

Bat Scoping Assessment

Building and Tree Inspection

Boughton Mount
Boughton Lane
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Maidstone
Kent
ME17 4NB

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NON-TECHNICAL SUMMARY

The Bat Scoping Assessment includes an inspection of all buildings and trees expected to be removed or impacted during the development within the site, in order to assess their suitability for roosting bats. The report also broadly assesses the value of the habitats within the site for foraging and commuting bats.

Findings:

Most notably, a brown long-eared bat was present behind a boarded window within building B11 during the survey. Bat droppings were also present within buildings B4 (the Lodge) B11 (large building with water tower) and B21 (Accommodation building).

The Bat Scoping Assessment classified the buildings as follows:

- 3 Confirmed bat roost buildings (bat evidence present)
- 3 High bat roost potential buildings
- 6 Moderate bat roost potential buildings
- 2 Low bat roost potential buildings
- 11 Negligible bat roost potential buildings

The buildings also included features suitable for hibernating bats, and for use as autumn 'swarming' roosts.

There are a high number of trees within the site boundary, ranging from those with no potential for roosting bats to those with a number of highly suitable features. Trees likely to be impacted by the development have been classified according to their potential bat roosting features.

The site has moderate overall suitability for foraging and commuting bats, due to the mosaic of habitats present.

Recommendations:

- Where feasible, buildings and trees used by roosting bats should be retained within the development. The extent of further surveys required is dependent on the layout of the proposed development and the extent of proposed building and tree removal.

- A Natural England Mitigation Licence will be required to allow any disturbing or destructive works to bat roosts. It is a requirement that alternatives to works impacting bat roosts are considered and shown not to be satisfactory.
- Any buildings with bat roost potential due to be impacted by the development should be subject to nocturnal emergence/re-entry surveys between May and August/September, inclusive. Details of the proposed number of survey occasions and number of surveyors required for each building are included in Appendix 1.
- The following additional building survey methods are also recommended in specified locations (see text for details): winter hibernation automated bat detector surveys, winter hibernation roost inspections, autumn 'swarming' automated bat detector surveys, summer automated bat detector surveys and bat dropping DNA analysis.
- The ruined walls (B23 and B24) cannot be subject to automated detector surveys in winter, as they do not include an enclosed space. Therefore, precautionary work methods are recommended. See report for details.
- Some buildings include areas for which access has not been possible. Should access become available, these areas should be internally inspected.
- Trees with bat roosting potential are present within the site. Details and recommendations for each tree are included in Appendix 2. This includes climbed inspection of some trees.
- To assess the relative importance of habitat features within the proposed footprint of the development, it is recommended that bat foraging/commuting activity surveys are undertaken (see text for details). The surveys will include automated detectors and walked transect methods.
- Consideration should be given at an early stage as to the inclusion of bat roost mitigation features within the development. Bat roost features may be incorporated into new or retained buildings and trees, and/or a purpose-built bat roost structure may be constructed.
- Lighting should be designed to avoid a detrimental impact on bats using the site.
- Where possible, the development should incorporate enhancements for bats. Recommended enhancements are included in this report.

1 INTRODUCTION

Background

- 1.1 This report has been instructed by Kent County Council.
- 1.2 Proposals are broadly for the development of the northern part of the site for residential use.

Site Description

- 1.3 The site comprises land and buildings including the former Maidstone SEC and Special Care Unit, Boughton Mount Hostel and Boughton Mount Grounds. The buildings are generally situated in the northern part of the holding with former formal gardens, woodlands and Listed Ha-Ha and Folly in the southern half. It is understood that the site has been unused since 2010, except for the woodland which is used as a forest school site.
- 1.4 The central grid reference for the site is TQ 76972 52240. The surveyed site covers approximately 4.6 hectares.

Aims of Survey

- 1.5 The Bat Scoping Survey includes an inspection of all buildings and the trees within the site (with the exception of the trees found in the woodland to the south of the site) in order to assess their suitability for roosting bats. The report also broadly assesses the value of the habitats within the site for foraging and commuting bats.
- 1.6 This report contains the details of the survey methodologies, results and recommended further surveys required to provide information to minimise the risk of an offence under section 9 of the Wildlife and Countryside Act 1981 (as amended) and Regulation 41 of The Conservation of Habitats and Species Regulations 2017 (the 'Habitats Regs'), relating to the protection of bats (see Appendix 5 for legislation details).

Information supplied

- 1.7 This report has been prepared with reference to the following supplied plans, showing extent of the site boundary and the proposed development:
 - Site Plan, Kent County Council, Jan 2013, ref. TQ7652/9B

Limitations

- 1.8 The site is in a derelict state and many of the buildings have partially collapsed. The following access limitations were encountered during the Bat Scoping Survey:
- Building 4: the roof void of was unsafe to enter fully and so could only be viewed from the loft hatch.
 - Building 5 (folly) had no access points to allow internal inspection, other than a restricted view through holes in the walls.
 - Building 8: the upper floor had a collapsing floor and so could not be entered and inspected fully, although it could be viewed from the stairway.
 - Building 19 was not entered for internal inspection due to health and safety constraints relating to asbestos.
 - Building 21 included a wooden clad room projecting above its flat roof. This room could not be entered for internal inspection as it was secured from below with a metal pole.
- 1.9 Where access was restricted, recommendations for further survey have been made accordingly.
- 1.10 Trees in group G81 (woodland in the south of the site) have not been assessed individually for potential bat roost features as these are not due to be significantly impacted by the development.
- 1.11 Weather conditions during the surveys were not considered to pose any restrictions to the assessment.
- 1.12 As the attributes of the site and its potential for protected species, including bats, may change over time, this report is broadly considered valid for a duration of **two years**, after which time it is recommended that an update site assessment is undertaken.

2 METHODS

Pre-survey Data Searches

- 2.1 The government's MAGIC search tool was searched for statutory sites designated for bat roosts within 10 km of site.
- 2.2 Kent and Medway Biological Records Centre (KMBRC) was consulted for records of non-statutory sites designated for nature conservation interest and for historic records of bat species within 5 km of the site.

Bat Scoping Survey

- 2.3 The building inspections and tree surveys were undertaken on 15th and 20th August 2018 by Simon Thomas (Natural England bat survey licence WML-A34-Level 2, registration number 2015-15632-CLS-CLS) and Brooke Waites of Tim Moya Associates.
- 2.4 The Bat Scoping Survey was undertaken in accordance with the Bat Conservation Trust's Bat Surveys for Professional Ecologists: Good Practice Guidelines (Collins, 2016). The buildings were inspected externally from all angles using binoculars and internally using a high-powered torch to inspect loft spaces (where present) and other rooms where evidence of bats may be present. Trees were inspected from ground level, using binoculars where needed and a high-powered torch to inspect potential bat roost features. Where possible, a ladder was used to inspect features within 3 m of ground level. All aspects of each tree were viewed, or wherever visibility was restricted (e.g. due to ivy or access limitations), this is stated in the report.
- 2.5 Evidence searched for included bat droppings, feeding remains, staining from urine or grease marks and potential access points into roosting features. Features indicating potential for bat roosts included missing roof tiles, weatherboarding and/or hanging tiles with gaps, poorly maintained roof structures, holes in tree trunks, cracks in major limbs, loose bark and dense ivy growth.

3 DESK STUDY RESULTS

Designated Sites

- 3.1 There are no statutory sites designated for bat populations within 10 km of the proposed development site.

Historical bat records

- 3.2 Kent Bat Group (KBG) returned records of 10 bat species within a 5 km radius of the site.

Table 1. Existing bat species records within 5 km

Bat Species	KBG		
	Number of non- roost records within 5 km	Number of roost records within 5 km	Most recent record
Common pipistrelle (<i>Pipistrellus pipistrellus</i>)	140	10	2017
Soprano pipistrelle (<i>Pipistrellus pygmaeus</i>)	86	5	2017
Nathusius' pipistrelle (<i>Pipistrellus nathusii</i>)	19	0	2017
Brown long-eared bat (<i>Plecotus auritus</i>)	26	86	2017
Leisler's (<i>Nyctalus leisleri</i>)	12	2	2017
Noctule (<i>Nyctalus noctula</i>)	51	0	2017
Serotine (<i>Eptesicus serotinus</i>)	10	1	2017
Natterer's (<i>Myotis nattereri</i>)	6	57	2016
Daubenton's Bat (<i>Myotis daubentonii</i>)	70	33	2017
Whiskered Bat (<i>Myotis mystacinus</i>)	4	0	2009

4 RESULTS OF BAT SCOPING ASSESSMENT

Buildings

- 4.1 The site includes 25 buildings (including greenhouses etc.). All buildings were classified according to the number and nature of any features offering roosting potential for bats. Roof voids are not the only areas of buildings that may be used by roosting bats. Bats often roost within roofing materials, inside cavity walls and beneath tiles. In these locations, evidence of a bat roost may not be evident during inspection.
- 4.2 Summary descriptions of the building structures, including evidence of bats, are included within Appendix 1. Target notes have been used to record potential bat access points or other notable building features and are detailed within Appendix 3 of this report.
- 4.3 Most notably, a brown long-eared bat was present behind a boarded window within building B11 during the survey. Bat droppings were also present within buildings B4 (the Lodge) B11 (large building with water tower) and B21 (Accommodation building).
- 4.4 The Bat Scoping Survey classified the buildings as follows, for **overall** potential for roosting bats (particularly during the summer):
 - 3 Confirmed bat roost buildings (bat evidence present)
 - 3 High potential buildings
 - 6 Moderate potential buildings
 - 2 Low potential buildings
 - 11 Negligible potential buildings.
- 4.5 The following buildings were assessed as having bat **hibernation** potential:
 - Low potential buildings: B3, B7, B19, B21, B22
 - Moderate/High potential buildings: B5, B8, B11, B23, B24, and B25.
- 4.6 The Folly (B5) is of particularly high potential for hibernating bats, due to its partially-buried cave-like structure. This structure is also considered to have potential for use as an autumn 'swarming' location (Collins, 2016).
- 4.7 The remainder of the buildings were not considered to include features with notably suitable features likely to be used by hibernating bats. However, bats are often found

using a very wide variety of structures during the winter and the possibility of bats being found unexpectedly should be incorporated into any mitigation strategy.

Trees

- 4.8 There are a high number of trees within the site boundary, ranging from those with no potential for roosting bats to those with a number of highly suitable features.
- 4.9 Tree inspection notes and recommendations for further surveys are listed in Appendix 2 of this report. A plan showing the location of all trees is also contained in Appendix 2.
- 4.10 All trees surveyed have been classified according to their potential bat roosting features, in accordance with the Bat Conservation Trust's Bat Surveys for Professional Ecologists: Good Practice Guidelines (Collins, 2016).
- 4.11 Please note: trees in group G81 (woodland in the south of the site) have not been assessed individually for potential bat roost features as these are not due to be significantly impacted by the development. However, if plans change, these trees will require a preliminary roost assessment survey, which may result in further survey requirements. This would include the introduction of artificial lighting or significant changes to the habitat of the woodland.

Foraging and Commuting Bats

- 4.12 The site has **moderate** overall suitability for foraging and commuting bats, due to the mosaic of habitats present. Mature trees and areas of mixed woodland, grassland and scrub are likely to be of particular value. Where present, rows of mature trees, hedgerows or other vegetation are likely to form 'commuting corridors', potentially linking on-site habitats to roosting or foraging habitats within or outside the site. The habitats directly surrounding the site are largely arable fields which are less suitable for foraging and commuting bats.
- 4.13 During survey visits in 2018, no artificial lighting was in operation within the site, although lighting will have been in operation throughout the developed northern half of the site when the site was still in use. The foraging and commuting behaviour of bats is known to be altered by artificial lighting and bats may avoid illuminated areas (Stone, 2013).

5 CONCLUSIONS AND RECOMMENDATIONS

- 5.1 In accordance with the Bat Conservation Trust's Bat Surveys for Professional Ecologists: Good Practice Guidelines (Collins, 2016), further surveys are recommended to confirm which buildings and trees are used by roosting bats and to inform an appropriate mitigation strategy. The extent of further surveys required is dependent on the layout of the proposed development.
- 5.2 It should be noted that the conclusions and recommendations made within this report are based on the daytime Bat Scoping Survey of the site (August 2018), which is the first step in investigating the use of the site by bats. As the recommended suite of further bat surveys are undertaken, the conclusions and recommendations of this report may be overridden or superseded. For instance, a building initially assessed as having moderate potential to be used by roosting bats may subsequently be proven as a confirmed bat roost. In such cases it is not intended that this Bat Scoping Assessment report should be continually updated to reflect later findings. Therefore, it should be understood that later Bat Survey Report(s) supersede this Bat Scoping Survey.
- 5.3 If bats are found to be roosting within buildings or trees, any works likely to disturb bats or bat roosts may only be undertaken once a Natural England European Protected Species (EPS) Mitigation Licence has been obtained. This is likely to require the provision of alternative roosting features within the development site.

Buildings

Nocturnal Bat Emergence/Re-entry Surveys

- | | |
|-----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 5.4 | Recommendation: Various buildings due to be impacted by the development should be subject to nocturnal bat emergence/re-entry (also known as dusk/dawn or presence/absence) surveys. The details of survey requirements for each building can be found in Appendix 1. In some locations, the use of infra-red cameras is recommended to assist surveyors. |
|-----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
- 5.5 The surveys should be undertaken between **May and August/September, inclusive**.
- 5.6 Details of the proposed number of survey occasions and number of surveyors required for each building are included in Appendix 1.

- 5.7 The number of surveys required is determined by the suitability of the building and the feature to be used by roosting bats. Buildings containing confirmed bat roosts or with high roost potential must be subject to at least three surveys. If surveys reveal a confirmed bat roost within buildings previously classified as having moderate or low potential for roosting bats, further survey visits may be required (three surveys total).

Summer Automated Bat Detector Surveys

- 5.8 Recommendation: The following buildings/structures should be subject to Summer Automated Bat Detector Surveys which requires an automated detector to be placed within the building/structure for two five day periods between **May-August (inclusive)**.

- Building 4 – Placed inside the lodge/cottage.
- Building 5 – Placed inside the folly.
- Building 8 – Placed in the upper floor.
- Building 11 – Placed within the main building.
- Building 21 – Upstairs corridor where numerous droppings and feeding remains were found.

‘Autumn Swarming’ Automated Bat Detector Survey

- 5.9 B5 (The Folly) was assessed to have potential to be used as autumn swarming roost.

- 5.10 Recommendation: An automated bat detector should be placed within the Folly building for five-day periods each month between August and October (inclusive). The data will be analyzed to confirm what bat activity has occurred during this period.

Winter Hibernation Automated Bat Detector Survey

- 5.11 Numerous buildings within the site have features suitable for hibernating bats. Appendix 1 shows details and recommendations for each building.

- 5.12 Recommendation: Where buildings have been assessed as having moderate/high potential for hibernating bats, an automated bat detector should be placed within the suitable areas for fortnightly periods each month between **December and February (inclusive)**. Where buildings have been assessed as having low potential for hibernating bats, an automated bat detector should be placed within the suitable areas for one fortnightly period between **January and February** (inclusive). The data will be analyzed to confirm whether any bat activity has occurred during this period.

- 5.13 The ruined walls (B7, B23 and B24) include features (holes high up on external walls) not possible to survey reliably for hibernating bats using automated detectors, as there is nowhere internal to place the bat detector. Additionally, these features cannot currently be accessed for close inspection due to their height and location. Therefore, if demolition or alteration of these structures is required and access for inspection cannot be provided, precautionary methods should be used, which should also take into account the results of summer emergence and re-entry surveys of these features (see above).

- 5.14 Recommendation: Structures B7, B23 and B24 (ruined walls) include potential bat hibernation features that cannot be surveyed conclusively for hibernating bats. If possible, it is recommended that access is provided (e.g. by cherry-picker) to closely inspect these features to assess their suitability for hibernating bats. If this is not possible, timing restrictions may be required to ensure that hibernating bats are not present during the works.

Internal Building Inspections

- 5.15 Recommendation: The following buildings/structures include features suitable for hibernating bats and should be accessed for close inspection **once in mid-January and once during mid-February**:

- The ground-floor rooms of building B11 and cavities in the brickwork on the outside of the building
- Crevices within the Ha-ha (B25) – use of an endoscope will be required.
- The folly (B5) had no access points to allow internal inspection, other than a restricted view through holes in the walls and therefore has not had an internal inspection. Due to its high hibernation potential, it is recommended that access is gained during the winter to reduce the number of surveys required. Use of an endoscope will be required.

- 5.16 Recommendation: The following areas have not been accessed and should be inspected internally if access is ever possible (**at any time**). This may reduce the extent of further surveys or precautions applying to these structures.

- Building 19 was not entered for internal inspection due to health and safety constraints relating to asbestos.

- Building 21 included a wooden clad room projecting above its flat roof. This room could not be entered for internal inspection as it was secured from below with a metal pole.

5.17 Recommendation: The following buildings/structures include features suitable for roosting bats in summer and should be inspected twice between **May – August (inclusive)**.

- Building 22 had an external cupboard on the eastern wall which offers suitable features for roosting bats.

Bat dropping DNA Analysis

5.18 The Bat Scoping Survey included collection of droppings samples from confirmed bat roosts. Droppings were collected from the following buildings: B4 (the Lodge) B11 (large building with water tower) and B21 (Accommodation building).

5.19 Recommendation: To confirm the species of bat that have been present in these locations, it is recommended that bat droppings are sent for DNA analysis. This will provide an advance indication of the species present, ahead of emergence/re-entry surveys (see above). Attempts should also be made to collect bat droppings from B5 (Folly) if possible.

Trees

5.20 The extent of surveys required will depend on the number of suitable trees requiring removal or pruning as part of the development. It is recommended that the removal of trees is avoided where possible.

5.21 Recommendation: Once trees set to be removed or pruned have been identified, the surveys recommended in Appendix 2 for each tree should be undertaken. The requirement for further surveys will be reduced if trees with bat roosting potential can be retained within the new development.

5.22 Details of the number and type of bat surveys recommended for each tree are included in Appendix 2

Climbed Tree Inspections

5.23 Climbed/elevated inspections aim to investigate potential bat roost features closely, using an endoscope to search for evidence of bats and investigate the extent of potential bat roost features. Climbed inspections are recommended as a first step for many trees, as they may be able to rule out the need for further surveys.

- 5.24 In some cases, climbed inspection will show that a potential roost feature actually does not extend into a cavity and therefore is not of roosting potential. In such cases the tree may be removed without further constraints.
- 5.25 Where climbed inspection shows that cavities are extensive, or finds evidence of roosting bats, emergence/re-entry surveys may still be required. Alternatively, where the tree cannot be practically climbed or inspected, emergence/re-entry surveys are likely to be recommended.

Soft-fell Method

- 5.26 For some trees where no potential bat roost features were visible but where minor features may exist out of view (See Appendix 2), it is recommended that a precautionary 'soft-fell' method is used in order to minimise the risk of harm to bats, as follows:
- During felling, trees or limbs must be lowered carefully to the ground using ropes.
 - If any cracks or fissures are observed, cross-cutting these features must be avoided.
 - Trees and limbs must be left on the ground for 24 hours, to allow any bats to escape if present, although this is considered unlikely.

Foraging and Commuting Habitat

- 5.27 The woodland area of the site (southern half) is considered to be of **high suitability** for foraging and commuting bats. As such it is recommended that the development avoids any impact to this area, including lighting, significant re-landscaping or other disturbing development activities. Minor landscaping works (e.g. minor footpaths without lighting) would not be expected to significantly impact the quality of foraging or commuting habitat. However, the timing of any disturbing works should be considered, in order to avoid impacting roosting bats.
- 5.28 The built-up area of the site (northern half) is considered to offer **moderate suitability** for foraging and commuting bats. Hedges and tree lines create the most suitable foraging and commuting features within this part of the site.

Bat activity Surveys

- 5.29 The site contains a range of suitable habitats for roosting, foraging and commuting bats.

5.30 Recommendation: In order to assess the relative importance of habitat features within the site, it is recommended that bat activity surveys are undertaken. In accordance with the BCT Guidelines (Collins, 2016), bat activity survey effort should be proportional to the value of the habitats present and the potential effects of the proposed development. The following survey methodology is proposed:

- One transect walkover survey per month between **April-October (inclusive)**, one of which will include both a dusk and consecutive pre-dawn survey. The transect route will cover the northern area being impacted by the development as well as the woodland to the south, in order to allow a comparison.
- In order to supplement the transect data, automated bat detectors will should be left at two points within the site for five consecutive nights per month (April – October inclusive). The recordings will be analysed to assess which species have been active in each location.

5.31 The findings of the bat activity surveys will be supplemented with any relevant findings from the bat emergence/re-entry surveys of buildings and trees, which will also identify any notable patterns of bat foraging or commuting.

5.32 The bat activity surveys will aim to identify any important foraging or commuting habitats, particularly if used by rare or notable species. Recommendations will be given to retain and enhance any valuable features identified.

Mitigation and Design

5.33 Full requirements for mitigation of impact on bats cannot be fully known until the bat surveys recommended above have been completed. Mitigation will have to take into account the species of bat recorded, and the type, size and importance of any bat roosts or habitats identified.

5.34 As a first option, buildings or trees with confirmed bat roosts should be considered for retention within the development. Where bat roosts can be retained and protected within the development, this will minimise the scale of mitigation required.

5.35 Equally, habitats likely to be used by commuting and foraging bats, such as tree lines and hedgerows, should be considered for retention within the development wherever possible. Peripheral vegetation linking the site to off-site habitats is likely to be of particular value and should be prioritised for retention.

5.36 This Bat Scoping Survey has already identified bat roosts within buildings and it is likely that emergence/re-entry surveys will reveal more. Since development of the site

is unlikely to be feasible without removal of a number of bat roosts, it is recommended that consideration is given at an early stage as to the inclusion of bat roost mitigation features. The following options should be considered in appropriate locations within the site:

- The inclusion of bat roost features in-built into proposed new buildings
- The alteration of retained buildings to include new bat roosting features
- Construction of new purpose-built bat roost structures (e.g. 'bat house')

5.37 Compensatory roost features will need to be constructed or installed before buildings identified as existing bat roosts are demolished. Therefore consideration will need to be given to the phasing of building demolition and construction. The new roosts will provide continued roosting resources for bats within the development and will also act as places where any bats found during the demolition can be relocated to.

5.38 Provided that roosting bats are adequately mitigated for and notable foraging and commuting features can be retained, the development of the site is considered to be achievable without a significant impact on the Favourable Conservation Status of bats in the local area. Section 6, below, suggests ways in which the development may achieve enhancements for bats.

Licensing

5.39 It is considered likely that the proposed development will require the removal of a number of buildings and possibly trees that are used by roosting bats. Destruction of bat roosts (whether or not bats are present) is prohibited under the Conservation of Habitats and Species Regulations 2017.

5.40 Any bats present within the buildings/trees at the time of the demolition would be disturbed by the demolition and there is a risk that they may be killed or injured if appropriate methods of demolition are not employed.

5.41 Given that the demolition of the buildings and removal of trees is due to cause an offence under the Habitats Regulations, these actions may only proceed under a Natural England European Protected Species (EPS) Mitigation Licence.

5.42 In determining whether or not to grant a licence Natural England must apply the requirements of Regulation 53 of the Regulations and, in particular, the three tests set out in sub-paragraphs (2)(e), (9)(a) and (9)(b). Natural England must be satisfied that:

- Regulation 53(2)(e). The activity is for the purposes of “preserving public health or public safety or other imperative reasons of overriding public interest including those of a social or economic nature and beneficial consequences of primary importance for the environment”.
- Regulation 53(9)(a). There must be no satisfactory alternative; and
- Regulation 53(9)(b). The action authorised will not be detrimental to the maintenance of the population of the species concerned at a favourable conservation status in their natural range.

5.43 Local authorities are required to give due consideration to the likelihood of these three tests being satisfied when making relevant planning decisions.

5.44 In order to be able to grant a licence, Natural England must be provided with sufficient survey information to inform their decision. They must also be satisfied that any mitigation and precautionary methods (e.g. soft-building strip, timing of works etc.) are proportionate and appropriate.

5.45 Where a Natural England Mitigation Licence is necessary, it is a requirement to demonstrate that alternatives to works impacting bat roosts were considered and shown not to be satisfactory. Documentary evidence should therefore be retained of any layout/design decisions which lead to works requiring an impact on roosting bats.

6 OPPORTUNITIES FOR ENHANCEMENT

6.1 In order to enhance the site for roosting, foraging and commuting bats, the development should seek to include the following features where possible.

- Artificial bat roost features may be incorporated into the fabric of new buildings in appropriate locations.
- Planting of additional trees within internal areas of the site, which are currently largely devoid of trees.
- Woodland may be improved for bats by removing non-indigenous conifer species to restore broad-leaved woodland.
- Creation of additional water features.
- Creation of new grassland/woodland/scrub/hedgerow mosaics or the linking of existing woodland with planting of new hedges or woodland strips.
- Creation of wildflower meadows to increase invertebrate numbers and diversity.

Lighting

6.2 The foraging and commuting behaviour of bats is known to be altered by artificial lighting and bats may avoid illuminated areas (ILP 2018).

6.3 In order to avoid a detrimental impact on bats using the site, there will be no increased light spillage on to areas of woodland and trees, particularly in the south and on the periphery of the site, where bats are most likely to forage and commute. Lighting must be restricted to the interior of the site and should be kept to a low level. Lighting must also avoid illuminating the areas surrounding artificial roost features (including bat boxes). The following measures will be implemented within the lighting scheme:

- Minimise light spill, through use of lighting hoods, and setting the height and angle appropriately;
- Application of low-intensity (sodium lamps or similar) lighting, where possible
- Reduce the light intensity to the minimum required for safety and security;
- Avoiding night-time lighting wherever possible.

- Where security lamps are used these should use a trigger to illuminate them (e.g. passive infra-red sensor), and switch off after a short period, rather than remaining on all night.
- All luminaires should lack a UV element.
- LED luminaires should be used where possible due to their sharp cut off, lower intensity and dimming capacity.
- Once the Bat Activity Surveys have been completed, these recommendations should be updated or expanded upon with reference to particular key areas of the site used by foraging and commuting bats.

7 REFERENCES

- Bat Conservation Trust and Institute of Lighting Engineers (2008). Bats and Lighting in the UK.
- Collins, J. (ed.) (2016) Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd edn). The Bat Conservation Trust, London.
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- Mitchell-Jones, A.J. (2004). Bat Mitigation Guidelines. English Nature, Peterborough.

8 APPENDICES

Appendix 1- Bat Scoping Assessment (Buildings)

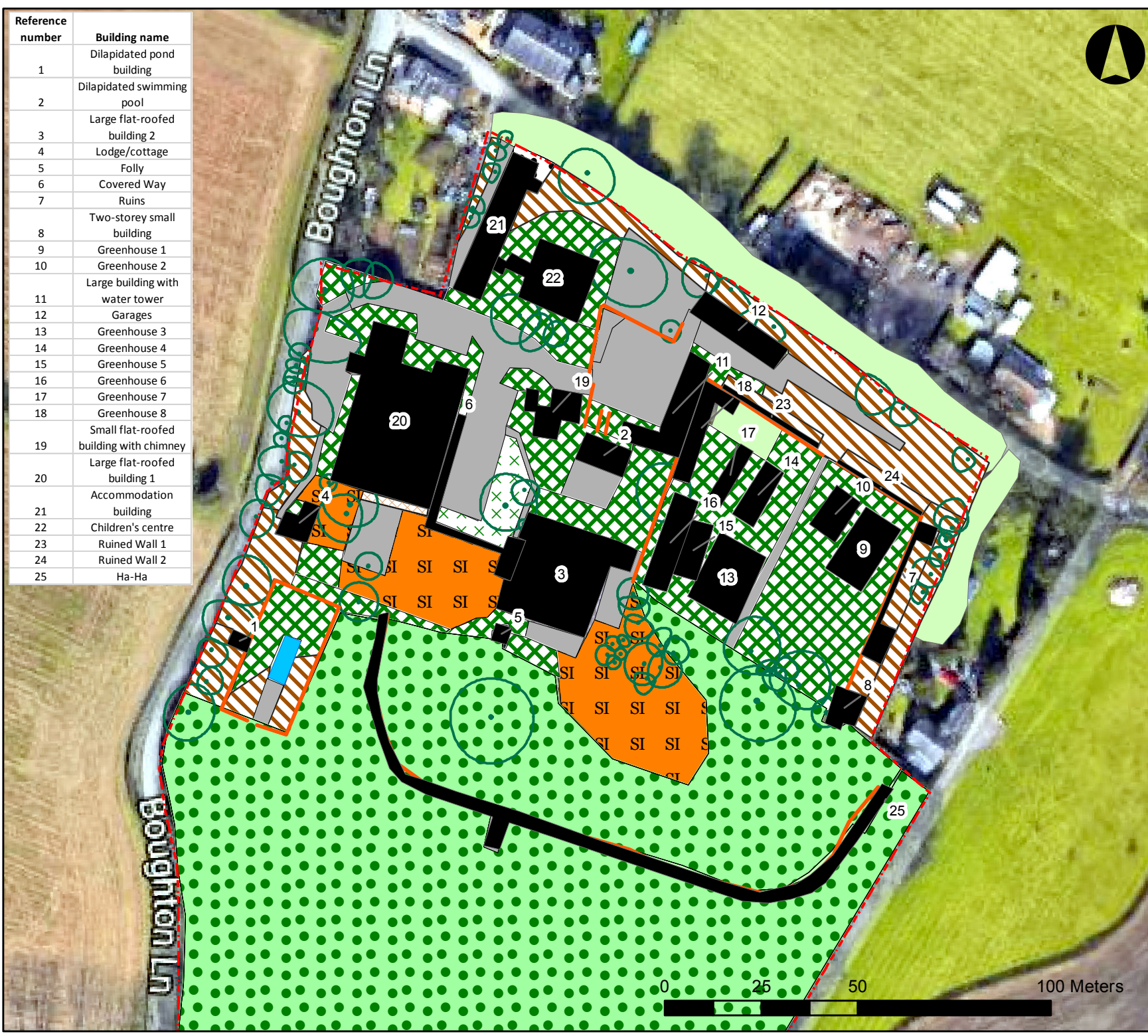
Appendix 2- Bat Scoping Assessment (Trees)

Appendix 3– Target Note Plan and Notes

Appendix 4– Photographs

Appendix 5– Wildlife Legislation

Appendix 1 - Bat Scoping Assessment (Buildings)

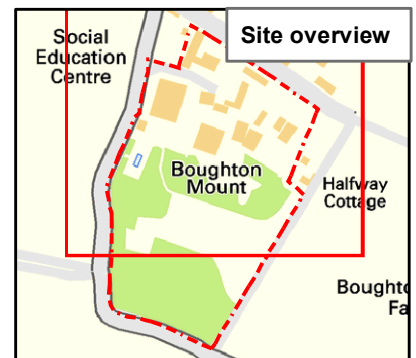


Reference number	Building name
1	Dilapidated pond building
2	Dilapidated swimming pool
3	Large flat-roofed building 2
4	Lodge/cottage
5	Folly
6	Covered Way
7	Ruins
8	Two-storey small building
9	Greenhouse 1
10	Greenhouse 2
11	Large building with water tower
12	Garages
13	Greenhouse 3
14	Greenhouse 4
15	Greenhouse 5
16	Greenhouse 6
17	Greenhouse 7
18	Greenhouse 8
19	Small flat-roofed building with chimney
20	Large flat-roofed building 1
21	Accommodation building
22	Children's centre
23	Ruined Wall 1
24	Ruined Wall 2
25	Ha-Ha



Legend

- Building
- Boundary
- Wall
- Waterbody
- Tree
- Mixed woodland - semi-natural
- Scrub - dense/continuous
- Scrub - scattered
- Neutral grassland - semi-improved
- Other tall herb and fern - ruderal
- Introduced shrub
- Hardstanding
- Bare ground
- TreeGroup



Project Name: Boughton Mount, Maidstone	
Drawing title: Buildings Plan	
Drawing number: 180337-E-02	
Client: Kent County Council	
Agent: Tim Moya Associates	
Date: 29/10/2018	Drawn by: BP
Scale: 1:1,300	

Bat Building Assessment Summary

180337 - Boughton Mount

180337ED-11

Object ID REF	Storeys	Use of Building	Roof type Condition	Materials	Cellars	Chimneys	Roof void present	Bats evidence	Bat roost potential	Hibernation pot.	Internal Inspection	Potential bat access points Potential bat roost features	Ecological notes	Recommendations	Survey date
1 Dilapidated pond building	1	None	Pitched Poor	Roof external: Slate (largely missing) Roof internal: Wooden board (largely missing) Wall: Brick	N	0	N	N	N	N	Yes		Roof structure largely absent. Open to elements.	- No further surveys required -	01/05/2018
2 Dilapidated swimming pool	1	None	Pitched Poor	Roof external: Fibreglass sheet Roof internal: None Wall: Fibreglass sheet (largely smashed)	N	0	N	N	N	N	Yes		Open structure due to dilapidation.	- No further surveys required -	01/05/2018
3 Large flat-roofed building 2	1	None	Flat Poor	Roof external: Plastic? Roof internal: ceiling boards Wall: Brick	Y	0	Y	N	M	L	Yes	Cladding - hanging tiles. Cladding - wooden. Eaves - gaps under fascia boards. Window - broken/missing windows Cladding - hanging tiles. Cladding - wooden. Eaves - gaps under fascia boards	Flat roof space approx. 60 cm. Internal areas generally well-sealed. Bat roost potential largely limited to external features. External pits lead into space beneath building foundations (may be suitable for hibernating bats).	- Automated bat detector survey- To investigate use of foundations by hibernating bats. Low potential - minimum 1 x two week recording period January/February. - Emergence / return surveys (May to August), if bat roost features are due to be impacted- Moderate bat roost potential - minimum two survey occasions with 3 surveyor locations proposed. - further visits may be required if roosting bats confirmed.	19/10/2018

Bat roost and Hibernation potential

C - Confirmed H - High M - Moderate L - Low N - Negligible

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180337 - Boughton Mount

180337ED-11

Object ID REF	Storeys	Use of Building	Roof type Condition	Materials	Cellars	Chimneys	Roof void present	Bats evidence	Bat roost potential	Hibernation pot.	Internal Inspection	Potential bat access points Potential bat roost features	Ecological notes	Recommendations	Survey date
4 Lodge/cottage	2	Previously residential	Pitched Poor	Roof external: Cement tiles Roof internal: Bitumen roof felt. Wall: Brick.	N	1	Y	Y	C	N	Yes	Cladding - wooden. Eaves - gaps behind soffit boxes. Eaves - gaps under fascia boards. Tiles - gaps between. Tiles - missing. Window - broken/missing windows Cladding - wooden. Eaves - gaps behind soffit boxes. Roof void. Tiles - gaps under ridge tiles	Approx. 10 bat droppings present (20/08/18) in downstairs living room beneath curtain. Droppings sampled. Roof void viewed from hatch only as unsafe to enter. Scattered mouse droppings present but also probable bat droppings (Sampled). No notable features with potential for hibernating bats.	- Automated bat detector survey- Minimum 2 x five-night automated detector sessions May-August - further visits may be required if roosting bats confirmed. - Emergence / return surveys (May to August), if bat roost features are due to be impacted- Evidence of confirmed bat roosting behaviour - minimum three survey occasions. 2 surveyor locations proposed.	20/08/2018

Bat roost and Hibernation potential
C - Confirmed H - High M - Moderate L - Low N - Negligible

180337 - Boughton Mount

180337ED-11

Object ID REF	Storeys	Use of Building	Roof type Condition	Materials	Cellars	Chimneys	Roof void present	Bats evidence	Bat roost potential	Hibernation pot.	Internal Inspection	Potential bat access points Potential bat roost features	Ecological notes	Recommendations	Survey date
5 Folly	1	None	Flat Good	Roof external: Stone Roof internal: Stone Wall: Stone	N	0	N	N	M	H	No	Wall materials - gaps in brickwork/masonry Rooms - cavities within internal rooms. Underground features. Wall materials - gaps in brickwork/masonry	Historic stone (ragstone rubble) folly building totally enveloped by vegetation and earth. Entrances bricked up. Not internally accessible. View of structure limited to brick-sized hole in western wall - shows internal cave-like structure with excellent suitability for roosting bats, particularly during hibernation.	<ul style="list-style-type: none"> - Automated bat detector survey- Five nights per month mid-August to end-October, to assess autumn swarming behaviour. - Emergence / return surveys (May to August), if bat roost features are due to be impacted- Moderate summer bat roost potential - minimum two emergence/re-entry survey occasions (combined with automated detector surveys) - further visits may be required if roosting bats confirmed. 1 surveyor location and the use of one IR camera is proposed. - Automated bat detector survey- Moderate summer bat roost potential - minimum 2 x five-night automated detector sessions May-August - further visits may be required if roosting bats confirmed. Building is obscured from view. - Automated bat detector survey- To investigate use of building by hibernating bats. High potential - 3 x Monthly two-week recording sessions December - February. - Inaccessible areas/features yet to inspect- To investigate use of building by hibernating bats - Internal inspection if access can be made available. Two visits (mid-Jan and mid-Feb). Also collection and DNA analysis of droppings, if possible. 	01/05/2018

Bat roost and Hibernation potential

C - Confirmed H - High M - Moderate L - Low N - Negligible

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Object ID REF	Storeys	Use of Building	Roof type Condition	Materials	Cellars	Chimneys	Roof void present	Bats evidence	Bat roost potential	Hibernation pot.	Internal Inspection	Potential bat access points Potential bat roost features	Ecological notes	Recommendations	Survey date
6 Covered Way	1	Covered walkway (not enclosed)	Flat Poor	Roof external: Bitumen felt Roof internal: Wooden board Wall: No walls.	N	0	N	N	L	N	Yes	Roof materials - flat roof Roof materials - cavity under flat roof	Covered walkway roof has 10 cm gap between upper and lower layers of wooden board.	- Emergence / return surveys (May to August), if bat roost features are due to be impacted- Low bat roost potential - minimum one survey occasion with three surveyor positions - further visits may be required if roosting bats confirmed. The use of IR cameras are recommended.	19/10/2018
7 Ruins	1	None	null	Roof external: No roof Roof internal: No roof Wall: Brick - largely collapsed	N	1	N	N	M	L	Limited	Wall materials - gaps in brickwork/masonry Wall materials - gaps in brickwork/masonry	Chimney and few remaining walls may include some crevices for roosting bats, although largely collapsed.	- Elevated endoscope inspection to investigate potential roost features closely- If use of a cherry picker is not possible to allow close inspection of the features, timing restrictions may be required to ensure hibernating bats are not present during the works. - Emergence / return surveys (May to August), if bat roost features are due to be impacted- Moderate bat roost potential - minimum two survey occasions - further visits may be required if roosting bats confirmed. 2 surveyor locations and the use of IR cameras for each survey is proposed.	19/10/2018

Bat roost and Hibernation potential

C - Confirmed H - High M - Moderate L - Low N - Negligible

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Object ID REF	Storeys	Use of Building	Roof type Condition	Materials	Cellars	Chimneys	Roof void present	Bats evidence	Bat roost potential	Hibernation pot.	Internal Inspection	Potential bat access points Potential bat roost features	Ecological notes	Recommendations	Survey date
8 Two-storey small building	2	None	Pitched Poor	Roof external: Slate tiles Roof internal: Bitumen roof felt Wall: Stone and brick	Y	0	N	N	M	M	Limited	Door - broken/missing. Tiles - missing. Wall materials - cavity wall accessible. Wall materials - gaps in brickwork/masonry. Window - broken/missing windows Building foundations. Roof materials - gaps between bitumen felt and roof tiles. Rooms - cavities within internal rooms. Wall materials - cavity wall accessible. Wall materials - gaps in brickwork/masonry	Upper floor not safe to inspect fully - floor collapsing. Building foundations accessible via shaft on south side.	- Automated bat detector survey- Emergence/re-entry surveys should be combined with automated detector placed in upper floor during surveys to provide supplementary data. Minimal 2 five day periods between May - August inclusive. - Emergence / return surveys (May to August), if bat roost features are due to be impacted- Moderate bat roost potential - minimum two survey occasions - further visits may be required if roosting bats confirmed. 1 surveyor location is proposed. - Automated bat detector survey- To investigate use of foundations by hibernating bats. Moderate potential - 3 x Monthly two-week recording sessions December - February.	20/08/2018
9 Greenhouse 1	1	Ex-greenhouse	Pitched Poor	Roof external: Glass (largely broken) Roof internal: N/A Wall: Glass (largely broken)	N	0	N	N	N	N	Limited		Derelict greenhouse completely full of brambles.	- No further surveys required -	08/05/2018
10 Greenhouse 2	1	Ex-greenhouse	Pitched Poor	Roof external: Glass (largely broken) Roof internal: N/A Wall: Glass (largely broken)	N	0	N	N	N	N	Limited		Derelict greenhouse completely full of brambles.	- No further surveys required -	08/05/2018

Bat roost and Hibernation potential

C - Confirmed H - High M - Moderate L - Low N - Negligible

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180337 - Boughton Mount

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Object ID REF	Storeys	Use of Building	Roof type Condition	Materials	Cellars	Chimneys	Roof void present	Bats evidence	Bat roost potential	Hibernation pot.	Internal Inspection	Potential bat access points Potential bat roost features	Ecological notes	Recommendations	Survey date
11 Large building with water tower	2	None	Pitched Medium	Roof external: Slate tiles Roof internal: Fibre board Wall: Stone	N	0	Y	Y	C	M	Yes	Door - broken/missing. Eaves - gaps behind soffit boxes. Eaves - gaps under roof eaves. Gable end - gap. Structures through walls - beams. Structures through walls - pipe. Tiles - gaps between. Wall materials - gaps in brickwork/masonry. Window - broken/missing windows Brickwork - gaps in brickwork. Cavity Wall. Eaves - gaps behind soffit boxes. Internal walls - cavity walls. Roof void. Rooms - cavities within internal rooms. Tiles - gaps under roof tiles. Wall materials - cavity wall accessible. Wall materials - gaps in brickwork/masonry. Windows - gaps surrounding	Large castle-style turret/water tower present. Also adjoining single-storey 'stables' building'. One brown long-eared bat present (15/08/18 & 20/08/18) between glass window and wooden board by main door. Scattered bat droppings present in first room by door. Few scattered bat droppings present in main space of building. Gaps between the stone and wooden cladding, in stables section of the building. Ground floor rooms have reasonable potential for hibernating bats. Nesting birds (pigeons) present.	- Automated bat detector survey- Summer emergence/re-entry surveys should be combined with automated detector placed in main building space during surveys to provide supplementary data. a minimum of 2 five day periods between May - August. - Emergence / return surveys (May to August), if bat roost features are due to be impacted- Confirmed bat roost - three survey occasions with 4 surveyor locations proposed. - Automated bat detector survey- To investigate use of main building space by hibernating bats. Moderate potential - 3 x Monthly two-week recording sessions December - February. - Elevated endoscope inspection to investigate potential roost features closely- Inspection during hibernation period. Inspect missing bricks on external wall of tower and internal ground-floor rooms of building accessed via fire escape door. Also internal boarded windows adjacent to front door. Two visits (mid-Jan and mid-Feb). Also collection and DNA analysis of droppings, if possible.	15/08/2018
12 Garages	1	None	Pitched Good	Roof external: Corrugated asbestos Roof internal: None Wall: Brick	N	0	N	N	N	N	Yes	Eaves - gaps under roof eaves	No notable bat roost features visible. No evidence of roosting bats.	- No further surveys required -	15/08/2018

Bat roost and Hibernation potential

C - Confirmed H - High M - Moderate L - Low N - Negligible

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Object ID REF	Storeys	Use of Building	Roof type Condition	Materials	Cellars	Chimneys	Roof void present	Bats evidence	Bat roost potential	Hibernation pot.	Internal Inspection	Potential bat access points Potential bat roost features	Ecological notes	Recommendations	Survey date
13 Greenhouse 3	1	Ex-greenhouse	Pitched Poor	Roof external: Glass (largely broken) Roof internal: N/A Wall: Glass (largely broken)	N	0	N	N	N	N	Limited		Derelict greenhouse completely full of brambles.	- No further surveys required -	08/05/2018
14 Greenhouse 4	1	Ex-greenhouse	Pitched Poor	Roof external: Glass (largely broken) Roof internal: N/A Wall: Glass (largely broken)	N	0	N	N	N	N	Limited		Derelict greenhouse completely full of brambles.	- No further surveys required -	08/05/2018
15 Greenhouse 5	1	Ex-greenhouse	Pitched Poor	Roof external: Glass (largely broken) Roof internal: N/A Wall: Glass (largely broken)	N	0	N	N	N	N	Limited		Derelict greenhouse completely full of brambles.	- No further surveys required -	08/05/2018
16 Greenhouse 6	1	Ex-greenhouse	Pitched Poor	Roof external: Glass (largely broken) Roof internal: N/A Wall: Glass (largely broken)	N	0	N	N	N	N	Limited		Derelict greenhouse completely full of brambles.	- No further surveys required -	08/05/2018
17 Greenhouse 7	1	Ex-greenhouse	null	Roof external: Roof missing Roof internal: N/A Wall: Glass (largely broken) and brick	N	0	N	N	N	N	Limited		Collapsed greenhouse	- No further surveys required -	08/05/2018
18 Greenhouse 8	1	Ex-greenhouse	Pitched Poor	Roof external: Roof largely missing Roof internal: N/A Wall: Glass (largely broken) and brick/stone where adjoining buildings.	N	0	N	N	N	N	Yes	Wall materials - gaps in brickwork/masonry	Collapsing greenhouse. At northern end abuts the large stone-clad wall which is considered part of B23.	- No further surveys required - But adjoining rubble-clad wall (Part of B23) is sheltered by the greenhouse and has High potential for roosting bats (further surveys recommended).	20/08/2018

Bat roost and Hibernation potential

C - Confirmed H - High M - Moderate L - Low N - Negligible

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Object ID REF	Storeys	Use of Building	Roof type Condition	Materials	Cellars	Chimneys	Roof void present	Bats evidence	Bat roost potential	Hibernation pot.	Internal Inspection	Potential bat access points Potential bat roost features	Ecological notes	Recommendations	Survey date
19 Small flat-roofed building with chimney	1	Unknown	Flat Medium	Roof external: Bitumen felt Roof internal: Unknown Wall: Brick	N	1	N	N	H	L	No	Cladding - wooden. Eaves - gaps under roof eaves Other roof roost feature. Roof void. Rooms - cavities within internal rooms	Access into building not permitted due to asbestos presence. Building itself likely has limited potential for roosting bats (although not inspected) but prominent tower/chimney structure has multiple suitable holes in wooden cladding. It is also in use by nesting starlings.	- Automated bat detector survey- To investigate use of building by hibernating bats (if access possible). Low potential - minimum 1 x two week recording period January/February. - Emergence / return surveys (May to August), if bat roost features are due to be impacted- Tower structure has High bat roost potential - three survey occasions - 1 surveyor location proposed. Remainder of building has Moderate bat roost potential - minimum two survey occasions - 1 surveyor location proposed. Further visits may be required if roosting bats - Elevated endoscope inspection to investigate potential roost features closely- Access internal area of building if ever safe to do so (asbestos).	19/10/2018

Bat roost and Hibernation potential

C - Confirmed H - High M - Moderate L - Low N - Negligible

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Object ID REF	Storeys	Use of Building	Roof type Condition	Materials	Cellars	Chimneys	Roof void present	Bats evidence	Bat roost potential	Hibernation pot.	Internal Inspection	Potential bat access points Potential bat roost features	Ecological notes	Recommendations	Survey date
20 Large flat-roofed building 1	1	Unknown	Flat Poor	Roof external: Plastic? Roof internal: Ceiling boards. Wall: Brick	N	0	Y	N	M	N	Yes	Cladding - hanging tiles. Cladding - wooden. Eaves - gaps under fascia boards. Roof materials - flat roof Cladding - hanging tiles. Cladding - wooden. Eaves - gaps under fascia boards. Wall materials - cavity wall accessible	Bat roost potential largely limited to external plastic cladding and hanging tiles. Fairly limited access into building for bats. Occasional holes in roof. small (40cm) flat roof cavity.	- Emergence / return surveys (May to August), if bat roost features are due to be impacted- Features on west side have Moderate bat roost potential - minimum two survey occasions - further visits may be required if roosting bats confirmed. Features on other three sides have Low bat roost potential - minimum one dawn re-entry survey occasion - further visits may be required if roosting bats confirmed. Proposed survey locations are: 3 surveyor locations for low potential features, with the use of IR and 1 surveyor location for moderate potential features.	20/08/2018

Bat roost and Hibernation potential

C - Confirmed H - High M - Moderate L - Low N - Negligible

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Object ID REF	Storeys	Use of Building	Roof type Condition	Materials	Cellars	Chimneys	Roof void present	Bats evidence	Bat roost potential	Hibernation pot.	Internal Inspection	Potential bat access points Potential bat roost features	Ecological notes	Recommendations	Survey date
21 Accommodation building	2	Former accommodation	Flat Poor	Roof external: Roof felt Roof internal: Ceiling panels (occasionally missing) Wall: Brick and breeze block (cavity)	N	0	Y	Y	C	L	Yes	Cladding - wooden. Eaves - gaps under fascia boards. Wall materials - cavity wall accessible. Window - broken/missing windows Cladding - wooden. Roof void. Rooms - cavities within internal rooms. Wall materials - cavity wall accessible	Dense ivy on much of the building obscures view. Broken windows provide good access for bats. Wooden cladding above windows is damaged, allowing access to the cavity behind and potentially the cavity wall. Scattered bat droppings and moth wings throughout upstairs corridor, indicating probable use as a bat feeding roost. Droppings grouped beneath light fittings. No likely bat roosting places noted within rooms - most likely in roof space. Roof space inspected from hatch and no obvious accumulations of droppings visible. Third floor extension projecting from roof is totally wooden-clad, providing good potential for roosting bats. The third floor room projecting above the roof is inaccessible as its hatch is secured with a metal pole from below.	- Automated bat detector survey- To investigate use of building roof space and upper corridor by hibernating bats. Low potential - minimum 1 x two week recording period January/February. - Automated bat detector survey- Emergence/re-entry surveys should be combined with automated detector placed in upstairs corridor between surveys to provide supplementary data. Proposed 2 five day periods between May-August inclusive. - Inaccessible areas/features yet to inspect- Gain access into third floor area via hatch (secured) if possible. - Emergence / return surveys (May to August), if bat roost features are due to be impacted- Confirmed use by roosting bats (droppings in corridor) - two emergence/re-entry surveys with a third to follow depending on results. 6 Survey locations proposed. This should be combined with infra-red camera to record bat behaviour.	15/08/2018

Bat roost and Hibernation potential

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Object ID REF	Storeys	Use of Building	Roof type Condition	Materials	Cellars	Chimneys	Roof void present	Bats evidence	Bat roost potential	Hibernation pot.	Internal Inspection	Potential bat access points Potential bat roost features	Ecological notes	Recommendations	Survey date
22 Children's centre	1	None	Flat Poor	Roof external: Wooden boards Roof internal: Ceiling boards. Wall: Brick	N	0	Y	N	L	L	Yes	Cladding - wooden. Roof materials - flat roof Cladding - wooden. Roof void. Rooms - cavities within internal rooms. Wall materials - cavity wall accessible	Building covered in dense ivy and surrounded by dense scrub - views limited. Skylights all without glass. Access available into 90cm roof space. Potential bat roost features are fairly limited - occasional cladding on exterior, although much is covered in dense ivy. Cupboard in external eastern wall - may be suitable for roosting bats although none present during inspection (see target note).	- Automated bat detector survey- To investigate use of internal building space by hibernating bats. Low potential - minimum 1 x two week recording period January/February. - Elevated endoscope inspection to investigate potential roost features closely- Inspect external cupboard on minimum two occasions (May-Aug) to confirm continued lack of use by bats. - Emergence / return surveys (May to August), if bat roost features are due to be impacted- Low bat roost potential - minimum one dawn re-entry survey (due to poor visibility) 2 surveyor locations both with IR cameras proposed. - Further visits may be required if roosting bats confirmed.	15/08/2018

Bat roost and Hibernation potential

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Object ID REF	Storeys	Use of Building	Roof type Condition	Materials	Cellars	Chimneys	Roof void present	Bats evidence	Bat roost potential	Hibernation pot.	Internal Inspection	Potential bat access points Potential bat roost features	Ecological notes	Recommendations	Survey date
23 Ruined Wall 1	1	Ruins	null	Roof external: Roof collapsed/missing Roof internal: Roof collapsed/missing Wall: Stone and brick	N	0	N	N	H	H	Limited	Wall materials - gaps in brickwork/masonry Wall materials - gaps in brickwork/masonry	Approx 6m tall wall - brick on one side and stone on the other. Generally intact but where cavities exist, offers roosting potential for bats. At western end/south side, wall is clad with rubble, which has abundant significant crevices suitable for roosting bats during winter or summer.	- Elevated endoscope inspection to investigate potential roost features closely- If use of a cherry picker is not possible to allow close inspection of the features, timing restrictions may be required to ensure hibernating bats are not present during the works. - Automated bat detector survey- Summer - to assess bats' use of stone-clad part of wall (western end, south side). Combined with infra-red camera instead of surveyor, as feature is in a very dark location. High bat roost potential - three emergence/re-entry survey occasions. - Emergence / return surveys (May to August), if bat roost features are due to be impacted- Holes in east end of wall are of High bat roost potential - three survey occasions. 1 surveyor location and 1 IR camera location proposed.	19/10/2018
24 Ruined Wall 2	1	Ruins	null	Roof external: Roof collapsed/missing Roof internal: Roof collapsed/missing Wall: Stone and brick	N	0	N	N	H	H	Limited	Wall materials - gaps in brickwork/masonry Wall materials - gaps in brickwork/masonry	Approx 6m tall wall - brick on one side and stone on the other. Generally intact but where cavities exist, offers roosting potential for bats.	- Elevated endoscope inspection to investigate potential roost features closely- If use of a cherry picker is not possible to allow close inspection of the features, timing restrictions may be required to ensure hibernating bats are not present during the works. - Emergence / return surveys (May to August), if bat roost features are due to be impacted- Holes in west end of wall have High bat roost potential - three survey occasions with 1 surveyor location proposed.	

Bat roost and Hibernation potential

C - Confirmed H - High M - Moderate L - Low N - Negligible

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MyTREES
tree management software

180337 - Boughton Mount

180337ED-11

Object ID REF	Storeys	Use of Building	Roof type Condition	Materials	Cellars	Chimneys	Roof void present	Bats evidence	Bat roost potential	Hibernation pot.	Internal Inspection	Potential bat access points Potential bat roost features	Ecological notes	Recommendations	Survey date
25 Ha-Ha		Ha-Ha	null	Roof external: N/A Roof internal: N/A Wall: Stone	N	0	N	N	M	H	Yes	Wall materials - gaps in brickwork/masonry Wall materials - gaps in brickwork/masonry	Historic stone Ha-Ha 2.2 m tall. Includes numerous crevices between stones, suitable for roosting bats and other small mammals. Harts tongue fern and male fern growing from cracks.	- Elevated endoscope inspection to investigate potential roost features closely- To investigate use by hibernating bats - Endoscope inspection of notable crevices in wall. Two visits, mid-Jan and mid-Feb. - Emergence / return surveys (May to August), if bat roost features are due to be impacted- Moderate bat roost potential - minimum two dawn re-entry survey occasions (due to number of suitable crevices) - further visits may be required if roosting bats confirmed. 3 surveyor positions with the use of IR cameras proposed.	

Bat roost and Hibernation potential

C - Confirmed H - High M - Moderate L - Low N - Negligible