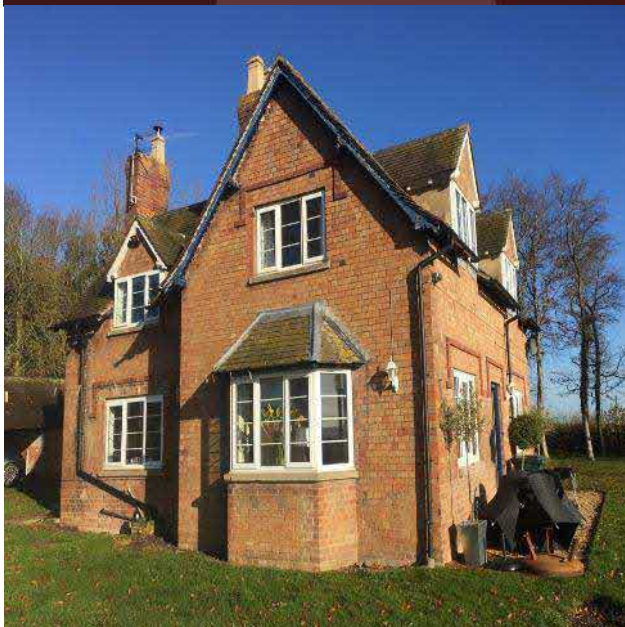


THE ELMS
COLSTON BASSETT

Bat Survey Report



Client:
Aitchison Raffety

Report Reference:
RSE_3322_02_V2

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PROJECT

Client: Aitchison Raffety

Project: The Elms, Wash Pit Lane, Colston Bassett

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1 INTRODUCTION AND BACKGROUND

1.1 Purpose and Scope of this Report

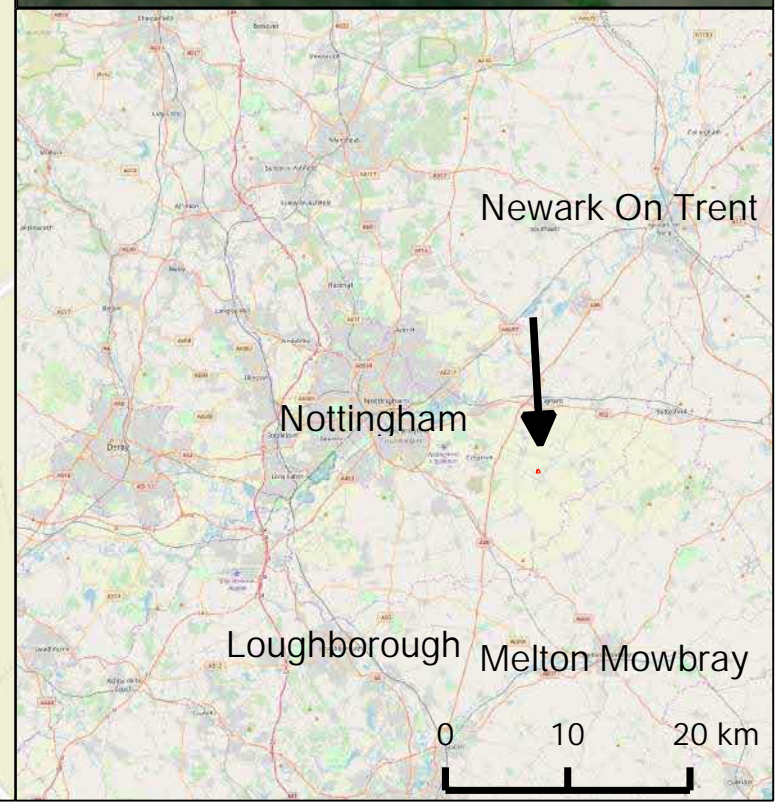
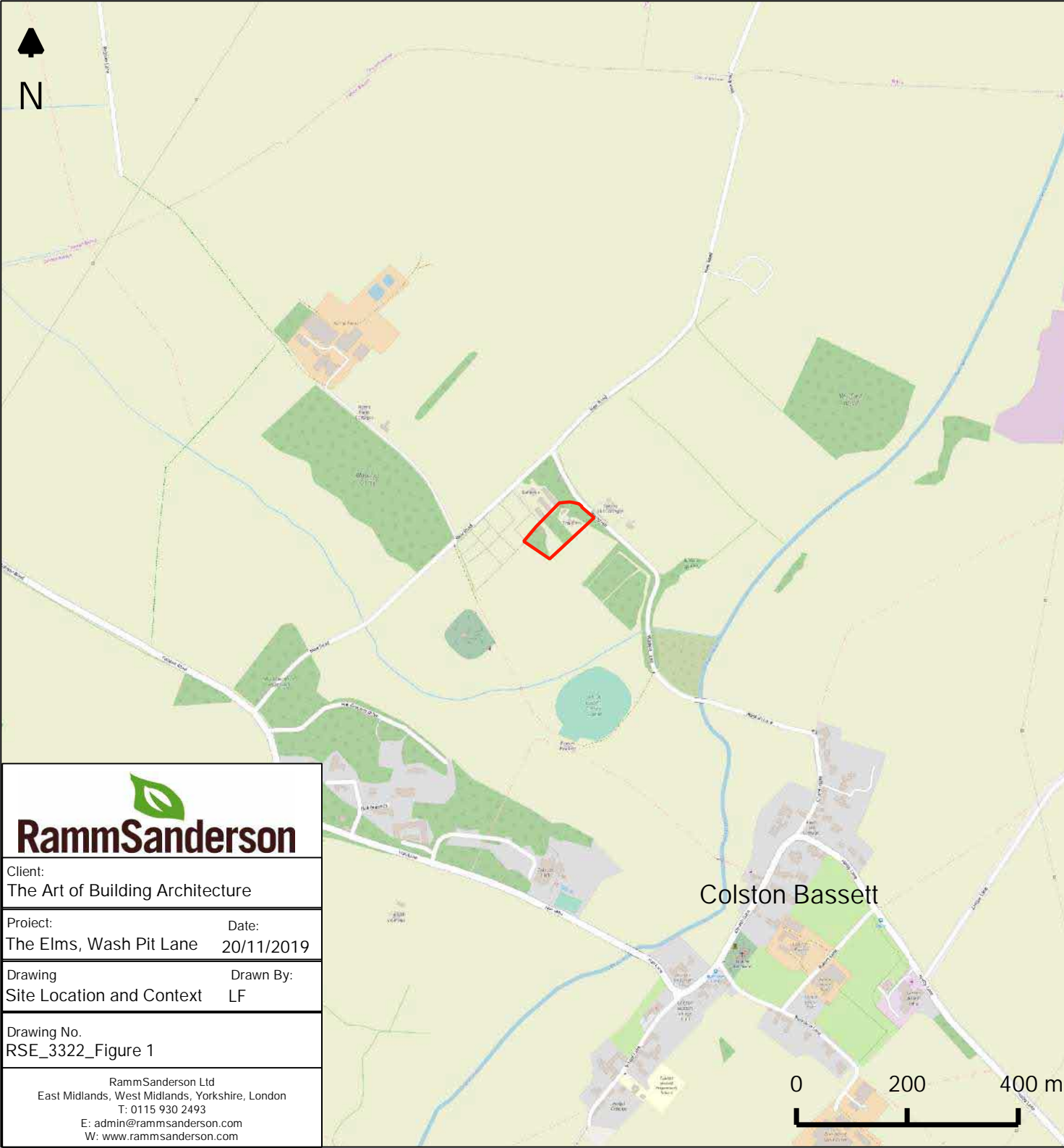
- I RammSanderson Ecology Ltd was instructed by Aitchison Raffety to carry out nocturnal bat surveys of a range of buildings at The Elms, Wash Pit Lane, Colston Bassett, to inform a planning application for residential redevelopment of the site. The surveys were required to determine the presence or likely absence of bat roosts at the site.
- ii The study area is defined as shown in the enclosed Site Location Plan to include the Zone of Influence (see below) of the proposals (hereafter referred to as the "Site").
- iii This appraisal is based on a review of the development proposals provided by the Client, and surveys of the Site. The aims of this survey and report are to:
 - Investigate the presence / likely absence of bats on site or in the immediate vicinity;
 - Identify potential impacts on bats (if present); and
 - Provide outline recommendations for mitigation or compensatory measures where applicable.
- iv This report pertains to these results only; recommendations included within this report are the professional opinion of an experienced ecologist and therefore the view of RammSanderson Ecology Ltd.
- v The surveys and desk-based assessments undertaken as part of this review and subsequent report including the Ecological Constraints and opportunities Plan are prepared in accordance with the British Standard for Biodiversity Code of Practice for Planning and Development (BS42020:2013).

1.2 Zone of Influence

- I The Zone of Influence is used to describe the geographic extent of potential impacts of a proposed development. The Zone is determined by the nature of the development and also in relation to individual species, depending on their habitat requirements, mobility and distances indicated in any best practice guidelines. This can be 5km from a site if significant bat habitat is to be affected.

1.3 Site Context and Location

- I The site consisted of a residential property and associated outbuildings with areas of amenity grassland, bare ground and mature scattered trees. The site was located at The Elms, Wash Pit Lane, Colston Basset, NG123FR (central grid reference SK 69663 34055) which comprises an occupied private residence. The site was located to the south west of Wash Pit Lane in an intrinsically rural setting to the north of the village of Colston Basset. To the north east the site is bound by Spring Hill Road, to the north is a small parcel of woodland, to the west there is a stable yard and farm house and to the south the site there were area of arable farmland and grazing areas.



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Client: The Art of Building Architecture

Project: The Elms, Wash Pit Lane Date: 20/11/2019

Drawing: Site Location and Context Drawn By: LF

Drawing No. RSE_3322_Figure 1

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2 METHODOLOGY

I The overall value of the site and its connectivity to the wider countryside was assessed with habitats and species recorded. As well as the daytime assessment for bats the survey took into account presence of nesting birds and took account of the likelihood of other protected species occurring on site.

2.1 Impact Appraisal

I In appraising any impacts the review considers the Client's Site proposals and any subsequent recommendations made are proportionate and appropriate to the site and have considered the Mitigation Hierarchy as identified below:

Avoid: Provide advice on how the development may proceed by avoiding impacts to any species or sites by either consideration of site design or identification of an alternative option.

Mitigate: Where avoidance cannot be implemented mitigation proposals are put forward to minimise impacts to species or sites as a result of the proposals. Mitigation put forward is proportionate to the site.

Compensate: Where avoidance cannot be achieved any mitigation strategy will consider the requirements for site compensatory measures.

Enhance: The assessment refers to planning policy guidance (e.g. NPPF) to relate the ecological value of the site and identify appropriate and proportionate ecological enhancement in line with both national and local policy.

ii The overall value of the site and its connectivity to the wider countryside was assessed in relation to bats. The likelihood of bats roosting at the site or moving through the site between local roost sites and foraging/mating/hibernation habitats was considered.

2.2 Building Bat Roost Suitability Assessment

I The site, including the trees and boundary trees, were assessed by an ecologist and graded as to their suitability for supporting roosting bats using the Bat Conservation Trust's *Bat Surveys for Professional Ecologists: Good Survey Guidelines* (Collins, J. Eds. 2016), an extract of which is provided interpreted in the table below.

Table 1: Criteria for bat roost potential assessment of buildings

Roost Potential	Description	Surveys Required (Buildings)
Confirmed roost	Evidence of roosting bats found during initial daytime inspection.	3 – including 1 dawn as a minimum
High *	Structures with one or more features suitable for bat roosting, with obvious suitability for larger numbers of bats.	3 – including 1 dawn as a minimum
Moderate	Structure with one or more potential roost sites that could be used due to size, shelter and protection but unlikely to support a roost of high conservation status.	2– including 1 dawn as a minimum
Low	Structure with one or more potential roosting sites used by individual bats opportunistically. Insufficient space, shelter or protection to be used by large numbers of bats.	1 Survey

Roost Potential	Description	Surveys Required (Buildings)
Negligible	No or negligible features identified that are likely to be used by roosting bats	None

** Unless it is a confirmed roost, additional surveys are required of buildings to assess presence / likely absence of a roost. The number of surveys are indicative to give confidence in a negative result, i.e. where no bats are found, confidence in a result can be taken.*

2.3 Dusk emergence / Dawn re-entry surveys

I Surveyors monitored the structures using EM Touch bat detectors on all surveys. The dusk emergence surveys commenced 15 minutes before sunset and proceeded until all species of bat would be expected to have left the buildings (approximately 2 hours after sunset). The majority of surveys were carried out in optimal weather conditions, within the bat active period and followed Bat Conservation Trust methodologies (BCT, 2016).

2.4 Limitations

- I It should be noted that whilst every effort has been made to provide a comprehensive description of the site, no investigation could ensure the complete characterisation and prediction of the natural environment.
- ii During the Covid-19 Pandemic RammSanderson have reviewed our safe working procedures and as a result of the limitations in providing accommodation for staff, this has limited the company's ability to provide safe working practices and manage Fatigue effectively. As such we took the decision to repurpose any dawn surveys as dusk survey. Whilst industry guidance states that it is best practice to combine dusk and dawn methods, and not to diminish the qualities of either technique, Staff safety is of paramount importance. As such all sites have still received the requisite number of nocturnal survey pursuant to their roost categorisation and these surveys are completed as dusk only. This is not considered a limitation to the overall impact appraisal of the site and any roosts characterisation

2.5 Accurate lifespan of ecological data

I The majority of ecological data remain valid for only short periods due to the inherently transient nature of the subject. The survey results contained in this report are considered accurate for approximately 2 years, notwithstanding any considerable changes to the site conditions.

3 RESULTS

3.1 Surveyor Competency

- ii The Preliminary bat roost assessment survey was carried out by Vicky Rowe BSc (Hons) ACIEEM and Katie Lawrence BSc (Hons). Vicky also holds a class one licence for GCN (2015-18127-CLS-CLS), a class 2 licence for bats (2019-39607-CLS-CLS) and has been a professional ecologist for the past nine years. The survey was completed during suitable conditions as detailed in the table below. Nocturnal surveys were led by Joe McLaughlin BSc (Hons) MCIEEM and Jade Armstrong MSc BSc (Hons). Both Joe and Jade have personal licences for bats (2016-26529-CLS-CLS and 2018-37885-CLS-CLS respectively) and are both appropriately experienced to carry out such work.

Table 2: Summary of conditions during survey

Abiotic Factor	Survey 1	Survey 2	Survey 3	Survey 4	Survey 5
Survey type	BBA	Dusk Emergence	Dusk Emergence	Dusk Emergence	Dusk Emergence
Date completed	18.11.19	14/05/2020	04/06/2020	18/06/2020	25/06/2020
Temperature	14° C	13° C	13° C	15° C	23° C
Wind speed (Beaufort Scale)	1	1	1	2	1
Cloud cover	2	2	8	2	0
Precipitation	0	0	0	0	0

3.2 Habitat Connectivity Analysis

- I In assessing the site, a review of online resources and desk study data was undertaken to assess the site with respect to its connectivity to the wider environment, particularly along linear features (rivers, railways, canals etc.) and any designated or protected sites. The figure below highlights the site and any such habitat connectivity. This assessment enables the evaluation of a particular proposal in context of the wider environment with regard to the site itself and any species which may utilise the site. As figure below shows, the site is in a rural setting characterised by arable farmland with mature hedgerow connections linking it to the wider countryside.



Key

- Terrestrial Connectivity
- Watercourse/waterbody
- Site Boundary
- 2km Buffer
- Terrestrial Connectivity
- Watercourse



Client:
Aitchison Raffety

Project:
The Elms, Wash Pit Lane

Drawing Title:
Habitat Connectivity Plan

Drawing No. RSE_3322	Scale: 1:21,000	Rev: V1
Drawn By: LF		Date: 20/11/2019

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3.3 Bat Building Assessment



- iii The site contained a total of five buildings, these included the main residential dwelling which was occupied at the time of the survey, and a total of four outbuildings which were either used for storage or empty. These were all assessed for their potential to provide bats with roosting opportunities and are discussed further in the bat building assessment section of the report below.

Figure 3: View of Residential Property



Table 3: Bat Building Assessment Results

Bldg. ref	Description	Potential Access Points	Evidence	Grading	Photographs
House	<p>A solid skin red brick two storey structure with a pitched slate roof and UPVC doors and windows. The building was occupied and generally considered to be watertight. There was a small single storey section with a tiled pitched roof which also formed a small porch over the front door. There were a total of three dormer windows as well as a bay window with a pitched tiled roof, with timber barge boards at the gable ends.</p> <p>Internally the roof was found to be constructed of modern sawn timbers, with no roofing felt so that the underside of the tiles was visible. Although there was an accessible roof void, due to the roofs in part being located within the roof space the height of the roof void was reduced (approx. 1.5m) with narrow sections sloping down below the joists around the sides of the dormer windows.</p>	<p>Gaps were noted in the main roof as a result of slipped or missing tiles, with light ingress points recorded in the roof void. The roof extends beyond the wall in a number of places with gaps visible at the top of the wall plate. There was a section of lifted lead flashing below one of the dormer windows as well as, gaps at the apex of the gable ends where beams extend from the roof. It was also noted that the porch, dormer windows and bay window all had small accessible voids present either as a result of slipped or missing tiles or gaps at the eaves.</p>	<p>Droppings were scattered throughout the roof void which was roughly T shaped and orientated northwest to southeast and northeast to southwest, it was noted that the northeast southwest section had a higher proportion of droppings with a small collection identified at the gable end of the northeast southwest section of the roof. It was also noted that there were a number of conspicuously clear gaps above the ridge board. The droppings were characteristic of BLE and may account for the scattering of droppings throughout the roof void as individuals undertake pre-emergent flight within the roof void prior to emerging.</p>	Confirmed	
B1	<p>A small single storey solid skin red brick structure with a clay tiled apex roof, split into two small rooms used to store firewood. Generally considered to be in a good state or repair. The roof was supported on modern sawn timbers with no roofing felt present. The interior was not thoroughly inspected due to the large volume of fire wood in each room.</p>	<p>Gaps were present all along the eaves of the building where the timber roof rafters extend over the top of the wall. There were also a number of small gaps in the brick work as a result of missing mortar.</p>	<p>No evidence was identified but access was limited due to presence of large amounts of firewood.</p>	Moderate	
B2	<p>A small single storey solid skin red brick structure with a clay tiled apex roof. The building had an open section in the middle forming a car port and a small storage room either side as well as a small room to the rear of the building. The roof was supported on modern sawn timbers with no roofing felt present in the middle and north storeroom. The south storeroom was noted as having a false ceiling comprising of MDF and cardboard creating a small void. Internally there were a large number of gaps present within the brickwork as a result of missing bricks or mortar or structural cracks that may provide roosting opportunities.</p>	<p>Free access at the eaves where a number of gaps were noted as well as via slipped or missing tiles. Free access to the central section as this is open with no doors.</p>	<p>No evidence identified</p>	Moderate	

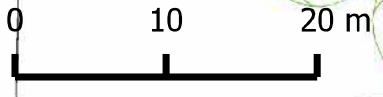
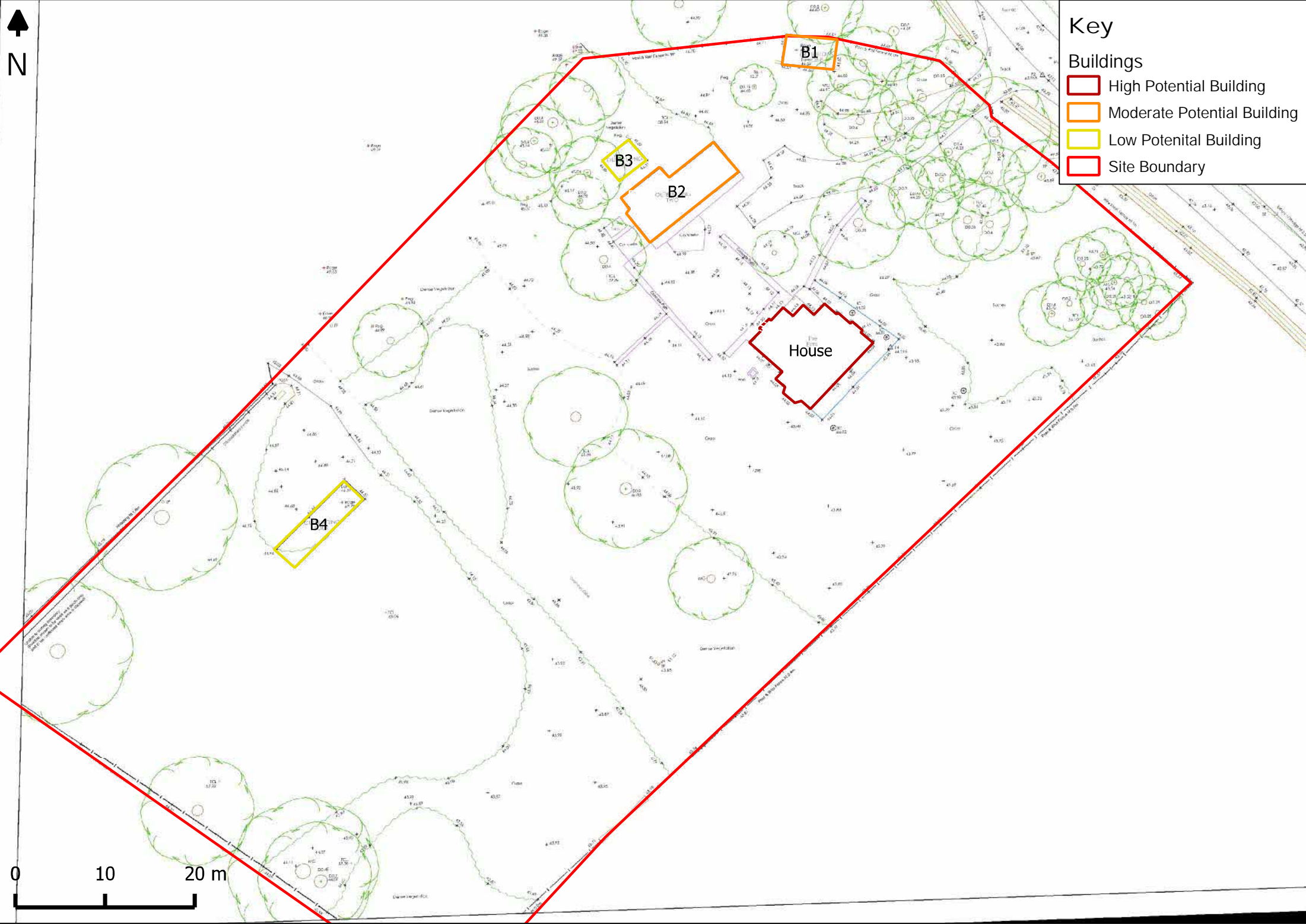
Bldg. ref	Description	Potential Access Points	Evidence	Grading	Photographs
B3	<p>A small single storey solid brick structure with a black felt apex roof. The building was in a dilapidated state with no doors or windows present. Internally the building looked to have been relatively recently re-roofed with modern sawn timbers and plywood boards between the beams and external roofing felt. There was a gap identified around one of the window frames as well as a large number of gaps internally as a result of missing bricks, structural cracks and at the wall plate in the gable ends.</p>	<p>The absence of glazing in the window frames and absence of a door provides free access into the building.</p>	<p>No evidence identified</p>	<p>Low</p>	
B4	<p>A small single storey solid brick structure with a clay tiled apex roof forming a single roof. The building was in a dilapidated state with one of the walls noticeably leaning out at the top. There was a small section of timber weather boarding at the north gable end which other than this was entirely absent. There were a number of doorways located along the south west aspect. Due to the potential for structural weakness owing to the bowed walls the building was not entered. Internally the roof was supported on modern sawn timbers with no roofing felt present on the underside of the tiles.</p>	<p>Open gable end, doorways and slipped a missing tiles on the roof.</p>	<p>No evidence but internal inspection was not carried out.</p>	<p>Low</p>	



Key

Buildings

- High Potential Building
- Moderate Potential Building
- Low Potential Building
- Site Boundary



3.3.1 Nocturnal Bat Survey Results

- I During the surveys the surveyors were positioned so that all suitable features on the buildings were visible where possible. Survey plans have been included in Appendix 2 and show the location of each of the surveyors during the surveys. Results of each survey can be reviewed below in Table 4.

14th May - Dusk

- ii Seven surveyors were optimally positioned to survey The Main house and Buildings 1, 2 and 3. Sunset was at 20:54, the survey began at 20:39 and ended at 22:25. The first recorded bat was at 21:13 which was a common pipistrelle (*Pipistrellus pipistrellus*). No emergences were recorded during this survey.
- iii General foraging behaviour was noted around B2, B3 and the nearby treeline throughout the survey with a max count of 2 common pipistrelle recorded. Noctule (*Nyctalus noctula*) and a myotis species were recorded but not seen, however these passes were a single pass each indicating commuting behaviour. The last recorded bat was a common pipistrelle which was heard but not seen.

4th June – Dusk

- iv Five surveyors were optimally positioned to survey the Main House and Building 4. Sunset was at 21:22, the survey began at 21:07 and ended at 22:52. The first recorded bat was at 21:42 and was a common pipistrelle. Four emergences were recorded during this survey.
- v The Main House had a total of three emergences. The first emergence occurred at 21:42, with a common pipistrelle emerging from under the bay window on the south-western elevation of the house (Figure 5). A second common pipistrelle emerged from within the lead flashing on the right dormer window on the south eastern aspect of the house at 21:44 (Figure 6). This bat re-entered soon after emerging due to a short burst of rain the ceased almost immediately. Another common pipistrelle then emerged at 21:52 from the same aspect. It is possible that this was the same bat that re-entered earlier.
- iv Building 4 had one emergence from a common pipistrelle which occurred at 22:07 from within the building. The exact emergence location cannot be confirmed, however it is likely to have been roosting within the wooden beams in the roof (Figure 7).
- vii General foraging behaviour was noted around B2, B3 and the house, with the foraging generally constrained to solitary individuals of common pipistrelle. A single pass of a noctule was also recorded but not seen, suggesting commuting overhead. The last recorded bat was a common pipistrelle heard not seen at 22:35.

Figure 5: Bay window roost location



Figure 6: Lead flashing roost location



Figure 7: Likely roost area within building 4



18th June – Dusk

- viii Eight surveyors were positioned optimally to view the Main House, Buildings 1, 2 and 4. Sunset was at 21:32, the survey began at 21:17 and ended at 23:02. The first recorded bat was a soprano pipistrelle foraging at 21:58. Three emergences were recorded during this survey.
- ix The main house had a total of one emergence at 22:01 from a common pipistrelle emerging from under the bay window on the south-western elevation of the house; the same location as the previous survey (Figure 5).
- x Building 2 had a total of two emergences. The second emergence was a common pipistrelle which occurred at 22:07, emerging from under the western aspect of B2 (see Figure 8). The third emergence occurred at 22:17 with a common pipistrelle emerging from the eaves of the western aspect of the south-western gable end (Figure 9).
- ix General foraging behaviour from common and soprano pipistrelle was noted around B2, B3 and the main house with a max count of two bats foraging at one time. Noctule, natterer's (*Myotis nattereri*) and whiskered (*Myotis mystacinus*) bats were recorded as heard not seen, and were single passes suggesting commuting nearby. The last recorded bat was a soprano pipistrelle heard not seen but assumed foraging.

Figure 8: Lifted tiles as roost location



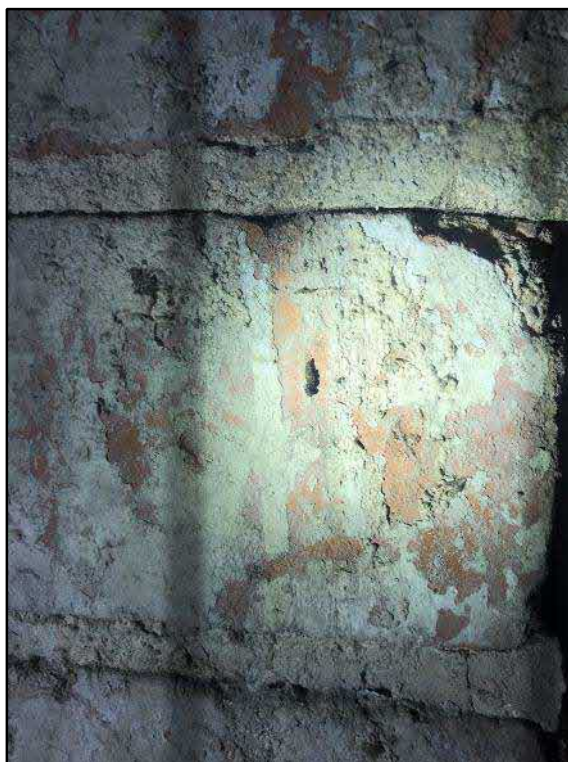
Figure 9: Eaves of south-western gable roosting location



25th June - Dusk

- xii Four surveyors were positioned optimally to view Buildings 2 and 4. Sunset was at 21:33, the survey began at 21:18 and ended at 23:03. The first recorded bat was a common pipistrelle commuting past B2 at 21:57. Three emergences were recorded during this survey.
- viii The first emergence was a common pipistrelle emerging from Building 4 at 22:11, following by a second emergence at 22:33 by another common pipistrelle. Evidence of bat droppings were found inside after the survey, suggesting the bats emerged from between the wooden panelling and the outer roof slates, similar to survey 2 (Figure 10).
- xiv Building 2 had one emergence at 22:19, with a common pipistrelle emerging from the eaves of the western aspect of the south-western gable as in the 3rd survey (Figure 9).
- xv General foraging behaviour was much as the previous three surveys, with frequent common pipistrelle around B2, B3 and B4 with a max count of three common pipistrelle recorded at one time during the survey. Two foraging soprano pipistrelle were also recorded foraging around B2. No other species were recorded during this survey.

Figure 10: Bat droppings found withing B4.



3.4 Nesting Birds

- I A nesting swallow was observed entering through the open windows within B3 during the 4th survey. No other nesting birds or empty nests were noted in the other buildings during the surveys.

Figure 11 : Swallow nest within B3



4 IMPACTS

4.1 Bats

3.3.1 Main House

- i This building was a two-storey detached residential dwelling which was confirmed as a roost during the daytime inspection. As per best practice guidelines three nocturnal surveys were carried out. A maximum count of three bats were recorded roosting in the house, with bats returning to two different locations during the surveys; the south eastern dormer window, and the south western bay window. All bats were common pipistrelle and as a result the two roosts can be classified as a summer daytime roost of low conservation significance. Common pipistrelle are common in a local and national context and so this site is not considered to represent a significant or locally important site. It must however be recognised that the roost site is legally protected and therefore an EPSL must be applied for before works commence.

3.3.1 Building 1

- ii Building 1 was considered to offer moderate potential to support roosting bats, with gaps present along the eaves and gaps within the bricks. Two surveys were carried out on this building in accordance with the current UK guidelines. No emergences or bat activity indicative of roosting bats was observed on this building. An EPSL is therefore not required for the redevelopment or demolition of this building. Instead a precautionary method of works should be adopted, as detailed in section 5.

3.3.1 Building 2

- iii Building 2 was considered to offer moderate potential to roosting bats, this was mainly due to the free access to the eaves where a number of gaps were noted, and lifted tiles on the roof. As per best practice guidelines two nocturnal surveys were carried out. However, an emergence was observed during the second survey and as such a third survey was conducted to ascertain roost population dynamics including size and class. A maximum count of two bats were recorded roosting in B2, with bats returning to two different locations; the western aspect of B2 and the eaves of the south western gable. All bats were common pipistrelle and this is indicative of transitional individual bats only taking advantage of the roost features available on this building. This building will also require an EPSL to legitimise its redevelopment.

4.1.4 Building 3

- iv Building 3 was considered to offer low potential to support roosting bats due to the absence of a door and glazing in the window frames. One survey was carried out on this building in accordance with the current UK guidelines. No emergences or bat activity indicative of roosting bats was observed on this building. An EPSL is therefore not required for the redevelopment or demolition of this building. Instead a precautionary method of works should be adopted, as detailed in section 5.

3.3.1 Building 4

- v Building 4 was considered to offer low potential to roosting bats due to its open gable end, doorways and missing tiles on the roof. As per best practice guidelines one nocturnal surveys was carried out. However, an emergence was observed during this survey and as such a second and third survey was conducted to ascertain roost population dynamics including size and class. A maximum count of two bats were recorded roosting in B4, within the wooden beams inside the barn. As the previous roosts on site, all bats were common pipistrelle and this is also indicative of small numbers of bats only taking advantage of the roost features

available on this building. This building will also require an EPSL to legitimise its redevelopment and should be encompassed within the EPSL for the site to include both the house and Building 2.

3.3.1 Bat Activity

- iv In addition to roosts within the house, Buildings 2 and 4, the nocturnal surveys demonstrated use of the site by 5 species of bat as a commuting and foraging resource. The open barns and treelines on site provided suitable foraging through the provision of insects on which the bats could feed. The site was used by common and soprano pipistrelles on multiple occasions as a foraging resource. The areas of dark around the edge of the site and treelines were used as a valuable commuting route by several species of bat. The dark treeline corridors created a steppingstone to the wider environment for more light sensitive species of bat, such as myotis species.
- vii The roosts present on site are located in buildings which benefit from these foraging provisions, in particular buildings 2 and 4, and as such the site redevelopment and subsequent EPSL provision will need to take into account the functionality for this site including landscaping and lighting strategies with further consideration to these given below.

4.2 Nesting Birds

3.3.1 Common nesting bird species

- i All species of bird, whilst nesting are protected under the Wildlife and Countryside Act (1981) as amended. Therefore, site demolition and clearance works should avoid the bird nesting season which runs from March to September inclusively. Works within this period should be preceded by an inspection for nesting birds by an ecologist. Where active nests are found, working restrictions would be put in place until follow up survey can demonstrate that all chicks have fledged. Based on this survey however, it is recommended that the site is cleared/prepared for redevelopment during the winter period outside the nesting season in line with bat recommendations (as detailed above) and as such numerous constraints would be put in place should clearance occur during the nesting period.
- ii Before building works commence within all buildings, any nests should be checked to ensure that all chicks have fledged.

5 MITIGATION AND ENHANCEMENT REQUIREMENTS – UNDER LICENCE

- I This section of the document provides details on subsequent mitigation requirements for the site in the eventuality that bats are found roosting on site and are to be encapsulated within a Natural England Protected Species Licence. Where bats are present works cannot proceed until the licence has been approved by Natural England. The compensatory roost elements identified will be taken forward into the build regardless of presence / absence of bats.

5.2 Mitigation

3.3.1 Site Supervision and Training

- I Before works commence on site, all site workers will be inducted by the licensed ecologist on site. This will include training on identification of bats and their roost requirements as well as appropriate working methods and behaviours in the unlikely event a bat is found.
- ii An ecologist will check the building before renovation / demolition works commence and supervise all critical works such as roof removal etc. Where a bat is found during these works, they will be carefully removed and placed in a translocation roost box as discussed below.
- iii The ecologist will remain on call for the duration of the building programme and provide ad-hoc advice if required. Spot checks for compliance will be made at any point during the contract period. This will also include signing off contractor method statements and works. The ecologist will also provide advice service and carry out an interim inspection of compensatory roost replacement works.

3.3.1 Temporary Roost Replacement

- iv During the initial construction phase, it will be essential to provide a temporary roost translocation site. one Schwegler 2FN bat box (or similar) will be erected on suitable nearby building or mature tree, prior to the works commencing. This should be installed at a height of 3m, and out of direct light. Where a mature tree is not available on site, a temporary roost can be placed on a telegraph pole that can be erected temporarily during works.

3.3.1 Timing

- v Currently it is considered that at most, the site represents a collection small, summer day roosts (non maternal) of limited conservation significance and as such timing constraints to the commencement of works are not anticipated. It is recommended that the initial site clearance works are however undertaken in the period of March to April or September to October when bats are active but least susceptible to disturbance pressures. The probability of bats roosting within this site, particularly small crevices on the buildings exteriors during winter is extremely low. Furthermore, disturbance of bats in torpor can lead to mortality and removal of bats in torpor from within crevice areas can be difficult and lead to injury (of the bats), and as a result it is recommended that the demolition works avoid the winter hibernation period.

3.3.1 Lighting

- iv Artificial lighting can affect the way that bats use habitats in a number of ways, depending on the species and proximity to a roost. Direct bright lighting of a roost can cause bats to delay emergence from a roost and could even cause them to desert the roost (BCT and ILE, 2008). The prey items for British bats are flying insects, and many flying insects are attracted to certain types of artificial light sources, especially those that emit light with an ultraviolet component (BCT and ILE, 2008; Rydell, 2006). Some species of bat recorded

within the site are known to be attracted to insects gathered around light sources (such as pipistrelle and noctule), whereas others actively avoid lit areas (such as Myotis species and long-eared bats) (BCT and ILE, 2008; Rydell, 2006). Lighting within the site could therefore be expected to affect the ways that the bats in the area are able to use the site. It is also possible that artificial lighting within the site could attract insects to the lit areas from outside the site, acting as a sink for insect activity and potentially resulting in the adjacent areas supporting lower numbers of insects and therefore a reduced availability of food for bats within these areas.

5.3 Compensation

- i The current potential roost features include a series of external crevice areas that have appeared as a result of neglect and weather damage. As such it is recommended that 5 external, integrated bat roost features such as the Habibat built in bat brick (or similar) are included within the new structures. These are chosen as there are self-cleaning and are isolated from any dwelling space. Additionally, the ability to face with any brick means they are easily blended into the new structures fabric and offer a discrete long-term solution for bats. Additionally, 5 boxes of the size proposed provide sufficient roosting for many more bats than could currently use the existing potential roost features at this site.
- ii It is not considered necessary or proportionate to provide a dedicated bat loft on this site owing to the apparent limited use.
- iii These crevice features should be installed on the walls closest to the current features utilised by bats at this site. They should avoid being placed close to windows and ideally on southern aspects of the site. northern aspects should be avoided as these will not provide a suitable temperature regime for roosting.

5.4 Post Construction Monitoring

- i None Proposed

6 REFERENCES

- i Institution of Lighting Professionals and Bat Conservation Trust (2018). Bats and Artificial Lighting in the UK – Bats and the Built Environment Series Guidance Note. 08/18
- ii BS 42020:2013 Biodiversity – Code of Practice for Planning and Development 2013: The British Standards Institution.
- iii Chartered Institute of Ecology and Environmental Management, 2018. Guidelines for Ecological Impact Assessment in the UK and Ireland. Terrestrial, Freshwater, Coastal and Marine. Winchester: CIEEM.
- iv Collins J eds. 2016. Bat Surveys: Good Practice Guidelines, 3rd Edition. London: Bat Conservation Trust.
- v Joint Nature Conservation Committee, 2004. Bat Workers Manual. 2nd ed. Peterborough: s.n.
- iv Office of the Deputy Prime Minister, 06/2005. Government Circular: Biodiversity and Geological Conservation - Statutory Obligations and their impact within the planning system. London: ODPM.

7 APPENDIX 1: LEGISLATION AND PLANNING POLICY

7.1 General & Regionally Specific Policies

I Articles of British legislation, policy guidance and both Local Biodiversity Action Plans (BAPs) and the NERC Act, 2006 are referred to throughout this report. Their context and application is explained in the relevant sections of this report. The relevant articles of legislation are:

- 1) The National Planning Policy Framework (2019)
- 2) ODPM Circular 06/2005 (retained as Technical Guidance on NPPF 2019)
- 3) Local planning policies for Leicestershire
- 4) The Conservation of Habitats and Species (*Amendment*) (*EU Exit*) Regulations 2019;
- 5) The Wildlife and Countryside Act 1981 (as amended);
- 6) The Natural Environment and Rural Communities (NERC) Act 2006;

7.2 Bats

I British bats are fully protected within UK Law under *Wildlife and Countryside Act 1981* (as amended) through their inclusion in Schedule 5. Under the Act, they are protected from:

- Intentional or reckless killing, injury, taking;
- Damage to or destruction of or, obstruction of access to any place of shelter, breeding or rest;
- Disturbance of an animal occupying a structure or place;
- Possession or control (live or dead animals);
- Selling, bartering or exchange of these species, or parts of.

ii This law is reinforced by the UK's transposition of the EU Habitats Regulations under *The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019*. These Regulations also prohibit:

- the deliberate killing, injuring or taking of great crested newt or bats;
- the deliberate disturbance of any great crested newt or bat species in such a way as to be significantly likely to affect:
 - their ability to survive, hibernate, migrate, breed, or rear or nurture their young; or
 - the local distribution or abundance of that species.
- damage or destruction of a breeding site or resting place;
- the possession or transport of great crested newt or bats or any other part of.

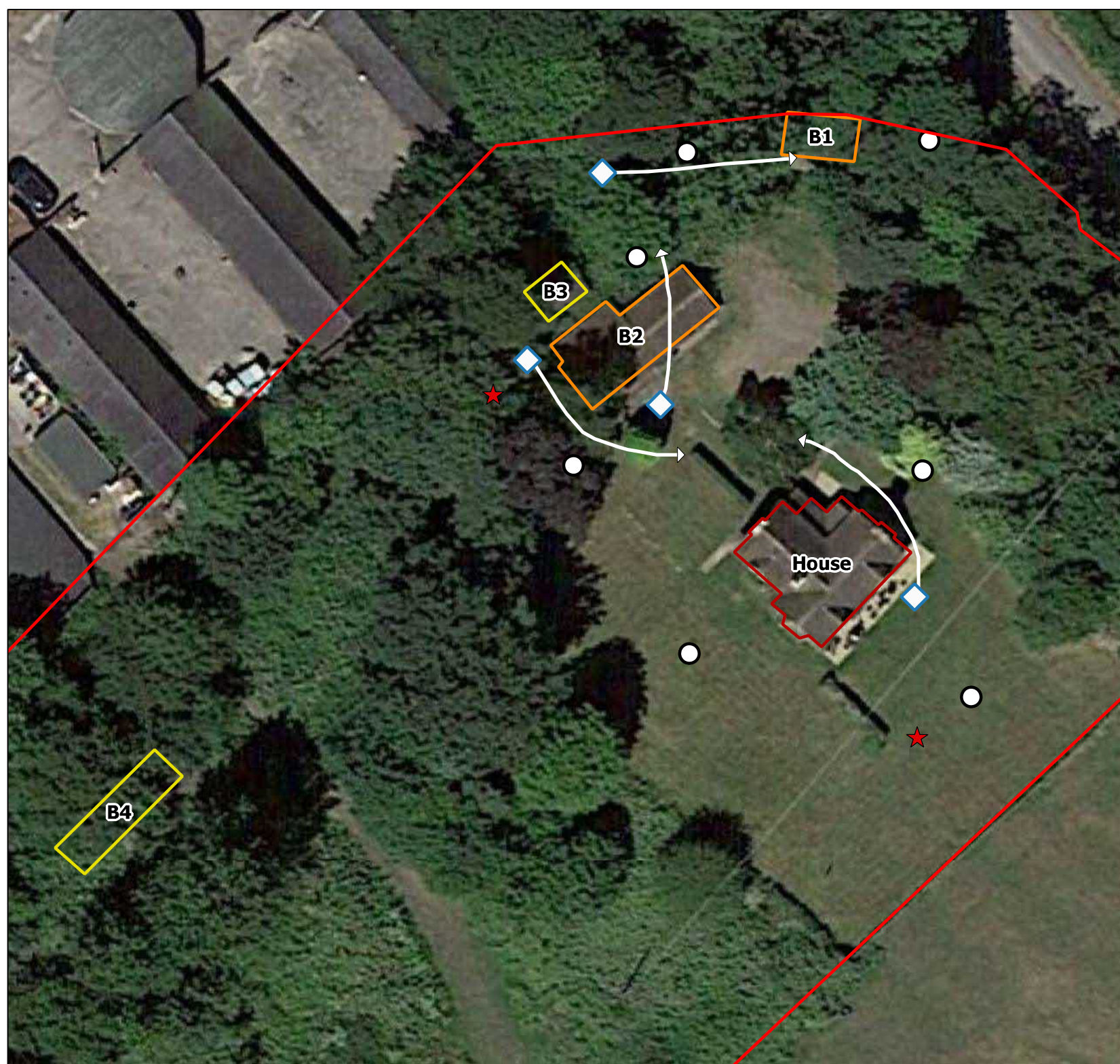
iii Under certain circumstances a licence may be granted by Natural England to permit activities that would otherwise constitute an offence. In relation to development, a scheme must have full planning permission before a licence application can be made.

iv In addition, seven British bat species are listed as Species of Principal Importance (SPI) under the Natural Environment and Rural Communities (NERC) Act, 2006. These are barbastelle (*Barbastellus barbastellus*), Bechstein's (*Myotis bechsteinii*), noctule (*Nyctalus noctula*), soprano pipistrelle (*Pipistrellus pygmaeus*), brown long-eared (*Plecotus auritus*), greater horseshoe (*Rhinolophus ferrumequinum*) and lesser horseshoe (*Rhinolophus hipposideros*).

v Under the National Planning Policy Framework 2019 the presence of any protected species is a material planning consideration. The Framework states that impacts arising from development proposals must be avoided where possible or adequately mitigated/compensated for and that opportunities for ecological enhancement should be sought.


7.3 Birds

- I The Wildlife and Countryside Act 1981 (as amended) is the principle legislation affording protection to UK wild birds. Under this legislation all birds, their nests and eggs are protected by law and it is an offence, with certain exceptions, to recklessly or intentionally:
 - Kill, injure or take any wild bird;
 - Take, damage or destroy the nest of any wild bird while it is in use or being built;
 - Take or destroy the egg of any wild bird.
- ii For birds listed on Schedule 1 of the Act, it is an offence to disturb any bird while it is building a nest, is at or near a nest with young; or disturb the dependant young of such a bird.
- iii Species listed in Annex 1 of the EU Birds Directive 1994 (e.g. barn owl) are required to have special conservation measures taken to preserve their habitats and sites to be classified as Special Protection Areas (SPAs) where appropriate.



Key

- Site Boundary
- Building**
- Building with Confirmed Roost
- Moderate Potential Building
- Low Potential Building
- 14/05/2020 Dusk**
- ★ Thermal Camera
- Surveyor Position
- Flight Direction Arrows
- Bat Contacts**
- Common Pipistrelle



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Client: Aitchison Raffety		
Project: The Elms, Wash Pit Lane		
Drawing Title: Dusk Results Plan - 14/05/2020		
Drawing No. RSE_3322_B1	Scale: 1:400	Rev: V1
Drawn By: AGM	Date: 26/06/2020	
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Key


- Site Boundary
- Building**
- Building with Confirmed Roost
- Moderate Potential Building
- Low Potential Building

04/06/2020 Dusk

- ★ Thermal Camera
- Flight Direction
- Surveyor Location

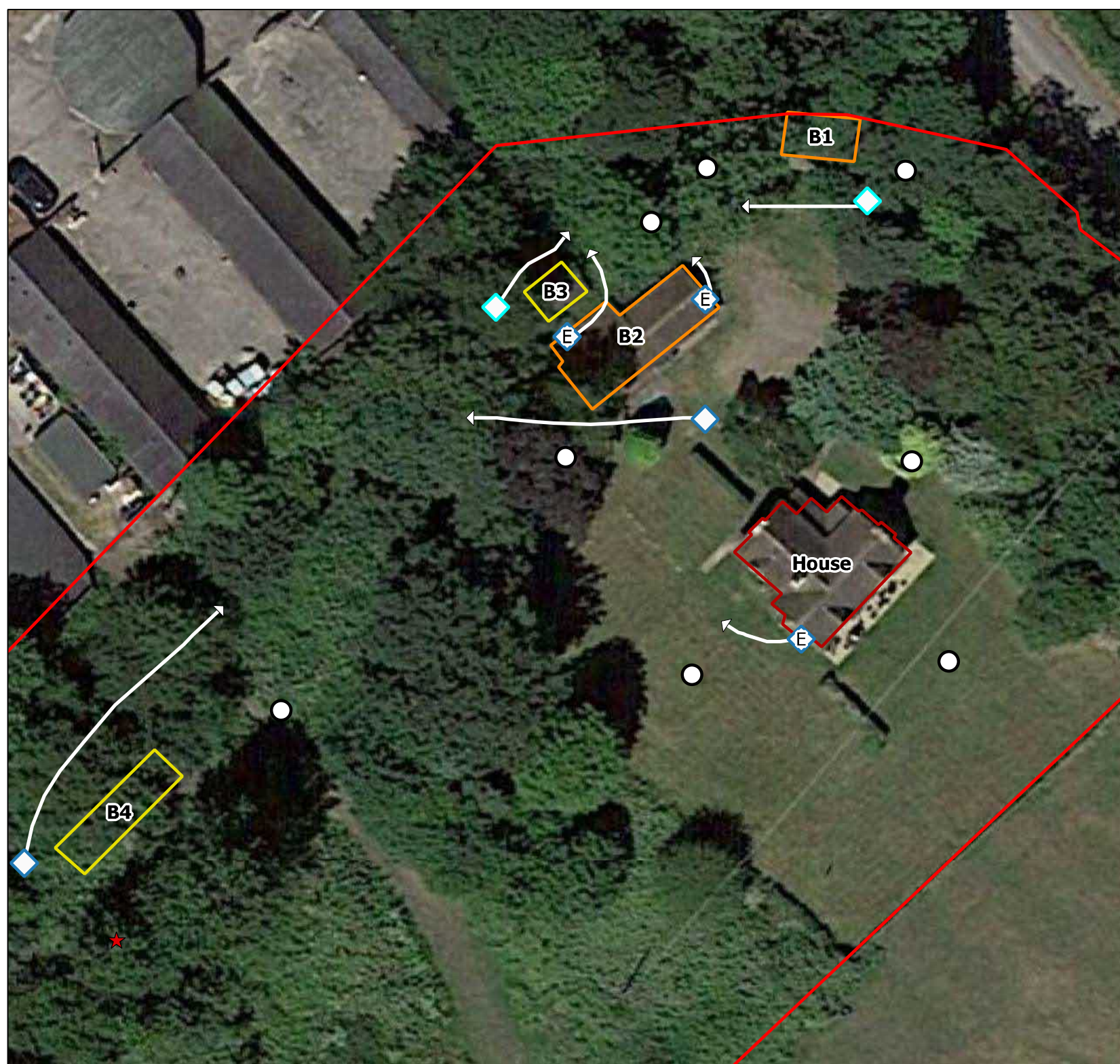
Bat Contacts

- E = Bat Emergence
- Common Pipistrelle



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Client: Aitchison Raffety		
Project: The Elms, Wash Pit Lane		
Drawing Title: Dusk Results Plan - 04/06/2020		
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Drawn By: AGM	Date: 26/06/2020	
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Key


- Site Boundary
- Building**
- Building with Confirmed Roost
- Moderate Potential Building
- Low Potential Building

18/06/2020 Dusk

- ★ Thermal Camera
- Flight Direction
- Surveyor Location

Bat Contacts

- E = Bat Emergence
- Common Pipistrelle
- Soprano Pipistrelle



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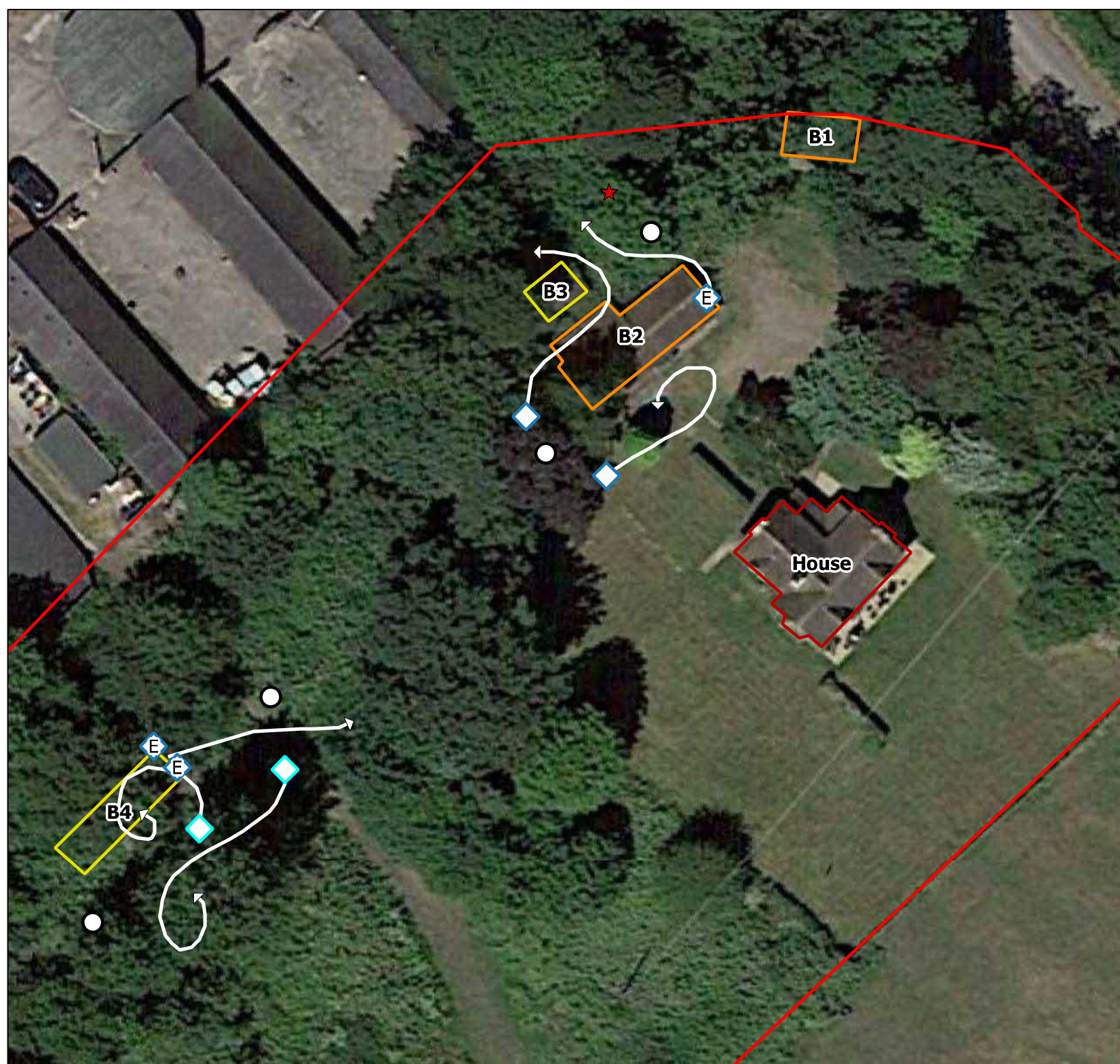
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Aitchison Raffety

Project:
The Elms, Wash Pit Lane

Drawing Title:
Dusk Results Plan - 18/06/2020

Drawing No. RSE_3322_B3	Rev: V1
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Key

- Site Boundary
- Building**
- Building with Confirmed Roost
- Moderate Potential Building
- Low Potential Building

25/06/2020 Dusk

- ★ Thermal Camera
- Flight Direction
- Surveyor Position

Bat Contacts

E = Bat Emergence

- Common Pipistrelle
- Soprano Pipistrelle



Client:
Aitchison Raffety

Project:
The Elms, Wash Pit Lane

Drawing Title:
Dusk Results Plan - 25/06/2020

Drawing No. RSE_3322_B4	Scale: 1:400	Rev: V1
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