66 STATION ROAD, HAMPTON, LONDON

PRELIMINARY BAT ROOST ASSESSMENT

A Report to: Hampton Care Home Ltd

Report No: RT-MME-150446-02

Date: August 2019

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REPORT VERIFICATION AND DECLARATION OF COMPLIANCE

Report Version	Date	Completed by:	Checked by:	Approved by:
Final	28/08/2019	Gemma Luckhurst (Ecological Project Officer) and Harry Stone (Ecological Project Officer)	Paul Roebuck BSc, MSc, MCIEEM (South East Manager)	Dr Philip Fermor CEnv MCIEEM (Managing Director)
Rev A	02/09/2019	Harry Stone (Ecological Project Officer)	Indre Barsketyte MSc Grad CIEEM (Principal Ecological Consultant)	Dr Philip Fermor CEnv 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 July 2019 Hampton Care Home Ltd commissioned Middlemarch Environmental Ltd to undertake a Preliminary Bat Roost Assessment of the former police station situated at 66 Station Road, Hampton, London. This assessment is required to inform a planning application associated with the redevelopment of the site into a care home facility.

To fulfil the above brief to assess the potential for the existing buildings and trees on site to support roosting bats, a Preliminary Bat Roost Assessment was undertaken on 1st August 2019.

Primarily due to features including holes in brickwork and missing mortar in sections of roof, both Building 1 and Building 2 were assessed as having high potential to support roosting bats. Building 3 had low potential to support roosting bats. The trees on site had negligible potential to support roosting bats.

As a result of these findings the following recommendations have been made:

R1 Building 1 & Building 2
The main buildings on site – the former police station and adjoining garages – have been identified as having high potential to support roosting bats. Bat Surveys: Good Practice Guidelines published by the Bat Conservation Trust (Collins, 2016) recommends that for structures with high bat roosting potential at least three dusk emergence and/or dawn re-entry surveys be undertaken during the bat emergence/re-entry survey season to determine the presence/absence of roosting bats within the structures. The bat emergence/re-entry survey season extends from May to September. At least two of the surveys should be undertaken during the peak season for emergence/re-entry surveys between May and August and one of the three surveys should be a dawn re-entry survey. If a roost is discovered during these surveys, a Natural England licence application may be required.

R2 Building 3
The small storage building situated in the southeast corner of the site 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 structure. 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 Trees
All 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 Habitat Enhancement
In line with the National Planning Policy Framework, the development should aim to enhance the site for bats. 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*.

CONTENTS

1. INTRODUCTION

1.1 PROJECT BACKGROUND

In July 2019 Hampton Care Home Ltd commissioned Middlemarch Environmental Ltd to undertake a Preliminary Bat Roost Assessment of the former police station situated at 66 Station Road, Hampton, London. This assessment is required to inform a planning application associated with the redevelopment of the site into a care home facility.

To fulfil the above brief to assess the potential for the existing buildings and trees on site to support roosting bats, a Preliminary Bat Roost Assessment was undertaken on 1st August 2019. Middlemarch Environmental were also commissioned to undertake a Preliminary Ecological Appraisal of the site on this date, the findings of which are detailed in report RT-MME-150446-01.

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 development site measures approximately 0.25 ha and is located within Hampton, a suburban area on the north bank of the River Thames, in the London Borough of Richmond upon Thames. The Ordnance Survey Grid Reference of the location is TQ 150 726.

Situated in a predominately residential area, the site is dominated by hardstanding, with a car park occupying a large area of the location. A small number of scattered trees are present the north, east and south-east of the site. A two metre tall red-brick wall and two metre tall wooden fence border the site's eastern and southern boundaries. A park with amenity grassland is situated immediately north of the site, neighbouring properties are situated east and west of the site, and Station Road is situated immediately south of the site.

The wider landscape consists of residential houses and gardens, parkland, a water treatment works and the River Thames.

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
Site Layout / 11045 FE_010 P4	PRC Architecture & Planning
Basement Floor Layout / 11045 FE_011 P5	PRC Architecture & Planning
Ground Floor Layout / 11045 FE_012 P5	PRC Architecture & Planning
First Floor Layout / 11045 FE_013 P5	PRC Architecture & Planning
Second Floor Layout / 11045 FE_014 P6	PRC Architecture & Planning
Third Floor Layout / 11045 FE_015 P5	PRC Architecture & Planning
Roof Plan / 11045 FE_016 P2	PRC Architecture & Planning
Proposed Elevations Sheet 1 / 11045 FE_020 P2	PRC Architecture & Planning
Proposed Elevations Sheet 2 /11045 FE_025 P2	PRC Architecture & Planning

Table 1.1: Documentation Provided by Client

2. METHODOLOGY

2.1 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 66 Station Road 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, however only one loft space (Building 1) was surveyed internally during the visit. Further loft spaces were not surveyed due to the risk of asbestos. Internal rooms and hallways were surveyed.

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.

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) recommend no further survey work is required for these tree classes.

Example of Potential Roost Features
Buildings Externally • Access through window panes, doors and walls; • behind peeling paintwork or lifted rendering; • behind hanging tiles; • weatherboarding; • eaves; • soffit boxes; • fascia's; • 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. Internally • 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. **Trees** • Bat, bird and dormouse boxes on trees; • Cankers (caused by localized bark death) in which cavities have developed; • Compression forks with included bark, forming potential cavities; • Cracks/splits in stems or branches (both vertical and horizontal); • Crossing stems or branches with suitable space between for roosting; • Ivy stems with diameters in excess of 50 mm with suitable roosting space behind (or where a roosting space can be seen where a mat of thinner stems has left a gap between the mat and the trunk); • Man-made holes (e.g. cavities that have developed from flush cuts); • Natural holes (e.g. knot holes) arising from naturally shed branches, or cavities created by branches tearing out from parent stems; • Other hollows or cavities, including rot holes and butt rots; • Partially detached or loose, platy bark; • Woodpecker holes; or, • Other features that offer a place of shelter.

Table 2.1: Potential Roost Features (Adapted from Collins 2016 and BSI 2015)

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. 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.
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). 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).
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). 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.
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)

3. DESK STUDY

3.1 STATUTORY NATURE CONSERVATION SITES

The site is located 1.6 km northwest of Kempton Park Reservoirs which is a European statutory site designated as RAMSAR, SPA, SSSI and LNR. One of the reservoirs here, Red House Reservoir, is known for supporting noctule *Nyctalus noctule,* serotine *Eptesicus serotinus,* daubenton's bat *Myotis daubentoni,* and pipistrelle *Pipistrellus pipistrellus,* bats.

The site is also located within 500 m – 1.95 km of the following UK Statutory Sites:

- Knight and Bessborough Reservoirs (SSSI);
- Oak Avenue Hampton (LNR); and,
- Bushy Park and Home Park (SSSI).

3.2 SPECIES RECORDS

The data search was carried out on 1st August 2019 by Greenspace Information for Greater London CIC. 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
Unidentified bat *Vespertilionidae* sp.	93	2002	110 m south-east	#	#, Local
Serotine bat *Eptesicus serotinus*	7	2004	610 m south-east	-	ECH 4, WCA 5, WCA 6, Local
Natterer's bat *Myotis nattereri*	9	2014	610 m south east	-	ECH 4, WCA 5, WCA 6, Local
Noctule *Nyctalus noctula*	11	2017	610 m south-east	✓	ECH 4, WCA 5, WCA 6, Local
Common pipistrelle *Pipistrellus pipistrellus*	14	2017	610 m south-east	-	ECH 4, WCA 5, WCA 6, Local
Soprano pipistrelle *Pipistrellus pygmaeus*	24	2017	610 m south-east	✓	ECH 4, WCA 5, WCA 6, Local
Daubenton's bat *Myotis daubentonii*	9	2016	690 m south west	-	ECH 4, WCA 5, WCA 6, Local
Nathusius's Pipistrelle *Pipistrellus nathusii*	2	2016	690 m south-west	-	ECH 4, WCA 5, WCA 6, Local
Pipistrelle *Pipistrellus* sp.	4	2004	800 m south-west	#	ECH 4, WCA 5, WCA 6, Local
Brown long-eared bat *Plecotus auritus*	2	2004	960 m north-east	✓	ECH 4, WCA 5, WCA 6, Local
Unidentified bat *Chiroptera* sp.	7	2018	1 km north	#	#, Local

Key:
#: Dependent on species.

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.

Species of Principal Importance: Species of Principal Importance for Nature Conservation in England.
Local: Species of Principal Importance in Richmond Upon Thames

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

3.3 PREVIOUS BAT SURVEYS

A Preliminary Ecological Appraisal and Initial Bat Report was carried out by RSK Environment Ltd on 27th August 2015 at this site, for the client UK Pacific Hampton Station LLP. This assessment identified one of the buildings (labelled Building 1 in our assessment) as having low potential to support roosting bats. A single bat emergence survey was carried out on 21st August 2017 by RSK and no bat roosts were identified. Common pipistrelle, soprano pipistrelle *Pipistrelle pygmaeus*, and noctule bat species were recorded.

4. SURVEY RESULTS

4.1 INTRODUCTION

The Preliminary Bat Roost Assessment was conducted on 1st August 2019 by Gemma Luckhurst (Ecological Project Officer) and Harry Stone (Ecological Project Officer). Drawing C150446-02-01 illustrating the layout of the buildings on site is provided in Chapter 6.

Weather conditions were recorded and are presented in Table 4.1.

Parameter	Conditions
Temperature (°C)	24
Cloud Cover (%)	0
Precipitation	None
Wind Speed (Beaufort)	F0-1

Table 4.1: Weather Conditions During the Preliminary Bat Roost Assessment

4.2 CONSTRAINTS

Following inspection of a loft space of Building 1, it was decided that surveyors would not enter remaining loft spaces due to asbestos warning signs noted throughout the building. Therefore, a full internal inspection of loft spaces on site was not possible. Building 3, a small building located at the south-eastern corner of the site, was unable to be entered as its doors were locked shut.

SURVEY RESULTS

4.3.1 Building 1

External Assessment

Building 1 was a Victorian era, three-storey, brick-built building with pitched slate tile roofs (Plate 4.1 and 4.2). The roofs had brick-built gable ends and lead flashing along the ridges. There was wooden fascia present in sections and the windows were single glazed set in wooden frames. The building was generally in a good condition with no notable vegetation growth recorded.

The roof was in a good condition with no lifted tiles noted nor features associated with the concrete soffit. There were multiple brick-built chimneys present, also in a good state of repair. Some lifted lead flashing was recorded where the dormer windows met the roof tiles on the south-facing aspect of the building (overlooking Station Road, Plate 4.3). There were also multiple holes in the walls of the building on the east-facing aspect (Plate 4.4). Both these features potentially led to internal cavities/crevices suitable for roosting bats.

Plate 4.1: Building 1, South-facing Aspect

Plate 4.2: Building 1, East-facing Aspect

Plate 4.3: Lifted Lead Flashing

Plate 4.4: Hole in Brick Wall

Flat roofs were present on the northern aspect of Building 1 (Plate 4.6). No suitable roosting features for bats were recorded on these roofs. On the west-facing aspect of the building there were holes in the brickwork potentially leading to a cavity, crevice or other similar space suitable for roosting bats. These holes were situated underneath an external concrete walkway running much of the length of the building, in the northerly corner (Plate 4.7). Gaps were also recorded above windows, between window frames and brickwork (Plate 4.8).

Plate 4.5: Typical Slate Roof (No Lifted Tiles)

Plate 4.6: Flat Roof Section, Building 1

Plate 4.7: Holes in Brickwork

Plate 4.8: Gap Above Window

Internal Assessment

A boiler room and brick-built generator room on the ground floor of the western aspect of the building were internally inspected. The boiler room consisted of concrete flooring and walls, boilers and associated pipework, which were in good condition. The generator room was also made of a concrete roof and walls, with associated wires and parts (Plate 4.9). No features suitable for roosting bats were identified in the either of the rooms. The internal hallways and residential rooms of Building 1 were considered unsuitable for roosting bats due to the absence of features and persistent human activity (Plate 4.10).

Plate 4.9: Generator Room Interior

Plate 4.10: Typical Interior, Building 1

The loft space of Building 1 was subject to an internal inspection. Two large water tanks prevented safe access to the entire loft space and as such only a partial assessment was carried out (Plate 4.11). The space was approximately two metres tall, 6 metres wide and 20 metres long. A wooden ridge beam was present and flush wooden boarding in a good state of repair. The loft was “L” shaped, uncluttered and had no sarking. While no roofing insulation was recorded, the space felt warm and there was no draught. No light was recorded entering at the eaves. Two rendered chimneys were present within the loft space. There were large sections of brickwork concealed from inspection by wooden boarding and beam structures (Plate 4.12). No evidence of roosting bats, e.g. droppings, urine staining, feeding remains or scratch marks, was recorded within these features.

Plate 4.11: Loft Space, Building 1

Plate 4.12: Boarding Concealing Brickwork

4.3.2 Building 2

External Assessment
Building 2 consisted of multiple adjoining single and two-storey car garages, with associated rooms, hallways and staircases (Plate 4.13). The buildings were brick-built with large metal roller doors. The roofs were a mix of pitched slate tile and pitched corrugated metal.

Where Building 2 adjoined Building 1 there was a brick-built gable end, and beneath the tiles of this gable end there was missing mortar creating a highly suitable potential roosting feature for bats (Plate 4.14). A similar feature was present on the larger section of Building 2, with missing mortar and brickwork present where metal fascia/guttering met brickwork at a gable end (Plate 4.15).

It was further possible for bats to gain access to Building 2 via large gaps at the tops of the various roller doors (Plate 4.16). 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.

Plate 4.13: Building 2, Southwest-facing Aspect

Plate 4.14: Missing Mortar at Gable End

Plate 4.15: Missing Brickwork/Mortar

Plate 4.16: Gaps Above Roller Doors

Internal Assessment

Building 2 mostly consisted of large car rooms previously used for vehicle storage, maintenance and washing. Potential roosting features for bats were limited due to the prevalence of concrete floors, ceiling and brick walls in a good state of repair (Plate 4.17). One of the rooms, situated to the west of the building, did however have a ceiling lined with wooden boarding which may have concealed potential features (Plate 4.18). Numerous access points to potential crevices and cavities behind this wooden boarding were recorded, and the room was easily accessible to bats via a large continuous gap at the top of the roller door (Plate 4.19). The gap between the false ceiling and the real ceiling may also contain a cavity potentially suitable for roosting bats.

A false office ceiling was recorded throughout much of the second floor of the building, again potentially concealing roosting features associated with the ceiling (Plate 4.20). Access to the internal spaces of the second floor was however considered very limited and no enclosed loft spaces were recorded.

No evidence of roosting bats, e.g. droppings, urine staining, feeding remains or scratch marks, was during the internal inspection of the building.

Plate 4.17: Typical Interior (Disused Carwash)

Plate 4.18: Wooden Boarded False Ceiling

Plate 4.19: Entry Point Above Roller Doors

Plate 4.20: Typical Interior with False Ceiling

4.3.3 Building 3

Building 3 was a small, windowless brick-built structure with two wooden doors and a corrugated asbestos roof (Plate 4.21). The building was generally in a good state of repair however it was locked shut preventing an internal inspection. A gap was present above one of the doors surrounding a cable inlet, providing potential internal access to the building to a roosting bat (Plate 4.22).

Plate 4.21: Building 3

Plate 4.22: Cable Inlet Above Door

No evidence of roosting bats, e.g. droppings, urine staining, feeding remains or scratch marks, was recorded within this building.

4.4 Survey Results – Trees

4.4.1 Trees with Low or Negligible Potential to Support Roosting Bats

A small number of scattered trees were recorded on site during the assessment. These trees were all in good condition with no roosting features present and were therefore deemed to have negligible potential to support roosting bats. The tree species were field maple *Acer campestre*, Scots pine *Pinus sylvestris,* and Cypress *Cupressus sp.*

4.5 Site and Surrounding Habitats

The habitats within the site boundaries consisted of hardstanding, introduced shrub, scattered scrub and some scattered trees. The site was considered to offer moderate foraging habitat and limited commuting features.

The site was situated in a relatively suburban area and well connected to residential gardens, hedgerows, woodland and many still and moving bodies of water. To the north, the site was immediately bordered by woodland and playing fields (Hampton Football Club and Beveree Wildlife Site). Bushy Park, The Royal Paddocks and Hampton Court Park were situated approximately 500 m east of the site while the River Thames and Hampton Treatment Works were situated approximately 200 m southwards. The site was furthermore connected to Hurst Park, Molesey Reservoirs Nature Reserve and Portlane Brook.

Station Road had street lighting and moderate levels of traffic, which may deter some bat species. The site was considered to have moderate value to bats while the surrounding landscape was considered highly suitable for bats.

5. DISCUSSION AND CONCLUSIONS

5.1 Summary of Proposals

This assessment is required to inform a planning application associated with the redevelopment of the site into a care home facility. Most of Building 1 is to be retained, however all other buildings are scheduled for removal, including a significant proportion of Building 1. In the footprint of the removed buildings a care home is to be built consisting of residential rooms, dining rooms and associated facilities. Approximately fourteen car parking spaces are to be built along the site's eastern boundary and the development is to incorporate two garden areas.

5.2 Assessment of Buildings

Building 1 had several features which might be utilised as bat roosts including holes in brickwork, lifted lead flashing around dormer windows and gaps between window frames and brickwork. As such, and with consideration to its surroundings, the building was assessed as having high potential to support roosting bats. While no evidence of roosting bats was recorded during the internal assessment of the main loft space, sections of the brickwork were concealed by wooden boarding and it was not possible to access half of the loft space. Consequently, a full assessment was not possible, and it was not appropriate to rule out the presence of roosting bats.

Where Building 2 adjoined Building 1 there was a significant amount of missing mortar at the gable end of the roof, creating a highly suitable roosting feature bats. Further features included missing brickwork under fascia/guttering and a gap above a roller door leading to a room containing potentially suitable roosting features.

Building 3 was potentially accessible to roosting bats and locked shut at the time of survey. Due to the height of the building and low number of potential features for roosting, it was assessed as having low potential to support roosting bats.

5.3 Assessment of Trees

The trees on site did not contain any suitable roosting features and were therefore deemed to have negligible potential for roosting bats.

5.4 Potential Impact on Bats

The site has been identified as having high potential for roosting bats. The demolition of Building 2, Building 3 and a significant proportion of Building 1 could have a direct impact on roosting bats by destroying them or causing major injury.

It is understood that much of Building 1, including its main loft space which was subject to an internal inspection, is to be retained. Refurbishment works and nearby demolition/construction works would pose a risk to roosting bats through disturbance.

It is not anticipated that the proposed soft and hard landscaping of the site will result in a significant loss of foraging and commuting habitat for bats on site. Scattered scrub and patches of introduced shrub will be removed, however the development is to create a courtyard garden and a garden terrace, the plants of which may provide some foraging habitat for bats.

It is necessary to carry out further survey work to ascertain if the buildings are being utilised as bat roosts and recommendations regarding this 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 Building 1 & Building 2

The main buildings on site – the former police station and adjoining garages – have been identified as having high potential to support roosting bats. Bat Surveys: Good Practice Guidelines published by the Bat Conservation Trust (Collins, 2016) recommends that for structures with high bat roosting potential at least three dusk emergence and/or dawn re-entry surveys be undertaken during the bat emergence/re-entry survey season to determine the presence/absence of roosting bats within the structures. The bat emergence/re-entry survey season extends from May to September. At least two of the surveys should be undertaken during the peak season for emergence/re-entry surveys between May and August and one of the three surveys should be a dawn re-entry survey. If a roost is discovered during these surveys, a Natural England licence application may be required.

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The small storage building situated in the southeast corner of the site 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 structure. 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.

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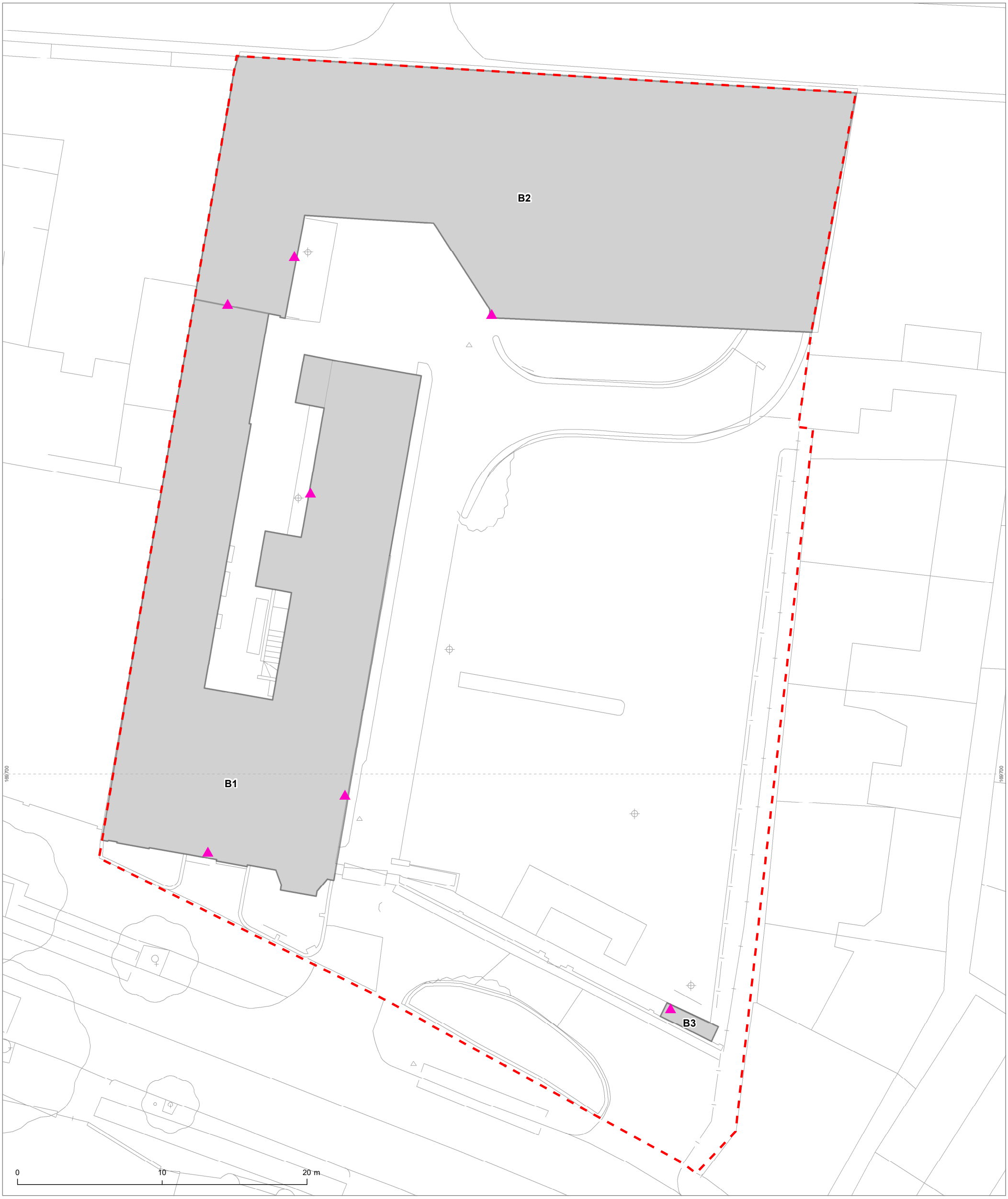
All trees on site were considered to have negligible potential for roosting bats. The survey data obtained for the site is valid for 12 months from the survey date. If proposed site works have not commenced within this timeframe it will be essential to update the survey effort to establish if the trees 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 Habitat Enhancement

In line with the National Planning Policy Framework, the development should aim to enhance the site for bats. 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 C150446-02-01 – Preliminary Bat Roost Assessment



Legend

- Site boundary
- Potential bat roost feature
- Building surveyed

N

Project	66 Station Road, Hampton, London
Drawing	Preliminary Roost Assessment
Client	Meedhurst Project Management Ltd
Drawing Number	150446-02-01
Revision	00
Scale @ A3	1:250
Date	August 2019
Approved By	HS
Drawn By	GT

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150446-02-01

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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.