

**BOYD COURT, DOWNSHIRE WAY,
BRACKNELL**

**PRELIMINARY BAT ROOST
ASSESSMENT**

A Report to: Baily Garner

Report No: RT-MME-153754-05

Date: February 2021



Triumph House, Birmingham Road, Allesley, Coventry CV5 9AZ

Tel: 01676 525880 Fax: 01676 521400

E-mail: admin@middlemarch-environmental.com Web: www.middlemarch-environmental.com

REPORT VERIFICATION AND DECLARATION OF COMPLIANCE

This study has been undertaken in accordance with British Standard 42020:2013 "Biodiversity, Code of practice for planning and development".

Report Version	Date	Completed by:	Checked by:	Approved by:
Final	12/02/2021	Margarita Smoldareva BSc, PGDip (Ecological Consultant)	Paul Roebuck MSC MCIEEM (South East Manager)	Tom Docker CEcol MCIEEM (Managing Director)

The information which we have prepared is true, and has been prepared and provided in accordance with the Chartered Institute of Ecology and Environmental Management's Code of Professional Conduct. We confirm that the opinions expressed are our true and professional bona fide opinions.

DISCLAIMER

The contents of this report are the responsibility of Middlemarch Environmental Ltd. It should be noted that, whilst every effort is made to meet the client's brief, no site investigation can ensure complete assessment or prediction of the natural environment.

Middlemarch Environmental Ltd accepts no responsibility or liability for any use that is made of this document other than by the client for the purposes for which it was originally commissioned and prepared.

VALIDITY OF DATA

The findings of this study are valid for a period of 12 months from the date of survey. If works have not commenced by this date, it may be necessary to undertake an updated survey to allow any changes in the status of bats on site to be assessed, and to inform a review of the conclusions and recommendations made.

NON-TECHNICAL SUMMARY

In October 2020, Baily Garner commissioned Middlemarch Environmental Ltd to undertake a Preliminary Bat Roost Assessment at Boyd Court, Downshire Way in Bracknell. This assessment is required to inform a planning application associated with the proposed refurbishment, to upgrade and to enhance the estate at Boyd Court.

To fulfil the above brief to assess the potential for the existing buildings on site to support roosting bats, a Preliminary Bat Roost Assessment was undertaken on 21st December 2020.

During the assessment, it was noted that the buildings onsite had potential features for roosting bats to utilise. B1 and B2 Buildings had lifted roof tiles, missing mortar on ridge tiles and lifted lead flashing at the base of the metal chimneys on all elevations. B3 building had lifted roof tiles and lifted lead flashing at the base of the metal chimneys. B4 building had lifted roof tiles and lifted lead flashing around the dormer windows on southern and northern elevations of the building. B5 building had missing roof tile, gap between soffit box and brickwork and the northern and western elevations were not fully inspected due to restricted access. All the buildings were not internally inspected due to Covid-19 restrictions.

Following the results of the Preliminary Bat Roost Assessment, the following recommendation have been made:

R1 B1, B2, B4 and B5 Building at Boyd Court, Bracknell

B1, B2, B4 and B5 Building at Boyd Court have been identified as having moderate potential to support roosting bats. Bat Surveys: Good Practice Guidelines published by the Bat Conservation Trust (Collins, 2016) recommends that for structures with moderate bat roosting potential two separate survey visits (consisting of one dusk emergence and a separate dawn re-entry survey) be undertaken during the bat emergence/re-entry survey season to determine the presence/absence of roosting bats within these buildings. The bat emergence/re-entry survey season extends from May to September. At least one of the surveys should be undertaken during the peak season for emergence/re-entry surveys between May and August. Should this survey confirm the presence of roosting bats, it will be necessary to undertake additional surveys in order to inform a Natural England licence application. In addition, should the survey identify the presence of significant levels of bat activity at the site, it may be necessary to undertake further survey visits to comprehensively assess the value of the site to bats.

R2 B3 Building at Boyd Court, Bracknell

has been identified as having low potential to support roosting bats. Bat Surveys: Good Practice Guidelines, published by the Bat Conservation Trust (Collins, 2016), recommends for structures with low bat roosting potential that at least one survey (consisting of either a dusk emergence survey or a dawn re-entry survey) be undertaken during the peak season for emergence/re-entry surveys (May to August) to determine the presence/absence of roosting bats within the building. Should this survey confirm the presence of roosting bats, it will be necessary to undertake additional surveys in order to inform a Natural England licence application. In addition, should the survey identify the presence of significant levels of bat activity at the site, it may be necessary to undertake further survey visits to comprehensively assess the value of the site to bats.

R3 Lighting

In accordance with best practice guidance relating to lighting and biodiversity (Miles et al, 2018; Gunnell et al, 2012), any new lighting should be carefully designed to minimise potential disturbance and fragmentation impacts on sensitive receptors, such as bat species. Examples of good practice are outlined in Chapter 6.

R4 Habitat Enhancement

In line with the National Planning Policy Framework, the development should aim to enhance the site for bats. Bat boxes should be installed to provide roosting habitat for species such as pipistrelle. Further information is in Chapter 6.

CONTENTS

1. INTRODUCTION	4
1.1 PROJECT BACKGROUND	4
1.2 SITE DESCRIPTION AND CONTEXT	4
1.3 DOCUMENTATION PROVIDED.....	4
2. METHODOLOGY	5
2.1 DESK STUDY	5
2.2 FIELD SURVEY.....	5
3. DESK STUDY	7
3.1 STATUTORY NATURE CONSERVATION SITES	7
3.2 SPECIES RECORDS.....	7
4. SURVEY RESULTS	8
4.1 INTRODUCTION	8
4.2 CONSTRAINTS	8
4.3 SURVEY RESULTS	8
4.3.1 Section 1 – B1 Building.....	8
4.3.2 Section 2 - B2 Building.....	10
4.3.3 Section 3 – B3 Building.....	13
4.3.4 Section 4 – B4 Building.....	13
4.3.5 Section 5 – B5 Building.....	16
4.4 SITE AND SURROUNDING HABITATS	18
5. DISCUSSION AND CONCLUSIONS	19
5.1 SUMMARY OF PROPOSALS	19
5.2 ASSESSMENT OF BUILDINGS	19
5.3 POTENTIAL IMPACTS ON BATS	19
6. RECOMMENDATIONS	20
7. DRAWINGS	22
REFERENCES AND BIBLIOGRAPHY	24
APPENDIX 1	25

1. INTRODUCTION

1.1 PROJECT BACKGROUND

In October 2020, Baily Garner commissioned Middlemarch Environmental Ltd to undertake a Preliminary Bat Roost Assessment at Boyd Court, Downshire Way in Bracknell. This assessment is required to inform a planning application associated with the proposed refurbishment, upgrade and enhancement of the estate at Boyd Court.

In addition, Middlemarch Environmental Ltd has been commissioned to undertake the following assessments:

- Preliminary Arboricultural Assessment (RT-MME-153754-01);
- Arboricultural Impact Assessment (RT-MME-153754-02);
- Arboricultural Method Statement (RT-MME-153754-03); and,
- Preliminary Ecological Appraisal (Rt-MME-153754-04).

To fulfil the above brief to assess the potential for the existing buildings on site to support roosting bats, a Preliminary Bat Roost Assessment was undertaken on 21st December 2020.

All UK bat species are European protected species and they are capable of being material considerations in the planning process. A summary of the legislation protecting bats is included within Appendix 1. This section also provides some brief information on the ecology of British bat species.

1.2 SITE DESCRIPTION AND CONTEXT

The site comprised a developed area of land, approximately 2 ha in size, centred at Ordnance Survey Grid Reference SU 86475 69671 off Downshire Way in Bracknell.

The land was formed of a housing estate surrounded by main roads with buildings and associated hard and soft landscaping dominating the site. Small areas of public landscaped amenity were present. These areas were characterised by introduced shrub, mature scattered trees and grassland. Hardstanding roads and footpaths allowed access into and around the estate.

To the north-eastern boundary a row of terraced houses was present; and to the south a larger area of grassland with scattered trees. Further afield the landscape was dominated by further residential housing, with associated schools and parkland to the north and a large industrial estate to the south.

1.3 DOCUMENTATION PROVIDED

The conclusions and recommendations made in this report are based on information provided by the client regarding the scope of the project. Documentation made available by the client is listed in Table 1.1.

Document Name / Drawing Number	Author
32826-BGL-A1-XX-DR-A-4101-P-01 Boyd Court - Survey Quote- Site Location Plan-Afi	Baily Garner

Table 1.1: Documentation Provided by Client

2. METHODOLOGY

2.1.1 DESK STUDY

As part of the Preliminary Ecological Appraisal (Report RT-MME-153754-04) an ecological desk study (which included a search for records of bats) was undertaken within a 1 km radius of the site. The consultees for the desk study were Natural England - *MAGIC* website for statutory conservation sites and Thames Valley Environmental Records Centre.

Middlemarch Environmental Ltd then assimilated and reviewed the desk study data provided by these organisations. Relevant bat data are discussed in Chapter 3. In compliance with the terms and conditions relating to its commercial use, the full desk study data are not provided within this report.

The desk study included a search for statutory nature conservation sites designated for bats within a 10 km radius of the site.

2.2 FIELD SURVEY

In line with the specifications detailed in Bat Mitigation Guidelines (English Nature, 2004) and Bat Surveys for Professional Ecologists: Good Practice Guidelines (Collins, 2016), a Preliminary Bat Roost Assessment of the buildings was conducted during daylight hours. A visual assessment was undertaken to determine the presence of any Potential Roost Features (PRFs), together with a general appraisal of the suitability of the site for foraging and commuting. Table 2.1 provides examples of PRFs. Any accessible PRFs were inspected using binoculars, a torch and endoscope for evidence of possible bat presence. Buildings were surveyed externally.

For reasons of health and safety, the survey was only undertaken in areas accessible from 3.5 m ladders.

Based on the PRF's present, the survey area was assessed using the suitability classes detailed within Bat Surveys for Professional Ecologists: Good Practice Guidelines (Collins, 2016), as detailed in Table 2.2.

Example of Potential Roost Features	
<p><u>Externally</u></p> <ul style="list-style-type: none"> • Access through window panes, doors and walls; • behind peeling paintwork or lifted rendering; • behind hanging tiles; • weatherboarding; • eaves; • soffit boxes; • fascias; • lead flashing; • gaps under felt (even including those of flat roofs); • under tiles/slates; • existing bat and bird boxes; and • any gaps in brickwork or stonework permitting access into access to cavity- or rubble-filled walls. <p><u>Internally</u></p> <ul style="list-style-type: none"> • behind wooden panelling; • in lintels above doors and windows; • behind window shutters and curtains; • behind pictures, posters, furniture, peeling paintwork; • peeling wallpaper, lifted plaster and boarded-up windows; • inside cupboards and in chimneys accessible from fireplaces. • within attic voids: • the top of gable end or dividing walls; • the top of chimney breasts; • ridge and hip beams and other roof beams; • mortise and tenon joints; • all beams (free-hanging bats); • the junction of roof timbers, especially where ridge and hip beams meet; • behind purlins; • between tiles and the roof lining; and • under flat felt roofs. 	

Table 2.1: Potential Roost Features (Adapted from Collins, 2016)

Suitability	Description
High	A structure 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.
Moderate	A structure with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions and surrounding habitat but unlikely to support a roost of high conservation status (with respect to roost type only – the assessments in this table are made irrespective of species conservation status, which is established after presence is confirmed).
Low	A structure with one or more potential roost sites that could be used by individual bats opportunistically. However, these potential roost sites do not provide enough space, shelter, protection, appropriate conditions and/or suitable surrounding habitat to be used on a regular basis or by larger numbers of bats (i.e. unlikely to be suitable for maternity or hibernation).
Negligible	Negligible habitat features on site likely to be used by roosting bats.

Table 2.2: Classification of Structures with Bat Potential (Adapted from Collins, 2016)

3. DESK STUDY

3.1 STATUTORY NATURE CONSERVATION SITES

The site is not located within 10 km of any statutory nature conservation sites designated for the presence of bats.

3.2 SPECIES RECORDS

The data search was carried out in December 2020 by Thames valley Environmental Records Centre. Records of bat species within a 1 km radius of the survey area provided by the consultee are summarised in Table 3.1. It should be noted that the absence of records should not be taken as confirmation that a species is absent from the search area.

Species	No. of Records	Most Recent Record	Proximity of Nearest Record to Study Area	Species of Principal Importance?	Legislation
Brown long-eared bat <i>Plecotus auritus</i>	16	2017	Potentially on site ⁺	✓	ECH 4, WCA 5, WCA 6
Common pipistrelle <i>Pipistrellus pipistrellus</i>	23	2019	30 m east	-	ECH 4, WCA 5, WCA 6
Unidentified bat <i>Chiroptera</i> sp.	2	2019	780 m north	#	#
Leisler's Noctule <i>Nyctalus leisleri</i>	1	2017	710 m east	-	ECH 4, WCA 5, WCA 6
Natterer's bat <i>Myotis nattereri</i>	1	2017	710 m east	-	ECH 4, WCA 5, WCA 6
Noctule <i>Nyctalus noctula</i>	11	2019	30 m east	✓	ECH 4, WCA 5, WCA 6
Pipistrelle <i>Pipistrellus</i> sp.	3	2016	360 m north-east	#	ECH 4, WCA 5, WCA 6
Serotine <i>Eptesicus serotinus</i>	1	2017	710 m east	-	ECH 4, WCA 5, WCA 6
Soprano pipistrelle <i>Pipistrellus pygmaeus</i>	7	2018	630 m north-east	✓	ECH 4, WCA 5, WCA 6
Unidentified myotis <i>Myotis</i> sp.	2	2017	710 m east	-	ECH 4, WCA 5, WCA 6
<p>Key: #: Dependent on species.</p> <p>ECH 4: Annex IV of the European Communities Council Directive on the Conservation of Natural Habitats and Wild Fauna and Flora. Animal and plant species of community interest in need of strict protection. WCA 5: Schedule 5 of Wildlife and Countryside Act 1981 (as amended). Protected animals (other than birds). WCA 6: Schedule 6 of Wildlife and Countryside Act 1981 (as amended). Animals which may not be killed or taken by certain methods.</p> <p>Species of Principal Importance: Species of Principal Importance for Nature Conservation in England.</p>					

Table 3.1: Bat Species Records Within 1 km of Survey Area

4. SURVEY RESULTS

4.1 INTRODUCTION

The Preliminary Bat Roost Assessment was conducted on 21st December 2020 by Margarita Smoldareva (Ecological Consultant). Drawing C153754-05-01, illustrating the layout of the buildings on site and the results of the survey is provided in Chapter 7.

Weather conditions were recorded and are presented in Table 4.1.

Parameter	Conditions
Temperature (°C)	10
Cloud Cover (%)	0
Precipitation	F0
Wind Speed (Beaufort)	Nil

Table 4.1: Weather Conditions During the Preliminary Bat Roost Assessment

4.2 CONSTRAINTS

Due to Covid-19 Restrictions on the day of the survey, internal inspection was not carried out.

4.3 SURVEY RESULTS

4.3.1 Section 1 – B1 Building

External Assessment

A large modern three-storey apartment building (Plate 4.1 and 4.2) was present to the north of the site boundary. It was an irregular rectangular shaped building. The building was in active residential use at the time of the survey and was in good state of repair. Small residential gardens were present on the ground floor on the eastern and western elevations.

The roof was hipped with clay tiles with metal chimneys in place. The tiles were in generally good condition throughout however there were some slightly lifted tiles on both elevations. The ridge tiles on the northern elevation were slightly lifted and missing mortar was present between the brick wall and the ridge tiles. The soffit boxes were all intact between brick walls and roofing tiles. The brick walls were in good condition and showed no missing bricks or mortar. The double-glazed windows and uPVC window frames were all intact and showed no gaps/crevices. The doors were well fitted and no gaps/crevices around the door frame and the brickwork were recorded.

Within one of the residential gardens on the eastern elevation, common ivy *Hedera helix* was recorded growing within a small residential garden. It was noted that the stem growth was insufficient in size to provide a roosting space for bats.

Numerous features were recorded around the building which could be utilised by bats to gain entry into the building and potential roost locations. These features include:

- Lifted or warped roof tiles;
- Lifted or warped ridge tiles;
- Missing mortar between ridge tiles; and,
- Lifted lead flashing around the base of the steel chimney.

It was not possible to inspect the lifted roof tiles, lifted ridge tiles, missing mortar between ridge tiles (Plate 4.3) and brickwork and lifted lead flashing around the base of the chimney (Plate 4.4) due to the height at which these were located and as such it was not possible to establish if bats had used these features to enter a roost location at the time of surveying. No evidence of roosting bats, e.g. droppings, urine staining, feeding remains or scratch marks, was recorded within the features that could be fully inspected during the survey.

Internal Assessment

Due to Covid-19 restrictions on the day of the survey, internal inspection was not carried out due to health and safety reasons.



Plate 4.1: Overview of B1 Building (Western Elevation)



Plate 4.2: Overview of B1 Building (Eastern Elevation)



Plate 4.3: Missing mortar on the ridge tile (Northern Elevation)



Plate 4.4: Lifted Lead Flashing at the Base of Steel Chimneys (Western Elevation)

4.3.2 Section 2 - B2 Building

External Assessment

Similar to the B1 Building, B2 Building was of similar construction and was joined to B1 Building. As seen in Plate 4.7 this was to allow vehicular access to car park, further B3, B4 and B5 Buildings and associated communal grounds within the development.

B2 Building was a large modern four-storey apartment building was present to the south of the site boundary. It was an irregular rectangular shaped building. The building was in active residential use at the time of the survey, and was in good state of repair. Small residential gardens were present on the ground floor on the southern elevation.

The roof was hipped with clay tiles and with metal chimneys in place. The tiles were in generally good condition throughout however there were some slightly lifted tiles on both elevations. The ridge tiles on the south-eastern elevation had missing mortar between the brick wall and the ridge tiles. The soffit boxes were all intact between brick walls and roofing tiles. The brick walls were in good condition and showed no missing bricks or mortar. The double-glazed windows and uPVC window frames were all intact and showed

no gaps/crevices. The doorframes were tightly fitted within the brickwork and no gaps or crevices were recorded.

Two features were recorded around the building which could be utilised by bats to gain entry into the building and potential roost locations. These features include:

- Missing mortar between ridge tiles; and,
- Lifted lead flashing around the base of the steel chimney.

It was not possible to inspect the missing mortar between ridge tiles and brickwork (Plate 4.8) and lifted lead flashing around the base of the chimney due to the height at which these were located and as such it was not possible to establish if bats had used these features to enter a roost location at the time of surveying. No evidence of roosting bats, e.g. droppings, urine staining, feeding remains or scratch marks, was recorded within the features that could be fully inspected during the survey.

Internal Assessment

Due to Covid-19 restrictions on the day of the survey, an internal inspection was not carried out due to health and safety reasons.



Plate 4.5: Overview of B2 Building (South-Eastern Elevation and Part of Northern Elevation)



Plate 4.6: Overview of Southern Elevation



Plate 4.7: Vehicular access to Boyd Court (Western Elevation)



Plate 4.8: Missing Mortar Between Ridge Clay Tiles and Brick Wall (South-eastern Elevation)

4.3.3 Section 3 – B3 Building

External Assessment

Similar in construction to B1 and B2 Buildings, B3 Building was two and three storeys apartment building (Plate 4.9) located to the centre of the site. It was an irregular rectangular shaped building. The building was in active residential use at the time of the survey and was in good state of repair.

The roof was hipped with clay tiles and with metal chimneys in place. The tiles were in generally good condition throughout however there were some slightly lifted tiles on both elevations. The ridge tiles were all in good condition and no missing mortar was recorded. The soffit boxes were all intact between brick walls and roofing tiles. The brick walls were in good condition and showed no missing bricks or mortar. The double-glazed windows and uPVC window frames were all intact and showed no gaps/crevices. All the doors were tightly fitted within the doorframes and no gaps or crevices were recorded.

Numerous features were recorded around the building which could be utilised by bats to gain entry into the building and potential roost locations. These features include:

- Lifted or warped roof tiles; and,
- Lifted lead flashing around the base of the steel chimney.

Similar to B1 and B2 Buildings, the roofing tiles were slightly lifted in places along the eastern and western elevations and base of the metal chimneys were lifted therefore creating gaps between tiles and led flashing. It was not possible to inspect these features due to the height at which these were located and as such it was not possible to establish if bats had used these features to enter a roost location at the time of surveying. No evidence of roosting bats, e.g. droppings, urine staining, feeding remains or scratch marks, was recorded within the features that could be fully inspected during the survey.

Internal Assessment

Due to Covid-19 restrictions on the day of the survey, internal inspection was not carried out due to health and safety reasons.



Plate 4.9: Overview of B3 Building (Western Elevation)

4.3.2 Section 4 – B4 Building

External Assessment

The B4 Building was two storey brick build with hipped clay tile roof building (Plate 4.10 and Plate 4.11) that was located to the eastern part of the site. The dormer windows were present on southern and northern elevations. The building was in active residential use at the time of the survey and was in good state of repair. Private residential gardens were present on the southern elevation of the building.

The roof tiles were in generally good condition and no lifted tiles were noted on all elevations of the building. The dormer windows double glazed uPVC windows which had been fitted with led flashing roofing and sides to join the roofing tiles. It was noted that the lead flashing was lifted and exposed many potential ingress points for fauna to enter.

The brick work on all elevations was in good condition and no missing bricks or missing mortar was recorded. The rest of the windows (first and second floor) were all intact and no gaps/crevices were recorded.

Features that were recorded around the building which could be utilised by bats to gain entry into the building and potential roost locations included:

- Lifted or warped roof tiles; and,.
- Lifted lead flashing around the dormer windows.

Two main potential roosting features were recorded on this building in the form of lifted lead flashing around the dormer windows on northern and southern elevations. Firstly, the gaps between clay tiles and lead flashing were substantial (Plate 4.12 and Plate 4.13) for the fauna to enter and potentially roost. Secondly, there were lifted roof tiles along the southern and northern elevations which created small gaps that could be utilised by roosting bats.

It was not possible to inspect gaps between lead flashing and clay tiles around the dormer windows and the lifted tiles due to the height at which these were located and as such it was not possible to establish if bats had used these features to enter a roost location at the time of surveying. No evidence of roosting bats, e.g. droppings, urine staining, feeding remains or scratch marks, was recorded within the features that could be fully inspected during the survey.

Internal Assessment

Due to Covid-19 restrictions on the day of the survey, internal inspection was not carried out due to health and safety reasons.



Plate 4.10: Overview of the Northern Elevation



Plate 4.11: Overview of the Southern Elevation



Plate 4.12: Gaps Noted Between Led Flashing and the Roof Tiles (North Elevation)



Plate 4.13: Gaps Noted Between Roof Tiles and Led Flashing (Southern Elevation)

4.3.2 Section 5 – B5 Building

External Assessment

B5 Building was present to the north of the site boundary. This one storey building (Plate 4.14) was similar to construction to the rest of the buildings on site and was in good state of repair. The building was used by the site management team. The western and northern elevation of the B5 building were not accessible due to overgrown overhanging vegetation and lack of walking space in order to fully inspect as seen in Plate 4.18 and Plate 4.19.

The roof was hipped with clay tiles and with air chimneys in place. The tiles were in generally good condition throughout however one roof tile was recorded to be missing near to the air chimney on the eastern elevation (Plate 4.16). The soffit boxes were fitted tightly and showed no ingress points on eastern and western elevation, however on the southern elevation, the gap between soffit box and the brick wall and the soffit box was large enough to be used by fauna to enter (Plate 4.17). The brick walls were in good condition and showed no missing bricks or mortar. The double-glazed windows and uPVC window frames were all intact and showed no gaps/crevices. The door frames were tightly fitted within the brickwork and showed no gaps or crevices on the day of the survey.

It was not possible to inspect gaps associated with the roof and as such it was not possible to establish if bats had used these features to enter a roost location at the time of surveying. No evidence of roosting bats, e.g. droppings, urine staining, feeding remains or scratch marks, was recorded within the features that could be fully inspected during the survey.

Internal Assessment

Due to Covid-19 restrictions on the day of the survey, internal inspection was not carried out due to health and safety reasons.



Plate 4.14: Overview of B5 Building (Southern Elevation)



Plate 4.16: Missing Clay Tile Near the Air Chimney (Eastern Elevation)



Plate 4.17: Gap Between Soffit Box and the Brick Wall (Southern Elevation)



Plate 4.18: Northern Elevation



Plate 4.19: Western Elevation

4.4 SITE AND SURROUNDING HABITATS

The site is situated off Downshire Way in Bracknell which is typically a residential and industrial area. It is considered that the site is of medium suitability for use by foraging and commuting bats due to presence of established vegetation on site. Areas of amenity grassland, introduced shrubs, mature and small scattered trees within the survey area provide good foraging and commuting opportunities for bats. Adjacent residential gardens and amenity green space provide more suitable habitat mosaics which could be utilised by foraging and commuting bats. The site is connected to suitable foraging and commuting habitat in the surrounding landscapes, such as the presence of Jock's Copse Local Nature Reserve and Ancient Semi-Natural Woodland (LNR and ASNW) 860 m north-west, Piggy Wood LNR and Local Wildlife Site 970 m north-east, Tinkers Copse LNR and ASNW 990 m north-west.

Habitats within 1 km of the site suitable for roosting, commuting and foraging include:

- Residential houses and associated gardens;
- Running water and standing waterbodies;
- Pockets of woodland;
- Churches, schools, hospitals and associated grounds, and;
- Railway lines with vegetated banks.

5. DISCUSSION AND CONCLUSIONS

5.1 SUMMARY OF PROPOSALS

This assessment is required to inform a planning application associated with the proposed refurbishment, upgrades and enhancement of the estate at Boyd Court.

5.2 ASSESSMENT OF BUILDINGS

B1 and B2 Buildings

The Preliminary Bat Roost Assessment has been identified that the B1 and B2 Buildings to have a moderate potential to support roosting bats. They were structures with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions and surrounding habitat but unlikely to support a roost of high conservation status. Numerous potential features were noted during the survey that could not be fully inspected due to the height of these features. Additionally, it was not possible to inspect the any loft voids that could be present inside the buildings. However, during external inspection no evidence of roosting bats, e.g. droppings, urine staining, feeding remains or scratch marks, was recorded within the noted features.

B3 Building

The Preliminary Bat Roost Assessment has been identified that the B3 Building to have a low potential to support roosting bats due to limited potential roosting features recorded. Two potential features were noted during the survey that could not be fully inspected due to the height of these features. Additionally, it was not possible to inspect the any loft voids that could be present inside the buildings. However, during external inspection no evidence of roosting bats, e.g. droppings, urine staining, feeding remains or scratch marks, was recorded within the noted features.

B4 and B5 Building

The Preliminary Bat Roost Assessment has been identified that the B4 and B5 Buildings to have a moderate potential to support roosting bats. They were structures with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions and surrounding habitat but unlikely to support a roost of high conservation status. Numerous potential features were noted during the survey that could not be fully inspected due to the height of these features. Additionally, it was not possible to inspect the any loft voids that could be present inside the buildings. However, during external inspection no evidence of roosting bats, e.g. droppings, urine staining, feeding remains or scratch marks, was recorded within the noted features.

5.3 POTENTIAL IMPACTS ON BATS

It is anticipated that the current proposals would have negative implications on roosting bats as B1, B2, B4 and B5 Buildings were identified as having moderate potential to support roosting bats and B3 was considered to have low potential. Demolition of these buildings are likely to harm, injure or disturb any bats roosting within the site. As such, recommendations have been made in Chapter 6 of this report.

The site is connected to suitable foraging and commuting habitat in the surrounding landscape. Therefore, due care and attention is required during and after the proposed works to ensure that foraging and commuting bats are not negatively affected. The proposed development is likely to create increases in lighting within areas of the site suitable for foraging and commuting for bats. As such, recommendations have been made in Chapter 6.

6. RECOMMENDATIONS

All recommendations provided in this section are based on Middlemarch Environmental Ltd's current understanding of the site proposals, correct at the time the report was compiled. Should the proposals alter, the conclusions and recommendations made in the report should be reviewed to ensure that they remain appropriate.

R1 **B1, B2, B4 and B5 Building at Boyd Court, Bracknell**

B1, B2, B4 and B5 Building at Boyd Court have been identified as having moderate potential to support roosting bats. Bat Surveys: Good Practice Guidelines published by the Bat Conservation Trust (Collins, 2016) recommends that for structures with moderate bat roosting potential two separate survey visits (consisting of one dusk emergence and a separate dawn re-entry survey) be undertaken during the bat emergence/re-entry survey season to determine the presence/absence of roosting bats within these buildings. The bat emergence/re-entry survey season extends from May to September. At least one of the surveys should be undertaken during the peak season for emergence/re-entry surveys between May and August. Should this survey confirm the presence of roosting bats, it will be necessary to undertake additional surveys in order to inform a Natural England licence application. In addition, should the survey identify the presence of significant levels of bat activity at the site, it may be necessary to undertake further survey visits to comprehensively assess the value of the site to bats.

R2 **B3 Building at Boyd Court, Bracknell**

has been identified as having low potential to support roosting bats. Bat Surveys: Good Practice Guidelines, published by the Bat Conservation Trust (Collins, 2016), recommends for structures with low bat roosting potential that at least one survey (consisting of either a dusk emergence survey or a dawn re-entry survey) be undertaken during the peak season for emergence/re-entry surveys (May to August) to determine the presence/absence of roosting bats within the building. Should this survey confirm the presence of roosting bats, it will be necessary to undertake additional surveys in order to inform a Natural England licence application. In addition, should the survey identify the presence of significant levels of bat activity at the site, it may be necessary to undertake further survey visits to comprehensively assess the value of the site to bats.

R3 **Lighting**

In accordance with best practice guidance relating to lighting and biodiversity (Miles et al, 2018; Gunnell et al, 2012), any new lighting should be carefully designed to minimise potential disturbance and fragmentation impacts on sensitive receptors, such as bat species. Examples of good practice include:

- Avoiding the installation of new lighting in proximity to key ecological features, such as mature trees and neighbouring residential gardens.
- Using modern LED fittings rather than metal halide or sodium fittings, as modern LEDs emit negligible UV radiation.
- The use of directional lighting to reduce light spill, e.g. by installing bespoke fittings or using hoods or shields. For example, downlighting can be used to illuminate features such as footpaths whilst reducing the horizontal and vertical spill of light.
- Where the use of bollard lighting is proposed, columns should be designed to reduce horizontal light spill.
- Implementing controls to ensure lighting is only active when needed, e.g. the use of timers or motion sensors.
- Use of floor surface materials with low reflective quality. This will ensure that bats using the site and surrounding area are not affected by reflected illumination.
- For internal lights, recessed light fittings cause significantly less glare than pendant type fittings. The use of low-glare glass may also be appropriate where internal lighting has the potential to influence sensitive ecological receptors.

R4 **Habitat Enhancement**

In line with the National Planning Policy Framework, the development should aim to enhance the site for bats. Bat boxes should be installed to provide roosting habitat for species such as pipistrelle. In general, bats seek warm places and for this reason boxes should be located where they will receive

full/partial sun, although installing boxes in a variety of orientations will provide a range of climatic conditions. Position boxes at least 4 m above ground to prevent disturbance from people and/or predators. The planting of species which attract night flying insects is encouraged as this will be of value to foraging bats, for example: evening primrose *Oenothera biennis*, goldenrod *Solidago virgaurea*, honeysuckle *Lonicera periclymenum* and fleabane *Pulicaria dysenterica*.


7. DRAWINGS

Drawing C153754-05-01 – Preliminary Bat Roost Assessment



Legend

- - - Site boundary
- Building surveyed
- Moderate bat roosting potential
- Low bat roosting potential

Project	Boyd Court, Bracknell	
Drawing	Preliminary Roost Assessment	
Client	Baily Garner	
Drawing Number	C153754-05-01	Revision 00
Scale @ A3	1:1000	Date January 2021
Approved By	MS	Drawn By VO
 MIDDLEMARCH ENVIRONMENTAL		
Triumph House, Birmingham Road, Allesley, Coventry CV5 9AZ T:01676 525880 F:01676 521400 E:admin@middlemarch-environmental.com		
This map is reproduced from the Ordnance Survey material with the permission of Ordnance Survey on behalf of The Controller of Her Majesty's Stationary Office. © Crown copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution of civil proceedings. License Number: 100045019		

C153754-05-01

REFERENCES AND BIBLIOGRAPHY

- Altringham, J (2003). *British Bats*. New Naturalist. HarperCollins.
- BSI. (2015). BS8596:2015 *Surveying for bats in trees and woodland*. British Standard Institution, London.
- Collins, J. (ed). (2016). *Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd edn)*. The Bat Conservation Trust, London.
- English Nature (2004). *Bat Mitigation Guidelines*. English Nature, Peterborough.
- Gunnell, K., Grant, G. and Williams, C. (2012) *Landscape and urban design for bats and biodiversity*. Bat Conservation Trust.
- Joint Nature Conservation Committee (2012). *UK Post-2010 Biodiversity Framework*. Available: http://jncc.defra.gov.uk/pdf/UK_Post2010_Bio-Fwork.pdf
- Jones, K and Walsh, A (2006). *A Guide to British Bats*. The Mammal Society, London.
- Middlemarch Environmental Limited (2021) *Preliminary Arboricultural Assessment: Boyd Court, Bracknell*. Report RT-MME-153754-01.
- Middlemarch Environmental Limited (2021) *Preliminary Ecological Assessment: Boyd Court, Bracknell*. Report RT-MME-153754-04.
- Miles, J., Ferguson, J., Smith, N. and Fox, H. (2018) *Bats and artificial lighting in the UK. Bats and the Built Environment Series*. Bat Conservation Trust and Institution of Lighting Professionals.
- Ministry of Housing, Communities and Local Government (2019) *National Planning Policy Framework*. Available: <https://www.gov.uk/government/collections/revISED-national-planning-policy-framework>
- Mitchell-Jones, A.J. & McLeish, A.P. (2004). *The Bat Workers' Manual (3rd Ed.)*. JNCC, Peterborough.
- The Conservation of Habitats and Species Regulations 2017.

APPENDIX 1

LEGISLATION

Bats and the places they use for shelter or protection (i.e. roosts) receive European protection under The Conservation of Habitats and Species Regulations 2017 (Habitats Regulations 2017). They receive further legal protection under the Wildlife and Countryside Act (WCA) 1981, as amended. This protection means that bats, and the places they use for shelter or protection, are capable of being a material consideration in the planning process.

Regulation 41 of the Habitats Regulations 2017, states that a person commits an offence if they:

- deliberately capture, injure or kill a bat;
- deliberately disturb bats; or
- damage or destroy a bat roost (breeding site or resting place).

Disturbance of animals includes in particular any disturbance which is likely to impair their ability to survive, to breed or reproduce, or to rear or nurture their young, or in the case of animals of a hibernating or migratory species, to hibernate or migrate; or to affect significantly the local distribution or abundance of the species to which they belong.

It is an offence under the Habitats Regulations 2017 for any person to have in his possession or control, to transport, to sell or exchange or to offer for sale, any live or dead bats, part of a bat or anything derived from bats, which has been unlawfully taken from the wild.

Whilst broadly similar to the above legislation, the WCA 1981 (as amended) differs in the following ways:

- Section 9(1) of the WCA makes it an offence to *intentionally* kill, injure or take any protected species.
- Section 9(4)(a) of the WCA makes it an offence to *intentionally or recklessly** damage or destroy, or *obstruct access to*, any structure or place which a protected species uses for shelter or protection.
- Section 9(4)(b) of the WCA makes it an offence to *intentionally or recklessly** disturb any protected species *while it is occupying a structure or place which it uses for shelter or protection*.

*Reckless offences were added by the Countryside and Rights of Way (CRoW) Act 2000.

As bats re-use the same roosts (breeding site or resting place) after periods of vacancy, legal opinion is that roosts are protected whether or not bats are present.

The following bat species are Species of Principal Importance for Nature Conservation in England: barbastelle bat *Barbastella barbastellus*, Bechstein's bat *Myotis bechsteinii*, noctule *Nyctalus noctula*, soprano pipistrelle *Pipistrellus pygmaeus*, brown long-eared bat *Plecotus auritus*, greater horseshoe bat *Rhinolophus ferrumequinum* and lesser horseshoe bat *Rhinolophus hipposideros*.

The reader should refer to the original legislation for the definitive interpretation.

ECOLOGY

At present, 18 species of bats are known to live within the United Kingdom, of which 17 species are confirmed as breeding. All UK bat species are classed as insectivorous, feeding on a variety of invertebrates including midges, mosquitoes, lacewings, moths, beetles and small spiders.

Bats will roost within a variety of different roosting locations, included houses, farm buildings, churches, bridges, walls, trees, culverts, caves and tunnels. At different times of the year the bats roosting requirements alter and they can have different roosting locations for maternity roosts, mating roosts and hibernation roosts. Certain bat species will also change roosts throughout the bat activity season with the bat colony using the site to roost for a few days, abandoning the roost and then returning a few days or weeks later. This change can be for a variety of reasons including climatic conditions and prey availability. Bats are known live for several years and if the climatic conditions are unfavourable at a particular roost, they may abandon it for a number of years, before returning when conditions change. Due to the matriarchal nature of bat colonies, the locations of these roosts can be passed down through the generations.

Bats usually start to come out of hibernation in March and early April (weather dependent), when they start to forage and replenish the body weight lost during the hibernation period. The female bats then start to congregate together in maternity roosts prior to giving birth and a single baby is born in June or July. The female then works hard to feed her young so that they can become independent and of a sufficient weight to survive the winter before the weather gets too cold and invertebrate activity reduces. Males generally live solitary lives, or in small groups with other males, although in some species the males can be found living with the females all year. The mating season begins in the autumn. During the winter bats hibernate in safe locations which provide relatively constant conditions, although they may venture outside to forage on warmer winter nights.