



Grace Machin

Redmays Bulcote, Nottingham

ECOLOGICAL APPRAISAL

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1.0 INTRODUCTION

- 1.1 Grace Machin commissioned FPCR Environment and Design Ltd. (FPCR) on behalf of their client to complete an ecological appraisal of the land located at Redmays, Bulcote, Nottingham (central OS grid reference SK 6565 8446).
- 1.2 The site is located to the northeast of Bulcote and is bound by Nottingham Road to the north and by fencing around the site perimeter. The site is surrounded by residential properties and their corresponding gardens. The wider landscape is dominated by arable land, further residential properties, and the River Trent located to the south (Figure 1a).
- 1.3 The site itself comprised a bungalow, straw barn, stables and garage, with a garden area, three small grassland field paddocks and a tree line located along the western site perimeter. This report has been provided to help inform the refurbishment proposals to combine the on-site bungalow and straw barn into one residential property.

2.0 METHODOLOGY

Desk Study

- 2.1 In order to compile existing baseline information for the study area, relevant ecological information was requested from Nottinghamshire Biological and Geological Records Centre (NBGRC).
- 2.2 In addition, the following resources were interrogated for additional information and context:
- Multi Agency Geographic Information for the Countryside (MAGIC) website¹;
 - Colour 1:25,000 OS base maps²; and
 - Aerial photographs from Google Earth³.
- 2.3 The geographical extent of the search area for biodiversity information was related to the significance of sites and species and potential zones of influence which might arise from development within the site. The consultation exercise was completed using the following scales, considered to be appropriate:
- 10km around the site boundary for sites of International Importance (e.g. Special Areas of Conservation (SAC), Special Protection Areas (SPA), Ramsar sites);
 - 2km around the site boundary for sites of National or Regional Importance (e.g. Sites of Special Scientific Interest (SSSI), National or Local Nature Reserves (NNR/LNR)); and
 - 1km around the site for non-statutory designated sites of County Importance (e.g. Local Wildlife Sites (LWS)) and protected or otherwise notable species records (including species of Principal Importance under S41 of the Natural Environment and Rural Communities (NERC) Act (2006))⁴, with data from the last 20 years used.

¹ [Online]. <http://www.magic.gov.uk/>

² [Online]. www.ordnancesurvey.co.uk

³ [Online]. www.maps.google.co.uk

⁴ *The Natural Environment and Rural Communities Act 2006*. [Online]. London: HMSO Available at: <http://www.legislation.gov.uk/ukpga/2006/16/contents>

Field Survey

Flora

Habitat Survey

- 2.4 A habitat survey was completed by FPCR on 18th October 2023 with reference to the standard Extended Phase 1 Habitat Survey Methodology⁵. This comprised a walkover of the site, mapping and broadly describing the principal habitat types, and identifying the dominant plant species present within each habitat type and any invasive weeds (where present). Whilst the plant species lists obtained should not be regarded as exhaustive, sufficient information was obtained to determine broad habitat types.

Hedgerows

- 2.5 The hedgerows across the site were assessed for their potential ecological value under the Hedgerow Regulations 1997 (Statutory Instrument No: 1160). Briefly, each hedgerow is evaluated by determining both the average number of woody native species present per 100m and the number of hedgerow associated features. These results were compared against the nature conservation criteria of the Hedgerow Regulations to ascertain whether a hedgerow is classed as 'Important' under these regulations. An assessment of archaeological importance as defined under the Hedgerow Regulations 1997 was beyond the scope of this assessment.
- 2.6 All hedgerows were also assessed as to whether they qualified as Habitats of Principal Importance (Priority Habitats), i.e. they consisted of 80% or more native species.

Fauna

- 2.7 During the habitat survey, observations, signs of or suitable habitat for any species protected under Part I of the Wildlife and Countryside Act 1981 (as amended), the Conservation of Habitats & Species Regulations 2017 (as amended) and the Protection of Badgers Act 1992 were recorded. Consideration was also given to the existence and use of the site by other notable fauna such as Schedule 1 bird species, breeding birds, Species of Principle Importance (SPI) under Section 41 of the NERC Act (2006), Red and Amber Lists of Birds of Conservation Concern (BoCC) in the UK and Local Biodiversity Action Plan (LBAP) or Red Data Book (RDB) species.

Badgers *Meles meles*

- 2.8 The standard methodology as recommended by Harris, Creswell and Jefferies⁶ was followed to complete a thorough search for evidence which would indicate the presence of badgers both on the site and locally. Evidence of badger occupation and activity sought included:

Setts: including earth mounds, evidence of bedding and runways between setts;

Latrines: often located close to setts, at territory boundaries or adjacent favoured feeding areas;

Prints and paths or trackways;

Hairs caught on rough wood or fencing;

Other evidence: including snuffle holes, feeding and playing areas and scratching posts.

⁵ JNCC. 2010. *Handbook for Phase 1 habitat survey – a technique for environmental audit*. Peterborough.

⁶ Harris, S., Cresswell, P. & Jefferies, D. 1989. *Surveying for badgers*. Occasional Publication of the Mammal Society No. 9.

Bats - Roosting

Ground Level Tree Assessment

- 2.9 Trees were assessed on 18th October 2023 from ground level for their potential to support roosting bats and to enable recommendations to be made with respect to the proposed works. During the survey potential roosting features for bats such as the following were sought (based on p16, British Standard BS 8596:2015)⁷:

Natural holes (e.g. knot holes) arising from naturally shed branches or cavities created by branches tearing out from parent stems).

Man-made holes (e.g. cavities that have developed from flush cuts or branches previously pruned back to a branch collar).

Woodpecker holes.

Cracks/splits in stems or branches (horizontal and vertical).

Partially detached, loose or bark plates.

Cankers (caused by localised bark death) in which cavities have developed.

Other hollows or cavities, including butt rots.

Compression of forks with occluded bark, forming potential cavities.

Crossing stems or branches with suitable roosting space between.

Ivy stems with diameters >50mm with suitable roosting space behind (or where roosting space can be seen where a mat of thinner stems has left a gap between the mat and the trunk).

Bat or bird boxes.

Other suitable places of rest or shelter.

- 2.10 Certain factors such as orientation of the feature, its height from the ground, the direct surroundings and its location in respect to other features may enhance or reduce the potential value.

Building Assessment

- 2.11 A preliminary roost assessment (PRA) of the bungalow and straw barn was also undertaken on 18th October 2023. This involved examination of the exterior of the structures to determine their potential to support roosting bats. From this, areas of likely / potential value for bats were broadly identified, and a decision made over the selection of locations for more detailed assessment. Any potential bat access points observed together with any suitable features were noted, in addition to evidence of occupation. The building assessment was based on survey effort described by guidance provided by the Bat Conservation Trust⁸ and JNCC⁹.
- 2.12 The interior of the buildings, including roof voids where present and accessible, were also visually assessed for evidence of bat activity and/or for the potential to be used by roosting bats. Evidence of a roost is determined as the presence of a dead or live bat(s), concentrated piles or scattered

⁷ British Standard BS 8596:2015. *Surveying for Bats in Trees and Woodland* – Guide, October 2015.

⁸ Bat Conservation Trust 2023. *Bat Surveys for Professional Ecologists: Good Practice Guidelines*, 4th Edition.

⁹ JNCC 1999. Mitchell-Jones, A.J., & McLeish, A.P. Ed. *Bat Workers Manual*.

droppings, food remains such as insect wing fragments as well as scratch marks and/or staining. This methodology takes into account statutory guidance¹⁰ and the BCT and JNCC guidance above.

- 2.13 Following internal and external inspections the buildings were classified as having negligible, low, moderate, or high suitability to support roosting bats, based on potential roost features and evidence recorded. Classifications of bat roosting potential are derived from Table 4.1 within the BCT guidance.

3.0 RESULTS

Desk Study

Statutory Designated Sites

- 3.1 No statutory designated sites of ecological importance are located within or adjacent to the site.
- 3.2 No international designations were identified within 10km of the site (Figure 1b).
- 3.3 One national level statutory designation is present within 2km of the site. Gunthorpe Local Nature Reserve (LNR) is located c.2km southeast of the site boundary (Figure 1b).

Non-statutory Sites

- 3.4 Two non-statutory sites were returned from the NBGRC within 1km of the site boundary. Bulcote Wood Local Wildlife Site (LWS) c.0.95km north west of the site boundary is described as an old but degraded damp woodland, designated for its botanical interest; the River Trent: Burton Joyce to Lowdham LWS is located c.0.9km to the south and is also designated for botanical interest, specifically River Trent marginal communities.

Fauna

Amphibians

- 3.5 A small number of common frog *Rana temporaria* records were returned by NBGRC (Figure 1b), the closest record was located c.200m south of the site boundary (dated 2016).

Bats

- 3.6 A number of bat records were returned from within 1km of the site boundary, comprising noctule *Nyctalus noctula*, common pipistrelle *Pipistrellus pipistrellus*, soprano pipistrelle *Pipistrellus pygmaeus*, *Pipistrellus* species, brown long-eared bat *Plecotus auratus*, Daubenton's bat *Myotis daubentonii* and *Nyctalus* species. The closest bat record was of an unidentified *Nyctalus* species, located c.8m south of the site and dated 2015.

Birds

- 3.7 A number of bird records was returned during the desk study, including notable species tree sparrow *Passer montanus*, cuckoo *Cuculus canorus*, sparrowhawk *Accipiter nisus*, kestrel *Falco tinnunculus*, house martin *Delichon urbicum*, lapwing *Vanellinus* and lesser redpoll *Acanthis cabaret*. All bird records returned from within the last 20 years were located c.100m south of the site boundary.

¹⁰ Mitchell-Jones, A.J. 2004. *Bat Mitigation Guidelines*. English Nature, Peterborough.

Other Mammals

- 3.8 A number of badger *Meles meles* records were returned by NBGRC from the vicinity of Bulcote, and a small number of hedgehog *Erinaceus europaeus* records also, with the closest hedgehog record located c.35m north east of the site and dated 2015.
- 3.9 A small number of water vole *Arvicola amphibius* records were returned by NBGRC from within 1km of the site, with the closest located c.900m south of the site boundary and dated 2003.

Reptiles

- 3.10 No reptile species records were returned by NBGRC from within 1km of the site from the last 20 years.

Field Survey

Phase 1 Habitat Survey (Figure 2 & Appendix A)

- 3.11 Habitat descriptions of the site are provided below, with habitat locations identified in Figure 2. A list of botanical species recorded is provided in Appendix A.

Improved Grassland

- 3.12 The site comprised three improved grassland fields and one section of improved grassland to the north of the site associated with building B3. The three fields (G1-G3) had previously been used as paddocks, with a history of grazing and associated management. These were dominated by perennial rye grass *Lolium perenne*, abundant creeping buttercup *Ranunculus repens* and frequent clover *Trifolium*. Other species recorded occasionally or rarely within the field margin sward included cock's foot *Dactylus glomerata*, false oat grass *Arrhenatherum elatius*, common nettle *Urtica dioica*, white dead nettle *Lamium album*, Yorkshire fog *Holcus lanatus*, common bent *Agrostis capillaris*, creeping bent *Agrostis stolonifera*, ragwort *Jacobaea vulgaris*, dock species *Rumex* sp. and bramble *Rubus fruticosus*. Within field G2 were also recorded occasional cleavers *Galium aparine* and rarely occurring bracken *Pteridium aquilinum*.
- 3.13 The field located to the west of the site (G3) was less intensively managed and had not been grazed recently allowing a more varied sward to develop. Additional species rarely recorded within this parcel of land included teasel *Dipsacus*, brome *Bromos* sp. and ribwort plantain *Plantago lanceolata*, with ash *Fraxinus excelsior* and holly *Ilex aquifolium* saplings.
- 3.14 Field G4 had not recently been used as a paddock but was an extension of G3 and the sward consisted of many of the same grass and herbaceous species, but with the addition of frequently occurring self-seeded hazel *Corylus avellana* saplings, and rarely occurring cow parsley *Anthriscus sylvestris* and green alkanet *Pentaglottis sempervirens*.

Ephemeral/Short Perennial

- 3.15 A small area of ephemeral/short perennial habitat was present towards the centre of the site within the garden area of the bungalow. This area had previously been a patio and gravel section partially surrounded by mixed woodland plantation, ornamental shrub planting and some garden planted beds. The garden area was dominated by fountain grass *Pennisetum alopecuroides* and abundant willow herb *Epilobium* sp. along with occasionally occurring ground ivy *Glechoma hederacea* and cypress *Cyprinus* saplings.

Hedgerows

- 3.16 Two hedgerows were present within and at the site boundaries (Figure 2).
- 3.17 H1 on the southern site boundary was over 1.5m in height at the time of the survey and was species poor and largely dominated by garden privet *Ligustrum ovalifolium* with some holly and cypress.
- 3.18 Hedgerow H2 along the northern site entrance from Nottingham Road was c.1m in height and comprised solely of barberry *Berberis* sp.
- 3.19 As both hedgerows comprise ornamental/non-native species they do not qualify as habitat of principal importance (as described in S41 of the NERC Act 2006).

Scrub and Ornamental Planting

- 3.20 Scrub was present within the north and south of the site in the form of bramble scrub. In addition, scattered bramble and mixed ornamental shrub planting including cherry laurel *Prunus laurocerasus* and rhododendron *Rhododendron ponticum* was recorded at the site boundary bordering the hardstanding areas and within the mixed woodland plantation surrounding the garden area.

Mixed Woodland Plantation

- 3.21 Two areas of mixed woodland plantation were present in the north and centre of the site. These mainly consisted of coniferous trees including yew *Taxus baccata* and *Leylandii*, as well as some broadleaved species such as holly and sycamore *Acer pseudoplatanus*.

Trees

- 3.22 One mature lime *Tilia* sp. tree line (TL1) was present along the western site boundary. This also included one sycamore tree. A single mature monkey puzzle tree *Araucaria araucana* was located to the north of the site within field G4.
- 3.23 One coppiced horse chestnut *Aesculus hippocastanum* tree (T1) was located in the south of the site boundary next to B4. This tree is further discussed in relation to roosting bats below.

Building

- 3.24 The site encompassed four buildings, comprising a bungalow (B1) and straw barn (B2) located at the centre of the site, timber framed stables (B3) to the northwest towards Nottingham Road, and a small garage (B4) to the south of the site.
- 3.25 Further details of the buildings to be directly affected by the planning proposal (B1 and B2) are provided in the bat roost survey description below.

Fauna

Bats

Foraging and Commuting

- 3.27 The site is dominated by open grassland and hardstanding which offer sub-optimal foraging opportunities for local bat populations. The plantation edge habitats, treeline and hedgerows

however provide foraging opportunities and suitable linear features for commuting bats, and additionally provide some habitat connectivity to the wider area.

- 3.28 The wider landscape provides more opportunities for foraging and commuting bats, with Bulcote Hill Plantation within 20m of the site boundary to the opposite side of Nottingham Road, and the River Trent and Burton Meadows located c.950m to the south.

Roosting

Trees

- 3.29 Most trees on site were recorded to be in good condition, with no features able to support roosting bats. A single coppiced horse chestnut tree (T1) located off the entrance driveway to the east of the site however was identified to have some potential to support roosting bats. A knot hole was present within the main trunk along with a fissure on the northwest aspect. Based on the features identified this tree was deemed to have suitable potential to support individual bats and as such was given PRF-I or low suitability to support roosting bats, based on the BCT Guidelines Table 6.2.

Buildings

- 3.30 Building B1 was a brick built residential bungalow with intact rendered walls and a multi-pitched pantile roof. Painted and well-sealed timber soffit boxes were present around dormer windows. The building also had overhanging eaves supported with timber joists and lined with non-bitumen coated roofing membrane. Other features of note included external sensor lighting on most aspects, two chimneys with lead flashing, UVPC windows, timber doors and a small flat roof conservatory attached to the north aspect of B1.
- 3.31 A number of potential bat access points were noted including missing mortar among ridge tiles at the gable ends that provided a suitable roosting feature for crevice dwelling bat species. Gaps were also noted in the lining under the eaves and a gap in the soffit box at the entrance porch on the south aspect. A small flat roof felt-lined loft extension had been built on the eastern aspect with a notable gap under the timber fascia boards creating a potential roosting feature.
- 3.32 Internally B1 had a partly converted loft void, with one third left as a loft space measuring approximately 6m L x 6m W x 3m H. The roof was supported by machined timber beams and trusses with rockwall insulation. Two alcoves in the northern and southern aspects extended above and to either side of the converted loft section. There was no safe access to the alcoves as the floor would not support any weight. Other features of note include an old wasp nest and cobwebbing throughout the roof void.
- 3.33 No field signs or evidence of bats was observed during the building inspection of B1. Overall it was assessed as having **low** potential to support roosting bats due to the number and type of potential roosting features present, the limited internal access points and lack of field signs.
- 3.34 Building B2 was a former straw barn 1.5 storeys tall and constructed from brick with half rendered walls. A single pitched tiled roof was present with a large number of slipped and missing tiles, as well as areas of missing mortar at the gable ends which were exposed and not sealed by any fascia or barge boards, creating suitable roosting features for crevice dwelling species. The gable ends were fully rendered and well-sealed. Other features of note included a garage door on the northern aspect and a small dilapidated, open-sided shed (B2a) attached on the eastern aspect.

- 3.35 Internally the structure was divided into a heavily cobwebbed storage area on the ground floor and an area open to the roof beams on the upper floor measuring c.8m L x 6.5m W x 3m H. Original timber beams and trusses supported the roof which was lined with non-bitumen coated roofing membrane in good condition. No bat field signs were observed, though the floor had been swept.
- 3.36 Overall, B2 was determined to have **moderate** potential to support roosting bats, based on the large number of potential roosting features.

Great Crested Newt

- 3.37 No waterbodies are present within the site and the improved grassland that characterises much of the site was of sub-optimal value to GCN, providing minimal shelter and no suitable hibernating opportunities to GCN or other amphibians. Some limited terrestrial habitat in the form of tussocky grass margins and areas of scrub were present along the site boundary provide suitable shelter and opportunities for commuting and foraging.
- 3.38 Examination of OS maps / publicly available aerial photographs identified a single waterbody within 250m of the site, located c.55m northeast of the site (P1 on Figure 2). This pond appears to be a large garden pond situated within a neighbouring property with no obvious barriers to the movement of fauna between this and the site. No access was granted to undertake an initial suitability survey of the identified off-site pond at the time of the site visit.

Reptiles

- 3.39 The majority of habitats within the site are unsuitable to support native reptile species, being dominated by close-cut grassland and hardstanding. The site does however offer some limited opportunities for this species group to forage and shelter among the field margins, areas of scrub and the ungrazed field to the west of the site.

Birds

- 3.40 The site offers some foraging and nesting opportunities in the form of hedgerows, trees and ornamental planting for a range of common and widespread bird species, especially urban / urban fringe species such as dunnock *Prunella modularis* and house sparrow *Passer domesticus*.
- 3.41 The grassland fields are all small in extent, grazed, with fencing and trees along the peripheries providing suitable vantage points for predatory raptors and corvids. As such it is considered unlikely that this site supports ground nesting birds given the small size and exposed nature of the fields to potential predators.

Other Species

- 3.42 No evidence of badger activity was recorded within the site, however given the nature of on-site habitats and the known presence of the species in the local area it is possible that badgers forage within the site on occasion.
- 3.43 No evidence or potentially suitable habitats for any other protected, rare or notable species was recorded.

4.0 DISCUSSION AND RECOMMENDATIONS

Statutory Designations

- 4.1 No international designated sites of ecological value were identified within 10km of the site boundary.
- 4.2 No national or local level statutory designations were identified within 2km of the site boundary.
- 4.3 Statutory designated sites are therefore not considered to pose a constraint to the proposed refurbishment.

Habitats

- 4.4 The degree to which habitats receive consideration within the planning system relies on a number of mechanisms, including:
 - Inclusion within specific policy (e.g. veteran trees, ancient woodland and linear habitats in the NPPF, or non-statutory site designation),
 - Identification as a habitat of principal importance for biodiversity under the NERC Act (2006) and consequently identification as a Priority Habitat within the LBAP.
- 4.5 Under the NPPF, development should seek to contribute a net gain in biodiversity with an emphasis on improving ecological networks and linkages where possible.
- 4.6 Habitats on site largely comprised managed improved grassland fields previously used as paddocks and considered to be of limited botanical and ecological interest. As such, the loss of this habitat would not result in significant adverse impacts to ecology and nature conservation within the local area.
- 4.7 As the planning proposal is for the refurbishment of buildings B1 and B2, it is not expected that there will be a significant impact on any of the surrounding habitats based on the illustrative drawing plan reference 2326-S02-1061. One section of introduced ornamental planting located to the east of B1 is due to be lost; however this is considered to be of limited botanical and ecological interest, though this habitat does provide suitable nesting opportunities for a range of bird species, and as such should be taken into consideration prior to any works as outlined below.
- 4.8 It is recommended that where possible habitats within the site are enhanced via the establishment of additional native species scrub, tree and/or and wildflower grassland planting.

Fauna

- 4.9 Principal pieces of legislation protecting wild species are Part 1 of the Wildlife and Countryside Act 1981 (as amended) and the Conservation of Habitats and Species Regulations 2017 (as amended). The impact that this legislation has on the planning system is outlined in ODPM 06/2005 Government Circular: Biodiversity and Geological Conservation – Statutory Obligations and their Impact within the Planning System.
- 4.10 This guidance states that as the presence of protected species is a material consideration in any planning decision, it is essential that the presence or otherwise of protected species, and the extent to which they are affected by proposals is established prior to planning permission being granted. Furthermore, where protected species are present and proposals may result in harm to the species

or its habitat, steps should be taken to ensure the long-term protection of the species, such as through attaching appropriate planning conditions for example.

- 4.11 In addition to protected species, there are those that are otherwise of conservation merit, such as species of principal importance for the purpose of conserving biodiversity under the NERC Act (2006). These are recognised in the NPPF which advises that when determining planning applications, LPAs should aim to conserve and enhance biodiversity.

Bats

- 4.12 All bats and their roosts are afforded full legal protection under the Conservation of Habitats and Species Regulations 2017 (as amended) and the Wildlife & Countryside Act 1981 (as amended). The purpose of the legislation is to maintain and restore protected species to a situation where their populations are favourable.
- 4.13 Under Regulation 41 of the Conservation of Habitats and Species Regulations 2017 (as amended) it is illegal to deliberately capture, injure or kill; deliberately disturb (including intentionally or recklessly) any UK bat species. This includes disturbance which impairs their ability to: breed and rear young, to migrate or hibernate, or adversely impacts their local distribution or abundance.

Foraging and Commuting Bats

- 4.14 The site provides some opportunities for foraging and commuting bats in the form of field margins, a tree line and hedgerows. The neighbouring landscape provides a much higher quality habitat for bats however, including areas of woodland and riverine habitats along the River Trent corridor, as well as arable fields with connecting hedgerows and tree lines. As such, the site is considered to hold no more than site value foraging and commuting opportunities for bats.

Roosting Bats

Buildings

- 4.15 As B1 and B2 have potential to support roosting bats, it is recommended that nocturnal surveys are carried out during the optimal survey season (May to September inclusive). Following the BCT guidelines, B1 will require a single nocturnal survey, while B2 will require two nocturnal surveys spaced at least three weeks apart. If during these surveys a roost is confirmed, further roost characterisation surveys will be required and a licence from Natural England obtained to proceed with the development proposal if there is a likelihood that works would disrupt or destroy the roost site.
- 4.16 The opportunity exists to enhance roosting opportunities for bats through the provision of bat boxes which can be erected on retained trees or on selected building aspects within the site area. Suitable designs include (but are not limited to) low profile WoodStone Bat Box, Vivara Pro WoodStone Bat and Vivara Pro Build-in WoodStone bat tube (or equivalent). These should be installed a height of at least 3m above ground in uncluttered locations and facing E/SE/S/SW/W to provide a range of alternate roosting opportunities.

Trees

- 4.17 A single tree with roosting potential was located within the site boundary. As proposals are for the refurbishment of B1 and B2, tree T1 should not be directly affected by the works and as such no further survey effort is required. If the planning proposal changes such as T1 will be impacted, then ecology work will be necessary prior to any works being undertaken.

- 4.18 Artificial lighting onto tree T1, onto structural planting around the property on onto the installed bat boxes will be avoided or otherwise minimised as far as possible in accordance with best practice guidance¹¹, including the incorporation where appropriate of:

Dark buffers and concentric zonation;

Appropriate luminaire specifications;

Sensitive configuration of lighting;

Physical screening;

Dimming and part-night lighting, or

Glazing treatments on buildings.

Great Crested Newt

- 4.19 No waterbodies are present within the site and therefore no suitable breeding habitat. Some suitable though limited terrestrial habitat is present on site, mainly in the form of scrub and hedgerow bases, and the plantation ground layer.
- 4.20 P1 was the only waterbody identified within 250m of the site, located c.55m to the northeast and connected to the site by continuous greenspace.
- 4.21 It is recommended that permission to access P1 for the purpose of undertaking a Habitat Suitability Index (HSI) survey is sought. A GCN eDNA survey of this pond is also recommended in order to further investigate the potential presence of this species. This would involve sampling the pond water under a strict protocol during the optimal period (March to May inclusive), with the results determined via laboratory analysis. Should the results be returned as positive for the presence of GCN, more detailed survey of the pond may be required.

Reptiles

- 4.22 The east of the site supports some limited suitable habitat for reptiles in the form of field margins and scrub, while the less frequently managed improved grassland (G3) to the west provides additional opportunities for reptiles. As such it is considered feasible for the site to support low numbers of individual animals.
- 4.23 Given the nature of the proposals, which focus on the refurbishment and joining of B1 and B2, no works are anticipated within the above habitats. Reptiles are therefore not considered a constraint to the application.

Birds

- 4.24 The Wildlife and Countryside Act 1981 (as amended) is the principal 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 in use or being built;

Take or destroy the egg of any wild bird.

¹¹ Bat Conservation Trust (BCT) and the Institute of Lighting Professionals (ILP) 2023: Guidance Note GN08/23 *Bats and Artificial Lighting At Night*.

- 4.25 Species listed on Schedule 1 of the Wildlife and Countryside Act 1981 (as amended) are specially protected at all times. In addition to statutory protection, some bird species are classified according to their conservation status, such as their inclusion on the Red and Amber lists of Birds of Conservation Concern (BoCC) in the UK¹².
- 4.26 Trees, scrub and ornamental planting present within the site provide opportunities for a range of common and widespread bird species, most of which are to be retained within the planning proposal. The refurbishment however will directly impact sections of introduced/ornamental shrub with the potential to support nesting birds.
- 4.27 To minimise the potential of an offence occurring from the destruction of an active nest during vegetation clearance, any removal of suitable nesting vegetation should where possible occur outside of the bird breeding season (i.e. avoiding March to August inclusive). If this is not possible, such vegetation must be checked prior to removal by a suitably experienced ecologist. If active nests are identified during this check, vegetation must be left untouched and suitably buffered from works until all birds have fledged. Specific advice should be sought prior to undertaking site clearance.
- 4.28 Buildings B1 and B2 have the potential to support nesting birds and as such nesting birds should be taken into consideration when carrying out the refurbishments. Any active nests present must be buffered suitably from works and retained until the chicks have fledged//the nest is no longer active.
- 4.29 The opportunity exists to enhance nesting provision for birds via the installation of bird boxes on north to east facing aspects of the renovated property and/or on other existing buildings or trees within the site. These should include a mix of open and hole-fronted boxes to encourage occupation by a range of species.

Badger

- 4.30 No evidence of badger activity such as badger setts, worn pathways, latrines, snuffle holes or prints was recorded within the site. The species is therefore not considered to be resident within the site. Badgers are nevertheless highly mobile and as such it is possible that badger resident within the wider area occasionally forage within the site as part of more extensive home ranges.
- 4.31 To minimise the risk of direct harm to badgers and other terrestrial fauna the following best practice construction procedures will be adhered to:

Any trenches/excavations left open overnight will either be provided with a sturdy ramp or will be profiled at one end to provide a means of escape.

Open pipe-work wider than 150mm diameter will be securely capped off at the end of each day.

¹² Eaton, M.A., Aebischer, N., Brown, A., Hearn, R., Lock, L., Musgrove, A., Noble, D., Stroud, D. and Gregory, R.D. 2016. Birds of Conservation Concern 5: the status of all regularly occurring birds in the United Kingdom, Channel Islands and the Isle of Man. *British Birds*. 114:723-747.

5.0 SUMMARY AND CONCLUSION

- 5.1 No impacts on any international or statutory designated site of ecological interest are anticipated as a result of the proposed development.
- 5.2 The site is dominated by habitats of low and limited botanical and ecological value. The habitats will largely be unaffected by the proposal, but with some minor loss of introduced shrub and ornamental planting from the garden area. Recommendations are provided for the enhancement of the ecological value of the site, such as through the establishment of native scrub and wildflower grassland where possible within the green infrastructure.
- 5.3 Buildings B1 and B2 have potential to support roosting bats and therefore require further ecological assessment in the form of nocturnal surveys to confirm if bats represent a constraint to the proposals. The opportunity exists to enhance the availability of roost sites for bats through the provision of bat boxes on retained trees or buildings within the site.
- 5.4 Consultation data described an assemblage of generally common and wide-spread bat species present within the surrounding area. Habitats of value to bats will be retained, and recommendations for an appropriate lighting scheme and alternative roosting sites are set out.
- 5.5 One off-site pond has been identified within 250m of the site. It is recommended that a HSI survey is carried out to better determine its suitability to support GCN, and that an eDNA survey is undertaken in early spring 2024.
- 5.6 There is some suitable habitat on site to support reptiles, however the proposal should not impact this and reptiles are not considered a constraint to the works.
- 5.7 Opportunities for foraging and nesting birds are present within the site and must be considered when carrying out construction works. Active nests will be protected from disturbance and destruction during site works via timing constraints to vegetation clearance, or via the requirement for a nesting bird check to be undertaken prior to such works, and any resulting precautionary working procedures as determined by the ecologist to be fully implemented.
- 5.8 The opportunity exists to further enhance long-term nesting opportunities for birds via the provision of a range of bird boxes throughout the site.
- 5.9 Best practice working procedures are outlined to avoid accidental harm to badgers or other wildlife that may become trapped or injured within the construction site.
- 5.10 No other protected or notable species were recorded during survey work undertaken across the site and as such are not considered to pose a statutory constraint to the site proposal.

APPENDIX A: BOTANICAL SPECIES LIST

Key: D: Dominant, A: Abundant, F: Frequent, O: Occasional, R: Rare

Common Name	Scientific Name	Frequency			
		G1	G2	G3	G4
Improved Grassland					
Ash	<i>Fraxinus excelsior</i>			R	
Bracken	<i>Pteridium aquilinum</i>		R		
Bramble	<i>Rubus</i>	R	R	R	
Brome sp.	<i>Bromos</i>			R	
Cleavers	<i>Galium aparine</i>		O	O	O
Clover	<i>Trifolium</i>	F	F	F	O
Cock's foot	<i>Dactylus glomerata</i>	R	R	A	
Common bent	<i>Agrostis capillaris</i>	R	R	O	
Common nettle	<i>Urtica dioica</i>	O	O	O	O
Cow parsley	<i>Anthriscus sylvestris</i>				R
Creeping bent	<i>Agrostis stolonifera</i>	R	R	O	
Creeping buttercup	<i>Ranunculus repens</i>	A	A	F	A
Dandelion	<i>Taraxacum</i>	R	R	R	
Dock sp.	<i>Rumex</i>	R	R	R	R
False oat grass	<i>Arrhenatherum elatius</i>	O	O	O	F
Green alkanet	<i>Pentaglottis sempervirens</i>				R
Ground ivy	<i>Glechoma hederacea</i>	O	O	R	O
Hazel	<i>Corylus avellana</i>				F
Hogweed	<i>Heracleum sphondylium</i>	R		R	R
Holly	<i>Ilex aquifolium</i>			R	
Perennial rye grass	<i>Lolium perenne</i>	D	D	D	D
Ragwort	<i>Jacobaea vulgaris</i>	R	R	O	R
Ribwort plantain	<i>Plantago lanceolata</i>			R	
Spear thistle	<i>Cirsium vulgare</i>	R		R	
Teasel	<i>Dipsacus fullonum</i>			R	
White dead nettle	<i>Lamium album</i>	R		O	
Yorkshire fog	<i>Holcus lanatus</i>	F	F	F	F
Ephemeral/Short Perennial					
Bracken	<i>Pteridium aquilinum</i>			R	
Bramble	<i>Rubus</i>			R	
Bristly oxtongue	<i>Helminthotheca echioides</i>			R	
Creeping buttercup	<i>Ranunculus repens</i>			O	
Cypress	<i>Cypressus</i>			O	
Dandelion	<i>Taraxacum</i>			F	
Fountain grass	<i>Pennisetum alopecuroides</i>			D	
Ground ivy	<i>Glechoma hederacea</i>			O	
Willow herb	<i>Epilobium</i>			A	

APPENDIX B: SITE PHOTOS



Western aspect of B1



Eastern aspect of B1
showing loft extension
dormer



Southern aspect of B1



Northern aspect of B2 and B2a showing the large area of slipped and missing roof tiles



Western aspect of B2 gable end



Southern aspect of B2 showing some missing tiles



Loft void in B1



Converted section of loft space in B1



Ground floor of B2





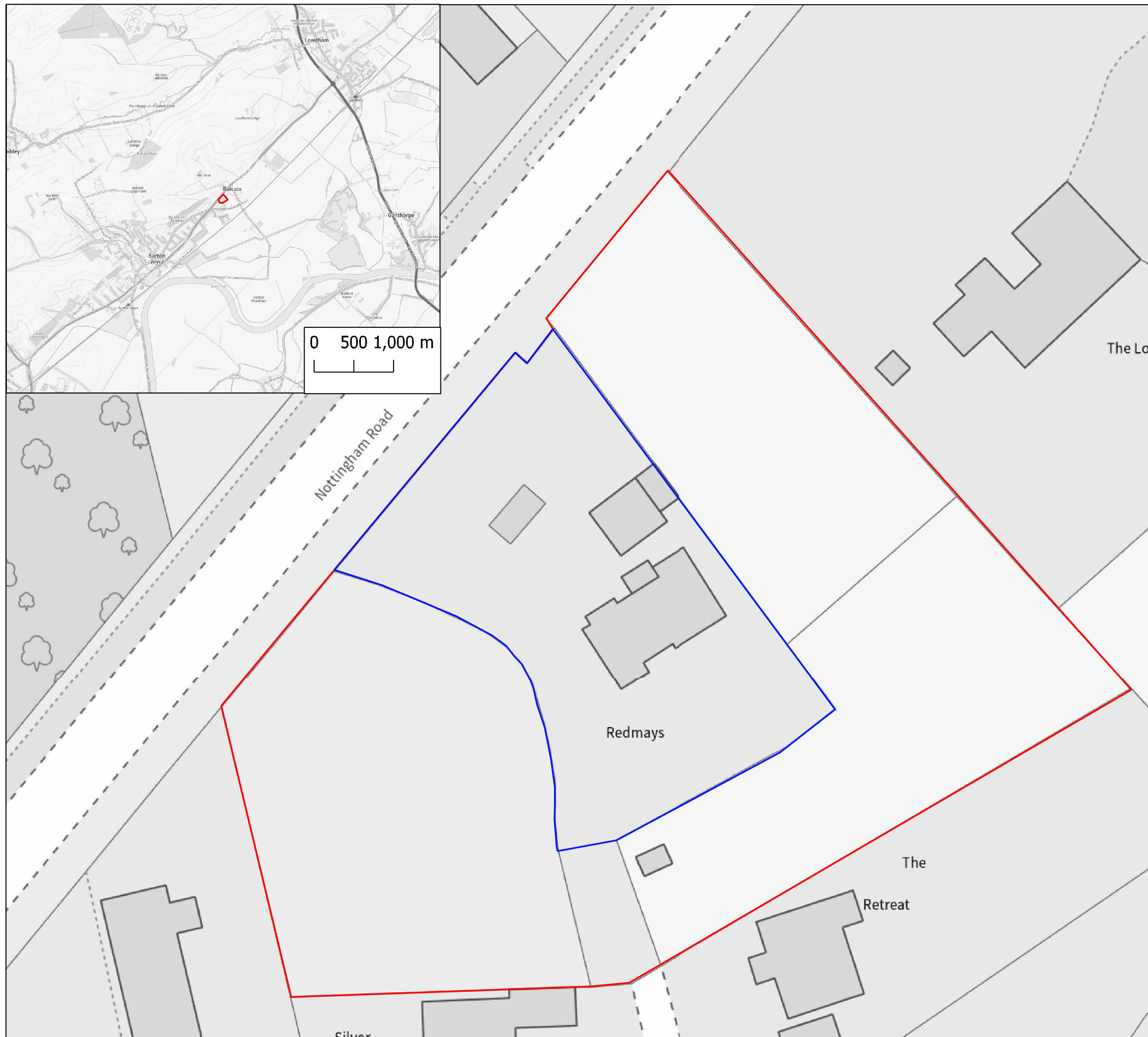
Upper floor level of B2

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Key

-  Site Boundary
-  Development Area



client
Grace Machin
project
Redmays,
Nottingham
drawing title
SITE LOCATION PLAN



scale @ A3
1:500
drawing / figure number
Figure 1a
drawn
SE
issue date
27/10/2023
rev
-

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Key

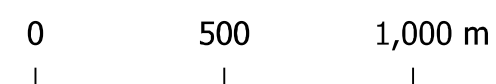
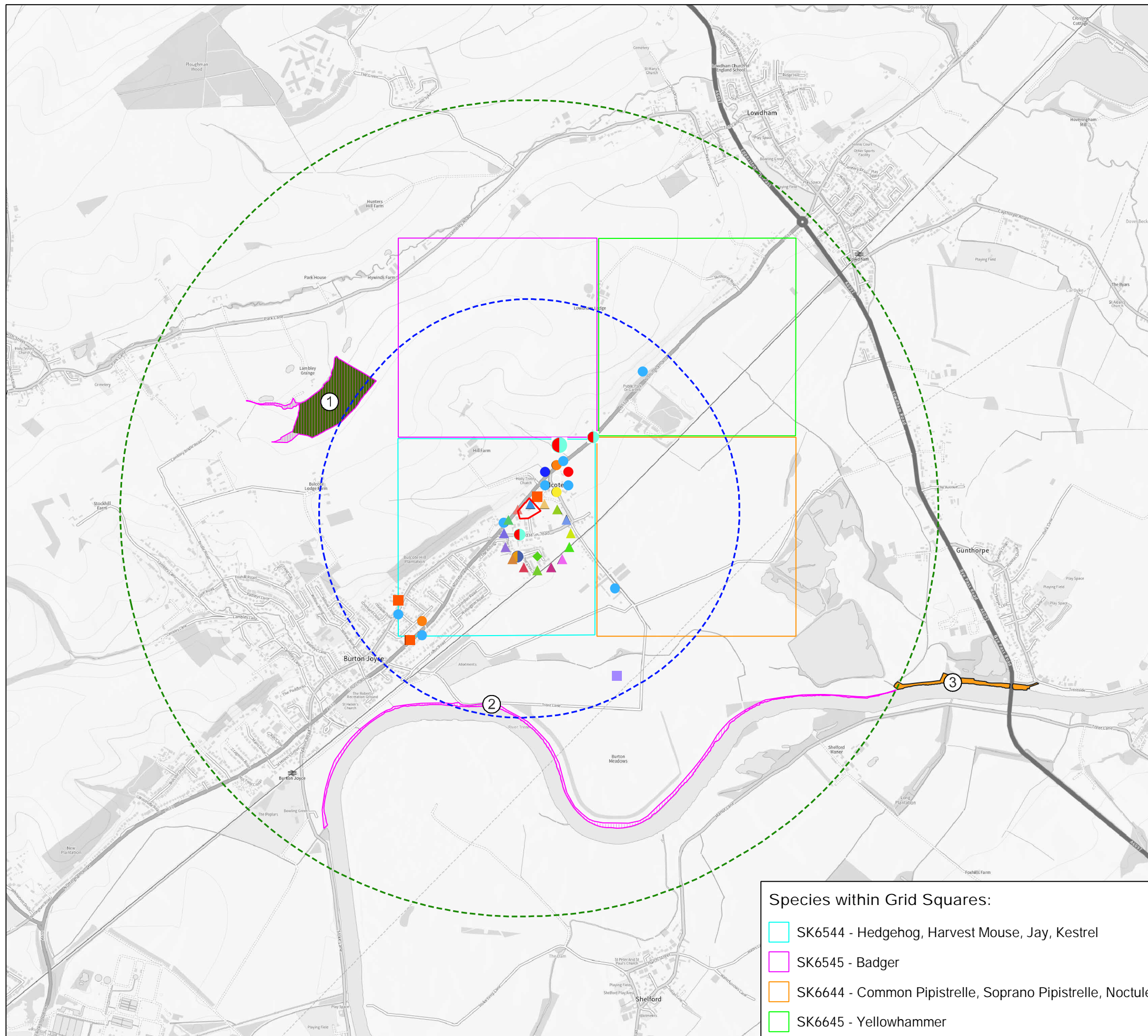
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|---|---------------------------------|---|----------------|
|  | Site Boundary |  | Grey Partridge |
|  | 1km Buffer |  | House Martin |
|  | 2km Buffer |  | Kestrel |
|  | Local Wildlife Site |  | Lapwing |
|  | Local Nature Reserve |  | Lesser Redpoll |
|  | Ancient & Semi-Natural Woodland |  | Osprey |
|  | Common Frog |  | Oystercatcher |
|  | Brown Long-eared Bat |  | Ringed Plover |
|  | Common Pipistrelle |  | Ruff |
|  | Daudenton's Bat |  | Shelduck |
|  | Myotis sp. |  | Sparrowhawk |
|  | Noctule |  | Tree Sparrow |
|  | Nyctalus sp. |  | Woodcock |
|  | Pipistrellus sp. |  | Hedgehog |
|  | Soprano Pipistrelle |  | Water Vole |
|  | Cuckoo | | |
|  | Greenshank | | |

Designated Sites:

- 1 - Bulcote Wood LWS
- 2 - River Trent: Burton Joyce to Lowdham LWS
- 3 - Gunthorpe LNR

Species within Grid Squares:

-  SK6544 - Hedgehog, Harvest Mouse, Jay, Kestrel
-  SK6545 - Badger
-  SK6644 - Common Pipistrelle, Soprano Pipistrelle, Noctule
-  SK6645 - Yellowhammer



client
Grace Machin

project
Redmays,
Nottingham

drawing title
CONSULTATION RESULTS PLAN

scale @ A3
1:20000

drawn
SE

issue date
2/11/2023

drawing / figure number
Figure 1b

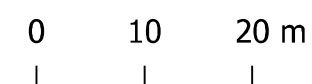
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Key

- Site Boundary
- Buildings
- Hardstanding
- Garden Planting
- Cultivated/Disturbed Land - Ephemeral/Short Perennial
- Improved Grassland
- Introduced Shrub/Ornamental Planting
- Mixed Woodland - Plantation
- Scrub - Dense/Continuous
- Pond
- Broadleaved Trees
- Intact Hedge - Species-poor
- Fence
- ✕ Scrub - Scattered
- Tree with Low Bat Potential
- Coniferous Tree
- Broadleaved Tree



client
Grace Machin

project
**Redmays,
Nottingham**

drawing title
PHASE 1 HABITAT PLAN

scale @ A3
1:700

drawn
SE

issue date
27/10/2023

drawing / figure number
Figure 2

rev
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