they might be used regularly, for longer periods by larger numbers of bats. These may be external features, such as lifted weatherboard

or crevices in brick or stonework, or internal, such as large loft spaces with potential access. Barns, with open doorways and windows with wooden rafters and beams, may fall into this category. If a structure is close to good habitats, such as a waterway, marshland or woodland, this also increases the potential for roosting bats.

- **Confirmed** roost presence when it is evident as a result of signs from inspection, such as droppings, or sight of bats, that a roost exists within the building. It is not always possible to ascertain the presence or absence of a roost even if some signs, such as droppings or feeding remains are found.

5.3 Bat Emergence / Re-entry Surveys and Assessment of Activity

7.2.1 Following the Preliminary Roost Assessment undertaken in March 2021 the structure on site was considered to have **low suitability for bats**. This is because the building is in a poor state of repair, but is situated in a built-up area, which reduces the likelihood of bats. There are damaged, missing and lifted slates across the roof on all elevations, and gaps between the slates and the lining, between slates and between slates and the beams have potential to support roosting crevice-dwelling species, such as pipistrelle bats.

5.3.1 Table 7.1 of Collins, J. (ed.) (2016). Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd Edn). The Bat Conservation Trust, London:

Table 7.3 Recommended minimum number of survey visits for presence/absence survey to give confidence in a negative result for structures.

Low roost suitability	Moderate roost suitability	High roost suitability
One survey visit. One dusk emergence or dawn re-entry survey.	Two separate survey visits. One dusk emergence and a separate dawn re-entry survey.	Three separate survey visits. At least one dusk emergence and a separate dawn re-entry survey. The third visit could be either dusk or dawn.

5.3.2 In order to determine the presence or absence of a bat roost, further survey work for bats was undertaken.

5.3.3 A single evening emergence survey was considered sufficient to give confidence in a negative result (absence of a roost). Evening surveys were chosen over dawn surveys as they provide greater reliability in detecting a roost. The bat emergence surveys were undertaken from 15minutes before sunset to 1.5 hours after sunset.

5.3.4 During the evening emergence survey three surveyors were positioned around the building such that the elevations were easily observed. The skyline was such that it was clear to see bats against the sky if they were to emerge.

5.3.5 Batbox Duet detectors and Echo Meter Touch detectors were used so that any calls heard that could not be identified were recorded for later analysis.

5.3.6 The time, activity (emergence, foraging, commuting) and species of bats (where possible) were recorded when observed. Notes were made of the activity of bats elsewhere on site as well as around the building. The number of bat passes were recorded to provide an indication of bat activity

level within the site.

6. Survey Limitations

6.0.1 The preliminary roost assessment survey work was undertaken in early-March. At this time of year bats are in a transitionary period between winter and summer roost sites. The structure on site has most potential as a summer roost site and is unsuitable for winter roosting. Evidence of bats associated with external features of a building are unlikely to be present due to the likelihood of being washed away by the weather. Assessment of suitability of a building for bats is possible, however. Evidence of bats utilising the buildings internally would be expected to be present if bats were using the structures in the summer months. However, given the recent fire damage, this is also unlikely to be present.

6.0.2 It was not possible to enter the building for health and safety reasons. Nevertheless, the survey work undertaken is considered sufficient to make an assessment of the impact of the proposed works.

6.0.3 The evening emergence survey was undertaken in early May, at a time of year when bats may be in transitional roosts or may be adopting summer roost sites.

7. Findings: Preliminary Roost Assessment

7.1 Suitability of the Locality for Bats

7.1.1 At a landscape level, the area surrounding the survey site is moderately good for bats. Refer to Figure 2.

7.1.2 Open landscape lies within close proximity to the survey site. The good mix of habitat, including grassland, tree lines, hedgerows and waterbodies will support a variety of bat species including widespread species such as common and soprano pipistrelle bat (*Pipistrellus pipistrellus* and *Pipistrellus pygmaeus* respectively). Species that favour open habitats such as Leisler's (*Nyctalus leisleri*) and noctule bat (*Nyctalus noctula*) would also be expected. However, given there are only small, scattered plots of woodland, species that favour wooded habitat, such as Natterer's bat (*Myotis* natterri), whiskered bat (*Myotis mystacinus*) and Brandt's bat (*Myotis brandtii*) are less likely to be abundant in the area.

7.1.3 The linear features (hedgerows, tree lines and waterways) provide good habitat links that are likely utilised by commuting bats and will facilitate the movement of bats through the landscape.

The Conservation Status of Bats in the Area

7.1.4 The conservation status of bats in the area is shown in Table 1.

***Table 1**: The Conservation Status of Bats in the area at a Local, County and Regional Level*

Species	***Local***	***County***	***Regional***
Common pipistrelle	*Likely to be common in the area. There are records of this species in the area (10km).*	*Common and widespread Frequently recorded.*	*Common and widespread Frequently recorded across the Northwest*
Soprano pipistrelle	*Likely to be present due to the presence of riparian habitat.*	*Widespread. Frequently recorded.*	*Common and widespread Frequently recorded across the Northwest*
Nathusius's pipistrelle	*Likely to be rare in the area.*	*Infrequently recorded, but this may be due to low survey effort. Not yet recorded breeding in the county.*	*Rare across the northwest. A migratory species.*
Brown long-eared bat	*Likely to be in the area. There is a recent record of this species within 10km of the site.*	*Common and widespread Frequently recorded.*	*Common and widespread Frequently recorded across the Northwest.*
Natterer's bat	*Likely to be in the area, although this species favours woodland habitat, which is infrequent in the landscape.*	*Scattered distribution in South Yorkshire.*	*Widespread and scattered across the Northwest.*

Noctule	*Present*	*Widespread and frequently recorded.*	*Common and widespread. Frequently recorded in the Northwest.*
Whiskered bat	*Present but likely rare*	*Present*	*Widespread.*
Brandt's bat	*Rare / absent*	*Present*	*Widespread.*
Alcathoe's bat	*Unknown*	*Unknown*	*Widespread. Likely under-recorded.*
Daubenton's	*Presence is likely due to the riparian habitat present.*	*Widespread, frequently recorded near water.*	*Widespread*
Serotine	*Rare / absent*	*Unknown*	*Restricted to south and southwest Britain, rarely recorded in the northwest.*
Leislers	*Rare*	*Unknown*	*Rare, but widespread in Britain. Present in the northwest.*
Barbastelle	*Unlikely to be present in the area. This species is a woodland-specialist and there is a lack of this habitat present.*	*Unknown*	*Present south of a line from North Wales to the Wash.*

Biological Records Data

7.1.5 Records data from Barnsley Biological Record Centre (Sheffield County Council) show that three bat species have been recorded within 1-1.5km of the survey site:

- Whiskered bat (*Myotis mystacinus*)
- Noctule bat (*Nyctalus noctule*)
- Common pipistrelle (*Pipistrellus pipistrellus*)

7.1.6 The records include data for six common pipistrelle roost located in Thurnscoe, the closest of which is approximately 300m west of the survey site. The other roosts are located approximately 400m southeast, 550m to the northwest, 1.4km west of the survey site.

7.1.7 The poor diversity of bat species in the locality is likely partially a reflection of the nature of the immediately built-up area and lack of suitable foraging areas or commuting routes (such as tree lines or waterways) and partly a reflection of the low number of bat recorders in the area.

7.1.8 Although there is countryside in relatively close proximity and the wider landscape (over 1.5km) is diverse, the landscape immediately surrounding Thurnscoe (within 1.5km) is composed largely of managed arable land.

7.3 Preliminary Roost Assessment

7.3.1 The building inspection and bat roost assessment was undertaken in daylight on 5th March 2021.

The Building

7.3.2 **The building was considered to have low suitability for bats.**

7.3.3 Externally there are features within the roof structure that might provide suitable roosting space for bats.

7.3.4 There are damaged, missing and lifted slates across the roof on all elevations, and gaps between the slates and the lining, between slates and between slates and the beams have potential to support roosting crevice-dwelling species, such as pipistrelle bats.

7.3.5 Internally, crevices between exposed boarding and peeling wall and roof materials may also provide suitable crevice-roost space.

7.3.6 However, the burned nature of the materials may deter bats.

7.3.7 The body of the building does not provide opportunities for bats in which to roost; the brickwork is intact and in good condition.

Showing lifted and missing slates on the west elevation of the building

8. Findings: Presence / Absence Surveys and Activity Assessment

8.1 Survey 1: Evening Emergence on 2nd May 2021

Surveyors: Verity Webster Bsc MSc CEcol MCIEEM (bat licence Class 2), Prudence Webster (two seasons bat survey experience and Mark Firth (two seasons bat survey experience).

Weather: 7°c at sunset – 6.5 °c. 90%-50% cloud cover across the survey period, dry, humidity 59%, still.

Sunset: 20:38

Time on site: 20:15 – 22:10

Findings

8.1.1 One of bat was recorded on site: common pipistrelle (*Pipistrellus pipistrellus*).

8.1.2 No bats were seen emerging from the building.

8.1.3 Bat activity within site during the survey was very low. Bats were recorded occasionally passing to the rear of the building (south) over gardens.

8.1.4 There was no activity recorded at the front (north) of the building. This is likely due to the noise of the road and the street lighting.

8.1.5 The first bat was recorded at 21:03, 41 minutes after sunset. This indicates that the bats had emerged from a roost likely some distance from the survey site. This late 'arrival' after sunset may also be an effect of the lighting in the residential area.

Table 1: Emergence Survey 1 data. *Pip 45 = Common pipistrelle. .*

Time	Surveyor	Species	No. Passes	Activity/ notes
21:03	C	Pip 45	1	Brief pass commuting east to west
21:20	C	Pip 45	1	Brief pass – not seen
21:23	C	Pip 45	1	Brief pass – not seen

Figure 3: The positions of surveyors during emergence survey

KEY

A Surveyor positions

9. Appraisal and Impact Assessment

9.1 Appraisal

9.1.1 A single species of bat was recorded within the survey site: common pipistrelle. Bat activity within the site was very low.

9.1.2 The bat activity recorded, which was minimal, was recorded to the south of the site.

9.1.3 Bats were first recorded 41 minutes after sunset, which suggests the bats were commuting past the site from a roost elsewhere.

9.1.4 The survey site itself does not provide a foraging area.

9.1.5 No bats were recorded emerging from the building and no bat activity was recorded in association with the building.

9.1.6 The survey work is considered sufficient to give confidence in a negative result (likely absence of a roost within the building).

9.2 Assessment of Impacts

9.2.1 The survey work indicates the likely absence of a bat roost within the building at Thurnscoe Hotel, Rotherham. The proposals to demolish the building will have no foreseen negative impact upon bats roosting in the area.

9.2.2 However, given that it was not possible to access the interior of the building to inspect for the presence of droppings, or any other indications of occasional use, it is proposed that precautionary methods of work are employed during demolition to minimise the risk of harm to itinerant bats.

9.3 Biodiversity Net Gain

9.3.1 As existing, the survey site does not support any green space. There are small individual ruderal plant species, but these are not substantial enough in number to be considered an area of habitat that might be of benefit to wildlife.

9.3.2 The value of the site for biodiversity is therefore restricted to that of roosting bats and, potentially (although no evidence was found) of nesting birds.

9.3.3 Given that there is no evidence of a bat roost on site, demolition of the building will result in 'no net loss' of biodiversity.

9.3.4 However, the proposals provide some scope to maintain and improve opportunities for biodiversity

including roosting bats and nesting birds and recommendations for this have been made.

9.3.5 If these recommendations are adopted, then there will likely be a net gain of biodiversity value on site.

10. Conclusion and Recommendations

Bat Survey

10.0.1 Following a Preliminary Roost Assessment, a single evening emergence survey was undertaken at Thurnscoe Hotel, Thurnscoe, Rotherham to determine the suitability of the buildings for roosting bats and to determine the likely impact of the proposed demolition and rebuild on bats.

10.0.2 Bat activity at the site was low. No bats were seen emerging from the building and there was no bat activity associated with the building.

10.0.3 Further survey work will be required to determine the presence or absence of a roost in the building.

10.0.4 Overall, the survey work is considered sufficient to give confidence in a negative result (likely absence of a roost within the building).

10.0.5 However, due to the fact that it is not possible to enter the structure and check for droppings or signs of occasional occupancy, the potential presence of itinerant bats cannot be entirely ruled out.

10.0.6 In order to minimise the risk of harm to bats, the following precautionary methods of work are recommended:

- Works to demolish the roof structure should be undertaken initially by hand with care, including removal of the slates and lining.
- Tiles and other roof materials must be checked for the presence of bats prior to being discarded.
- If bats are found during works, works must stop and an ecologist must be contacted for advice.

Biodiversity Enhancement

9.0.1 In order to enhance the site for roosting bats and nesting birds following works, the following is proposed:

- Two bat boxes are integrated into the walls of the new structure to the rear (south), so they are not regularly subject to noise or other disturbance. Examples of bat boxes available are detailed below.

- Two bird boxes are integrated into the walls of the new structure to the rear (south), or attached externally to the structure. Examples of bird boxes available are detailed below.

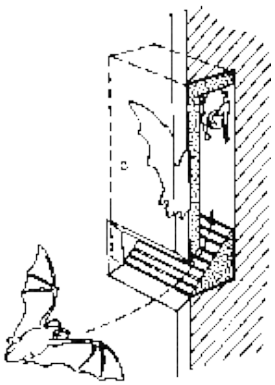
- It is recommended that a hedgerow is planted along the rear (southern) boundary of the site and to the east and west if possible. The hedgerow should be composed of native plant species that produce flowers and berries and form a dense screen. This will provide opportunities for nesting birds such a sparrow, which are on the red list of Birds of Conservation Concern.

  Hedgerow species could include hawthorn (*Crataegus monogyna*) at a high percentage, which provides cover, with a lower percentage privet (*Ligustrum vulgare*) and guelder rose (*Viburnum opulus*).

Bat Boxes

1FE Schwegler bat access panel

This box is durable and does not require cleaning.



Ibstock Enclosed Bat Box 'C'

This box is durable and does not require cleaning.

Beaumaris Woodstone Bat Box

This box is durable and does not require cleaning.

All bat boxes are available from NHBS Ltd

Bird Boxes

1SP Schwegler Sparrow Terrace

These boxes are constructed of woodcrete and are very durable.

This box can be integrated into the walls of the new building. The front can be removed to facilitate cleaning in winter.

All bat boxes are available from NHBS Ltd

1MR Schwegler Avianex

These boxes are constructed of woodcrete and are very durable.

These boxes would need to be fixed externally to the building walls.

These boxes would require cleaning each winter to remove old nests and encourage nesting the following spring.

11. References

- BING maps (2016) http://www.bing.com/mapspreview
- Collins, J. (ed.) (2016) Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd edn). The Bat Conservation Trust, London. ISBN-13 978-1-872745-96-1
- Google maps (Accessed 2019) https://www.google.co.uk/maps
- MAGIC Map (Accessed 2019) http://www.magic.gov.uk/MagicMap.aspx. DEFRA.

• APPENDIX A: Wildlife Legislation and Planning Policy

1.0 UK AND EU LEGISLATION

KEY LEGISLATION

In the UK, the following legislation relates to wildlife and habitats:

- Wildlife and Countryside Act 1981 (as amended)
- The Countryside and Rights of Way Act (CROW), 2000
- The Badger Act 1992
- The Natural Environment and Rural Communities Act (NERC, 2006)
- Conservation of Habitats and Species and Plannning (Various Amendments) (England and Wales) Regulations (2018)
- The Hedgerow Regulations (1997)

1.1 WILDLIFE AND COUNTRYSIDE ACT 1981 (AS AMENDED)

1.1.1 The Wildlife and Countryside Act 1981 consolidates and amends existing national legislation to implement the Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention) and Council Directive 79/409/EEC on the conservation of wild birds (Birds Directive) in Great Britain (NB Council Directive 79/409/EEC has now been replaced by Directive 2009/147/EC of the European Parliament and of the Council of 30 November 2009 on the conservation of wild birds (codified version)).

BIRDS

1.1.2 **The Act makes it an offence (with exception to species listed in Schedule 2) to intentionally:**

- kill, injure, or take any wild bird,
- take, damage or destroy the nest of any wild bird while that nest is in use or being built (also [take, damage or destroy the nest of a wild bird included in Schedule ZA1] under the Natural Environment and Rural Communities Act 2006), or
- take or destroy an egg of any wild bird.

Schedule 1 birds

1.1.3 Special penalties are available for offences related to birds listed on Schedule 1, for which there are additional offences of disturbing these birds at their nests, or their dependent young, for example Barn Owl and Red Kite.

Areas of Special Protection for Birds

1.1.4 The Secretary of State may also designate Areas of Special Protection (subject to exceptions) to provide further protection to birds.

Other offences

1.1.5 The Act also prohibits certain methods of killing, injuring, or taking birds, restricts the sale and possession of captive bred birds, and sets standards for keeping birds in captivity.

OTHER ANIMALS

1.1.6 The Act makes it an offence (subject to exceptions) to intentionally ([or recklessly] - only under the Nature Conservation (Scotland) Act 2004) kill, injure or take any wild animal listed on Schedule 5, and prohibits interference with places used for shelter or protection, or intentionally disturbing animals occupying such places. The Act also prohibits certain methods of killing, injuring, or taking wild animals.

1.1.7 For animals listed in Schedule 5 of the act, it is an offence under:

- Section 9(1) to kill, injure or take the animal by any method
- Section 9(2) to possess or control a dead or live animal (or part of derivative).
- Section 9(4)(a) to cause damage to, destruction of, obstruction of access to any structure or place used by a scheduled animal for shelter or protection.
- Section 9(4)(b) to disturb any animal on the schedule occupying such as structure or place.
- Section 9(4)(c) to obstruct access to any structure or place which any such animal uses for shelter or protection.

- Section 9(5)(a) to sell, offer or expose for sale, possess or transport for the purpose of sale, any live or dead wild animal, or part or derivative of an animal included in Schedule 5.

- Section 9(5)(b) to publish or cause to be published any advertisement likely to be understood as conveying that he buys or sells, or intends to buy or sell, any of those things.

Species that receive FULL PROTECTION under the act:

- All UK bats
- Otter
- Water vole
- Dormouse
- Red squirrel
- Wildcat
- Reptiles – Smooth snake and sand lizard
- Amphibians – Great crested newt, Natterjack toad, Pool frog
- Invertebrates – some including, but not restricted to Swallowtail butterfly, Marsh fritillary butterfly, Large copper butterfly, Heath fritillary butterfly, Large blue butterfly, Barberry carpet moth, Rainbow leaf beetle, Violet click beetle, Medicinal leech.

Species that protected from intentional KILLING, INJURY and SALE only:

- Reptiles – widespread species; Common lizard, Slow-worm, Grass snake and Adder.

Species protected from TAKING and SALE only:

- Atlantic stream (white-clawed) crayfish

Species protected from SALE only:

- Common toad
- Common frog
- Palmate newt
- Smooth newt
- Invertebrates – Some including 18 butterflies such as Chalk hill blue butterfly, Adonis blue butterfly, Large tortoiseshell butterfly.

Vascular Plants, Bryophytes, Lichens and Fungi (PLANTS)

1.1.8 For any vascular plant, bryophyte, lichen or fungi listed in Schedule 8 of the Act, it makes it an offence under:

- Section 13(1)(a) to Intentionally pick, uproot or destroy plants in Schedule 8.
- Section 13(1)(b) to undertake unauthorised intentional uprooting of any wild plant not included in Schedule 8.
- Section 13(2)(a) to sell, offer for sale, posess or transport for the purpose of sale any plant (live or dead, part or derivatives) on Schedule 8.
- Section 13(2)(b) to publish or causes to be published any advertisement likely to be understood as conveying that he buys or sells, or intends to buy or sell, any of those things.

1.1.9 Species with protection under Schedule 8 include, but are not restricted to:

1.1.10 Bluebell, Wood calamint, Rock chinquefoil, Early spider orchid, Spring gentian, Stinking goosefoot, Small hare's-ear, Alpine copper moss (*Mielichoferia mielichoferi),* Goblin lights lichen (*Catolechia wahlenbergii*).

Non-Native Species

1.1.11 Species listed in Schedule 9 of the Act are non-native species, which the establishment of in the wild may be detrimental to native wildlife. Species listed in Schedule 9 include Japanese knotweed, Himalayan Balsam and Giant hogweed.

1.1.12 For species listed in Schedule 9 of the act it is an offence:

- Under Section 14(1) if any person releases or allows to escape into the wild any animal which—

  (a) is of a kind which is not ordinarily resident in and is not a regular visitor to Great Britain in a wild state; or

  (b) is included in Part I of Schedule 9,

- Under Section 14ZA (1) to sell, offers or exposes for sale, or has in his possession or transports for the purposes of sale an animal or plant to which this section 14 applies, or anything from which such an animal or plant can be reproduced or propagated.
- Under Section 14ZA (2) to publish or cause to be published any advertisement likely to be understood as conveying that he buys or sells, or intends to buy or sell an animal or plant to which this section applies, or anything from which such an animal or plant can be reproduced or propagated.

1.1.13 Section14ZB gives the Secretary of State the power to issue codes of practice, or approve a code of practice issued by others, relating to non-native animal and plant species. It is intended that the codes will be used to provide recommendations, advice and information on how to stop the damage caused by non-native animals and plants.

1.2 SITES OF SPECIAL SCIENTIFIC INTEREST (SSSIs) AND OTHER PROTECTED AREAS

1.2.1 Sections 28 to 33 of Part 2 of the Wildlife and Countryside Act detail the law regarding SSSIs.. Sections 34 to 53 deal with other protected areas within Great Britain.

- The Act provides for the notification and confirmation of Sites of Special Scientific Interest (SSSIs) – these sites are identified for their flora, fauna, geological or physiographical features – by the country conservation bodies in England (Natural England) and Wales (Natural Resources Wales).
- The Act also contains measures for the protection and management of SSSIs.
- The Act provides for the making of Limestone Pavement Orders, which prohibit the disturbance and removal of limestone from such designated areas
- The Act provides means for the designation of Marine Nature Reserves.
- The Act prohibits the undertaking of agricultural or forestry operations on land within National Parks which has been either moor or heath for 20 years, without consent from the relevant planning authority.

1.3 THE COUNTRYSIDE AND RIGHTS OF WAY (CROW) ACT 2000

1.3.1 The Countryside and Rights of Way Act 2000 strengthened the Wildlife and Countryside Act 1981 in the following ways:

Schedule 12

1.3.2 Schedule 12 of the Act amends the species provisions of the Wildlife and Countryside Act 1981 and strengthens the legal protection of species by:

- Providing provisions to make certain offences 'arrestable'
- Changing the term ‘intentional’ to ‘reckless’ with regard to disturbance offences, such that ignorance of the law is no longer a defence.
- Conferring greater powers to police and wildlife inspectors for entering premises and obtaining wildlife tissue samples for DNA analysis, and;
- Enabling heavier penalties on conviction of wildlife offences.

Schedule 9

1.3.3 Schedule 9 of the Act amends SSSI provisions of the Wildlife and Countryside Act 1981, including provision to change SSSIs and providing increased powers for their protection and management, placement of a duty on public bodies to further the conservation and enhancement of SSSIs and increases in penalties on convictions where the provisions are breached.

1.4 THE BADGER ACT 1992

1.4.1 Under the Badger Act 1992, it is an offence to:

- Section 1 – Take, injure or kill a badger, or attempt to do so
- Section 2 – Cruelly ill-treat a badger, inclusive of digging for a badger
- Section 3 – Interfere with a badger sett. A person is guilty of an offence if, except as permitted by or under this Act, he interferes with a badger sett by doing any of the following things—

  (a)damaging a badger sett or any part of it;

(b)destroying a badger sett;

(c)obstructing access to, or any entrance of, a badger sett;

(d)causing a dog to enter a badger sett; or

(e)disturbing a badger when it is occupying a badger sett,

- Section 4 – To sell or possess a live badger.
- Section 5 – To mark or ring a badger unless under licence to do so.

1.5 THE HEDGEROWS REGULATIONS, 1997

1.5.1 The Hedgerows Regulations, 1997 ensure the protection from damage or desturction of 'important' hedgerows. Criterial within the regulations detemine the importance.

1.6 THE CONSERVATION OF HABITATS AND SPECIES AND PLANNING (VARIOUS AMENDMENTS) (ENGLAND AND WALES) REGULATIONS 2018

1.6.1 In addition to the Wildlife and Countryside Act 1984, certain species have additional protection under European Law.

1.6.2 The Conservation of Habitats and Species and Planning (Various Amendments) (England and Wales) Regulations 2018 (the Habitats Regs) consolidate the amendments made to the Conservation (Natural Habitats. &c.) Regulations 1994 in England and Wales. The Regulations transpose the Council Directive 92/43/EEC on the conservation of natural habitats and wild fauna and flora (EC Habitats Directive) into UK law.

1.6.3 The Habitats Regulations 2010 provide protection for 'European Protected Species' and protection and designation for 'European Protected Sites'.

Schedule 2: European Protected Species of Animals

- All UK bats
- Dormice
- Otter
- Large blue butterfly
- Wild cat
- Sand lizard
- Smooth snake
- Great crested newt
- Natterjack toad
- Fishers estuarine moth
- Lesser whirlpool ram'- horn snail
- Sturgeon
- Marine turtles
- All dolphins, porpoises and whales.

1.6.4 For species listed in Schedule 2, Under Part 3 Regulation 41(1) it is an offence to

(a) deliberately capture, injure or kill any wild animal of a European protected species,

(b) deliberately disturb a wild animal of any such species,

(c) deliberately take or destroy the eggs of such an animal, or

(d) damage or destroy a breeding site or resting place of such an animal,

1.6.5 Under Part 3 Regulation 41 (2) For the purposes of paragraph (1)(b), disturbance of animals includes in particular any disturbance which is likely—

(a) to impair their ability—

(i) to survive, to breed or reproduce, or to rear or nurture their young, or

(ii)i n the case of animals of a hibernating or migratory species, to hibernate or migrate; or

(b) to affect significantly the local distribution or abundance of the species to which they belong.

Under Part 3 Regulation 41.(3) It is an offence for any person—

(a)to be in possession of, or to control,

(b) to transport,

(c) to sell or exchange, or

(d) to offer for sale or exchange any animal in Schedule 2.

Schedule 5: European Protected Species of Plants

- Shore dock
- Killarney Fern
- Early Gentian
- Lady's-slipper
- Creeping marshwort
- Slender naiad
- Fen orchid
- Floating-leaved water plantain
- Yellow-marsh saxifrage.

1.6.6 For species listed in Schedule 2, Under Part 3 Regulation 45(1) It is an offence deliberately to pick, collect, cut, uproot or destroy a wild plant of a European protected species.

1.6.7 Under Part 3 Regulation 45(1) (2) It is an offence for any person

(a) to be in possession of, or to control,

(b) to transport,

(c) to sell or exchange, or

(d) to offer for sale or exchange any plant in Schedule 5

European Designated Sites

1.6.8 These include:

- Special Protection Areas – SPAs are classified in accordance with Article 4 of the EC Birds Directive for rare and vulnerable birds (as listed on Annex I of the Directive), and for regularly occurring migratory species
- Special Areas of Conservation – SACs are classified in accordance with Article 3 of the EC Habitats Directive. SACs are designated to establish a European network of important high-quality conservation sites that will make a significant contribution to conserving the 189 habitat types and 788 species identified in Annexes I and II of the Directive (as amended).

1.6.9 Natura 2000 is the name of the European Union-wide network of nature conservation sites established under the EC Habitats and Birds Directives. This network will comprise Special Areas of Conservation (SACs) and Special Protection Areas (SPAs). Marine Natura 2000 sites contribute to our ecologically coherent network of marine protected areas.

1.7 NATURAL ENVIRONMENT AND RURAL COMMUNITIES (NERC) ACT 2006

Planning Authorities: A Duty to Conserve Biodiversity

1.7.1 Under this legislation, planning authorities are obliged to make sure that they have all the information on the presence of protected species on site *before* they make a decision on the planning permission.

1.7.2 Part 2, Section 40 confers on the planning authorities a duty to conserve biodiversity and states:

''*Every public authority must, in exercising its functions, have regard, so far as is consistent with the proper exercise of those functions, to the purpose of biodiversity*''

Species of Principal Importance

1.7.3 Part 3, Section 41 requires the Secretary of State to ''*publish a list of the living organisms and types of habitat which in the Secretary of State's opinion are of* ***principle importance*** *for the purpose of conserving biodiversity*''.

1.7.4 This requirement lead to production of a list of species and habitats of Principal Importance, which should be a material consideration during the planning process.

1.8 DESIGNATED SITES OF CONSERVATION INTEREST

1.8.1 Sites of conservation interest can be designated on a statutory or non-statutory basis.

Statutory Sites

1.8.2 Statutory sites can be designated under UK legislation (the Widlife and Countryside Act 1981), European Law (the Habitats Regulations

2010) or International law (Ramsar Convention).

1.8.3 The designated sites are referred to under the relevant legislation above.

1.8.4 UK designated sites include Sites of Special Scientific Interest (SSSIs).

1.8.5 European designated sites include Special Areas of Conservation (SACs) and Special Protection Areas (SPAs).

1.8.6 Ramsar sites are wetlands of international importance designated under the Convention on Wetlands of International Importance, agreed in Ramsar, Iran, in 1971.

1.8.7 Local Nature Reserves (LNRs): Under the National Parks and Access to the Countryside Act 1949 LNRs may be declared by local authorities after consultation with the relevant statutory nature conservation agency. LNRs are declared and managed for nature conservation, and provide opportunities for research and education, or simply enjoying and having contact with nature.

1.8.8 National Nature Reserves (NNRs): are declared by the statutory country conservation agencies under the National Parks and Access to the Countryside Act 1949 and the Wildlife and Countryside Act 1981.

Non-Statutory Sites

1.8.9 Local authorities for any given area may designate certain areas as being of local conservation interest. The criteria for inclusion, and the level of protection provided, if any, may vary between areas. Most individual counties have a similar scheme, although they do vary.

1.8.10 These sites, which may be given various titles such as 'Listed Wildlife Sites' (LWS), 'Local Nature Conservation Sites' (LNCS), 'Sites of Importance for Nature Conservation' (SINCs), 'Biological Heritage Sites' (BHS) or 'Sites of Nature Conservation Importance' (SNCIs), together with statutory designations, are defined in local and structure plans under the Town and Country Planning system and are a material consideration when planning applications are being determined.

2.0 Plans and Policies

In the UK, the following plans and policies relate to wildlife and habitats:

- National Planing Policy Framework (NPPF, 2018)
- The Natural Environment White Paper 'The Natural Choice: Securing the Value of Nature'
- Biodiversity – The UK Action Plan (1994, and subsequent revisions)
- Local Biodiversity Action Plans where applicable
- Neighbourhood plans where applicable

NATIONAL PLANNING POLICY FRAMEWORK

2.1.1 In March 2012 the Government introduced the National Planning Policy Framework (NPPF). This was revised in 2018.

Chapter 15: Conserving and Enhancing the Natural Environment

Chapter 15, Para 170 of NPPF states: *"The planning system should contribute to and enhance the natural and local environment by:*

b) ***protecting and enhancing valued landscapes, sites of biodiversity*** *or geological value and soils….*

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

Para 171 states: "*Plans should: distinguish between the hierarchy of international, national and locally designated sites; allocate land with the least environmental or amenity value, where consistent with other policies in this Framework; take a strategic approach to maintaining and enhancing networks of habitats and green infrastructure; and plan for the enhancement of natural capital at a catchment or landscape scale across local authority boundaries."*

Para 174 identifies that plans should do the following to protect and enhance biodiversity and geodiversity:

c) "***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; wildlife corridors and stepping stones that connect them; and areas identified by national and local partnerships for habitat management, enhancement, restoration or creation; and***

d) ***Promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species; and identify and peruse opportunities for securing measurable net gains for biodiversity.*****"**

Para 175 states that "*when determining planning applications, local authorities should apply the following principles:*

b) ***if significant harm to biodiversity from a development cannot be avoided…,adequately mitigated, or, as a last resort compensated for, then planning permission should be refused'***

c) ***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;*

d) ***Development result in the loss of deterioration of irreplaceable habitats (such as ancient woodland or ancient or veteran trees) should be refused,*** *unless there are wholly exceptional reasons and a suitable compensatory strategy exists; and*

e) ***Development whos primary objective is to conserve or enhance biodiversity should be supported; while opportunities to incorporate biodiversity improvements in and around developments should be encouraged, especially where this can secure measurable net gains for biodiversity.***

Para 177 states "*the presumption in favour of sustainable development does not apply where development requiring appropriate assessment because of its potential impact on a habitats site is being planned or determined*."

2.2 ODPM CIRCULAR 06/2005: BIODIVERSITY AND GEOLOGICAL CONSERVATION

2.2.1 This document, to be read in conjunction with NPPF provides administrative guidance on the application of the law relating to planning and nature conservation as it applies in England. It makes it clear that it is the intention of the government that local authorities and developers consider protected species at the earliest possible stage in the planning process. Any planning application that is likely to affect protected species should come with details of the surveys which have been undertaken and should include, if necessary, recommendations for mitigation. Applications which do not include sufficient data should be rejected.

2.3 The Natural Environment White paper

2.3.1 The Natural Environment White Paper 'The Natural Choice: Securing the Value of Nature' states that 'We want to create a resilient and *coherient ecological network at national and local levels across England… To make this happen the government will put in place a clear institutional framework to support nature restoration. This means: establishing Local Nature Partnerships… Creating new Nature Improvement Areas (NIAs) and strengthening support though the planning system*.'

Biodiversity Offsetting

2.3.2 Biodiversity offsetting is described in the Natural Environment White Paper as 'conservation activities designed to deliver biodiversity benefits in compensation for losses in a measurable way. Good developments incorporate biodiversity considerations in their design but are still likely to result in some biodiversity loss. One way to compensate for this loss is by offsetting: the developer secures compensatory habitats elsewhere.'

2.3.3 The level of biodiversity offsetting required could be determine by means of assessments undertaken in accordance with the Department for Environment, Food and Rural Affairs (DEFRA) metric contained in Biodiversity Offsetting Pilots published in March 2012 as applied in the Defra offsetting pilot projects. Biodiversity offsetting could be delivered by developers in partnership with various partners including conservation organisations, local landowners and the borough council.

2.4 Biodiversity Action Plan (Local or UK)

UK Biodiversity Action Plan

2.4.1 Biodiversity: The UK Action Plan outlines how the UK plans to address biodiversity conservation in response to the Rio Convention on Biological Diversity (1992). In 2004 a UK Biodiversity Steering Group was formed and discussions resulted in the publication of 'Biodiveristy: the UK Steering Group Report – meeting the Rio challenge', which established a framework and criteria for identifying species and habitats of conservation concern. From this list, action plans for 391 species and 45 broad habitat types were prepared. In 2007, the UK List of Priority Species and Habitats was reviewd and the revised list identifies 1149 species and 65 habitats requiring conservation action.

2.4.2 These species are now listed in Section 41 of the NERC Act, 2006 and referred to as Habitats and Species of Principal Importance (HPI or SPI).

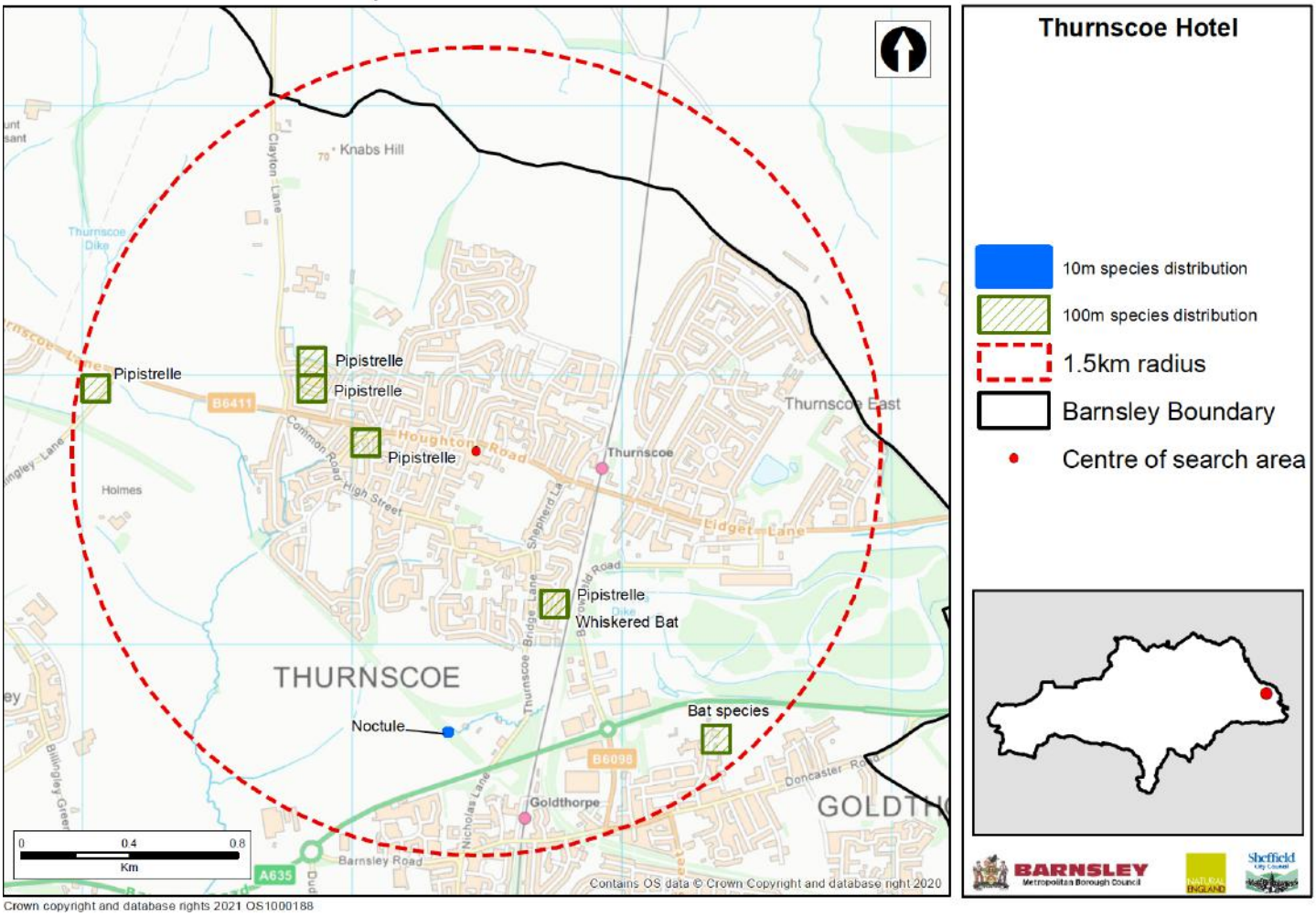
2.4.3 Outcome 3 of the Government's Biodiversity 2020 strategy (DEFRA, 2011) contains an ambition to ensure that "*By 2020, we will see an overall improvement in the status of our wildlife and will have prevented further human-induced extinctions of known threatened species*". Protecting and enhancing England's Species and Habitats of Principal Importance is key to delivering this outcome.

Local Biodiversity Action Plans

2.4.4 Local Biodiversity Action Plans (LBAPs) are a means for delivering UK Biodiversity Action Plan targets at a local level. LBAPs were launched in 1997 by a partnership of conservation groups, government agencies and local authorities. They set out a framework for nature conservation in the specified area. This framework includes priority species and habitats and sets targets to maintain and enhance their conservation status.

APPENDIX B: Biological Records Data (Bats) Map

Known Distribution of a Selected Species Within Search Area - *Bats*



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