

LAND AT BARROW HILL QUARRY, EARL SHILTON

Construction and Ecological Management Plan (CEMP)



Client:

AT Contracting & Plant Hire Ltd.

Report Reference:

RSE_5294_R3_V1_CEMP

Issue Date:

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This report contains confidential information relating to the location of badger setts. Due to the sensitive nature of this information, all reference to badgers should be redacted from the report prior to its release into the public domain and its circulation restricted.

PROJECT

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CONTENTS

1	INTRODUCTION AND BACKGROUND	5
1.1	PURPOSE AND SCOPE OF THIS REPORT	5
1.2	THE SITE AND SCHEME	6
1.3	BACKGROUND INFORMATION - ECOLOGY	6
1.4	RESPONSIBILITIES	7
2	LEGISLATION AND PLANNING POLICY	8
2.1	GENERAL & REGIONALLY SPECIFIC POLICIES	8
2.2	PROTECTED SPECIES	8
2.3	INVASIVE PLANT SPECIES	9
2.4	SPECIES AND HABITATS OF PRINCIPAL IMPORTANCE FOR THE CONSERVATION OF BIODIVERSITY	9
2.5	LEICESTER, LEICESTERSHIRE, AND RUTLAND BIODIVERSITY ACTION PLAN	9
3	RISK ASSESSMENT AND MANAGEMENT OBJECTIVES	11
3.2	ECOLOGICAL CLERK OF WORKS (ECOW)	11
3.3	BIODIVERSITY TARGETS	11
3.4	HABITATS: WATERCOURSES AND WATERBODIES	11
3.5	BATS	11
3.6	GREAT CRESTED NEWT	12
3.7	NESTING/BREEDING BIRDS	12
3.8	REPTILES	13
3.9	BADGERS	13
3.10	HEDGEHOGS, BROWN HARE, AND COMMON AMPHIBIANS	13
3.11	INVASIVE PLANT SPECIES	14
4	PRE AND MID CONSTRUCTION MITIGATION	15
4.2	HABITATS: WATERCOURSES AND WATERBODIES	15
4.3	BATS	15
4.4	NESTING BIRDS	16
4.5	REPTILES	16
4.6	BADGERS	17
4.7	HEDGEHOG, BROWN HARE, AND COMMON AMPHIBIANS	18
4.8	INVASIVE PLANT SPECIES	18
5	SUMMARY OF PRE AND MID CONSTRUCTION MITIGATION	19
5.1	CRITICAL PATHWAY ELEMENTS	19
6	REFERENCES	24

7 FIGURES

25

FIGURES

FIGURE 1: SITE LOCATION AND CONTEXT PLAN	26
FIGURE 2: PHASE I HABITATS PLAN	27
FIGURE 3: ECOLOGICAL CONSTRAINTS PLAN	28
FIGURE 4: BADGER SURVEY PLAN	29

TABLES

TABLE 1: SUMMARY OF BADGER SETT DISTURBANCE DISTANCES	17
TABLE 2: SUMMARY OF MITIGATION REQUIREMENTS	20
TABLE 3: MITIGATION ACTIONS AND ASSOCIATED TIMING SUMMARY	22

1 INTRODUCTION AND BACKGROUND

1.1 Purpose and Scope of this Report

- i This Construction and Ecological Management Plan (CEMP) has been prepared by RammSanderson Ecology Ltd. (RS) on behalf of AT Contracting and Plant Hire Ltd. (the Applicant), to support the erection of 21 holiday lodges and associated infrastructure and landscaping (the 'Scheme'). All land within the red line boundary of the Scheme is hereafter referred to as the 'Site'. The Site is shown in Figure 1.
- ii The purpose of this CEMP is to detail the measures required to avoid or mitigate impacts upon protected/notable habitats¹ and species², during the construction phase of the Scheme, thereby allowing the Scheme to proceed in accordance with relevant wildlife legislation and policy (as summarised in Section 2). The CEMP is consistent with the requirements of British Standard 42020:2013 *Biodiversity. Code of Practice for Planning and Development*.
- iii This CEMP forms part of the technical information commissioned by the Applicant in connection with the Scheme and should be considered alongside the Ecological Impact Assessment (EcIA) (RSE_5294_R2_V2_ECIA) and the Landscape and Ecology Management Plan (LEMP) (RSE_5294_R4_V1_LEMP).
- iv **It is noted that the information and measures as detailed within this report pertain to the current iteration of the Site and the current planned working methodology only.** It is assumed that, in the event the recommended mitigation measures cannot be implemented, or that the Scheme's proposals or scope change from that which is described in Section 1.2, the Applicant will contact RS for further advice and this document will be updated accordingly.
- v This CEMP has been produced to discharge Condition 15 of planning consent (21/01390/FUL), which is worded as follows:

No development shall take place (including ground works or vegetation clearance) until a Construction Environment Management Plan for biodiversity (CEMP: Biodiversity) has been submitted to and approved in writing by the LPA. The CEMP shall include the following details:

- A) *Identification of potentially damaging construction activities*
- B) *Identification of biodiversity protection zones*
- C) *Practical measures and sensitive working practices to avoid or reduce impacts during construction, in particular for badgers and reptiles*
- D) *Timing of works to avoid harm to nesting birds*
- E) *Responsible persons for overseeing sensitive works*

¹ Notable habitats are taken as principal habitats for the conservation of biodiversity listed under Section 41 of the Natural Environment and Rural Communities Act 2006; habitats listed under the Leicestershire Biodiversity Action Plan (BAP); hedgerows identified as being 'important' under the wildlife criteria of the Hedgerow Regulations 1997, ancient woodlands and veteran trees.

² Notable species are taken as principal species for the conservation of biodiversity listed under Section 41 of the Natural Environment and Rural Communities Act 2006; any species listed in an IUCN Red Data Book; and any other species listed under the Leicestershire Biodiversity Action Plan.

F) Use of protective fencing where required

The approved CEMP shall be adhered to and implemented throughout the construction period strictly in accordance with the approved details, unless otherwise agreed in writing by the LPA.

1.2 The Site and Scheme

- i The Site (Figure 1) includes all land within the red line boundary of the Scheme. The Site is located on land at the disused Barrow Hill Quarry, to the south-east of Earl Shilton, Leicestershire (Central Grid Reference: SP 4876 9715). It is approximately 2.9ha in size.
- ii The habitats on Site mainly comprised dense scrub, with small areas of poor semi-improved grassland, tall ruderal, short ephemeral/perennial vegetation and bare ground. Inland cliffs were present along the northern Site boundary (Figure 2).
- iii The Site is mostly surrounded by arable land, with a large waterbody and the M69 to the south.
- iv The Scheme pertains to the development of 21 single storey holiday lodges and a management building with associated vehicular access, parking, surface water drainage provision, and landscaping. Specifically, there will be four parking spaces per lodge and the management building will be single storey with a terrace area. Main access to the Site will be from Mill Lane, with a new access track through the Site. There will be landscape buffers to parts of the southern boundary and across the Site and there will be new acoustic fencing along the south-eastern corner of the Site. The Scheme was granted planning permission by Hinckley & Bosworth Borough Council in April 2023, subject to 27 conditions, two of which (condition 10 and 15) pertain to ecology.
- v Construction is expected to commence by late 2025.

1.3 Background Information - Ecology

- i A Preliminary Ecological Appraisal (PEA) for the Scheme was conducted by RS in October 2021, the results of which are presented in the PEA Report (RSE_5294_01_V1). This appraisal aimed to establish baseline conditions, map the habitats present at the Site, and determine the presence of Important Ecological Features (IEF) (or those that could be present). Results concerning IEFs not deemed to require further survey work or mitigation are detailed within the PEAR and are not discussed further in this CEMP.
- ii The PEA involved a desk study to obtain records of designated sites up to 5km from the Site and protected and notable species up to 2km from the Site.
- iii A variety of ecological receptors were subject to further survey following the recommendations of the PEA. The specific requirement for the surveys was indicated by the results of the PEA and understanding of the scope/detailed design of the Scheme. These surveys are reported on in full within the EcIA, but they generally aimed to further investigate suitability of features/habitats to support protected/notable species; and/or confirm presence/likely absence of the species from the Zone of Influence; and/or give an indication of population size/conservation significance of the population/species assemblage present.
- iv The following ecological surveys have been conducted in relation to the Scheme: badger survey, botanical condition assessment, botanical survey update, suite of reptile surveys, suite of bat activity surveys, suite of breeding bird surveys, invertebrate scoping assessment.
- v The EcIA assesses the potential impacts of the Scheme on the species surveyed. It concludes that, where appropriate mitigation can be applied, impacts can be reduced to a negligible level, and it recommends that construction phase mitigation is presented within a CEMP.

1.4 Responsibilities

- i The responsibility for implementing this management plan will be AT Contracting and Plant Hire Ltd., their Principal Contractors, and any associated sub-contractors.
- ii A copy of this document should be kept at the Site and referred to where necessary.

2 LEGISLATION AND PLANNING POLICY

2.1 General & Regionally Specific Policies

- i Articles of British legislation, policy guidance and both Local Biodiversity Action Plans (BAPs) and the Natural Environment and Rural Communities 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:
 - The National Planning Policy Framework (2024)
 - The Conservation of Habitats and Species Regulations 2019;
 - The Wildlife and Countryside Act 1981 (as amended);
 - EC Council Directive on the Conservation of Wild Birds 79/409/EEC;
 - The Protection of Badgers Act 1992;
 - The Natural Environment and Rural Communities (NERC) Act 2006;
 - Leicester, Leicestershire and Rutland Biodiversity Action Plan;
 - Hinckley and Bosworth Borough Council Local Plan (up to 2026).

2.2 Protected Species

2.2.1 Bats

- i British bats are protected under Regulation 43 of the 2017 Regulations as amended by the 2019 Regulations. This makes it an offence to deliberately capture, injure or kill a bat; deliberately disturb a bat; or damage or destroy a breeding site or resting place used by a bat.
- ii Deliberate capture or killing is taken to include “accepting the possibility” of such capture or killing. Deliberate disturbance of bats includes in particular any disturbance which is likely a) to impair their ability (i) to survive, to breed or reproduce, or to rear or nurture their young, or (ii) to hibernate; or b) to affect significantly the local distribution or abundance of the species to which they belong.
- iii Where development works are at risk of causing one or more of the offences listed above, a mitigation licence from Natural England can be obtained to facilitate the works that would otherwise be illegal.
- iv Bats are also protected under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended). This makes it an offence to intentionally or recklessly obstruct access to any structure or place used for shelter or protection or disturb a bat in such a place.
- v Lower levels of disturbance not covered by the Conservation of Habitats and Species Regulations 2017 remain an offence under the Wildlife and Countryside Act 1981 although a defence is available where such actions are the incidental result of a lawful activity that could not reasonably be avoided.

2.2.2 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 the 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 site to be classified as Special Protection Areas where appropriate.

2.2.3 Reptiles

- i All Reptile species are partially protected under Schedule 5 (Sections 9(1) and 9(5)) of the Wildlife and Countryside Act 1981 (as amended).
 - Reckless or intentional killing and injury;
 - Selling, offering for sale, possessing or transporting for the purpose of the sale or publishing advertisements to buy or sell a protected species.

2.2.4 Badgers

- i Badgers are protected under the Protection of Badgers Act 1992. This act makes it an offence to:
 - Wilfully kill, injure, take possession or cruelly ill-treat a badger, or attempt to do so
 - To intentionally or recklessly interfere with a sett. Sett interference includes disturbing badgers whilst they are occupying a sett, as well as damaging or destroying a sett or obstructing access routes
- ii A sett is defined as:

“Any structure or place which displays signs indicating current use by a badger”.
- iii Works that disturb badgers whilst occupying a sett is illegal without a licence, badgers may be disturbed by work near the sett even if there is no direct interference or damage to the sett.
- iv Licences only allow works to be carried out between July and November inclusive.

2.3 Invasive Plant Species

- i Under the Wildlife and Countryside Act, 1981 (as amended), it is an offence to plant or otherwise cause these species to grow in the wild.
- ii Any contaminated soil or plant material is classified as controlled waste and should be disposed of in a suitably licensed landfill site, accompanied by appropriate Waste Transfer documentation, and must comply with section 34 of the Environmental Protection Act 1990.

2.4 Species and Habitats of Principal Importance for the Conservation of Biodiversity

- i Section 40 of the Natural Environment & Rural Communities Act (NERC) 2006 sets out the duty for public authorities to conserve biodiversity in England.
- ii Habitats and species of principal importance for the conservation of biodiversity are identified by the Secretary of State for England, in consultation with Natural England, are referred to in Section 41 of the NERC Act for England. The list, known as the ‘England Biodiversity List’, of habitats and species can be found on the Natural England web site.
- iii The ‘England Biodiversity List’ is used as a guide for decision makers such as public bodies, including local and regional authorities, in implementing their duty under Section 40 of the NERC Act 2006 to have regard to the conservation of biodiversity in England when carrying out their normal functions. The habitats and species on the List, are material considerations of planning, where present on an application site.

2.5 Leicester, Leicestershire, and Rutland Biodiversity Action Plan

- i The Leicester, Leicestershire, and Rutland (LLR) Biodiversity Action Plan: Space for Wildlife 2016-2026 aims to protect, enhance, and restore biodiversity across the region. The document sets out specific objectives to:
 - Conserve Key Habitats and Species: Identify and safeguard priority habitats and species, ensuring their resilience and long-term survival.
 - Promote Habitat Connectivity: Create and maintain networks of wildlife corridors to support species movement and ecosystem health.

- Sustain Partnerships and Community Engagement: Foster collaboration among local authorities, environmental organizations, landowners, and the public to support conservation efforts.
 - Monitor and Report Progress: Implement strategies for assessing the success of biodiversity projects and report findings to inform future conservation work.
 - Integrate Biodiversity into Land Use Planning: Ensure that biodiversity considerations are embedded in local and regional development plans.
- ii Habitats and Species with Action plans which may be relevant to this CEMP are as follows:
- Inland cliffs
 - Bats

3 RISK ASSESSMENT AND MANAGEMENT OBJECTIVES

- i In order to inform this section of the plan, a desktop review of all background data including reports and local policies has been undertaken.
- ii This section summarises field survey results; full details and further information can be found within the EclA report (RSE_5294_R2_V2_ECIA). It is noted that field survey results (mostly gathered in 2022) are now considered out of date, due to the time elapsed since the EclA, and associated survey work, was completed. It is unlikely the overarching nature of the Site has changed significantly since this baseline, however, due to the presence of mobile species, such as badger, identified on Site, it is necessary to provide some updates to field survey work. An updated walkover of the entire Site will be conducted in summer 2025, prior to the commencement of construction, to identify any material differences between prior field survey results and current conditions. If required following this walkover, this CEMP will be updated accordingly.

3.2 Ecological Clerk of Works (ECoW)

- i All works which require an ECoW to be present are to be carried out by an experienced ecologist (nominated by RammSanderson Ecology Ltd.) in accordance with the Ecological Clerk of Works code of practice.
- ii Predevelopment checks involve the following:
 - Toolbox talk to all operatives;
 - Reptile and badger checks – prior to the vegetation clearance of dense scrub on Site (see Sections 3.8 and 3.9 for more details);
 - Nesting bird checks – prior to the removal of vegetation within the nesting bird season (typically March to August inclusive) (see Section 3.7 for more details); and,
 - Pre-commencement checks for Species of Principal Importance (SoPI).

3.3 Biodiversity Targets

- i In compiling this document, consideration is given to the local and national targets of;
 - The Natural Environment and Rural Communities (NERC) Act 2006;
 - Leicester, Leicestershire and Rutland Local Biodiversity Action Plan 2016-2026 (LLRBAP);
 - Hinckley and Bosworth Borough Council's target of achieving 10% Biodiversity Net Gain (BNG) for new developments.
- ii Retained and created habitats at the Site and their management will be documented in an accompanying LEMP (RSE_5294_R4_V1_LEMP). Vegetation clearance across the Site will be minimised as far as possible in Scheme design.

3.4 Habitats: Watercourses and Waterbodies

- i There were no watercourses or ponds on Site, however a watercourse was located 115m south-west and a large waterbody was also present approximately 20m south of the Site boundary.
- ii Due to the proximity of these features to the Site, in the absence of mitigation, there is a risk of pollution to these habitats due to construction activities.
- iii Therefore, the objective is to prevent negative impacts on these habitats through pollution; pollution prevention guidelines are provided in Section 4 of this report.

3.5 Bats

- i The desk study identified recent records of eight bat species within 2km of the Site. This included common pipistrelle, soprano pipistrelle, Daubenton's bat, noctule, brown long-eared bat, serotine, and an unidentified *Chiroptera* species. The closest of these records was located 30m south-west.

- ii No buildings or trees were present on Site that had potential for supporting roosting bats.
- iii The dense scrub, adjacent large waterbody, and lack of artificial lighting on Site makes the site moderately suitable for bat foraging and commuting, as assessed according to the Bat Conservation Trust Guidelines. There is also good connectivity to the wider landscape via hedgerows along adjacent field margins.
- iv Bat activity transect surveys were conducted by RS between June and October 2022. The species recorded on Site during these transects included common pipistrelle, noctule, Nathusius' pipistrelle, Leisler's bat, unidentified *Nyctalus* species, and unidentified *Myotis* species. Two static detectors were also deployed during the transects for a duration of five nights per visit. Low levels of bat activity were recorded during surveys and static recording on Site. Activity was relatively consistent across the Site with commuting and foraging activity occurring over areas of scrub and along adjacent hedgerows.
- v Much of the scrub habitat is to be retained and with tree planting also set to occur on Site under current proposals.
- vi Considering these risks, the objective is to prevent adverse impacts to foraging and commuting bat routes through disturbance through artificial lighting during the construction phase and to avoid contravening legislation detailed in Section 2 of this report.

3.6 Great Crested Newt

- i The desk study identified 30 records of great crested newt (GCN) within 2km of the Site, the closest record was located 0.5km south-east.
- ii Terrestrial habitats on the Site, such as scrub, grassland, tall ruderal, and brash/deadwood piles, provided opportunities for refuge seeking, hibernating, and commuting GCN.
- iii There were no waterbodies on Site, however, the large waterbody to the south of the Site was subject to a Habitat Suitability Index (HSI) assessment for GCN. It was not possible to perform GCN HSI assessments on the remaining five waterbodies within 500m of the Site boundary due to land access issues.
- iv The HSI assessment was conducted by RS in October 2021. The waterbody was classified as having 'Poor' suitability for GCN and so an environmental DNA (eDNA) survey was not deemed necessary.
- v However, it was not possible to assess the remaining waterbodies within 500m for their GCN suitability or conduct presence/absence surveys, due to land access permissions. Therefore, it remains unknown whether these habitats are being utilised by breeding GCN and it is therefore possible that the terrestrial habitats on Site may harbour GCN.
- vi Mitigation for GCN is being enacted through the Natural England District Level Licensing process for Leicestershire and Rutland and will not be discussed further in this CEMP. At the time of writing, an application has not yet been made, but is in the process, via support from RS. If necessary, an amended version of the CEMP will be produced detailing any mitigation measures within the licence, when this has been granted.

3.7 Nesting/Breeding Birds

- i The desk study identified recent records of 39 notable bird species within 2km of the Site, the closest record was located 30m south-west.
- ii Two Breeding Bird Surveys (BBS) were conducted by RS in between June and July 2022. The BBS found a common and widespread bird assemblages with low numbers of species of amber and red conservation concern.
- iii Much of the scrub on Site is to be retained and new tree planting is proposed which may provide suitable nesting habitat for birds.

- iv Considering this risk, the objective is to prevent the destruction of active bird nests and limit adverse impacts to bird populations during any vegetation removal on Site.

3.8 Reptiles

- i No records of reptiles were identified within the desk study.
- ii The Site currently provides suitable habitat for reptile species, for example scrub, grassland, and brash/deadwood and rubble piles (Figure 3). Reptile presence/absence surveys were undertaken on Site by RS in 2022 whereby no reptiles were recorded. Despite no reptiles being encountered during surveys on Site, presence cannot be entirely discounted due to disturbance from dirt bikers potentially affecting normal reptile behaviour and decreasing their detectability during surveys.
- iii In absence of mitigation, there is a risk of mortality/injury to reptiles during the construction activities, such as vegetation clearance and brash/deadwood and rubble piles dismantlement.
- iv Considering this risk, the objective is to minimise risk during the construction phase to reptiles to negligible levels, by strict adherence to the working methods outlined in Sections 4 and 5, to avoid contravening legislation detailed in Section 2 of this report.

3.9 Badgers

- i The desk study identified 14 recent records of badger within 2km of the Site. This included records of a historic sett on the Site (Figure 4).
- ii Badger field signs were recorded during survey visits on Site, including the discovery of a large disused outlier sett along the southern Site boundary (Figure 4). Several well-used mammal paths were also found leading from a parcel of scrub to the south which indicated frequent use.
- iii As it was not possible to fully survey the scrub habitat present due to it being too dense, there remains a possibility that badger setts could be present on Site.
- iv Badgers are a highly mobile species and can excavate setts in a short time. Additionally, a significant amount of time has elapsed since previous field work, and there are known historic records on the Site. Therefore, in absence of mitigation, there is a risk that any existing or newly dug setts on Site, or within 30 m of the Site, could be destroyed/disturbed by construction activities, particularly those which involve breaking ground. Additionally, if good practice is not adhered to across the construction areas, there is a risk of mortality/injury to terrestrial fauna (including badgers) which may traverse the Site overnight.
- v Considering this risk, the objective is to minimise the risk of reckless killing and/or injuring of badgers as a result of the Scheme, which would contravene legislation outlined in Section 2, and reduce risks posed by construction activities on badgers to negligible levels by strict adherence to the working methods outlined in Sections 4 and 5.

3.10 Hedgehogs, Brown Hare, and Common Amphibians

- i The desk study identified recent records of smooth newt, common frog, common toad, brown hare, and hedgehog within 2km of the Site. The closest record was of brown hare located 0.7km NE.
- ii The habitats on Site and the wider landscape have the potential to support brown hare, hedgehog, and common amphibian populations.
- iii There is therefore a risk that harm could be caused to these species, both passing through the Site and during any vegetation clearance.
- iv As such, the objective is to minimise adverse impacts to these protected species during the construction phase of the Scheme to prevent any risk to their conservation status.

3.11 Invasive Plant Species

- i Japanese knotweed stands, cotoneaster, and field horsetail were identified on Site (Figure 3).
- ii Whilst field horsetail is not listed on Schedule 9 of the Wildlife and Countryside Act, it is a fast-growing species which may outcompete native species on Site.
- iii A specialist management plan should be produced and followed to avoid the spread of Japanese knotweed and cotoneaster on Site and within the wider, as detailed in Sections 4 and 5. Considering this risk, the objective is to minimise the risk of spread of invasive species as a result of the Scheme, which would contravene legislation outlined in Section 2

4 PRE AND MID CONSTRUCTION MITIGATION

- i Within each phase of the works, vegetation clearance should take place working towards the more suitable habitats for flora and fauna species such as hedgerows and waterbodies within the wider environment.
- ii Each ecological feature requiring ecological mitigation (pre-construction and mid-construction) is addressed in sections 4.2 to 4.7 with suggested timings of works and, where necessary, identification of any supplementary pre-commencement surveys, and where Ecological Clerk of Works (ECoW) will be required. Section 5 provides a summary table of the species-specific recommendations provided below.
- iii Section 5 of this document should be used within any Site briefing document and be controlled by the Site foreperson and a nominated Site 'biodiversity champion'. It is recommended that this document is briefed to all Site managers and Site operatives. This should also form part of the Site diary, and the biodiversity champion should record all actions taken at the Site that are within the remit of this CEMP.
- iv Prior to works starting, telephone numbers will be exchanged between the nominated Site ecologist and Site manager to provide a clear line of communication.

4.2 Habitats: Watercourses and Waterbodies

- i To address the risk of pollution runoff during the construction phase of the Scheme, pollution prevention guidelines will be adhered to for the duration of the works (CIRIA C532). This will prevent material/silt washing into the watercourse/waterbody in proximity to the Site.
- ii Spill kits must be available on Site and any spillage notified to the relevant competent authority. These measures also include the use of drip trays.
- iii Refuelling of tools will not take place within 10m of the off-Site watercourse/waterbody.

4.3 Bats

- i The Site is particularly noteworthy for having a lack of artificial lighting. Most bat species' behaviour is impacted by artificial lighting so any changes in lighting across the Site may alter bat behaviour.
- ii It has been suggested that slower flying, broad winged bats such as *Myotis* species avoid commuting and foraging routes that are illuminated with a variety of different street luminaries (BCT, 2023). Conversely, studies have shown that faster flying species such as noctule, Leisler's, and pipistrelle can congregate around white light sources (BCT, 2023). These species were all observed on Site during the bat transect activity surveys.
- iii It is therefore recommended that lighting within the Site, during construction and post-development, is sensitive to the needs of foraging and commuting bats.
- iv A 10m dark corridor is also recommended along the dense scrub around the boundaries of the Site and along the hedgerows in the adjacent landscape to prevent disturbance to bat foraging and commuting pathways.
- v During both the construction and operational phases of all areas of the Site, efforts should be made to prevent impacts to foraging and commuting bats by the implementation of a Sensitive Lighting Strategy. This should follow the guidelines set out in Bats and Artificial Lighting at Night (BCT & ILP 2023). Therefore, associated Site lighting proposals must consider the following:
 - Avoid nocturnal lighting as far as practical;
 - A 10m dark corridor will be enforced along the dense scrub around the boundaries of the Site and along the hedgerows in the adjacent landscape to prevent disturbance to bat foraging and commuting pathways.

- Install lamps at the lowest permissible density;
- Lamps should be positioned to direct light to avoid upward spill onto any green corridors that could be used by commuting bats or features with bat roost potential;
- LED lighting with no/low UV component is recommended;
- Lights with a warm colour temperature – 3000K or 2700K have significantly less impact on bats;
- Light sources that peak higher than 550nm also reduce impacts to bats;
- The use of timers and dimmers on construction security lighting to avoid lighting areas of the Site all night is recommended.

4.4 Nesting Birds

- i Vegetation clearance works will be programmed to avoid the core nesting bird season (March to September inclusive). However, if this cannot be achieved, works within the core bird nesting season will require the following method in order to protect any nesting birds present within the Site.
 - A detailed Site walkover recording nesting activity will be required 24 hours prior to works starting on Site by the nominated on-Site ecologist. It is proposed that the nesting bird check is completed over approximately 2 hours to accurately record the location of any active nests. Any active nests or suspected active nests will be marked with barrier tape providing a 10m exclusion (more if considered appropriate), GPS recorded, highlighted on a plan, and discussed during toolbox talks with operatives before works commence.
 - Should contractors subsequently observe or suspect nests during their works then work will immediately stop in that area and the Site ecologist will be notified. The nest area will then be marked with barrier tape and GPS recorded as above. Clearance works will only be permitted to recommence within excluded nesting zones once an ecologist has reassessed the area and confirmed all birds and dependant young have fledged.
- ii Additionally, soil scrapes will not be left over winter as this will increase the risk of these areas becoming attractive to ground nesting species such as lapwing. Should this prove unavoidable, then the above method will also be required in relation to ground nesting birds.

4.5 Reptiles

- i Presence/absence surveys conducted by RS identified no reptiles. The Site is highly unlikely to form a core area for reptiles locally, however, given the mobile nature of reptile species and the noise disturbance and ground vibrations on Site during the surveys due to dirt biking, a precautionary method of works for the Site will be adhered to which will include:
 - Suitably experienced ecologists will provide a toolbox talk to all site operatives involved with vegetation clearance works and provide fact sheets on what to do in the unlikely event that a reptile is found.
 - Vegetation removal will only be conducted within reptile active season (April to September inclusive) and in temperatures above 11°C, ideally in the late morning to afternoon when reptiles are most active.
 - Vegetation removal will be conducted in two phases. The habitats will first be cut to a height of 15-20cm by hand tools only under a watching brief by a suitably qualified ecologist. The area will be left for 24-48hrs and then, prior to a second cut, an ecologist will conduct a ground level fingertip search of the area for any reptiles. The vegetation will then be cut to 5cm using the same

method, working in the same direction as the previous cut. This will allow any reptiles present to disperse into the wider environment unharmed.

- Potential refugia habitats such as brash/deadwood and rubble piles will be removed by hand or sensitively using hand tools, under a watching brief by a suitably qualified ecologist. This should only be conducted outside of reptile hibernation season (October to March inclusive) to avoid adverse impacts to hibernating reptiles.
- In the extremely unlikely event a reptile is seen during these works, they will be allowed to escape unharmed at their own pace. Only a trained ecologist should attempt to move reptiles by hand. If multiple reptiles are encountered, works should cease and the methodology be re-evaluated.
- Any debris/rubble/brash created during construction will be placed into a skip and immediately removed from Site to avoid creation of new herptile refugia.

4.6 Badgers

- i Works are proposed to encroach within 10m of the potential outlier sett along the southern Site boundary. Given the dynamic nature of badgers and their sett building and the length of time elapsed since the last field survey, a pre-commencement badger survey should be undertaken as soon as possible to determine if badgers are utilising the outlier sett and to check for any newly created setts prior to the start of vegetation clearance works. A further pre-commencement badger survey may be required should works not commence within six months of the survey date.
- ii If any setts, or suspected setts, are identified during the walkover, the setts should be monitored with a camera(s) prior to works commencing for a period of 21 days, where necessary. If a sett is evidenced to be disused, it will be dug out/meshed over immediately after the monitoring period (i.e. within 24 hours) to avoid it becoming active in the future. If a sett is evidenced to be in active use by badgers, an appropriate buffer zone (see Table 1) will be implemented and enacted with fencing (of a type which would allow dispersal of badgers into the wider landscape). No construction activities will take place in this area until further mitigation, such as a Natural England licence, can be enacted.
- iii Vegetation removal of the dense scrub on Site should be undertaken using hand tools only and under a watching brief by a suitably qualified ecologist. This will allow identification of any setts within this habitat that may have been missed on the walkover survey whilst limiting potential disturbance. If any setts, or suspected setts, are identified during the vegetation clearance, works should stop immediately and the advice of the on Site ecologist sought.

Table 1: Summary of Badger Sett Disturbance Distances

Distance	Activity in Relation to Badger Sett ³
10m	All works to 10 metres of the nearest sett entrance must be undertaken using hand tools only. Where strimming or vegetation removal closer than this is required, a robust method statement and ecological clerk of works will be required (if roots are to be removed the 30m buffer applies).
30m	Using heavy machinery within 30 metres of any entrance to an active sett may require a licence

³ This table shows indicative distances for differing activities that can cause tunnel collapse or the abandonment of setts. This is provided as a guideline and should be considered on a case-by-case basis per Scheme.

- iv The following additional practical precautionary measures relating to terrestrial fauna will also be put in place to reduce the risk of killing/injury of badgers to a negligible level;
- Ramps will be created (mammal ladders) by edge-profiling excavations or by using planks to allow mammal escape;
 - Open pipework greater than 200mm external diameters are to be capped off at the end of each working day;
 - No night working. Security lighting used during the development phase should be faced away from the areas of dense scrub and Site boundaries; and,
 - Any chemicals should be stored in secure compounds away from access for any animals.
 - If any fresh sett digging is observed, notify the Site Ecologist immediately and leave a 30m buffer around the area until further assessment can be made.

4.7 Hedgehog, Brown Hare, and Common Amphibians

- i The precautionary measures in place to protect badgers (detailed in Section 4.6) will also protect terrestrial SoPl.
- ii Additional precautionary methods of working relating to terrestrial fauna should be followed as detailed below:
- Any rubble or brash piles should be removed by hand and the area to be cleared should be checked by a suitably qualified ecologist prior to works commencing. This should occur outside of hedgehog breeding and hibernation season (Breeding: May and June; Hibernation: December to March (inclusive)).
 - The phased vegetation removal in place for reptiles (as detailed in Section 4.5) will also protect terrestrial SoPl.
 -
 - Any hedgehogs, brown hare, or common amphibians sighted should be left to disperse of their own accord. If the animal does not disperse it should be moved by an ecologist to an area of scrub/vegetation which is to be retained.

4.8 Invasive Plant Species

- i The Japanese knotweed on Site will be subject to a remediation strategy designed and implemented by a specialist contractor, yet to be appointed, in order to prevent spread within the Site and into the adjacent habitats. A 7m exclusion zone should be erected as soon as possible to prevent further spread via the underground rhizome systems.
- ii If the cotoneaster on Site is to be removed, the specialist contractor will include recommendations on appropriate removal methods within the Japanese knotweed remediation strategy. If the cotoneaster is to be retained, prior to commencement of works, any stands on Site will be demarcated via fencing (up to 1m around the stand) and no plant movement will be allowed within this area. A suitably qualified ecologist will oversee this demarcation, and it will remain in place for as long as construction continues in that area.
- iii Whilst field horsetail is not listed on Schedule 9 of the Wildlife and Countryside Act, it is a fast-growing species which may outcompete native species on Site. Recommendations regarding the removal of field horsetail and the planting of more diverse native species are discussed within the LEMP report (RSE_5294_R4_V1_LEMP).

5 SUMMARY OF PRE AND MID CONSTRUCTION MITIGATION

5.1 Critical Pathway Elements

- i The below is a brief bullet point list of critical items to consolidate the primary risk mitigation measures associated with the Site. These are detailed further by species within Tables 2 and 3 below.
- Pollution prevention guidelines will be adhered to throughout the construction phase of the Scheme (CIRIA C532);
 - Implementation of a Sensitive Lighting Strategy for foraging and commuting bats;
 - Suitably qualified ecologist to deliver toolbox talk with respect to amphibians, reptiles, nesting birds, and terrestrial mammals (including badger);
 - Vegetation clearance will be conducted in two phases, under a watching brief by a suitably qualified ecologist;
 - Potential refugia habitats for reptiles and terrestrial mammals will be removed by hand or sensitively using hand tools, under a watching brief by a suitably qualified ecologist. This should be undertaken outside of reptile hibernation season (October to March inclusive) and hedgehog breeding and hibernation seasons (Breeding: May and June; Hibernation: December to March inclusive).
 - A pre-commencement badger survey will be conducted as soon as possible and prior to works commencing.
 - A nesting bird check will be conducted by a suitably qualified ecologist 24 hours prior to works starting on Site; If any construction excavations are present, ramps will be created (mammal ladders) by edge-profiling excavations or by using planks to allow mammal escape;
 - Any open pipework greater than 200 mm external diameters are to be capped off at the end of each working day;
 - Keep all fuel and other harmful substances in a locked area;
 - Ensure any spillages are treated with spill kits; and,
 - The Japanese knotweed on Site will be subject to a remediation strategy designed and implemented by a specialist contractor. Details of cotoneaster removal, if required, will be included within this strategy.

Table 2: Summary of Mitigation Requirements

Species	Further Survey	Mitigation		Timing Constraints
	Pre-construction	Pre-construction	Mid-construction	
Habitats: Watercourses and Waterbodies	None	Pollution prevention guidelines will be adhered to throughout the construction phase of the Scheme.	Pollution prevention guidelines will be adhered to throughout the construction phase of the Scheme.	None
Bats	None	Design Sensitive Lighting Strategy.	Reduce lighting impacts, including absence of lighting on scrub and offsite areas and using lights with a warm colour temperature and the use of timers/dimmers	Sensitive Lighting Strategy is only relevant during the bat active season (April to October inclusive). Works occurring outside of this season will not need to consider impacts to foraging and commuting bats.
Nesting birds	Check of vegetation to be cleared by a suitably experienced ecologist immediately prior to works (if within bird nesting season).	Should an active nest be identified, area to be left with appropriate buffer zone until all chicks have fledged. Toolbox talk by ecologist, signed by contractors.	Should an active nest be identified, works should cease immediately. An appropriate buffer zone should be established by the ecologist and works should not resume until all the chicks have fledged.	Avoidance of main nesting season taken to be March – August (inclusive).
Reptiles	None	Clear vegetation from Site in a systematic/phased manner working towards suitable habitat. Ground level fingertip search of habitats after the initial cut by a suitably qualified ecologist. Toolbox talk by ecologist, signed by contractors.	Sensitive vegetation management and ecological watching brief when removing areas of dense scrub and brash/deadwood and rubble piles. Removal of potential refugia will be conducted under a watching brief using hand tools only. Any reptiles encountered on Site will be allowed to disperse on their own accord or moved by an appropriately trained ecologist.	Works in areas suitable for reptiles should be undertaken when reptiles are active (April to September inclusive) and when temperatures exceed 11°C.

Species	Further Survey	Mitigation		Timing Constraints
	Pre-construction	Pre-construction	Mid-construction	
Badger	Pre-commencement badger survey prior to works commencing to identify any new setts/evidence. Monitoring of any setts identified to determine active status and enact appropriate buffers and licences where required.	Toolbox talk by ecologist, signed by contractors.	Vegetation clearance conducted with hand tools under a watching brief by a suitably qualified ecologist, to identify potential setts in the dense scrub which may have been missed during the walkover survey. Follow best practice guidelines which includes avoidance of leaving open excavations overnight and no night working. Any vegetation removal within the 30m buffer zone of a badger sett must be a minimum of 10m from the sett entrances and be carried out using hand tools only.	Walkover and monitoring can be conducted at any time of year but is most effective during winter when vegetation is less dense. Badger licences, if required, are only granted for works between July and November.
Hedgehog, Brown Hare, and Common Amphibians	None	Dismantle brash/rubble piles outside of hedgehog breeding or hibernation season; or by hand if required within these seasons. Toolbox talk by ecologist, signed by contractors.	Follow best practice guidelines which includes avoidance of leaving open excavations overnight and no night working.	Hedgehog breeding season: May and June Hedgehog hibernation season: December to March (inclusive)
Invasive Plant Species	A Japanese knotweed remediation strategy will be designed and implemented by a specialist contractor. Details of cotoneaster removal, if required, will be included within this strategy.	7m exclusion zone around Japanese knotweed stands to prevent further spread via the underground rhizome systems. Retained stands of cotoneaster will be demarked via fencing (up to 1m around the stand).	Field horsetail will be carefully removed and more diverse native species planted, as outlined in the LEMP report.	There may be timing restrictions on removing invasive plant species. These will be detailed within the remediation strategy.

Table 3: Mitigation Actions and Associated Timing Summary

Action	Month Applicable											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Habitat Management and Miscellaneous Actions												
Sensitive nocturnal lighting (for bats and other nocturnal fauna)	X	X	X	X	X	X	X	X	X	X	X	X
Adherence to pollution prevention measures	X	X	X	X	X	X	X	X	X	X	X	X
Measures to protect terrestrial fauna e.g. earth ramps in excavations	X	X	X	X	X	X	X	X	X	X	X	X
Place debris/rubble directly into skip/remove from Site to avoid creation of herptile refugia	X	X	X	X	X	X	X	X	X	X	X	X
Cover soil scrapes (for ground nesting birds), if created.	X	X									X	X
Vegetation Clearance Activities												
Vegetation clearance, outside core bird nesting season, where not conflicting other advice.	X	X							X	X	X	X
Clear vegetation within reptile active season				X	X	X	X	X	X			
Clear rubble/brush piles outside of reptile hibernation season	X	X	X							X	X	X
Clear rubble/brush/leaf litter piles outside hedgehog breeding or hibernation season				X			X	X	X	X	X	
Dismantle rubble/brush/leaf litter piles by hand if within hedgehog breeding/hibernation	X	X	X		X	X						X
Site Walkovers and Pre-Commencement Inspections												

Action	Month Applicable											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Badger walkover (and sett monitoring, if applicable)	X	X	X							X	X	X
Nesting bird inspection where required for vegetation clearance.			X	X	X	X	X	X				

6 REFERENCES

- i BS 42020:2013 Biodiversity – Code of Practice for Planning and Development 2013: The British Standards Institution.
- ii CIRIA, 2014. Control of water pollution from construction sites. Guidance for consultants and contractors (C532). Containment systems for pollution prevention.
- iii Collins, J (Eds.). 2023. Bat Surveys for Professional Ecologists: Good Survey Guidelines (Collins, J. Eds. 2023). London: Bat Conservation Trust.
- iv Department of Communities & Local Government, 2024. National Planning Policy Framework, London: DCLG.
- v Hinckley and Bosworth District Council, 2009. Local Plan (up to 2026)
- vi Institution of Lighting Professionals and Bat Conservation Trust, 2023. Bats and Artificial Lighting at Night, Guidance Note GN08/23.
- vii Leicestershire and Rutland Local Biodiversity Action Plan (LBAP).
- viii 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. RammSanderson, 2021. Land at Barrow Hill Quarry, Earl Shilton. Preliminary Ecological Appraisal (PEA) (RSE_5294_01_V1).
- ix RammSanderson, 2022. Land at Barrow Hill Quarry, Earl Shilton. Ecological Impact Assessment (EcIA) (RSE_5294_R2_V1_ECIA).
- x RammSanderson, 2025. Land at Barrow Hill Quarry, Earl Shilton. Landscape and Ecological Management Plan (LEMP) (RSE_5294_R4_V1_LEMP).

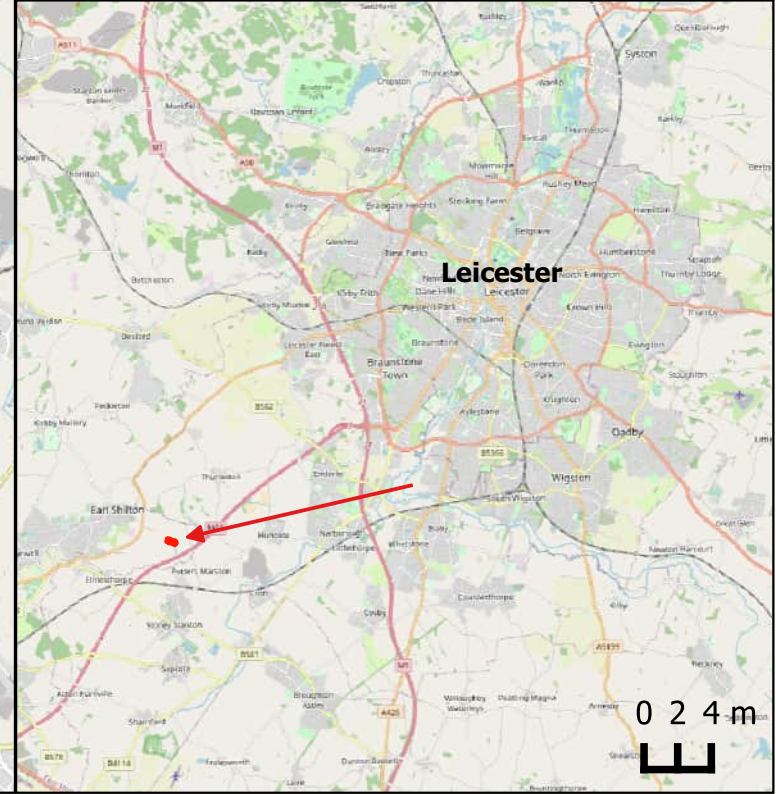
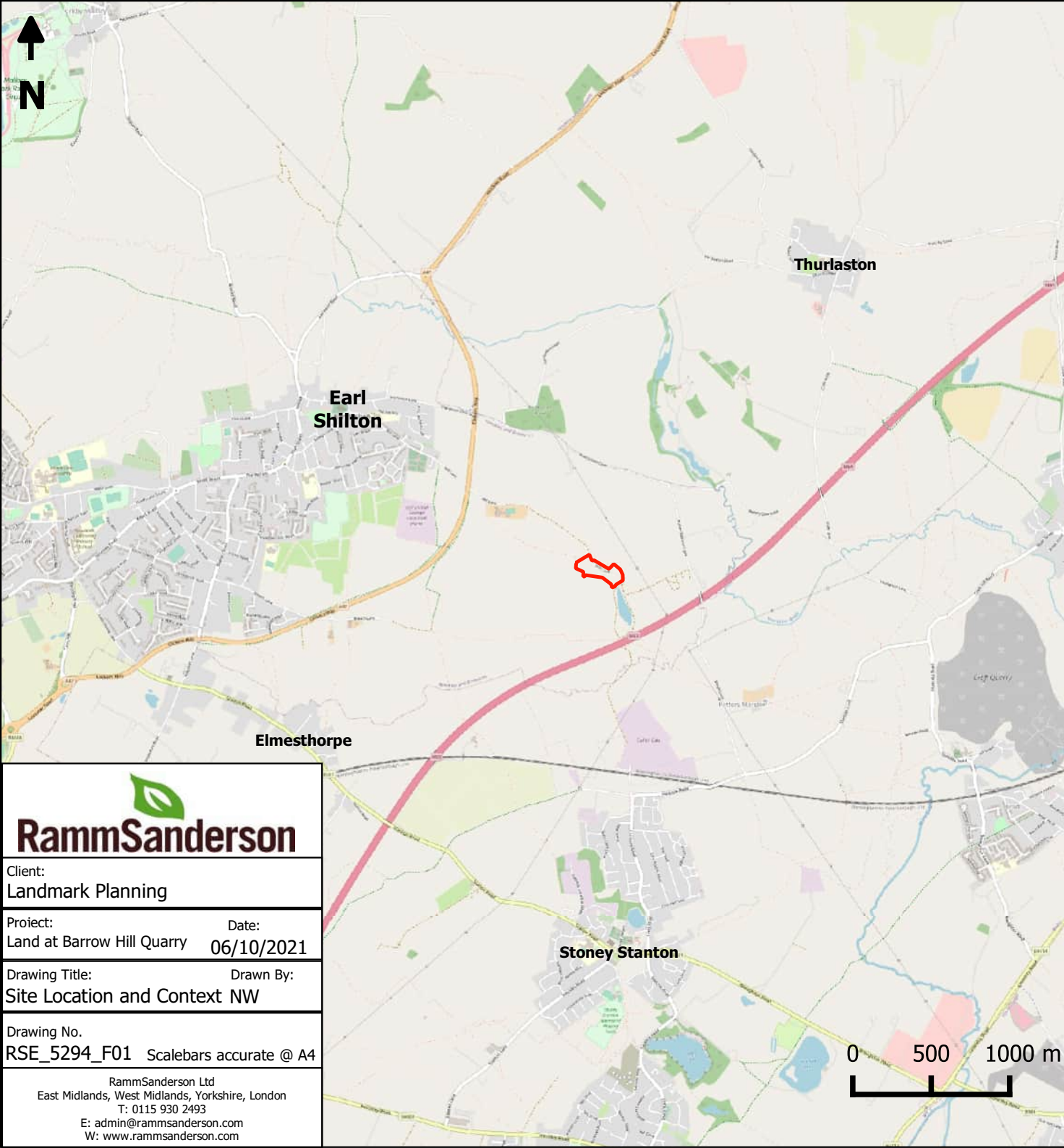
7 FIGURES

Figure 1: Site Location and Context Plan

Figure 2: Phase I Habitats Plan

Figure 3: Ecological Constraints Plan

Figure 4: Badger Survey Plan





RammSanderson

Client:
Landmark Planning

Project:
Land at Barrow Hill Quarry

Date:
06/10/2021

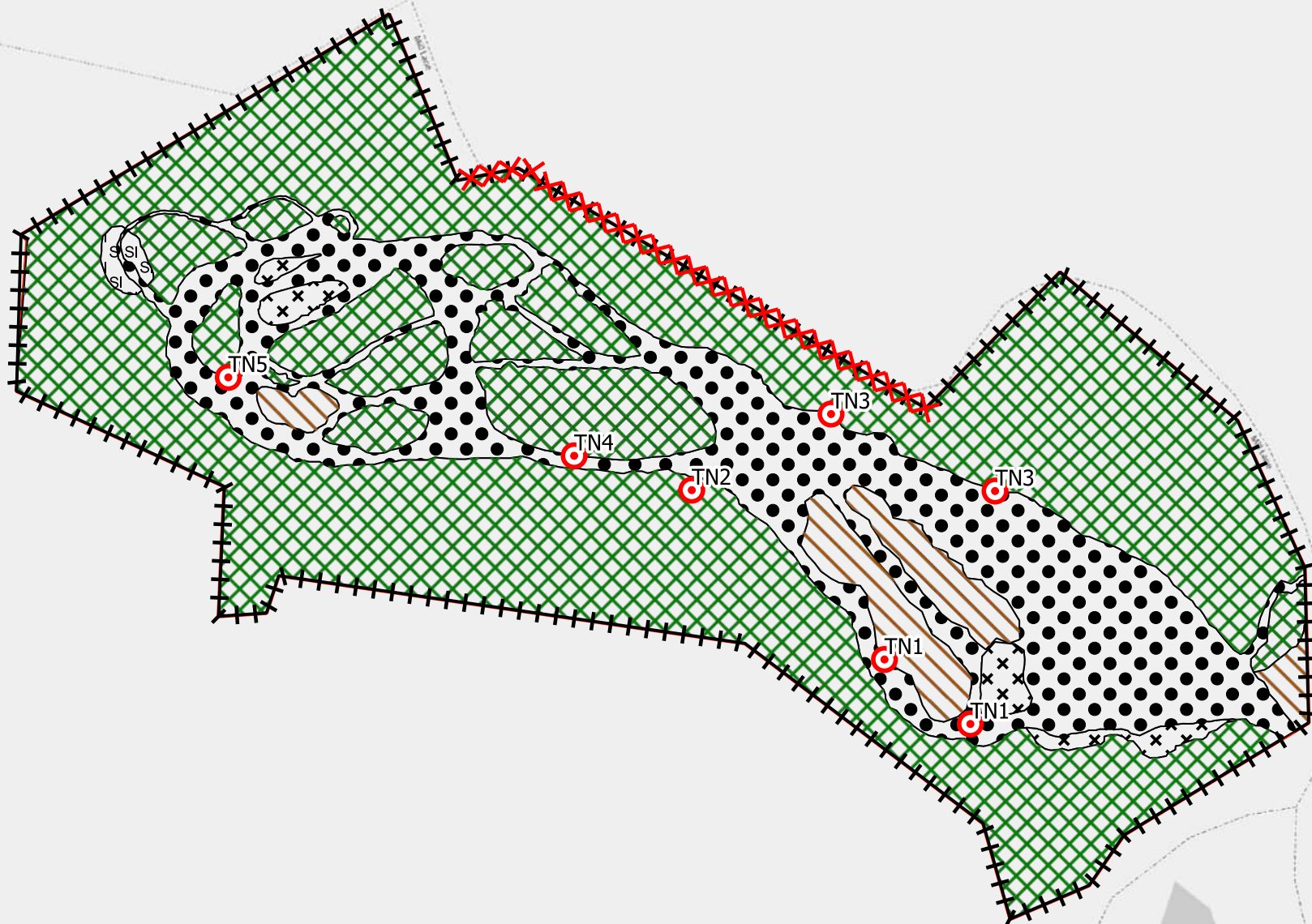
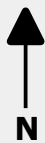
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Site Location and Context NW

Drawn By:

Drawing No.
RSE_5294_F01

Scalebars accurate @ A4

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Key

-  Site Boundary
-  A2.1 - Scrub - dense/continuous
-  B6 - Poor semi-improved grassland
-  C3.1 - Other tall herb and fern - ruderal
-  J1.3 - Cultivated/disturbed land - ephemeral/short perennial
-  J4 - Bare ground
-  I1.1.2 - Inland cliff - basic
-  J2.4 - Fence
-  Target Note
 - TN1: Brash/deadwood pile
 - TN2: Scrub/rubble pile
 - TN3: Japanese knotweed
 - TN4: Cotoneaster sp.
 - TN5: Location of rushes/sedges



Client:
Landmark Planning

Project:
Land at Barrow Hill Quarry

Drawing Title:
Phase 1 Habitat Plan

Drawing No.	Rev:
RSE_5294_F02	V1
Drawn By:	Date:
NW	03/11/2021
Scale @ A4:	
1:1423	

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Key

 Site Boundary

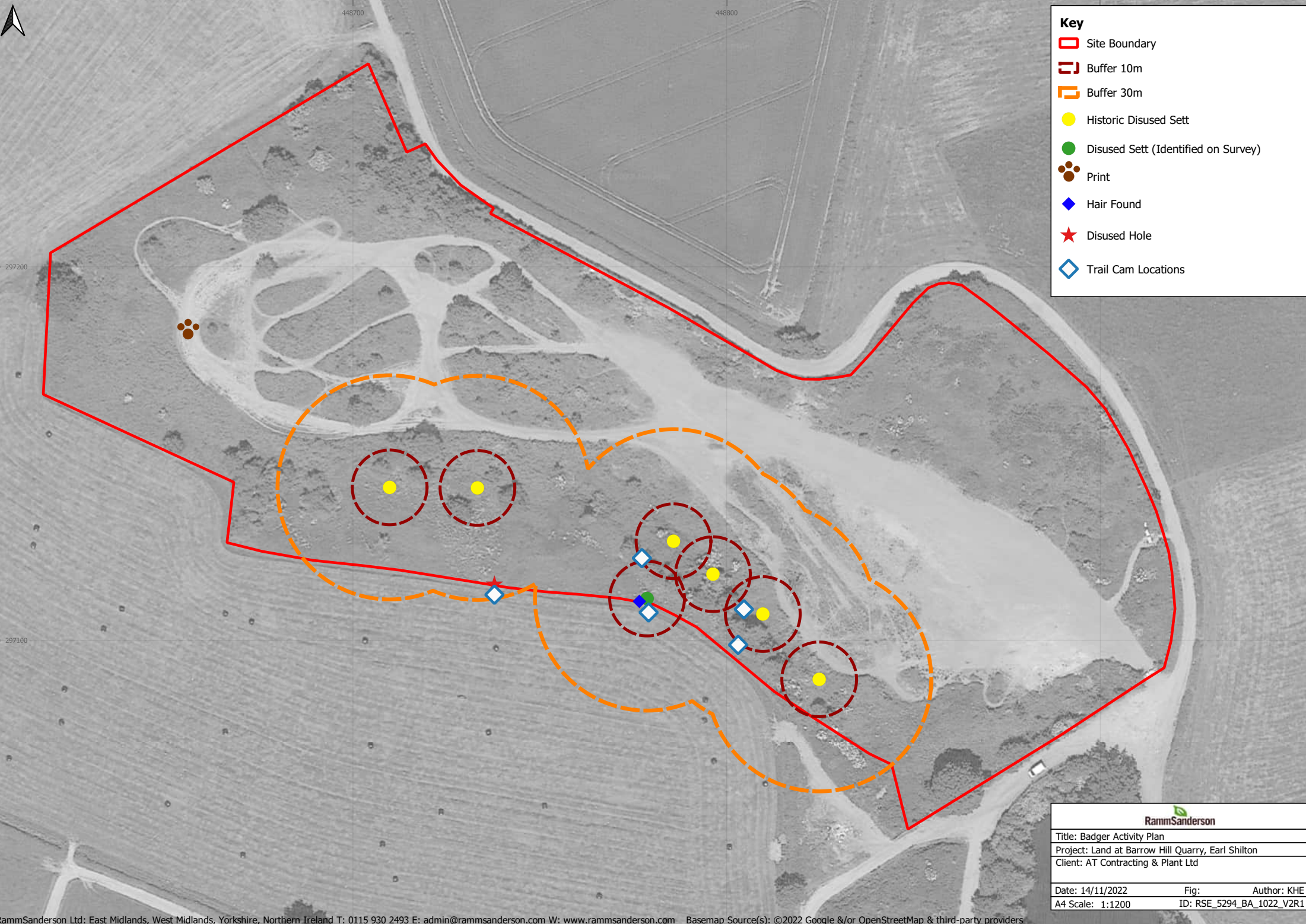
Risk Items - Polygons

 High Risk Item - Schedule 9 plants

Risk Items - Points

 High Risk Item - brash/deadwood/rubble piles





Key

Site Boundary

Buffer 10m

Buffer 30m

Historic Disused Sett

Disused Sett (Identified on Survey)

Print

Hair Found

Disused Hole

Trail Cam Locations

Title: Badger Activity Plan

Project: Land at Barrow Hill Quarry, Earl Shilton

Client: AT Contracting & Plant Ltd

Date: 14/11/2022

Fig:

Author: KHE

A4 Scale: 1:1200

ID: RSE_5294_BA_1022_V2R1