

Quality Assurance

Date	Version	Author	Checked and Approved by
30/06/2023	Final	Sarah Simpson (Ecological Field Officer)	Ellie Rickman MSc, MCIEEM (Principal Ecological Consultant)
07/07/2023	Revision A	Sarah Simpson (Ecological Field Officer)	Ellie Rickman MSc, MCIEEM (Principal Ecological Consultant)

Declaration of Compliance

This study has been undertaken in accordance with British Standard 42020:2013 “Biodiversity, Code of Practice for Planning and Development”. 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

Project Background

Middlemarch was commissioned by ISG to undertake bat surveys at Hempland Primary School located off Whitby Avenue in York. These surveys are required to inform a planning application associated with the proposed demolition of the existing school building and the construction of a new school on the same site. Two initial bat surveys were commissioned by Spatial Initiative on the site in August and September 2022 and a third survey was subsequently commissioned by ISG and carried out by Middlemarch in June 2023, this report covers the findings of all three surveys.

Scope of Survey

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 29th September 2022. Further survey work, in the form of dusk emergence surveys and a dawn re-entry survey, were undertaken between 22nd August 2022 and 6th June 2023.

Summary of Key Bat Features

Roosting Bats. The Main School Building was assessed as having high potential to support roosting bats during the Preliminary Bat Roost Assessment, whilst the Caddell Centre, the Bike Shed/Storage Building, and the Bike Shelter were assessed as having negligible potential to support roosting bats.

During the first dusk emergence survey, an individual common pipistrelle and an individual soprano pipistrelle emerged from gaps beneath the roof edging on the two-storey sections located towards the south-eastern end of the Main School Building.

During the second dusk emergence survey, two soprano pipistrelles emerged from the same gap beneath the roof edging as identified during the first dusk survey.

During the dawn re-entry survey a soprano pipistrelle was observed returning to roost in the same location.

Commuting/Foraging Bats. The habitats on site were considered to have high potential to be used by bats, with the adjacent Tang Hall Beck providing a valuable commuting corridor through the wider landscape.

Four bat species were recorded during the dusk emergence surveys: noctule, common pipistrelle, soprano pipistrelle, and Daubenton's bat. Commuting and foraging activity was recorded during the survey period. This was predominantly by pipistrelles along the hedgerow associated with the western boundary of the site. Intermittent foraging was also recorded along the tree line located at the eastern end of the playing field, and over the grassland and trees located to the north of the Main School Building.

Potential Impacts on Bats

Following the completion of the survey work undertaken on site to date, it can be confirmed that the Main School Building contains bat roosts used by common pipistrelle and soprano pipistrelle. Therefore, no unlicensed works can be undertaken.

Recommendations

- **Main School Building:** As a bat roost/resting place has been identified in the Main School Building, no unlicensed work can be undertaken which will contravene the legislation outlined in Appendix 1. Prior to any works being undertaken which are likely to result in a breach of the legislation, a development licence must be obtained from Natural England. Prior to a licence being issued, planning permission must be granted and relevant conditions relating to protected species and habitat issues must be discharged.

- **Caddell Centre, Bike Shed/Storage Building, Bike Shelter:** These buildings had negligible potential for roosting bats. The survey data obtained for the site is valid for 12 months from the survey date. In the unlikely event that a bat is found during demolition works all works must immediately cease and a suitably qualified ecologist should be contacted.
- **Trees:** The scattered trees on site were considered to have negligible potential for roosting bats. The survey data obtained for the site is valid for 12 months from the survey date. In the unlikely event that a bat is found during works to the trees all works must immediately cease and a suitably qualified ecologist should be contacted.
- **Scheme Design:** The proposed development should be designed to minimise effects on bats in accordance with ecological mitigation hierarchy as set out in the National Planning Policy Framework (NPPF), and the National Planning Practice Guidance (NPPG).
- **Lighting:** 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 provided in Chapter 7.

Contents

1. Introduction.....	6
1.1 Project Background	6
1.2 Site Description and Context.....	6
1.3 Documentation Provided	7
2. Methods.....	8
2.1 Desk study	8
2.2 Preliminary Bat Roost Assessment.....	8
2.3 Dusk Emergence and Dawn Re-entry Surveys.....	9
2.4 Constraints.....	11
3. Desk Study	12
3.1 Statutory Nature Conservation Sites	12
3.2 Species Records.....	12
4. Preliminary Bat Roost Assessment.....	13
4.1 Building/Structures.....	13
4.2 Trees.....	20
4.3 Site and Surrounding Habitats.....	20
5. Dusk Emergence and Dawn Re-entry Surveys	21
6. Impact Assessment	25
6.1 Summary of Proposals	25
6.2 Summary of Key Bat Features	25
6.3 Potential Impacts on Bats.....	25
7. Recommendations	26
8. Drawings.....	28
Appendix 1	33
Relevant Legislation	33
Appendix 2	35
Examples of Potential Roost Features.....	35

1. Introduction

1.1 Project Background

Middlemarch was commissioned by ISG to undertake bat surveys at Hempland Primary School located off Whitby Avenue in York. These surveys are required to inform a planning application associated with the proposed demolition of the existing school building and the construction of a new school on the same site.

Middlemarch has previously carried out a Preliminary Ecological Appraisal for Spatial Initiative at this site. The findings of this survey are detailed in Report RT-MME-156485-02. In addition, Middlemarch has been commissioned to undertake the following assessments:

- Preliminary Arboricultural Assessment (Report RT-MME-158201-01);
- Arboricultural Impact Assessment (Report RT-MME-158201-02); and,
- Arboricultural Method Statement (Report RT-MME-158201-03).

During the Preliminary Ecological Appraisal, the buildings and trees on site were assessed for their potential to support roosting bats. No evidence of bats was identified during the field survey; however, the main school building was considered to provide potential roosting features comprising lifted fascia boarding and damaged soffit boxes. Therefore, it was recommended that further survey work should be carried out prior to works commencing. None of the trees on site possessed suitable roosting features for bats.

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 29th September 2022. Further survey work, in the form of two dusk emergence surveys, was undertaken between 22nd August 2022 and 29th September 2022. A dawn emergence survey was conducted on 6th June 2023.

All UK bat species are legally 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.

1.2 Site Description and Context

Table 1.1 provides a brief summary of the site and its surroundings.

Attribute	Description
Site Location	Hempland Primary School, Whitby Avenue, York
National Grid Reference	SE 6257 5297
Site Area (ha)	2.3
Topography	Flat, with no obvious slope.
Land Cover (on site)	The site largely consisted of the built environment. However, there were areas of grassland with scattered trees located throughout the site, with a playing field dominating the southern half of the site. Small amounts of scrub were located in the north and west, hedgerows were present along the site boundaries, and an area of woodland was located in the south.

Table 1.1: Summary of Site and Surroundings (cont's)

Attribute	Description
Land Cover (site surrounds)	The school is bordered to the north and east by residential properties. To the immediate south and west of the school are a mixture of green spaces and playing fields, with residential properties beyond these. Further afield to the west lie the suburbs of the City of York, Layerthorpe and Clifton, while to the east is predominately rural.

Table 1.1 (cont'd): Summary of Site and Surroundings

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 1.2.

Document / Drawing Number	Author
Existing Site Plan: 142844-1 [23/01/2018]	Education and Skills Funding Agency
School Output Specification – Hempland Primary School: Rev P21 [25/05/2022]	Department for Education
Feasibility Study: Rev P04 [13/04/2022]	Department for Education
Planning Appraisal Report: SRP1062-MMD-XX-XX-T-X-0170 Rev P02 [08/04/2022]	Mott Macdonald
Design Control Option: SRP1062 RCA-00-00-DR-A-0102 Rev P9 [10/02/2022]	Race Cottam Associates

Table 1.2: Documentation Provided by Client

2. Methods

2.1 Desk study

As part of the Preliminary Ecological Appraisal (Report RT-MME-156485-02) an ecological desk study was undertaken. The consultee for the desk study was North and East Yorkshire Ecological Data Centre.

Middlemarch then assimilated and reviewed the desk study data provided by this organisation. 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 Preliminary Bat Roost Assessment

A Preliminary Bat Roost Assessment of the buildings and trees was carried out on site in line with the specifications detailed in Bat Mitigation Guidelines (English Nature, 2004)¹ and Bat Surveys for Professional Ecologists: Good Practice Guidelines (Collins, 2016)². The assessment was conducted on 29th September 2022 by Dr Nick Steggall (Associate Director: Technical, Registered Consultant for Low Impacts under bat class licence 21, and Licensed Bat Worker under bat class licences 19 and 20). Weather conditions were recorded and are presented in Table 2.1.

Parameter	Condition
Temperature (°C)	14
Cloud (%)	50
Wind (Beaufort)	F3
Precipitation	Nil

Table 2.1: Weather Conditions During Field Survey

A visual assessment was conducted during daylight hours of the buildings and trees 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 bats. Please refer to Appendix 2 for a list of example PRFs. Any accessible PRFs were inspected using binoculars, a torch and endoscope for evidence of possible bat presence.

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)², as detailed in Table 2.2. Trees with features present that are suitable to support roosting bats (high and moderate suitability) are discussed more fully in the report.

¹ English Nature (2004). *Bat Mitigation Guidelines*. English Nature, Peterborough.

² Collins, J. (ed). (2016). *Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd Ed.)*. The Bat Conservation Trust, London.

A summary of the trees within the survey area without suitable features to support roosting bats (low and negligible suitability) is provided within the report. Due to their negligible potential to support roosting bats, the Bat Surveys for Professional Ecologists: Good Practice Guidelines (Collins, 2016)² recommend no further survey work is required for these tree classes.

Suitability	Description
High	<p>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.</p> <p>A tree with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions and surrounding habitat.</p>
Moderate	<p>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).</p> <p>A tree 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).</p>
Low	<p>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).</p> <p>A tree of sufficient size and age to contain PRFs but with none seen from the ground or features seen with only very limited roosting potential.</p>
Negligible	Negligible habitat features on site likely to be used by roosting bats.

Table 2.2: Classification of Buildings and Trees with Bat Potential (Adapted from Collins, 2016)²

2.3 Dusk Emergence and Dawn Re-entry Surveys

Overview

A bat roost has been identified within the main school building during the first dusk emergence survey. As such, in line with Bat Surveys for Professional Ecologists: Good Practice Guidelines (Collins, 2016)², an additional two bat surveys were carried out consisting of a second dusk emergence bat survey and a dawn re-entry bat survey. The aim of these surveys was to determine the status of the roost found within the building, and to enable a profile of site utilisation by bats to be compiled.

The surveys were undertaken by the following personnel:

- Dr Nick Steggall (Associate Director: Technical, Registered Consultant for Low Impacts under bat class licence 21, and Licensed Bat Worker under bat class licences 19 and 20);
- Marie Steggall (Principal Ecological Consultant and Licensed Bat Worker under bat class licences 19 and 20);
- Dorothy Dunne (Ecological Project Officer);
- Sam Weir (Ecological Project Officer);
- Amy Barnacle (Ecological Project Assistant);
- David Higgins (Ecological Project Assistant);
- Archie Neale (Field Ecologist);
- Benedetta De Luigi (Field Assistant); and,
- Tim Meigh (Field Assistant).
- Ellie Rickman (Principal Ecological Consultant)
- Anna Evans (Ecological Consultant)
- Charlotte Richardson (Senior Ecological Consultant)
- Amy Carter (Ecological Consultant)
- Sarah Simpson (Ecological Field Officer)

The weather conditions were recorded on each survey and are presented in Table 2.1.

Type of Survey	Date	Time	Parameter			
			Temperature °C	Cloud %	Precipitation	Wind (Beaufort Scale)
Dusk	22-08-22	Start	18	80	Nil	F3
		End	17	100	Nil	F3
Dusk	29-09-22	Start	13	5	Nil	F2
		End	11	0	Nil	F2
Dawn	6-6-2023	Start	11	100	Nil	F0
		End	10	100	Nil	F0

Table 2.1: Weather Conditions During Field Surveys

Dusk Emergence Bat Surveys

In line with the specifications detailed in Bat Surveys for Professional Ecologists: Good Practice Guidelines (Collins, 2016)², the dusk surveys commenced 20 minutes prior to sunset and continued until 90-120 minutes after sunset.

Dawn Re-Entry Bat Survey

Bats swarm at their roost site 10-90 minutes prior to entering the roost at dawn (Mitchell-Jones & McLeish, 2004)³. Surveying for dawn swarming by bats is an efficient way of detecting bat roosts. In line with the specifications detailed by Bat Surveys for Professional Ecologists: Good Practice Guidelines (Collins, 2016)² the dawn survey commenced 90-120 minutes prior to sunrise and continued until 15 minutes after sunrise.

³ Mitchell-Jones, A.J. & McLeish, A.P. (2004). *The Bat Workers' Manual (3rd Ed.)*. JNCC, Peterborough.

Equipment and Analysis

The dusk emergence and dawn re-entry surveys were conducted using electronic bat detectors (Echometer Touch 2) and night vision aids to facilitate the detection of bats and to aid in the determination of species of bat using the site. Subsequent computer analysis of sound recordings was used to facilitate the identification of bat species/families present during the surveys. Some species of bats echolocate at similar frequencies and the characteristics of their calls can overlap, i.e. *Myotis* species, and calls can vary dependant on the environment that the bats are in. It is widely accepted that if there is any doubt identifying a bat to species level then identification to family level is satisfactory (Russ, 1999)⁴. If echolocation calls more closely resemble one species than another, then they will be assigned to species level based on the parameters set out in Russ (2012)⁵ for guidance. Identification of overlapping species should, however, be interpreted with caution.

2.4 Constraints

Due to access restrictions, the buildings were only surveyed externally.

⁴ Russ, J. (1999). *The Bats of Britain and Ireland. Echolocation calls, sound analysis, and species identification*. 1st edn. Alana Ecology Ltd, London.

⁵ Russ, J. (2012) *British Bat Calls: A Guide to Species Identification*. Pelagic Publishing, Exeter.

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 October 2021 by North and East Yorkshire Ecological Data 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 Survey Area	Species of Principal Importance?	Legislation / Conservation Status
Pipistrelle <i>Pipistrellus pygmaeus</i>	1	2010	5 m west	#	ECH 4, WCA 5, WCA 6
Common pipistrelle <i>Pipistrellus pipistrellus</i>	23	2014	140 m south-west	-	ECH 4, WCA 5, WCA 6
Unidentified bat <i>Chiroptera</i> sp.	1	2004	700 m south-east	#	ECH 2 #, ECH 4, WCA 5, WCA 6
<p>Key: #: Dependent on species.</p> <p>ECH 2: Annex II of the European Communities Council Directive on the Conservation of Natural Habitats and Wild Fauna and Flora. Animal and plant species of community interest whose conservation requires the designation of Special Areas of Conservation.</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.</p> <p>WCA 5: Schedule 5 of Wildlife and Countryside Act 1981 (as amended). Protected animals (other than birds).</p> <p>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. Preliminary Bat Roost Assessment

4.1 Building/Structures

Drawing C158201-04-01, illustrating the layout of the buildings on site and the results of the survey, is provided in Chapter 8.

Main School Building (EFAA)

External Assessment

The Main School Building comprised several sections which varied from single-storey to two-storeys in height (Plates 4.1 to 4.8). It was constructed from brick with concrete rendering present in some sections. The roofs were all flat, except for the pitched section at the southern end of the eastern elevation, and they were all covered in bitumen felt. The soffits around the main entrance had been replaced with uPVC boards, but the rest of the building had wooden soffits with wooden fascia boards. A number of windows were present around the building. These were set in uPVC frames, which were tightly fitted with no gaps.

A small, covered courtyard was present midway along the southern elevation of the Main School Building. The canopy in this area was constructed from clear plastic sheeting supported by a metal frame (Plate 4.9). At the northern end of the western elevation, there was a wooden framed canopy with a curved roof (Plate 4.10). No gaps were present where the canopies joined the Main School Building.

There was a tall brick chimney rising from the centre of the building (Plate 4.11). This appeared to be in good condition when viewed from the ground using binoculars.

Multiple features were identified around the building which could potentially be used by bats to gain access into the building or potential roosting locations. These features included:

- Gaps under roof edging (Plates 4.12 and 4.13);
- Damaged fascia boards (Plates 4.14 to 4.16);
- Damaged soffits (Plates 4.17 and 4.18);
- Missing vent cover leading into soffit box (Plate 4.19);
- Lifted lead flashing (Plate 4.20);
- Holes in brickwork (Plate 4.21); and,
- Gaps around windowsills.

Due to their height and location, many of the features listed above could not be fully inspected. Where accessible, features were checked and found to be clear of cobwebs and debris, possibly indicating recent use by bats or birds. No evidence of bats was recorded.



**Plate 4.1: Main entrance,
central section of northern elevation**



**Plate 4.2: Northern end
of eastern elevation**



**Plate 4.3: Central section
of eastern elevation**



Plate 4.4: Southern end of eastern elevation



Plate 4.5: Eastern end of southern elevation



**Plate 4.6: Western end
of southern elevation**



Plate 4.7: Southern end of western elevation



Plate 4.8: Western end of northern elevation



Plate 4.9: Courtyard in central section of southern elevation



Plate 4.10: Canopy at northern end of western elevation

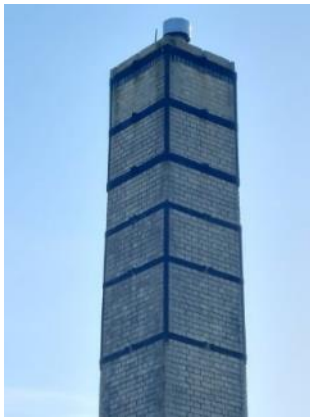


Plate 4.11: Tall chimney in centre of building



Plate 4.12: Gaps under roof edge



Plate 4.13: Gaps under roof edge



Plate 4.14: Damaged fascia boards



Plate 4.15: Damaged fascia boards



Plate 4.16: Gap in fascia board



Plate 4.17: Damaged soffit

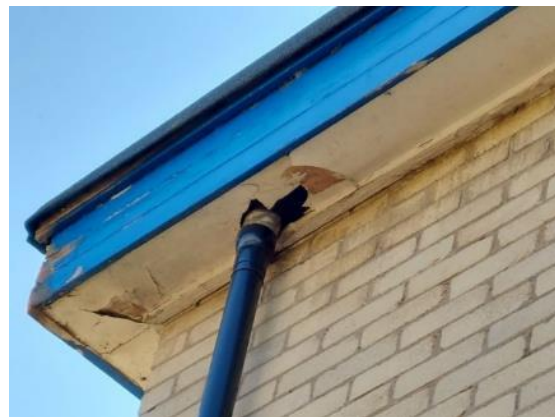


Plate 4.18: Damaged soffit



Plate 4.19: Missing vent cover

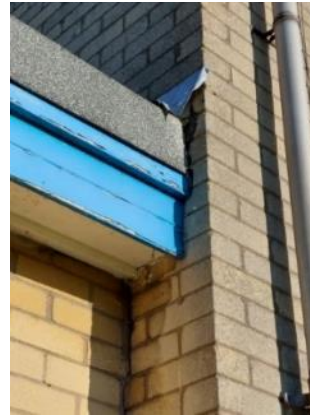


Plate 4.20: Lifted lead flashing



Plate 4.21: Holes in brickwork and gap around windowsill

Internal Assessment

An internal inspection of the Main School Building was not possible at the time of the survey due to access restrictions.

The areas beneath the canopies were very draughty and open to the elements, with high levels of daylight making them unsuitable for roosting bats. They held no potential roosting features for bats.

Roosting Potential

The Main School Building has been assessed as having high potential to support roosting bats.

Caddell Centre (EFAB)

External Assessment

This was a modern addition to the original school building, consisting of a single-storey, standalone block located to the south of the Main School Building (Plate 4.22). It had a brick base with wooden cladding on the walls, and a flat roof covered in metal sheeting. There were wide, metal soffits all around the building, the windows and doors were set in uPVC frames. The building was well-sealed with no potential ingress points or roosting features present.

A canopy connected the eastern elevation of the Caddell Centre to the Main School Building, forming a small covered courtyard between the two buildings (Plate 4.23). The canopy was constructed from clear plastic sheeting supported by a metal frame. No gaps were present where the canopy joined the two buildings.



Plate 4.22: Southern elevation



Plate 4.23: Canopy connecting the eastern elevation to the Main School Building

Internal Assessment

An internal inspection of the Caddell Centre was not possible at the time of the survey due to access restrictions.

The area beneath the canopy was very draughty and open to the elements, with high levels of daylight making it unsuitable for roosting bats. It held no potential roosting features for bats.

Roosting Potential

The Caddell Centre has been assessed as having high potential to support roosting bats.

Bike Shed/Storage Building

External Assessment

A Bike Shed/Storage Building was present to the north of the Main School Building. This comprised a single-storey building with a flat roof covered in bitumen felt (Plate 4.24). The central section housed a storage room, which was constructed from brick and had wooden doors along the southern elevation (Plate 4.25). The brickwork was in good condition with no cracks or crevices present. The wooden doors were also in good condition and tightly fitted with no gaps. At the eastern and western ends of the building, there was a bike shed and storage area which were open sided (Plate 4.26). Wooden fascia boards were present along the entire length of the building. These were intact and tightly fitted with no gaps.



Plate 4.24: Northern elevation



Plate 4.25: Storage room in centre of building



Plate 4.26: Bike store at eastern end of building

Internal Assessment

An internal inspection of the storage room was not possible at the time of the survey due to access restrictions.

The bike shed and open storage area were very draughty and open to the elements, with high levels of daylight making these areas unsuitable for roosting bats. The roof in these areas was supported by painted wooden beams and a steel frame. They held no potential roosting features for bats.

Roosting Potential

The Bike Shed/Storage Building has been assessed as having negligible potential to support roosting bats.

Bike Shelter

External Assessment

A Bike Shelter was present to the south-west of the Main School Building. This was constructed from a metal frame with clear plastic sheets (Plate 4.27). It held no potential roosting features for bats.



Plate 4.27: Bike Shelter

Internal Assessment

The interior of the Bike Shelter was very draughty and open to the elements, with high levels of daylight making it unsuitable for roosting bats. It held no potential roosting features for bats.

Roosting Potential

The Bike Shelter was assessed as having negligible potential to support roosting bats.

4.2 Trees

There was a mature plantation of broadleaved trees at the southern end of the site, adjacent to the corridor of the off-site Tang Hall Beck. The trees had been planted in a double row for most of the length of woodland, although they were more spaced out towards the western end of the woodland area. Tree species present comprised alder *Alnus glutinosa*, ash *Fraxinus excelsior*, blackthorn *Prunus spinosa*, common lime *Tilia x europaea*, crab apple *Malus sylvestris*, English oak *Quercus robur*, field maple *Acer campestre*, rowan *Sorbus aucuparia*, hornbeam *Carpinus betulus*, whitebeam *Sorbus* sp., and wild cherry *Prunus avium*. This area of woodland is to be retained according to the proposed plans, and therefore the trees here were not subject to the Preliminary Bat Roost Assessment.

In addition, there were a number of scattered trees present on site, as well as some hedgerow trees. Species included: alder, apple *Malus* sp., ash, beech *Fagus sylvatica*, bird cherry *Prunus padus*, blackthorn, common lime, copper beech *Fagus sylvatica purpurea*, crab apple, elder *Sambucus nigra*, English oak, field maple, golden weeping willow *Salix x sepulcralis* 'Chrysocoma', hawthorn *Crataegus monogyna*, Himalayan birch *Betula utilis*, holly *Ilex aquifolium*, hornbeam, Leyland cypress *X Cupressocyparis leylandii*, maidenhair tree *Ginkgo biloba*, Norway maple *Acer platanoides*, Norway maple variety *Acer platanoides* 'Crimson King', pear *Pyrus communis*, plum *Prunus domestica*, silver birch *Betula pendula*, sycamore *Acer pseudoplatanus*, whitebeam, and wild cherry. The trees ranged from young to mature and measured up to approximately 17 m in height. Some trees had minor deadwood in the canopy and old pruning wounds. However, these features did not extend into any suitable cavities for bats. There was also a light covering of ivy on some trees, but this did not create any potential roosting features. Therefore, the trees were classed as having negligible potential to support roosting bats.

4.3 Site and Surrounding Habitats

The areas of grassland, scrub, scattered trees, hedgerows and woodland on site provide suitable foraging and commuting opportunities for bats, linking the site to alternative roosting, foraging and commuting features in the surrounding area. This includes the adjacent Tang Hall Beck, which provides a valuable commuting corridor through the wider landscape. Therefore, the habitats on site were considered to have high potential to be used by bats.

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

- Residential houses and associated gardens;
- Farmhouses and associated agricultural buildings;
- Running water and standing waterbodies;
- Pockets of woodland;
- Agricultural fields with tree and hedge lined boundaries;
- Allotments;
- Churches, schools and associated grounds; and,
- Golf courses and recreational grounds with associated open grassland habitats.

5. Dusk Emergence and Dawn Re-entry Surveys

5.1 First Dusk Emergence Survey

The first dusk emergence survey commenced 15 minutes prior to sunset and continued until 120 minutes after sunset. Sunset was at 20:20 hrs (BBC Weather Centre Data for York). Four species of bat were recorded during the survey: noctule *Nyctalus noctula*, common pipistrelle *Pipistrellus pipistrellus*, soprano pipistrelle *Pipistrellus pygmaeus*, and Daubenton's bat *Myotis daubentonii*. Survey results are plotted on Drawing C158201-04-02 in Chapter 8.

Common pipistrelle

The first common pipistrelle was detected at 20:33 (13 minutes after sunset) as it commuted onto site from the north-east and flew south past the eastern elevation of the Main School Building before continuing south towards the woodland and Tang Hall Beck.

At 20:42 (22 minutes after sunset), a common pipistrelle commuted onto site from the south-east and flew northwards along the tree line located at the eastern end of the playing field before exiting the site to the north-east.

At 20:45 (25 minutes after sunset), a common pipistrelle was detected as it foraged along the hedgerow associated with the western boundary of the site. This bat was not observed emerging from any features associated with the site. Occasionally the bat foraged over the grassland and trees close to the Main School Building before returning to the western boundary. Foraging activity was recorded intermittently in these areas until 21:15 (55 minutes after sunset) when the bat flew around the south-western corner of the Main School Building and commuted east past the southern elevation before heading south across the playing field towards the woodland and Tang Hall Beck.

At 20:47 (27 minutes after sunset), a common pipistrelle was detected as it foraged along the tree line located at the eastern end of the playing field. This bat was not observed emerging from any features associated with the site. Foraging activity was recorded intermittently in this area until 21:15 (55 minutes after sunset).

At 20:48 (28 minutes after sunset), a common pipistrelle was detected as it foraged over the grassland and trees located to the north of the Main School Building. This bat was not observed emerging from any features associated with the site. Foraging activity was recorded intermittently in this area until 21:00 (40 minutes after sunset).

At 20:58 (38 minutes after sunset), an individual common pipistrelle emerged from a gap beneath the roof edging on the two-storey section located at the south-eastern end of the Main School Building. This bat did not stay to forage on site; instead, it commuted south-west across the playing field and exited the site.

Noctule

The first noctule was detected at 20:34 (14 minutes after sunset) as it commuted high over the site. This bat was not observed emerging from any features associated with the site. This bat did not stay to forage over the site. Additional noctule passes were recorded at 20:41 (21 minutes after sunset) and 21:11 (51 minutes after sunset).

Soprano pipistrelle

The first soprano pipistrelle was detected at 20:47 (27 minutes after sunset) as it foraged along the hedgerow associated with the western boundary of the site. This bat was not observed emerging from any features associated with the site. Occasionally the bat foraged over the grassland and trees close to the Main School Building before returning to the western boundary. Foraging activity was recorded intermittently in these areas until 20:54 (34 minutes after sunset) when the bat commuted south-east across the playing field towards the woodland and Tang Hall Beck.

At 20:57 (37 minutes after sunset), a soprano pipistrelle commuted from south-east to north-west across the playing field before turning and flying back towards the woodland and Tang Hall Beck.

At 21:02 (42 minutes after sunset), a soprano pipistrelle commuted onto site from the north-east and flew south past the eastern elevation of the Main School Building before continuing south towards the woodland and Tang Hall Beck.

At 21:03 (43 minutes after sunset), a soprano pipistrelle emerged from a gap beneath the roof edging on the two-storey section located towards the south-eastern end of the Main School Building. This bat did not stay to forage on site; instead, it commuted south across the playing field towards the woodland and Tang Hall Beck.

At 21:05 (45 minutes after sunset), a soprano pipistrelle commuted onto site from the west and flew east past the southern elevation of the Main School Building before turning and flying back towards western boundary. Similar soprano pipistrelle passes were recorded at 21:06 (46 minutes after sunset) and 21:07 (47 minutes after sunset).

Daubenton's bat

The first Daubenton's bat was detected at 21:00 (40 minutes after sunset) as it commuted onto site from the west and flew past the southern elevation of the Main School Building before commuting southwards along the tree line located at the eastern end of the playing field and exiting the site to the south-east. A similar Daubenton's bat pass was recorded at 21:13 (53 minutes after sunset).

No other species of bat were detected or observed during this survey. Analysis of the sound recordings did not identify any further species of bat.

5.2 Second Dusk Emergence Survey

The second dusk emergence survey commenced 15 minutes prior to sunset and continued until 120 minutes after sunset. Sunset was at 18:47 hrs (BBC Weather Centre Data for York). Three species of bat were recorded during the survey: noctule, common pipistrelle and soprano pipistrelle. Survey results are plotted on Drawing C158201-04-03 in Chapter 7.

Soprano pipistrelle

The first soprano pipistrelle was detected at 18:55 (8 minutes after sunset) as social calls were recorded in the vicinity of the roost identified during the first dusk emergence survey. Then within a couple of minutes of each other, two soprano pipistrelles emerged from a gap beneath the roof edging on the two-storey section located towards the south-eastern end of the Main School Building. These bats began foraging within the courtyard below and occasionally along the southern elevation of the building. Foraging activity was recorded intermittently in these areas for the remainder of the survey.

Common pipistrelle

The first common pipistrelle was detected at 19:09 (22 minutes after sunset) as it foraged along the hedgerow associated with the western boundary of the site. This bat was not observed emerging from any features associated with the site. Occasionally the bat foraged over the grassland and trees close to the Main School Building before returning to the western boundary. Foraging activity was recorded intermittently in these areas for the remainder of the survey.

At 19:10 (23 minutes after sunset), a common pipistrelle was detected as it foraged along the tree line located at the eastern end of the playing field. This bat was not observed emerging from any features associated with the site. Foraging activity was recorded intermittently in this area until 19:25 (38 minutes after sunset).

At 19:12 (25 minutes after sunset), a common pipistrelle commuted onto site from the north-west and flew south past the western elevation of the Main School Building. This bat then flew around the south-western corner of the building and commuted east past the southern elevation before heading south across the playing field towards the woodland and Tang Hall Beck.

At 19:14 (27 minutes after sunset), a common pipistrelle was detected as it foraged over the grassland and trees located to the north of the Main School Building. This bat was not observed emerging from any features associated with the site. Foraging activity was recorded intermittently in this area until 19:38 (51 minutes after sunset).

At 19:14 (27 minutes after sunset), a common pipistrelle commuted onto site from the north-east and flew south past the eastern elevation of the Main School Building before flying around the south-eastern corner of the building and commuting south-west across the playing field.

At 19:24 (37 minutes after sunset), a common pipistrelle commuted onto site from the west and flew east past the northern elevation of the Main School Building before exiting the site to the east.

At 19:35 (48 minutes after sunset), a common pipistrelle commuted onto site from the north-east and flew south past the eastern elevation of the Main School Building before flying around the south-eastern corner of the building and commuting south-west across the playing field.

Noctule

The first noctule was detected at 19:16 (29 minutes after sunset) as it commuted high over the site. This bat was not observed emerging from any features associated with the site. This bat did not stay to forage over the site. A second noctule pass was recorded at 19:19 (32 minutes after sunset).

No other species of bat were detected or observed during this survey. Analysis of the sound recordings did not detect any further species of bat.

5.3 Dawn Re-entry Survey

The third dawn re-entry survey commenced 90 minutes prior to sunrise and continued until 15 minutes after sunrise. Sunrise was at 04:36 hrs (BBC Weather Centre Data for York). Three species of bat were recorded during the survey: common pipistrelle, soprano pipistrelle and brown long eared bat. Survey results are plotted on Drawing C158201-04-04 in Chapter 7.

Common pipistrelle

The first common pipistrelle was recorded at 03:06 a.m, 1 hour and 30 minutes before sunrise. Occasional detections were noted between 03:06 and 03.53, however no visual detections were

made until 03:41, when a bat was observed passing over the building from east to west, with a bat exiting the site to the north-east after foraging over the hardstanding.

At 03:06 (90 minutes before sunrise), two common pipistrelle were seen foraging over the hardstanding and grassland, adjacent to the building until 03:09, with just one bat seen until 03:15am, with another bat returning to forage after this time. One or two bats were seen regularly foraging until 03.23am.

At 03:08 (88 minutes before sunrise), a common pipistrelle was observed foraging over the hard standing area to the north of the building.

At 03:26 (70 minutes before sunrise), a common pipistrelle was observed foraging in the same location as above. This was briefly detected up until 03:50am in this area.

At 03.42 (54 minutes before sunrise), a common pipistrelle was detected but not seen.

At 03.50 (46 minutes before sunrise), a common pipistrelle flew west to east along the south side of the building.

At 3:51 (45 minutes before sunrise), a common pipistrelle flew along the south side of the building and flew off to the west.

At 03:52 (44 minutes before sunrise), a common pipistrelle flew from the east, briefly foraging and returned east back over the building. No re-entry was observed.

At 03.57 (39 minutes before sunrise), a common pipistrelle flew over the surveyor in the courtyard and disappeared. This bat was assumed to have returned to roost as it was not detected by surveyors on the other side of the building.

At 04.06 (30 minutes before sunrise), a common pipistrelle foraged around the trees to the south.

At 4:08 and 04:10 (28 minutes before sunrise), a common pipistrelle was detected but no visual contact was made.

At 04:12 (24 minutes before sunrise), a common pipistrelle was seen commuting north to south in front of the building, then flying off into the trees.

At 04:20, (16 minutes before sunrise) the last common pipistrelle detection was made. No visual contact was observed, but no bats were seen re-entering the building.

Soprano pipistrelle

A soprano pipistrelle was detected at 03:15 (81 minutes before sunrise) by the surveyor to the north west of the building. This bat was not observed but was considered likely to be foraging around trees behind the surveyor.

Brown long eared

At 03.38 (58 minutes before sunrise) a brown long eared bat was detected to the north of the building, but no visual contact was made.

6. Impact Assessment

6.1 Summary of Proposals

Proposals comprise the demolition of the existing school building and the construction of a new school on the same site with associated hard and soft landscaping. The existing woodland is to be retained in its entirety. Most of the existing scattered trees will also be retained, but a small number will be removed to facilitate the new development.

6.2 Summary of Key Bat Features

Roosting Bats

The Main School Building was assessed as having high potential to support roosting bats during the Preliminary Bat Roost Assessment, whilst the Caddell Centre, the Bike Shed/Storage Building, and the Bike Shelter were assessed as having negligible potential to support roosting bats.

During the first dusk emergence survey, an individual common pipistrelle and an individual soprano pipistrelle emerged from gaps beneath the roof edging on the two-storey sections located towards the south-eastern end of the Main School Building.

During the second dusk emergence survey, two soprano pipistrelles emerged from the same gap beneath the roof edging as identified during the first dusk survey. This was on the two-storey section located towards the south-eastern end of the Main School Building.

During the dawn re-entry survey, a single common pipistrelle returned to roost in the same location.

Commuting/Foraging Bats

The habitats on site were considered to have high potential to be used by bats, with the adjacent Tang Hall Beck providing a valuable commuting corridor through the wider landscape.

Four bat species were recorded during the dusk emergence surveys: noctule, common pipistrelle, soprano pipistrelle, and Daubenton's bat. Commuting and foraging activity was recorded during the survey period. This was predominantly by pipistrelles along the hedgerow associated with the western boundary of the site. Intermittent foraging was also recorded along the tree line located at the eastern end of the playing field, and over the grassland and trees located to the north of the Main School Building. Occasional noctule passes were recorded as bats commuted high over the site. Only two Daubenton's bat passes were recorded; these were over the playing field in the south of the site.

6.3 Potential Impacts on Bats

Following the completion of the survey work undertaken on site to date, it can be confirmed that the Main School Building contains individual summer bat roosts used by common pipistrelle and soprano pipistrelle. Therefore, no unlicensed works can be undertaken. A recommendation regarding the licence application is made in Chapter 7.

7. Recommendations

All recommendations provided in this section are based on Middlemarch'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 Main School Building: As a bat roost/resting place has been identified in the Main School Building, no unlicensed work can be undertaken which will contravene the legislation outlined in Appendix 1. Examples of works which will breach this legislation include:

- Roof modifications/repairs/removal;
- Timber treatment;
- Noise, vibrations and storage of odorous and dangerous chemicals;
- Alterations to bat entrance/exit points;
- Investigations works in the roof as this can cause bats to abort their young/awake from hibernation and can alter the roof temperature/humidity; and,
- Works in the main body of the building.

N.B. This is not an exhaustive list and a bat worker should be consulted to determine if the works are likely to breach any legislation.

Prior to any works being undertaken which are likely to result in a breach of the legislation, a development licence must be obtained from Natural England. The licence application process will include the submission of a method statement detailing the current status of bats on site and how the favourable conservation status of the bat population will be maintained. Prior to a licence being issued, planning permission must be granted and relevant conditions relating to protected species and habitat issues must be discharged.

R2 Caddell Centre, Bike Shed/Storage Building, Bike Shelter: The Caddell Centre, Bike Shed/Storage Building and Bike Shelter had negligible potential for roosting bats. The survey data obtained for the site is valid for 12 months from the survey date. If development works to the surveyed buildings have not commenced within this timeframe it will be essential to update the survey effort to establish if suitable features have developed and if bats have colonised the buildings in the interim. In the unlikely event that a bat is found during demolition works all works must immediately cease and a suitably qualified ecologist should be contacted.

R3 Trees: The scattered trees on site were considered to have negligible potential for roosting bats. The survey data obtained for the site is valid for 12 months from the survey date. If proposed site works have not commenced within this timeframe it will be essential to update the survey effort to establish if the trees have developed features that could be used by roosting bats in the interim. In the unlikely event that a bat is found during works to the trees all works must immediately cease and a suitably qualified ecologist should be contacted.

R4 Scheme Design: The proposed development should be designed to minimise effects on bats in accordance with ecological mitigation hierarchy as set out in the National Planning Policy Framework (NPPF), and the National Planning Practice Guidance (NPPG): The ecological mitigation hierarchy requires all development schemes to apply to following principles:

- *Avoidance* – the proposed development should seek to avoid/minimise losses of features with bat potential, in the first instance and incorporate these features in the landscaping layout of the scheme accordingly. Similarly, protection measures for retained features and surrounding habitats should be considered to prevent incidental damage or disturbance during the construction phases. These measures will help to reduce the likelihood of impacting bats and minimise losses of suitable bat roosts and habitat.
- *Mitigation* – where significant harm cannot be wholly or partially avoided, adverse should be minimised by design or through the use of effective mitigation measures such as minimising light spill (see below).
- *Compensation* – where unavoidable losses occur and mitigation cannot be provided, compensation for significant residual harm will be required as a last resort or planning permission could be refused. Where there is a significant effect on a bat roost, a compensation strategy sufficient to obtain a development licence from Natural England may also be required.

R5 Lighting: In accordance with best practice guidance relating to lighting and biodiversity (Miles et al, 2018⁶; Gunnell et al, 2012⁷), 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 trees, hedgerows and woodland edges.
- 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.

⁶ 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.

⁷ Gunnell, K., Grant, G. and Williams, C. (2012) *Landscape and urban design for bats and biodiversity*. Bat Conservation Trust.

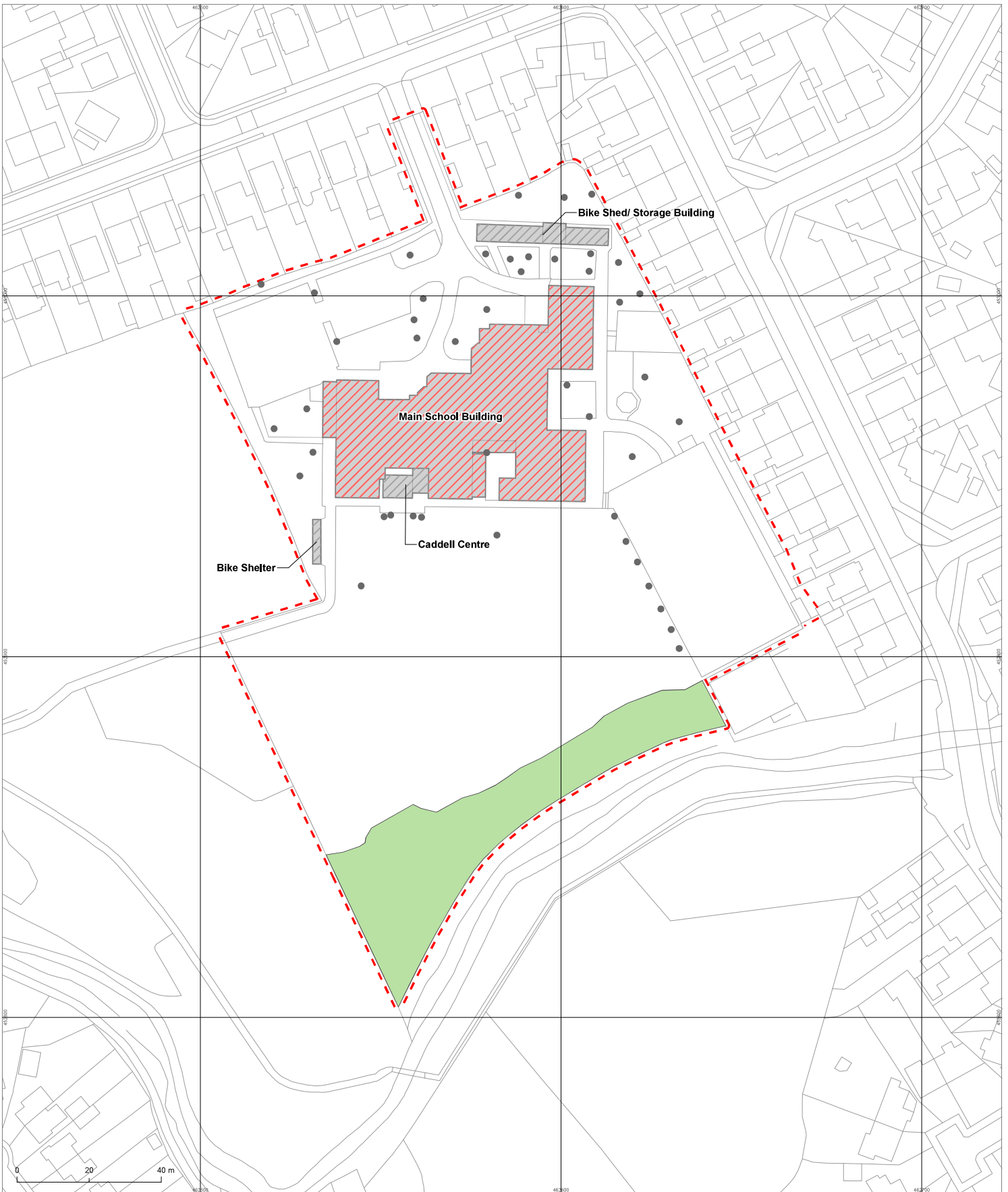
8. Drawings

Drawing C160543-04-01 – Preliminary Bat Roost Assessment

Drawing C160543-04-02 – First Dusk Emergence Survey


Drawing C160543-04-03 – Second Dusk Emergence Survey

Drawing C160543-04-04 – Dawn Re-entry Survey



- Legend**
- - - Site boundary
 - Tree surveyed with negligible roosting potential
 - Building surveyed
 - ▨ Building surveyed with high roosting potential
 - ▧ Building surveyed with negligible roosting potential
 - Woodland to be retained

Project		Hempland Primary School, York	
Drawing		Preliminary Roost Assessment	
Client		ISG	
Drawing Number	C160543-04-01	Revision	00
Scale @ A3	1:1,000	Date	June 2023
Approved By	ER	Drawn By	BD



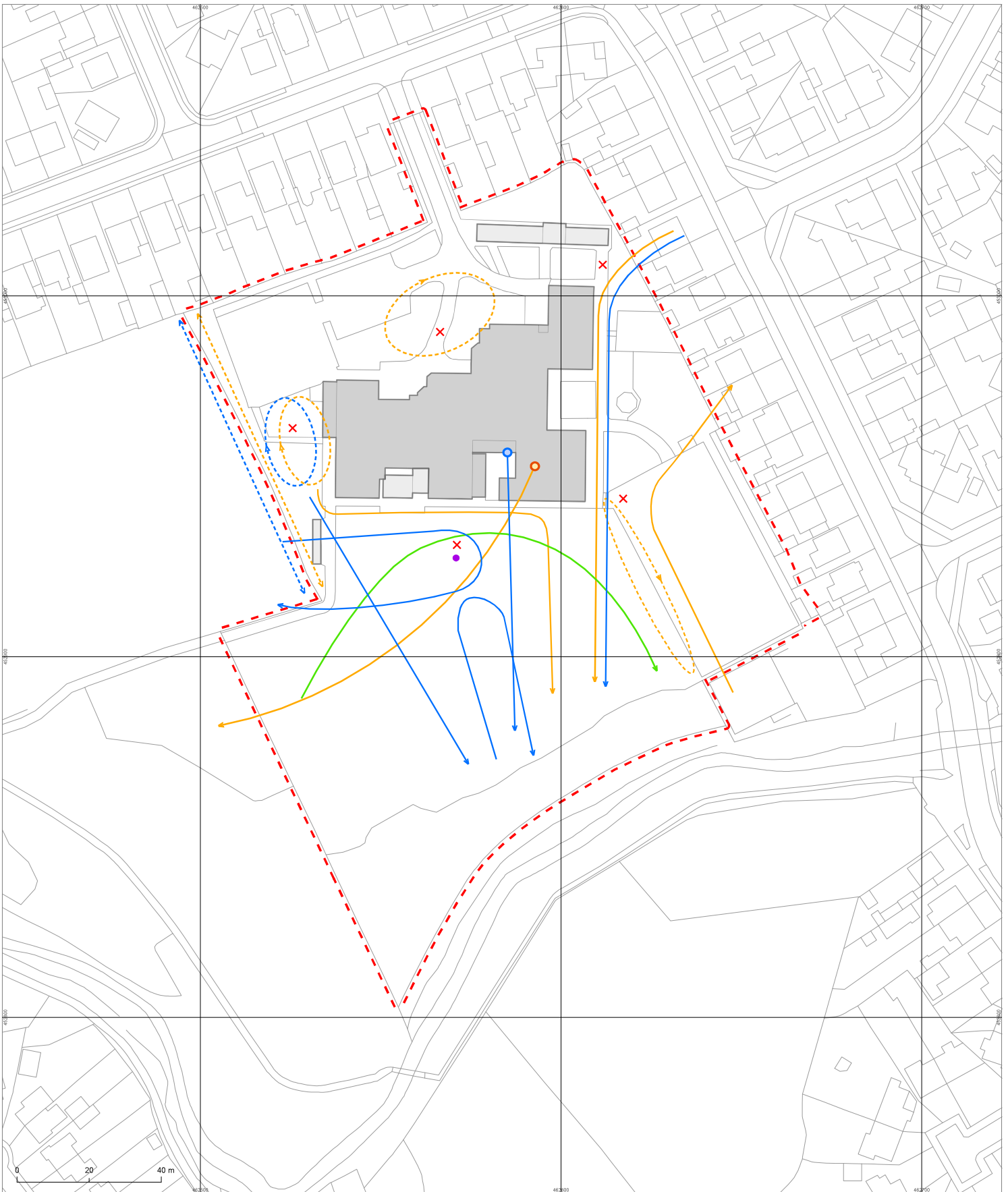
MIDDLEMARCH

Triumph House, Birmingham Road, Allestree, Coventry CV5 9AZ
T: 01676 525880
E: admin@middlemarch-environmental.com

C160543-04-01

This map is reproduced from the Ordnance Survey material with the permission of Ordnance Survey on behalf of The Controller of Her Majesty's Stationery Office. © Crown copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution if not proceedings.

License number: 10004219



- Legend**
- - - Site boundary
 - Building surveyed
 - Building not surveyed
 - X Surveyor location
 - Bat activity:**
 - Soprano pipistrelle emergence point
 - Noctule detected
 - Common pipistrelle commuting
 - Common pipistrelle foraging
 - Daubenton's bat commuting
 - Soprano pipistrelle commuting
 - Soprano pipistrelle foraging
 - Common pipistrelle emergence point

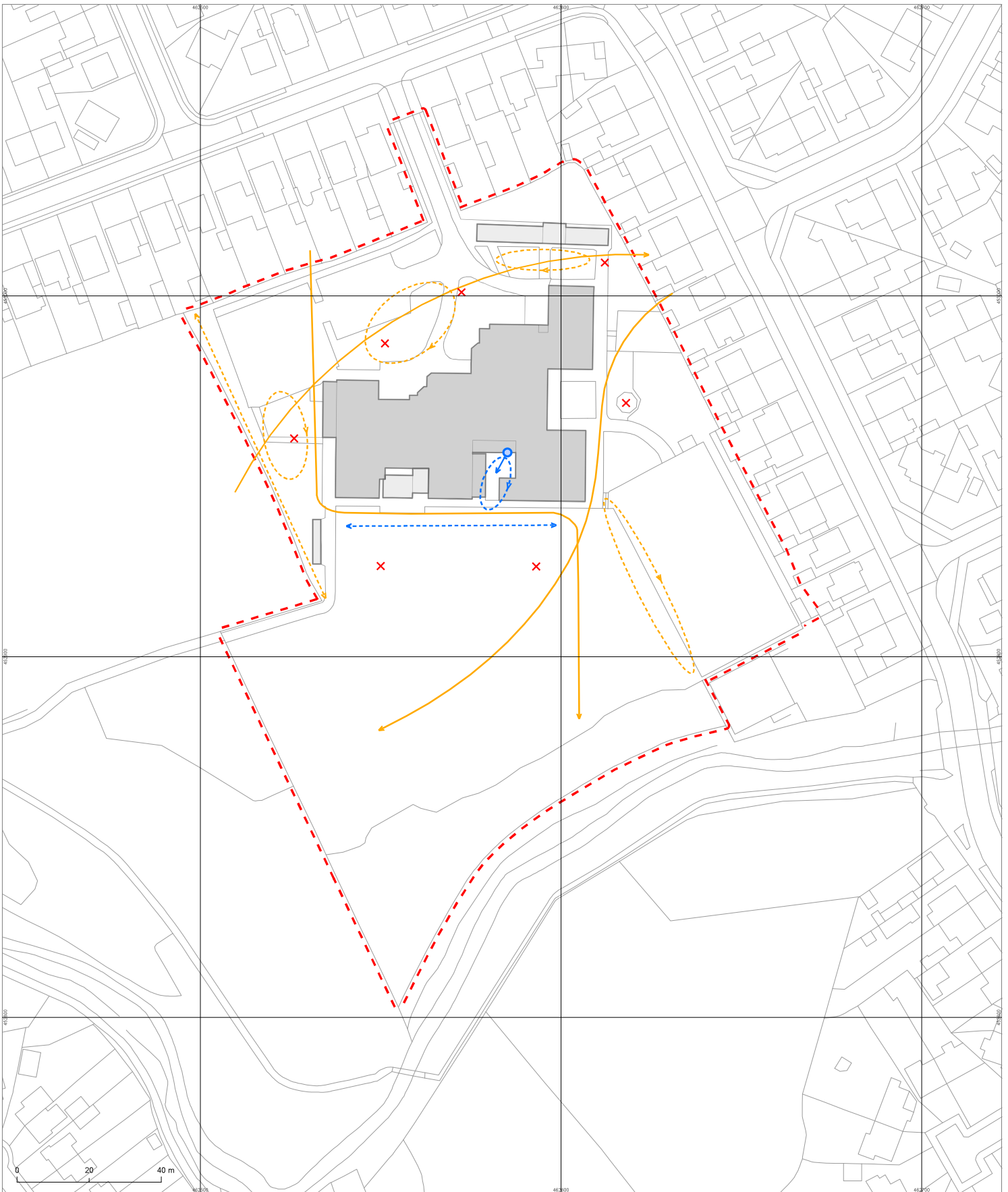
Project		Hempland Primary School, York	
Drawing		First Dusk Emergence Survey (22/08/2022)	
Client		ISG	
Drawing Number	C160543-04-02	Revision	00
Scale @ A3	1:1 000	Date	June 2023
Approved By	ER	Drawn By	BD

MIDDLEMARCH

Triumph House, Birmingham Road, Allesley, Coventry CV5 9AZ
T: 01676 525880
E: admin@middlemarch-environmental.com


This map is reproduced from the Emergence Survey material with the permission of Emergence Survey on behalf of The Controller of Her Majesty's Stationery Office. © Crown Copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution for civil proceedings. Licence number: 10004219

C160543-04-02



- Legend**
- - - Site boundary
 - Building surveyed
 - Building not surveyed
 - × Surveyor location
- Bat activity:**
- Soprano pipistrelle emergence point
 - Common pipistrelle commuting
 - Common pipistrelle foraging
 - Soprano pipistrelle commuting
 - Soprano pipistrelle foraging

Project		Hempland Primary School, York	
Drawing		Second Dusk Emergence Survey (29/09/2022)	
Client		ISG	
Drawing Number	C160543-04-03	Revision	00
Scale @ A3	1:1 000	Date	June 2023
Approved By	ER	Drawn By	BD

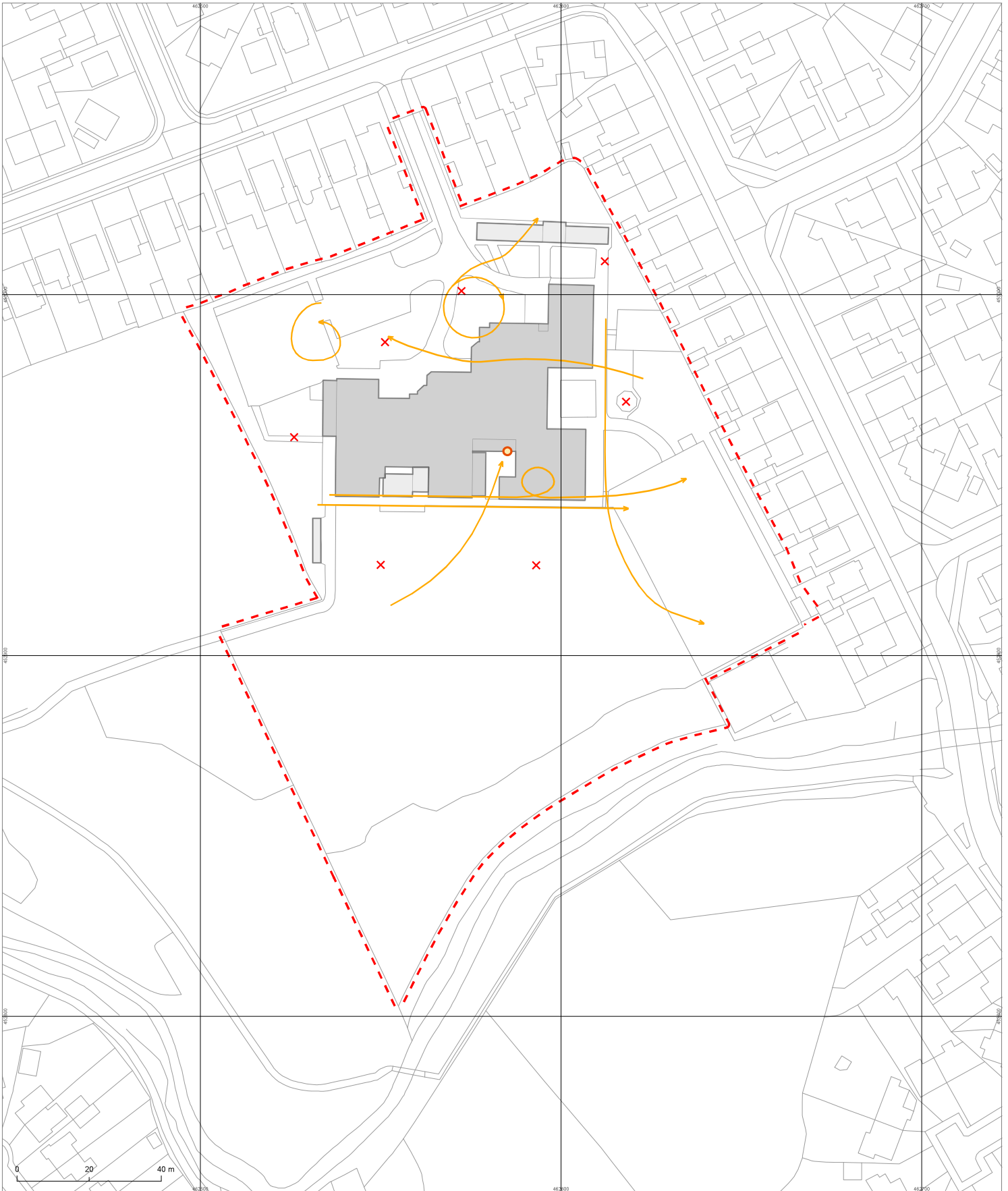


MIDDLEMARCH

Triumph House, Birmingham Road, Allesley, Coventry CV5 9AZ
T:01676 525880
E:admin@middlemarch-environmental.com

C160543-04-03

This map is reproduced from the Ordinance Survey material with the permission of Ordnance Survey on behalf of The Controller of Her Majesty's Stationery Office. © Crown copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution if not prevented. Licence number: 10004919



Legend

- - - Site boundary
- X Surveyor location
- Building surveyed
- Building not surveyed
- Bat activity**
- Common pipistrelle re-entry point
- Common pipistrelle activity

Project Hempland Primary School, York	
Drawing Dusk Re-entry Survey (06/06/2023)	
Client ISG	
Drawing Number C160543-04-04	Revision 00
Scale @ A3 1:1 000	Date June 2023
Approved By ER	Drawn By AW
MIDDLEMARCH	
Triumph House, Birmingham Road, Allestree, Coventry CV5 9AZ T:01676 525880 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 Stationery Office. © Crown copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution for civil proceedings. Licence number: 10004919	

C160543-04-04



Appendix 1

Relevant Legislation

Bats and the places they use for shelter or protection (i.e. roosts) receive legal protection under the Conservation of Habitats and Species Regulations 2017 (Habitats Regulations 2017) and the Conservation of Habitats and Species Regulations (Amendment) (EU Exit) Regulations 2019 (Habitats Regulations 2019). 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.

Changes have been made to parts of the Habitats Regulations 2017 so that they operate effectively from 1st January 2021. The changes are made by the Habitats Regulations 2019, which transfer functions from the European Commission to the appropriate authorities in England and Wales.

All other processes or terms in the 2017 Regulations remain unchanged and existing guidance is still relevant.

The obligations of a competent authority in the 2017 Regulations for the protection of species do not change. A competent authority is a public body, statutory undertaker, minister or department of government, or anyone holding public office.

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

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*. Species of Principal Importance for Nature Conservation in England are material considerations in the planning process. The list of species is derived from Section 41 list of the Natural Environmental and Rural Communities (NERC) Act 2006.

Appendix 2

Examples of Potential Roost Features

External Features

- 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.

Internal Features

- 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.

Potential Roost Features (Adapted from Collins, 2016²)