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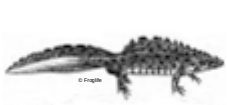
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Preliminary Ecological Appraisal

November 2022

**1NQ, Tariff Street,
Manchester,
M1 2FJ**

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Preliminary Ecological Appraisal

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Executive Summary

As part of a proposed planning application regarding a plot of land on Tariff Street, Manchester that is currently in use as a car park, a Preliminary Ecological Appraisal (PEA) was undertaken by Tyrer Ecological Consultants Ltd during October 2022, in accordance with the *Guidelines for Preliminary Ecological Appraisal* (CIEEM, 2017) and other best practice guidance. The details of the proposed development involve the demolition of an existing building on site and the erection of two residential apartment buildings (Use Class C3) including a part 9, part 10 (with set back amenity level) and a separate stand-alone 12 storey building (comprising of 267 dwellings in total), with ground floor commercial use (Use Class E), associated resident's amenity space, cycle parking, landscaping, access, street loading and other associated works.

Extensive findings, conclusions and recommendations are presented throughout the report; however, the reader should be aware of the following Key recommendations.

Bats: Based upon the findings of the survey, covered through sections 6.0 – 7.0 of the report and supported by Appendix I, the existing building on the northern edge of the site is determined to offer '**Negligible**' bat roost potential in accordance with Bat Conservation Trust - Bat Surveys for Professional Ecologists: Good Practice Guidelines, 3rd ed. (2016); no further surveys are required in relation to bats, with general enhancement measures recommended in Appendix II.

Table 4.1 Guidelines for assessing the potential suitability of proposed development sites for bats, based on the presence of habitat features within the landscape, to be applied using professional judgement.		
Suitability	Description Roosting habitats	Commuting and foraging habitats
Negligible	Negligible habitat features on site likely to be used by roosting bats.	Negligible habitat features on site likely to be used by commuting or foraging bats.

Breeding Birds: In relation to common birds, Pigeons were observed utilising the existing building on the northern edge of the site. A General License is therefore likely to be necessary to legally control the species. From 1 January 2021, you must follow the conditions of general license GL41 to control certain target birds for the purposes of preserving public health or public safety. The main changes to the license conditions are:

- Species that can be controlled under license are listed by 3 health and safety purposes of: slips and falls; spread of human disease; birds nesting,
- Magpie, carrion crow and rook are removed from the license,
- License users must comply with the standard license conditions for trapping wild birds and using decoy birds in traps (WML-GL33),
- You may use the license on or near a protected site as long as you have any necessary consent from Natural England to do so and comply with any site-specific conditions on the license,

Biodiversity Enhancement: A series of recommendations have been given within section 8.0 and Appendix III which provide opportunities for biological enhancement at the development site and within the wider area. Enhancement opportunities include recommendations relative to the provision of favourable planting and landscaping, with wildlife boxes.

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1.0 Introduction & Objectives

- 1.1 As part of a proposed planning application regarding a plot of land on Tariff Street, Manchester that is currently in use as a car park (**see Figure 1.1**), a Preliminary Ecological Appraisal (PEA) was undertaken by Tyrer Ecological Consultants Ltd during October 2022, in accordance with the *Guidelines for Preliminary Ecological Appraisal* (CIEEM, 2017) and other best practice guidance. The details of the proposed development involve the demolition of an existing building on site and the erection of two residential apartment buildings (Use Class C3) including a part 9, part 10 (with set back amenity level) and a separate stand-alone 12 storey building (comprising of 267 dwellings in total), with ground floor commercial use (Use Class E), associated resident's amenity space, cycle parking, landscaping, access, street loading and other associated works.
- 1.2 Ecological surveys, particularly where a specially protected / noteworthy species is or may be present, are generally required as part of the Local Authority's Planning Policies. This survey and report have been commissioned by Marco Living 2 Ltd and Axis-RE Ltd.

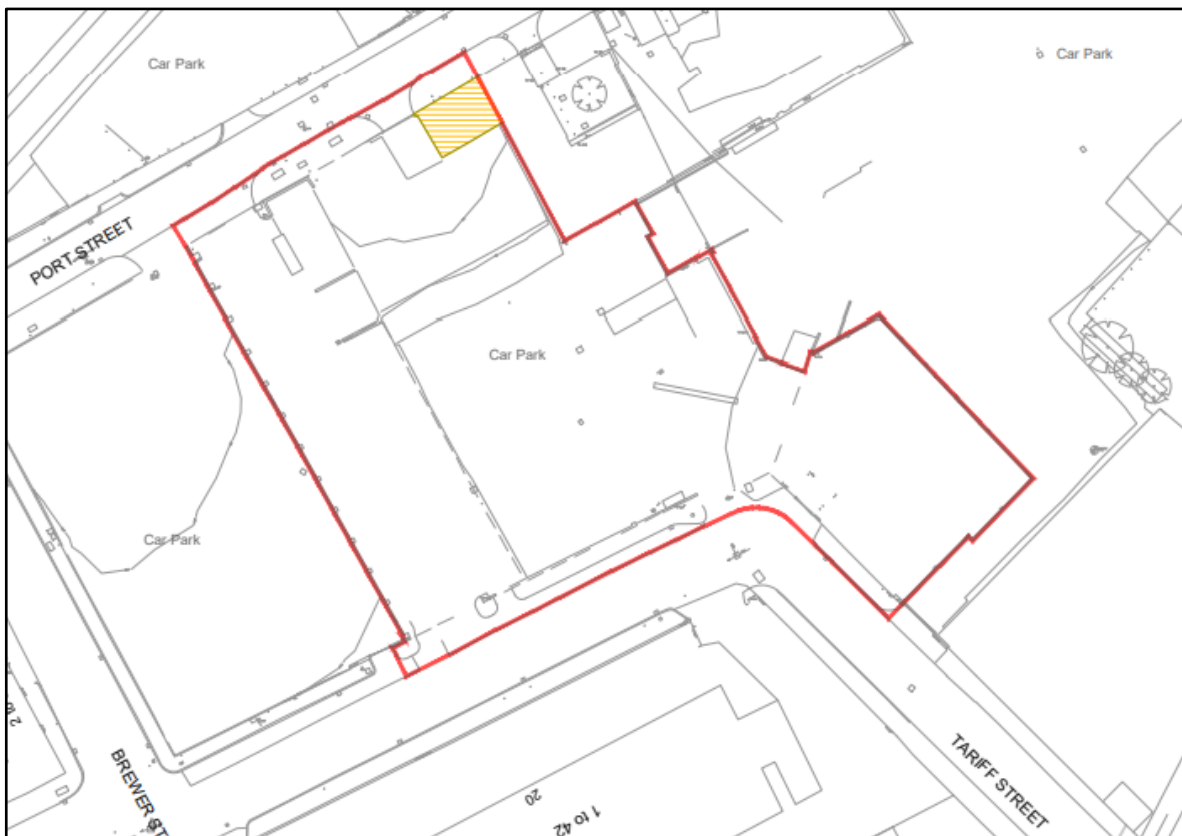


Figure 1.1: Site location plan at Tariff Street to be developed upon (Source: Leach Rhodes Walker Architects)

Aims & Objectives

- 1.3 The aim of the survey was to ascertain the nature of the land, and where possible obtain information on any priority wildlife habitats, or species, that may be present and if so determine if they will be affected by the proposals. The survey therefore includes the following objectives:

- Gather baseline ecological information on site/off site (as necessary),
- Identify any likely ecological constraints associated with the proposals for the site (i.e. the presence of protected/priority habitats or species that exist within the confines of the application boundary, or zone of influence (ZOI),
- Identify mitigation / compensation measures likely to be required in line with the mitigation hierarchy (i.e. avoidance > impact minimisation > mitigation > compensation),
- Identify additional survey requirements following on from this preliminary appraisal,
- Identify a series of enhancement opportunities for biodiversity in line with national and local planning policy following '*Biodiversity Net Gain: Good practice principles for development*' (CIEEM *et. al.*, 2019).

1.4 As part of this ecological appraisal:

- Habitats on site were identified, measured and mapped using the UK Habitat Classification – Habitat Definitions Version 1.1 (2020);

1.5 As part of the Local Planning Authorities (LPA) planning policies and obligations to the Planning Framework, ecological surveys are generally required prior to planning permission being granted, particularly where protected/priority species are, or may be present, that could be affected by the proposals for which the application seeks consent.

1.6 This report will therefore provide baseline information as derived from the diurnal appraisal process outlined above and recommend any necessary additional surveys, or work, where applicable, to provide a conclusive ecological impact assessment.

1.7 The Applicant should be aware that if during the appraisal:

- The application site/area was found to be suitable for any European Protected Species (EPS), otherwise protected, or priority habitats/species, or,
- Signs of use by particular protected species were found, or suspected, or,
- Seasonal constraints significantly limit the gathering of ecological information to arrive at an accurate conclusion on which the planning application can proceed,

Then more detailed surveys may be recommended where necessary, to allow the ecologist to arrive at a conclusive impact assessment.

1.8 If any protected species was subsequently found during detailed further surveys and / or may be affected by the development proposals, then a European Protected Species Mitigation Licence (EPSML) may be required to proceed with the development.

1.9 Where more detailed surveys are recommended by the ecologist, following ecological appraisal, then Local Planning Authorities (LPA's) on the advice of their ecological advisors, may not grant permission until such time that all relevant material information is gathered in accordance with their obligations to the legislature.

1.10 Protected/priority species omitted from this report have been discounted due to factors including obvious absence/isolation of suitable habitats, and/or distributional aspects negating the necessity to survey for them, and/or the proposed works were not considered to negatively impact the species or encroach on areas where the species may be present.

2.0 Legislation & Policy

2.1 The legislature considered for the purposes of this report includes the following:

- Conservation of Habitats and Species Regulations (amendment) (2019) (EU Exit)
- Wildlife and Countryside Act (1981) (as amended)
- Countryside Rights of Way (CROW) Act (2000)
- Natural Environment and Rural Communities (NERC) Act 2006
- Protection of Badgers Act (1992)
- The Hedgerow Regulations (1997)
- Town and Country Planning Act (1990)
- Wild Mammals Protection Act (1996)

2.2 These acts entail relevance to both protected and invasive species. The degree of protection offered to taxa provided within existing UK and EU legislature often varies depending on species/group, for example, some species may purely be protected during one of its life stages (e.g. common species of breeding bird whilst nesting/with eggs/young); some species may receive full protection within the EU (e.g. otter), whereas others may be protected solely on a national basis (e.g. grass snake).

2.3 Table 2.1 contains appropriate legislature to each species/group specifically respective to the site and provides the relevance of said legislation.

Table 2.1 - Relevant Legislation

Species Group/Species	Relevant Legislation	Level of Protection
Badger	Protection of Badgers Act (1992), Wildlife and Countryside Act (1981) (as amended)	Illegal to wilfully kill, injure or take a badger (or attempt to do so). Cruelly ill-treat a badger. Dig for a badger. Intentionally or recklessly damage or destroy a badger sett, or obstruct access to it. Cause a dog to enter a badger sett. Disturb a badger when it is occupying a sett.
Bats	CROW Act (2000) Conservation of Habitats and Species Regulations (2019) (EU Exit) Wildlife and Countryside Act (1981) (as amended)	All British bats and their roosts are afforded full protection from damage/destruction and bats may not be injured/killed/taken at any life stage. Once identified, roosts are protected whether the bat is in occupation or not.

Birds (Breeding)	CRoW Act (2000) Wildlife and Countryside Act (1981) (as amended)	All wild birds (with only minor exceptions) and their nests whilst being built or containing eggs or dependant young are protected. Birds listed on Schedule 1 Wildlife & Countryside Act (1981) (as amended) are afforded a greater level of protection.
Great Crested Newt (GCN)	CRoW Act (2000) Conservation of Habitats and Species Regulations (2019) (EU Exit) Wildlife and Countryside Act (1981) (as amended)	Great Crested Newts (GCN's) are fully protected from disturbance, killing, injuring or possession at any life stage. Confirmed breeding ponds and resting places are afforded the same protection.
Invasive Plant Species	Wildlife and Countryside Act (1981) (as amended)	Species listed within Schedule 9 Wildlife and Countryside Act (1981) (as amended) as invasive, including Japanese Knotweed (<i>Reynoutria japonica</i>) and Himalayan Balsam (<i>Impatiens glandulifera</i>). The Act makes it an offence for any person to grow or cause to grow in the wild any plants listed as invasive.
Reptiles	Conservation of Habitats and Species Regulations (2019) (EU Exit) - SL/SS Wildlife and Countryside Act (1981) (as amended) - SL/SS CRoW Act (2000)	All native reptile species have some degree of protection in the UK, through section 8(1) and (5) (specified in Schedule 5) of the Wildlife and Countryside Act 1981 (as amended). Sand lizard (SL) and smooth snake (SS) are species of principal importance however with greater protection(s).

Policy

2.4 Paragraph 180 of the National Policy Planning Framework (as revised in July 2021) states:

180. When determining planning applications, local planning authorities should apply the following principles:

a) if significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused;

b) development on land within or outside a Site of Special Scientific Interest, and which is likely to have an adverse effect on it (either individually or in combination with other developments), should not normally be permitted. The only exception is where the benefits of the development in the location proposed clearly outweigh both its likely impact on the features of the site that make it of special scientific interest, and any broader impacts on the national network of Sites of Special Scientific Interest;

c) development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons and a suitable compensation strategy exists; and,

d) development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to improve biodiversity in and around developments should be integrated as part of their design, especially where this can secure measurable net gains for biodiversity or enhance public access to nature where this is appropriate.

- 2.5 Policy EN15 of the Manchester Core Strategy 2012 to 2027, titled Biodiversity & Geological Conservation, echoes this national focus on ecological conservation, and states:

“Developers will be expected to identify and implement reasonable opportunities to enhance, restore or create new biodiversity, either on-site or adjacent to the site, contributing to linkages between valuable or potentially valuable habitat areas where appropriate...”

and:

“Where adverse impacts are unavoidable, developers will be required to provide appropriate mitigation and/or compensation”, “It is important to recognise that brownfield sites often contain diverse and valuable biodiversity.”

3.0 Priority Habitats & Species

National context

- 3.1 In the United Kingdom, legal protection and otherwise legislative recognition is afforded to particular habitats and species. Certain habitats and species are considered to hold nature conservation importance and are thus protected due to factors such as their ecological functionality, their rarity, their vulnerability, environmental importance or declining population/status. They are referred to as priority habitats and priority species.
- 3.2 The UK Biodiversity Action Plan (UKBAP) provided a statutory basis for lists of habitats and species of national conservation importance - now transposed under section 41 (s.41) of the Natural Environment Rural Communities Act 2006 (NERC Act).
- 3.3 The following species are considered relevant to the survey area:

Species:

- Bats: Brown long-eared (*Plecotus auritus*), Soprano Pipistrelle (*Pipistrellus pygmaeus*) and Common Noctule (*Nyctalus noctula*),
- s.41 Bird species that include but not limited to: Grey Partridge (*Perdix perdix*), Dunnock (*Prunella modularis*), Bullfinch (*Pyrrhula pyrrhula*), Song thrush (*Turdus*

- philomelos*), Tree Sparrow (*Passer montanus*), House Sparrow (*Passer domesticus*), Starling (*Sturnus vulgaris*), Willow Tit (*Poecile montanus*)., Curlew (*Numenius arquata*), Pink Footed Goose (*Anser brachyrhynchus*).,
- Land mammals that include: Hedgehog (*Erinaceus europaeus*), Brown hare (*Lepus europaeus*), for e.g.,
 - Herpetofauna that include: Great Crested Newt (GCN) (*Triturus cristatus*), Common toad (*Bufo bufo*), Slow worm (*Anguis fragilis*) for e.g.,
 - Botanical species that includes Purple ramping-fumitory (*Fumaria purpurea*), Bluebell (*Hyacinthoides non-scripta*), Cornflower (*Centaurea cyanus*) for e.g.

District context

- 3.4 Local Biodiversity Action Plans (LBAP's) are a way of encouraging people to work together and deliver a program of continuing action for biodiversity at a local level. LBAPs also embrace the idea of 'local distinctiveness'; habitats and species which are not considered UK conservation priorities can be catered for by LBAPs if they are of particular local significance.

LBAP's set out practical steps that aim to:

- Help protect biodiversity,
- Enhance and improve biodiversity where possible, and,
- Promote biodiversity at a local level

- 3.5 The Greater Manchester Biodiversity Action Plan (GMBAP, 2009) lists key local habitats/species considered to be rare or declining in the area; some may be of national concern while others are significant at local level. The following local plans are considered of potential relevance to the survey.

Species

- Bats (all);
- Black Redstart (*Phoenicurus ochruros*)
- Native Black Poplar (*Populus nigra* subsp. *betulifolia*);
- Twite (*Carduelis flavirostris*);
- Willow Tit (*Poecile montanus*).

Habitats

- Hedgerows

4.0 Survey Methods

- 4.1 As part of the Preliminary Ecological Appraisal report, desk-top and field-based studies were conducted. Methods for both components of the appraisal are given below.

Desktop Study

- 4.2 Prior to a site visit a desktop study was conducted using online resources to obtain information pertaining to any sites afforded statutory (e.g. SSSI) and non-statutory (e.g. LWS) designations within 2.0km of the site boundary. To do so, the 'Multi Agency Geographic Information for the Countryside (MAGIC – provided by Defra)' along with data from the 'Natural England Open Data Geoportal' was accessed to gather such information; this interactive mapping service was also used to locate any European Protected Species

Mitigation Licenses (EPSML) and species records to further inform conclusions concerning protected species in the context of the study site and its proposed development.

- 4.3 Historic satellite imagery was reviewed using sources such as Google Earth (© 2021/22) to help establish past use of the land and determine the nature of adjoining and extending habitats; such information aids in the understanding of how the site might interact with its surroundings ecologically and its value in that context, and how the development may impact at a wider scale.
- 4.4 In addition the Council Planning Portal 'Search for planning applications' function was utilised to help inform the desktop study by analysis of existing publicly accessible ecological survey results that have been carried out locally within the previous five years.
- 4.5 A commercial data request to the Local Environment Records Centre serving the area has not been sourced during this preliminary appraisal assessment and is justified through application of the following recent guidance:

1) The Guidelines for Accessing, Using and Sharing Biodiversity Data in the UK (CIEEM, 2020) states: "It is generally expected that a desk study, including a data search, will be a key part of the ecological surveys or reports produced to inform a planning application. **Freely available web-based sources of data and contextual information should always be used**; in some cases, it may be acceptable to not undertake a data search with the LERC or other relevant NSS or local interest groups, for example:

*ii) Situations where the data search would be extremely unlikely to provide information needed to inform the assessment; due to the **scale** and **location** of the proposed development. The appropriateness of excluding a data search will need to be judged on a case-by-case basis as, in most situations, it will be essential to carry out such a search even if the development is very small or is likely to have a low impact. It can be very difficult to demonstrate that a data search would not have provided relevant information without obtaining and reviewing those data.*

iii) In some cases for Preliminary Roost Assessments of buildings in low impact / small-scale scenarios, such as an extension to a residential property, loft conversions (full or partial), installation of Velux/dormer windows, single modern agricultural or similar building conversion or demolition; however, it should not be assumed that data searches are never required for such scenarios and this must be judged on a case by case basis and justified accordingly.

2) The Guidelines for Preliminary Ecological Appraisal (CIEEM, 2017) states: "*Very occasionally it might be possible to carry out a robust PEA without obtaining LERC/NBDC/CEDaR data; this will usually only apply to **low impact or small-scale projects** (e.g. by virtue of size, extent, duration of works, magnitude and locality), and should be determined on a case-by-case basis.*"

As exemptions as made **bold** above can be applied for the proposed development in good practice, it is considered unnecessary to conduct a commercial data request at this time, however, if a data search is considered to be necessary by the Local Authority or advisory body to better inform the appraisal, a proportionate data search should be commissioned with results interpreted into the conclusions and recommendations of a re-issued/updated report.

Field Survey

- 4.6 A daytime preliminary ecological appraisal was conducted on 17th October 2022 in dry conditions (13°C), wind 2/12 (Beaufort scale), 0% cloud by Mr. H. Mulligan Qualifying CIEEM, a Trainee Ecologist undergoing extensive training and with experience undertaking PEAs.

Floristic assessment

- 4.7 The survey followed the UK Habitat Classification Version 1.1 (Butcher, et.al., 2020) being introduced as part of the roll out of Biodiversity Net-gain with reference to the Joint Nature Conservation Committee (JNCC) Phase 1 Habitat Methodology standards (JNCC, 2010) and reference to the Chartered Institute of Ecology and Environmental Management (CIEEM) Technical Guidance Series “*Guidelines for Preliminary Ecological Appraisal, 2nd Edition*” (CIEEM, 2017).
- 4.8 During the survey walkover, botanical assemblages were assessed, and the land was inspected for the presence of red-listed (Stroh *et al*, 2014; Hodgetts, 2011), s.41 and LBAP species alongside specially protected species as listed under Schedule 8 of the Wildlife and Countryside Act (WCA) (1981) (as amended) and / or Schedule 5 The Conservation of Habitats and Species (amendment) (EU exit) Regulations (2019). Species nomenclature follows Stace, C. (2019) – definitive English names.
- 4.9 Additional to attributing ecological value to red-listed / BAP species, in accordance with existing CIEEM guidance, a geographic frame of reference is also adopted. Plant species and habitats may be recognised for their ecological notoriety on a geographical scale which is adopted on a site-to-site basis (see Figure 4.1 overleaf).

For a site-relevant species list, see Appendix II.

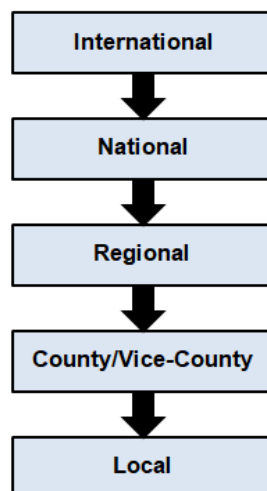


Figure 4.1 - Geographic Frame of Reference entailing degrees of conservation importance

- 4.10 In combination with assessing the area in relation to flora and habitats of conservation importance, the land was also assessed in relation to the presence of invasive non-native species (INNS) as listed under Schedule 9 (Part II) of the Wildlife and Countryside Act (1981) (as amended).

Faunal assessment

- 4.11 The identification and/or evidence of fauna encountered would be documented whilst in tandem the area was assessed for the potential to support the priority species covered in the previous tables. The 'walkover' also aimed to identify any ephemeral pools or unmapped waterbodies.

Bats

- 4.12 The site would be assessed for bats, buildings (where present) would be inspected for potential places that may be of value to bats and to determine evidence of use. This typically involves a search for potential roost features (PRF) both internally (investigation of loft spaces/upper floors/internal elevations) as well as externally, comprising an investigation of features (roof material, building components) using a high-powered torch. Field signs of bats typically comprise bat droppings, incidental animal presence, dead specimens and/or prey items.
- 4.13 Trees (where present) would be inspected for places that may be of value to bats and to determine if evidence of use was present; this typically involves a search for potential roost features along with an investigation of those features using a high-powered torch or close focus binoculars. Potential roost features can include woodpecker holes, rot holes, hazard beams, other vertical or horizontal cracks or splits in stems and branches, partially decayed lifted bark, knot holes, man-made holes, tear-outs, cankers in which cavities have developed, other hollows or cavities, including butt-rots, double-leaders forming compression forks with included bark, gaps between overlapping stems or branches, partially detached Ivy with stem diameters in excess of 50mm or bat/bird boxes. Several mature trees are present along the survey boundaries; it is not anticipated that these will be impacted by the proposed works these were investigated in full.
- 4.14 Criteria for preliminary bat roost assessment are based upon the determinants given in the Bat Conservation Trust - Bat Surveys for Professional Ecologists: Good Practice Guidelines, 3rd ed. (2016): (see Figure 4.2).

Table 4.1 Guidelines for assessing the potential suitability of proposed development sites for bats, based on the presence of habitat features within the landscape, to be applied using professional judgement.

Suitability	Description Roosting habitats	Commuting and foraging habitats
Negligible	Negligible habitat features on site likely to be used by roosting bats.	Negligible habitat features on site likely to be used by commuting or foraging bats.
Low	A structure with one or more potential roost sites that could be used by individual bats opportunistically. However, these potential roost sites do not provide enough space, shelter, protection, appropriate conditions ^a and/or suitable surrounding habitat to be used on a regular basis or by larger numbers of bats (i.e. unlikely to be suitable for maternity or hibernation ^b). A tree of sufficient size and age to contain PRFs but with none seen from the ground or features seen with only very limited roosting potential. ^c	Habitat that could be used by small numbers of commuting bats such as a gappy hedgerow or unvegetated stream, but isolated, i.e. not very well connected to the surrounding landscape by other habitat. Suitable, but isolated habitat that could be used by small numbers of foraging bats such as a lone tree (not in a parkland situation) or a patch of scrub.
Moderate	A structure or tree with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions ^a and surrounding habitat but unlikely to support a roost of high conservation status (with respect to roost type only – the assessments in this table are made irrespective of species conservation status, which is established after presence is confirmed).	Continuous habitat connected to the wider landscape that could be used by bats for commuting such as lines of trees and scrub or linked back gardens. Habitat that is connected to the wider landscape that could be used by bats for foraging such as trees, scrub, grassland or water.
High	A structure or tree with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions ^a and surrounding habitat.	Continuous, high-quality habitat that is well connected to the wider landscape that is likely to be used regularly by commuting bats such as river valleys, streams, hedgerows, lines of trees and woodland edge. High-quality habitat that is well connected to the wider landscape that is likely to be used regularly by foraging bats such as broadleaved woodland, tree-lined watercourses and grazed parkland. Site is close to and connected to known roosts.

^a For example, in terms of temperature, humidity, height above ground level, light levels or levels of disturbance.
^b Evidence from the Netherlands shows mass swarming events of common pipistrelle bats in the autumn followed by mass hibernation in a diverse range of building types in urban environments (Korsten et al., 2015). This phenomenon requires some research in the UK but ecologists should be aware of the potential for larger numbers of this species to be present during the autumn and winter in large buildings in highly urbanised environments.
^c This system of categorisation aligns with BS 8596:2015 Surveying for bats in trees and woodland (BSI, 2015).

Figure 4.2 - Bat Conservation Trust (BCT) guidelines extract

4.15 Factors considered during the preliminary roost assessment include:

- Knowledge of bat species relevant to the site location and geographical range,
- Nature of the immediate / surrounding habitat in relation to foraging opportunities,
- Presence and conditions of loft spaces, upper floors, roof linings where present,
- Presence / absence of roost potential,
- Value of roost potential, if present.

Breeding Birds

- 4.16 Habitats would be checked for evidence of nesting birds and suitability for relevant species. Bird species observed and heard were recorded on site, and a search was made for nest material, or areas suitable for nesting. Additional to the site's capacity to support generally common species for breeding, the area was also subject to an assessment for the site's capacity to support species especially protected under Schedule 1 of the Wildlife & Countryside Act (1981) (as amended), for example Black Redstart (*Phoenicurus ochruros*) and other priority species.

Other terrestrial mammals

- 4.17 The walkover included a search for field signs of Badger (*Meles meles*) which includes signs of activity such as digging, setts, 'runs' leading to and from a sett and the existence of latrines or 'snuffle' holes where badgers have foraged in the ground. Any signs indicative of use of the site by European Hedgehogs (*Erinaceus europaeus*) and Brown Hare (*Lepus europaeus*) or habitats of value to them, were also recorded.

GCN

- 4.18 During the desktop assessment a 250m search was undertaken from a site-central grid reference in relation to the presence of ponds, ditches or other water bodies that may support Great Crested Newts (GCN). The information gathered would then be used to aid in establishing if more detailed surveys are required.

NB: *English Nature's (now Natural England) Great Crested Newt Mitigation Guidelines (2001) states ponds within 500m of a proposed development site should be considered for their potential to support GCN, however, in some instances this distance may be reduced to 250m due to the presence of physical barriers and obstructions or based on the likely magnitude of impacts arising from the proposed development.*

- 4.19 Following current best practice considering the national roll out of District Level Licencing (DLL) across England and based on likely effects, a proportionate assessment of the water bodies range within 250m from site has been applied, given the highly urbanised nature of the application site and the subsequent lack of foraging or commuting habitat nearby. Where a development is anticipated to affect GCN the search can be extended up to 500m or more.
- 4.20 No ponds exist on the application site; nor do any ponds exist within 250m of the application site.

Reptiles

- 4.21 The site and its surroundings were assessed for suitability for use by reptiles, with particular attention paid to features that could be used as basking areas (e.g. south-facing slopes), hibernation sites (e.g. banks, walls, piles of hardcore) and opportunities for foraging (e.g. rough grassland and scrub). Beebee & Griffiths (2000) state specific habitat preferences of common UK reptiles:

- Common Lizards (*Zootoca vivipara*) use a variety of habitats from woodland glades to heaths, walls and pastures, as well as brownfield sites,
- Slow-worms (*Anguis fragilis*) use similar habitats to Common Lizards, and are often found in rank grassland, gardens and derelict land under refugia,
- Grass Snakes (*Natrix natrix*) have broadly similar requirements to Common Lizards but with a greater reliance on ponds and wetlands, where they prey on amphibians.

In assessment of a site for reptiles important habitat characteristics are considered, outlined in Table 4.2, as derived from the Reptile Habitat Management Handbook (Edgar, 2010).

Table 4.2 - Important habitat characteristics for reptiles

1. Location (in respect of species range)	7. Connectivity to good quality habitat
2. Vegetation structure	8. Prey abundance
3. Insolation	9. Refuge opportunity
4. Aspect	10. Hibernation habitat potential
5. Topography	11. Disturbance regime
6. Surface geology	12. Egg-laying site potential

Invertebrates

- 4.22 The application site was assessed for the presence of features that should be considered of high value to invertebrates. Several important features were considered, based on the assemblage descriptions provided within the Research Report "Surveying terrestrial and freshwater invertebrates for conservation evaluation" (NERR005, 2007), including but not limited to:
- Wood decay,
 - Early successional mosaic habitat,
 - Shaded ground layer,
 - Still and flowing water.
- 4.23 The results, conclusions and recommendations of this report are based on a number of factors i.e.
- Skills and experience of the surveyor,
 - Knowledge of flora and fauna relevant to the site location and geographical range,
 - Nature of the immediate and surrounding habitat in relation to shelter, foraging and commuting opportunities.
- 4.24 The results, conclusions and recommendations of this report have been assessed by Mrs. K. Wilding, Director of Tyrer Ecological Consultants Ltd, and her assessment concurs with the findings and recommendations of Mr. H. Mulligan.

5.0 Limitations

- 5.1 This report does not contain a comprehensive list entailing the totality of botanical taxa on Site. Though the list is extensive a PEA is not a concentrated effort to gather full botanical information. Many plant species are only evident at certain times of the year; consequently, it is possible some plant species may have gone undetected.
- 5.2 The survey was conducted outside of the bat activity and breeding bird season, therefore there is a decreased probability of encountering field signs. This did not affect the assessment of potential roost features or possible nesting opportunities.
- 5.3 No internal access into the building present on the application site was granted during the survey however the surveyor is satisfied that enough information was obtained from the external assessment of the building in regard to determining the building's suitability for bats. Otherwise no further access limitations were experienced on site with permission granted to the surveyor to access all important areas. Taking everything into consideration no significant limitations affected the survey effort that would affect the results, conclusions, and recommendations in this report.

6.0 Desk Study Results

- 6.1 The plot of land on Tariff Street (hereafter referred to in-part as “the application site” or “the site”) circa 0.3 ha is situated in Manchester, located to the east of Manchester City Centre. The application site comprises of hard standing and unsealed surface and is bordered by buildings, car parks and streets.

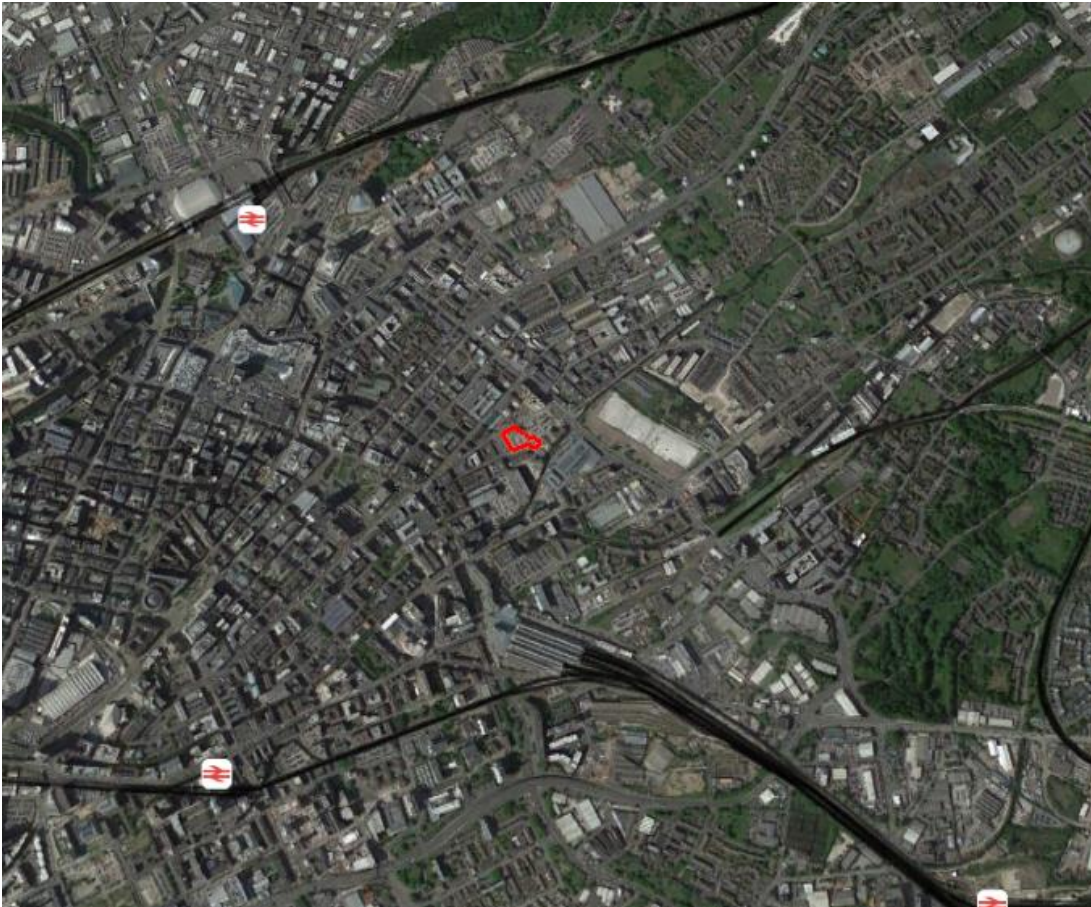


Figure 6.1 - Location of application site within the surrounding landscape (Source: Google Earth 2022).

- 6.2 Immediate environs can be broadly described as distinctly urban with the only features of ecological interest present in the immediate environment being lines of trees bordering the nearby Rochdale canal at the south-east of the application site.
- 6.3 The extending habitat predominantly continues in similarity to that of the immediate in that it is highly urbanised and is characterised by an abundant array of multi-storey commercial premises and apartment blocks. Ecological features are limited to lines of trees and fragments of modified grassland; however, a strip of priority deciduous woodland is located at the eastern extent of the 2.0km search radius and small fragments are also located at the far north and far south of the 2.0km search radius.
- 6.4 In respect to connectivity, the site has poor linkages to the abovementioned habitats with abundant infrastructure providing a significant barrier to dispersal for most terrestrial species; though access to the application site by avian fauna is considered possible, the habitat present on the application site and surrounding is considered unfavourable.

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- 6.6 The protected species most typically associated with the habitats described is the Common Pipistrelle (*Pipistrellus pipistrellus*) bat, frequently associated with buildings in both urban and rural settings, and this species presence in surrounding landscape is likely.
- 6.7 No statutory designated sites for nature conservation are present within 2.0km of the application site (see Table 6.1). The site does however fall within the impact zone of Rochdale Canal SSSI; however, given the inner-city nature of the site, and the distance from the SSSI, the works are unlikely to have any adverse impact on the designation.
- 6.8 In relation to ponds none exist on site nor are any present within 250m of the application site. Rochdale canal is however located 35m south-east of the application site; the canal is separated from the application site by several buildings and enclosed areas.
- 6.9 **Bats:** 19 European Protected Species Mitigation Licences (EPSMLs) have been granted in relation to bats within 2.0km of the site boundary (Figure 6.3), relating to breeding and non-breeding roosts of Common Pipistrelle (*Pipistrellus pipistrellus*), Soprano Pipistrelle (*Pipistrellus pygmaeus*) and Brown Long-eared (*Plecotus auritus*). The closest EPSML is located approximately 300m north of the application site.
- 6.10 **Great Crested Newt:** No EPSMLs in relation to GCN have been granted within the 2.0km buffer.

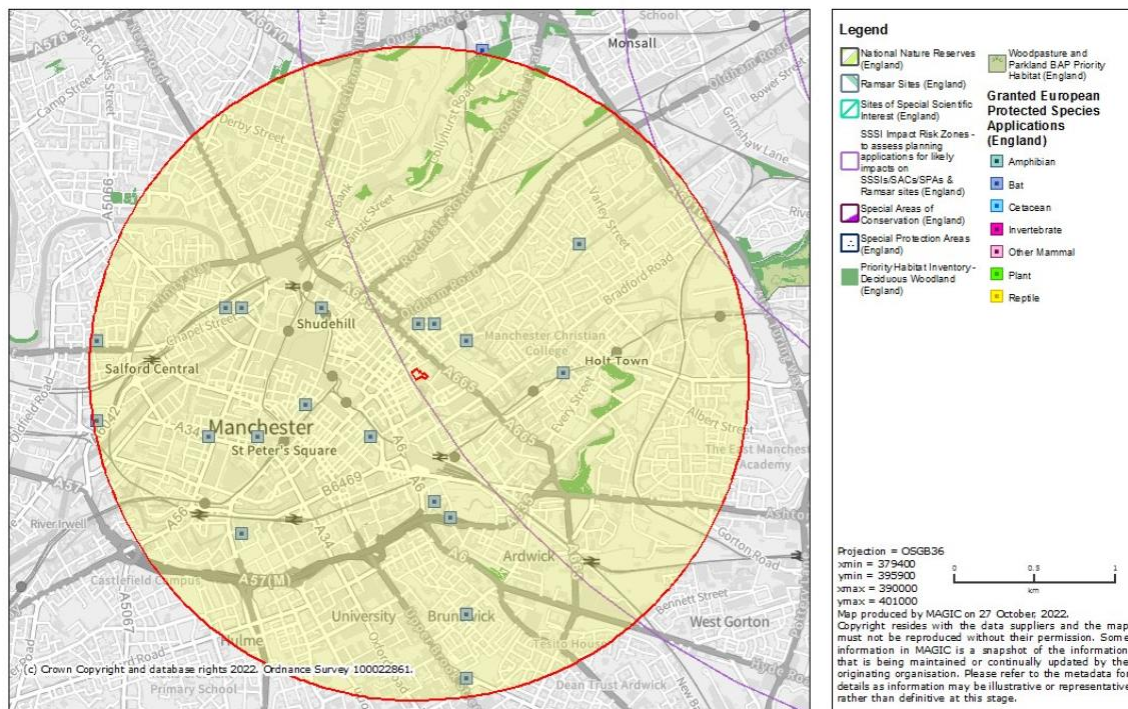


Figure 6.3 – Location of granted EPSMLs , priority habitats and designated sites (if present) relative to the application site (Source: adapted from MAGIC Maps, 2022).

7.0 Field Survey Results

7.1 Habitat Survey

- 7.1.1 See Table 7.1 (below) for habitat descriptions. Refer to Appendix IV - UKHabs Habitat Map for the location of all described habitats & Target Notes (TN). Species nomenclature follows Stace, C. (2019) – definitive English names.

Table 7.1 - UKHabs habitat types within the survey area with target notes

Habitat Code	Description
Built linear feature - u1e 68 – mortared wall	Several of the boundaries surrounding the site feature red brick walls.
Developed sealed surface - u1b 17 – ruderal/ ephemeral 89 – car park	The majority of the application site consists of hardstanding pavement within the car park, with several rare or occasional patches of vegetation growing throughout consisting of ruderal/ ephemeral species such as Common Nettle (<i>Urtica dioica</i>), Willowherb sp. (<i>Epilobium sp.</i>), Buddleia (<i>Buddleja davidii</i>), Dandelion (<i>Taraxacum officinale agg.</i>), Creeping Thistle (<i>Cirsium arvense</i>) and White Clover (<i>Trifolium repens</i>).
Artificial unvegetated unsealed surface – u1c 17 – ruderal/ ephemeral 89 – car park	The south-eastern section of the site consists of gravelled surface with similar small patches of vegetation consisting of ruderal species growing through in rare or occasional amounts, with the same species as above featuring.
Buildings – u1b5	A single building lies at the north of the site, see section 7.3 for full description.

7.2 Vegetation

- 7.2.1 No species of conservation importance or species listed as invasive under Schedule 9 of the WCA were identified anywhere within the site boundary.

7.3 Bats

- 7.3.1 One building is present within the application site boundary, close to the northern boundary; this is a brick built two storey building with a collapsed, pitched roof with shutter doors and windows covered by timber boards. The building is to the approximate maximum dimensions of 7m x 8.5m x 6m (depth x width x height). Whilst the surveyor is not qualified to assess the structural integrity of the building, the building is considered to be in aesthetically poor condition.

7.3.2 Internally no access was granted however it can be discerned from the external appearance of the building that no loft void is present with in the structure, with the roof being open throughout and lacking any roofing materials; this means that the building is likely very draughty, bright and illuminated. Given this and the absence of a loft space the application site is considered unsuitable for the breeding requirements of the Brown Long-eared (*Plecotus auritus*) which favours dark, warm loft spaces which allow free flight; conditions not provided by this structure.

7.3.3 Similarly, the collapsed roof means that there is no roof lining present; where present bitumen 1F underlining or other such roof linings typically improve a buildings value to bats notably for crevice-dwelling bats of the *Pipistrellus* genus, whereby the bats roost between the lining and the roof cover material provided external opportunities exist.

NB: The breeding roosts of Pipistrelle bats are proportionally higher in occupied residential dwellings where the warm, dry conditions favour the requirements of a maternity colony but other structures are also used, especially for hibernation or by male bats which do not need the same conditions as a maternity colony.

7.3.4 Externally the numerous large voids in the collapsed roofing are considered too large to provide crevice dwelling opportunity for bats of the *Pipistrellus* genus, given this and the character of the building as described and the unfavourable character of the surrounding habitat the building has been duly categorised as pertaining to 'Negligible' bat roosting potential in line with current BCT guidance.

7.4 Breeding Birds

7.4.1 In relation to WCA Schedule 1 specially protected bird species such as Black Redstart, which is associated with urban environments, no evidence was found to suggest the presence of this species.

7.4.2 In relation to wider breeding birds, numerous feral pigeons (*Columba livia domestica*) were observed utilising the building on site. As breeding birds are protected during nesting / when at the nest, timing implications are applicable for the loss of this building.

7.5 Other Terrestrial Mammals

Badger

7.5.1 No field signs were located to suggest the presence of Badgers, including any setts, latrines, pathways, hairs, footprints or feeding signs such as snuffle holes and scratched trees/logs; the application site and surrounding habitat is considered highly unsuitable for this species and their presence on the application site is considered highly unlikely.

European Hedgehog

7.5.2 No areas that constitute suitable habitat for hedgehog (*Erinaceus europaeus*) i.e. refuge, foraging, and commuting are present across the site e.g. scrub, dense vegetation, hedgerow/trees adjacent to the site. The presence of European Hedgehog on the application site is considered highly unlikely.

7.6 Herptiles

Great Crested Newt (GCN)

- 7.6.1 No ponds are present within 250m of the application site, the site offers highly unfavourable habitat for GCN and hence GCN are not considered a material consideration in this planning proposal.

Other Herptiles

- 7.6.2 Given the habitat present on site and the surrounding habitats, as described, which are highly urbanised and predominantly devoid of vegetation or waterbodies suitable for supporting common and widespread herptiles such as Common Frog (*Rana temporaria*) and Common Toad (*Bufo bufo*). The presence of this species group on the application site is considered highly unlikely.

Reptiles

- 7.6.3 With regards to reptiles, the application site does not provide a suitable diversity of habitat structures required for this species group and is highly fragmented from any suitable surrounding habitat hence reptiles are not a material consideration in this planning application.

7.7 Invertebrates

- 7.7.1 An assessment of habitats and features on site found no ecotones to be present and an absence of deadwood or any other such feature likely to be of local significance to invertebrate assemblages or specially protected invertebrates; no impacts are foreseen for this taxon.

8.0 Conclusions & Recommendations

Habitats

- 8.1 No habitats of conservation importance were identified on the application site.

Vegetation

- 8.2 No botanical species of conservation were identified within the site boundary and no further recommendations are applied at this time.
- 8.3 To improve the value of the site for native wildlife, a list of appropriate native species that might be incorporated into the proposed development has been supplied (see Appendix III).

Bats

- 8.4 Based upon the findings of the survey, covered through sections 6.0 – 7.0 of the report and supported by Appendix I, the the existing building on the northern edge of the site is determined to offer '**Negligible**' bat roost potential in accordance with Bat Conservation Trust - Bat Surveys for Professional Ecologists: Good Practice Guidelines, 3rd ed. (2016); no further surveys are required in relation to bats, with general enhancement measures recommended in Appendix II.

Table 4.1 Guidelines for assessing the potential suitability of proposed development sites for bats, based on the presence of habitat features within the landscape, to be applied using professional judgement.		
Suitability	Description Roosting habitats	Commuting and foraging habitats
Negligible	Negligible habitat features on site likely to be used by roosting bats.	Negligible habitat features on site likely to be used by commuting or foraging bats.

Figure 8.1 – Bat Conservation Trust extract on Negligible roost potential requirements

- 8.5 No recommendations are necessary in relation to bats and trees as no vegetation on site was observed as having bat roost potential.
- 8.6 Bats are a transient species and buildings can deteriorate over time. In the highly unlikely event that bat(s), or evidence of bat(s), are found during proposed works then as a legal requirement the work at the site should immediately cease and an Ecologist be contacted for further advice. If bat(s) or their roost(s) will be affected, then an EPSML may be required to legally commence with the works. See Figure 8.2 for indicative evidence of bats.



Figure 8.2 – Evidence of bats – droppings on the left / a Common Pipistrelle bat on the right - indicative

- 8.7 Owing to the highly urbanised, well illuminated and busy surrounding environment already present on and surrounding the application site, it is unlikely that the proposed development will result in light and/or noise disturbance exceeding the current level; however, as a precautionary measure owing to the presence of confirmed bat records within 300m of the application site the following lighting recommendations are suggested should any night work be undertaken:

Installation of harsh artificial lighting as part of any development that exceeds current levels could have a negative impact upon foraging/commuting bats in the landscape, particularly if increased light spillage occurs in areas of that are currently free from illumination such as boundary features. A bat-sensitive lighting plan is recommended as part of the scheme, in order to avoid potential impacts to bats that may use the site. Several options to consider have been listed below, though the reader is referred to the Bat Conservation Lighting Guidelines for further information.

Appropriate luminaire specifications

Luminaires come in a myriad of different styles, applications and specifications which a lighting professional can help to select. The following should be considered when choosing luminaires.

All luminaires should lack UV elements when manufactured. Metal halide, fluorescent sources should not be used. LED luminaires should be used where possible due to their sharp cut-off, lower intensity, good colour rendition and dimming capability. Lighting should be directed to where it is needed and light spillage avoided. This can be achieved by the design of the luminaire and by using accessories such as hoods, cowls, louvres and shields to direct the light to the intended area only. Planting can also be used as a barrier or

manmade features that are required within the build can be positioned so as to form a barrier.

Predicting where the light cone and light spill will occur: There are lighting design computer programs that are widely in use which produce an image of the site in question, showing how the area will be affected by light spill when all the factors of the lighting components listed above are taken into consideration. This should be a useful tool to inform the mitigation process.

Light levels: The light should be as low as guidelines permit. If lighting is not needed in any particular area, do not light. Numerous software programmes are currently available which can be used inform lighting plans, demonstrating how lighting decisions will illuminate a site.

Please refer to the 'Landscape and urban design for bats and biodiversity' (Gunnell et. al., 2012, Bat Conservation Trust)
Guidance Note 8 'Bats and Artificial Lighting' 2018, Bat Conservation Trust for further information.

Breeding Birds

- 8.8 In relation to common bird species, direct evidence of breeding by feral pigeon (*Columba livia 'domestica'*) was encountered throughout the existing building on the northern edge of the site. Feral Pigeon breeding presence may need to be addressed from a pest control point of view as breeding habits in relation to this species are untypical of other bird species and can last throughout the year.

A General License is therefore likely to be necessary to legally control the species. From 1 January 2021, you must follow the conditions of general license GL41 to control certain target birds for the purposes of preserving public health or public safety. The main changes to the license conditions are:

- *Species that can be controlled under license are listed by 3 health and safety purposes of: slips and falls; spread of human disease; birds nesting,*
- *Magpie, carrion crow and rook are removed from the license,*
- *License users must comply with the standard license conditions for trapping wild birds and using decoy birds in traps (WML-GL33),*
- *You may use the license on or near a protected site as long as you have any necessary consent from Natural England to do so and comply with any site-specific conditions on the license,*

For further information on General Licensing see - Wild birds: license to kill or take for public health or safety (GL41) - GOV.UK (www.gov.uk).

NB: *All wild birds (with only minor exceptions) and their nests whilst being built or containing eggs or dependant young are protected from destruction, damage and disturbance under the Wildlife & Countryside Act 1981 (as amended). It is a punishable offence to interfere in any way with an active nest.*

Biodiversity Enhancement

- 8.10 General recommended ideas to enhance the site in accordance with the principles of '*Biodiversity Net Gain: Good practice principles for development*' (CIEEM *et. al.*, 2019), are presented in Appendix III.

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Appendix I: Site Photographs



Plate 1 – The application site as seen from Tariff Street



Plate 2 – Hardstanding nature of most of the application site



Plate 3 – Gravelled area at south-east of the site



Plate 4 – Surrounding area on Port Street to the north of the application site



Plate 5 – The building on site as seen from the north



Plate 6 – The southern aspect of the building on site, with feral pigeons seen perched

Appendix II: Site-Specific Botanical Species List

Each species recorded was given an abundance value according to the standard DAFOR scale, where:

- D = Dominant
- A = Abundant
- F = Frequent*
- O = Occasional*
- R = Rare*

*These values can be prefixed by the letter L (locally) to provide more subtle biogeographical data.

Taxon	Common Name	Scientific Name	DAFOR
Bryophyta (Mosses)	Springy Turf Moss	<i>Rhytidiadelphus squarrosus</i>	O
Polypodiopsida (Ferns)	Male Fern	<i>Dryopteris filix-mas</i>	R
Anthophyta (Flowering plants)	Broad-leaved Dock	<i>Rumex obtusifolius</i>	O
	Buddleia	<i>Buddleja davidii</i>	R
	Cocks-foot	<i>Dactylis glomerata</i>	O
	Common Nettle	<i>Urtica dioica</i>	O
	Creeping Buttercup	<i>Ranunculus repens</i>	O
	Creeping Thistle	<i>Cirsium arvense</i>	O
	Dandelion	<i>Taraxacum officinale agg.</i>	O
	Herb Robert	<i>Geranium robertianum</i>	R
	Horseweed	<i>Erigeron canadensis</i>	R
	Oxford Ragwort	<i>Senecio squalidus</i>	R
	Perennial Rye-grass	<i>Lolium perenne</i>	O
	White Clover	<i>Trifolium repens</i>	R
	Willowherb Species	<i>Chamerion sp.</i>	O

Appendix III: Biodiversity Enhancement

Proposed - Native Landscaping

A series of trees, woody shrubs, climbers, herbaceous plants and ferns have been given within the table below which are suitable for incorporation into the proposed development; the list of plants given below are readily commercially available.

	Common Name	Scientific Name	Planting Preference
Ferns	Male Fern	<i>Dryopteris filix-mas</i>	Semi-shade or shaded
	Soft Shied-fern	<i>Polystichum setiferum</i>	Semi-shade or shaded
	Maidenhair Fern	<i>Adiantum capillus-veneris</i>	Suitable for rockeries / walled gardens
	Royal Fern	<i>Osmunda regalis</i>	Full sun in moist-damp areas
Herbaceous plants	Bloody Crane's-bill	<i>Geranium sanguineum</i>	Dry soils - suitable for rockeries
	Columbine	<i>Aquilegia vulgaris</i>	Semi-shade or open areas
	English Bluebell	<i>Hyacinthoides non-scripta</i>	Moist soils in semi-shade or open areas
	Giant Bellflower	<i>Campanula latifolia</i>	Semi-shade or open areas
	Greater Knapweed	<i>Centaurea scabiosa</i>	Dry-moist soils. Suitable for borders
	Greater Woodrush	<i>Luzula sylvatica</i>	Moist soils in semi-shade or open areas
	Meadow Crane's-bill	<i>Geranium pratense</i>	Humid-moist soils. Suitable for borders
	Musk Mallow	<i>Malva moschata</i>	Dry-moist soils. Suitable for borders and rockeries
	Sea Campion	<i>Silene uniflora</i>	Dry soils - suitable for rockeries
	Stinking Hellebore	<i>Helleborus foetidus</i>	Semi-shade or open areas
Climbers	Honeysuckle	<i>Lonicera periclymenum</i>	Dry-moist soils
	Hops	<i>Humulus lupulus</i>	Dry-moist soils
	Ivy	<i>Hedera helix</i>	Dry-moist soils
	Sweet-briar	<i>Rosa rubiginosa</i>	Dry-moist soils
Woody Shrubs	Blackthorn	<i>Prunus spinosa</i>	-
	Dogwood	<i>Cornus sanguinea</i>	-
	Guelder Rose	<i>Viburnum opulus</i>	-
	Hawthorn	<i>Crataegus monogyna</i>	-
	Hazel	<i>Corylus avellana</i>	-
	Holly	<i>Ilex aquifolium</i>	-
Trees	Alder Buckthorn	<i>Frangula alnus</i>	-
	Osier	<i>Salix viminalis</i>	-
	Pedunculate Oak	<i>Quercus robur</i>	-
	Purple Willow	<i>Salix purpurea</i>	-
	Rowan	<i>Sorbus aucuparia</i>	-
	Silver Birch	<i>Betula pendula</i>	-
	Wild Cherry	<i>Prunus avium</i>	-
Aquatic/marginal plants	Common Water-crowfoot	<i>Ranunculus aquatilis</i>	Ponds
	Marsh Marigold	<i>Caltha palustris</i>	Marginal vegetation
	Ragged Robin	<i>Silene flos-cucculi</i>	Marginal vegetation
	Water Mint	<i>Mentha aquatica</i>	Marginal vegetation
	Water-violet	<i>Hottonia palustris</i>	Ponds
	White Water-lily	<i>Nymphaea alba</i>	Ponds

Enhancing a development site for Bats

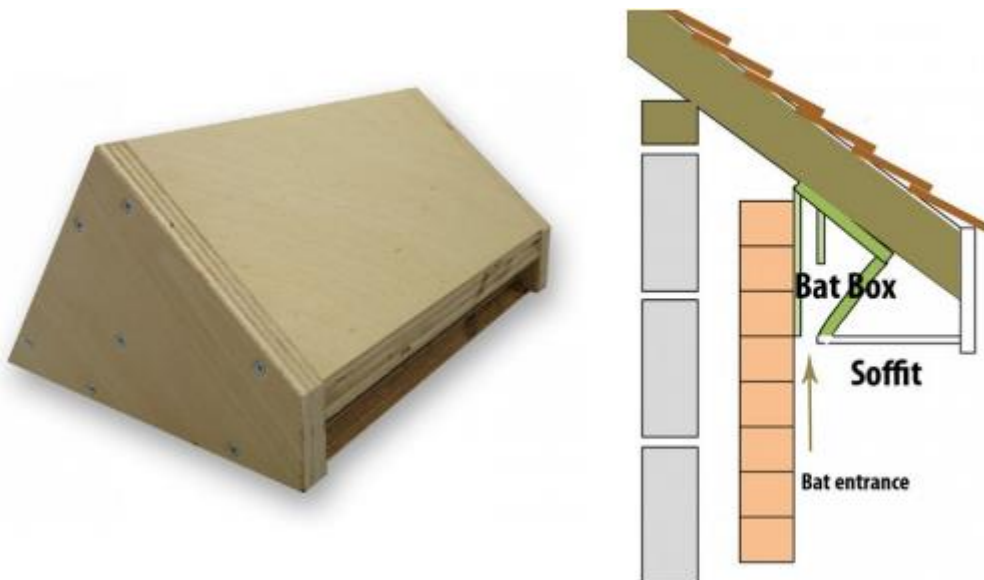
Integrated bat box

The Habibat Bat Box is a solid box made of insulating concrete with internal roosting space. The box blends seamlessly into brick-built properties and may be incorporated into the fabric of buildings, being best placed on gable elevations.



Soffit access

Where soffits are instated at gable elevations, roost provision may be instated in the form of a soffit bat box with internal roosting space.



Externally fitted boxes

A large number of externally fitted box models for bats exist for buildings and trees. Suitable models for both buildings and trees may include the Greenwoods Ecostyrocete Bat Box.

See - <https://www.greenwoodsecohabitats.co.uk/shop>

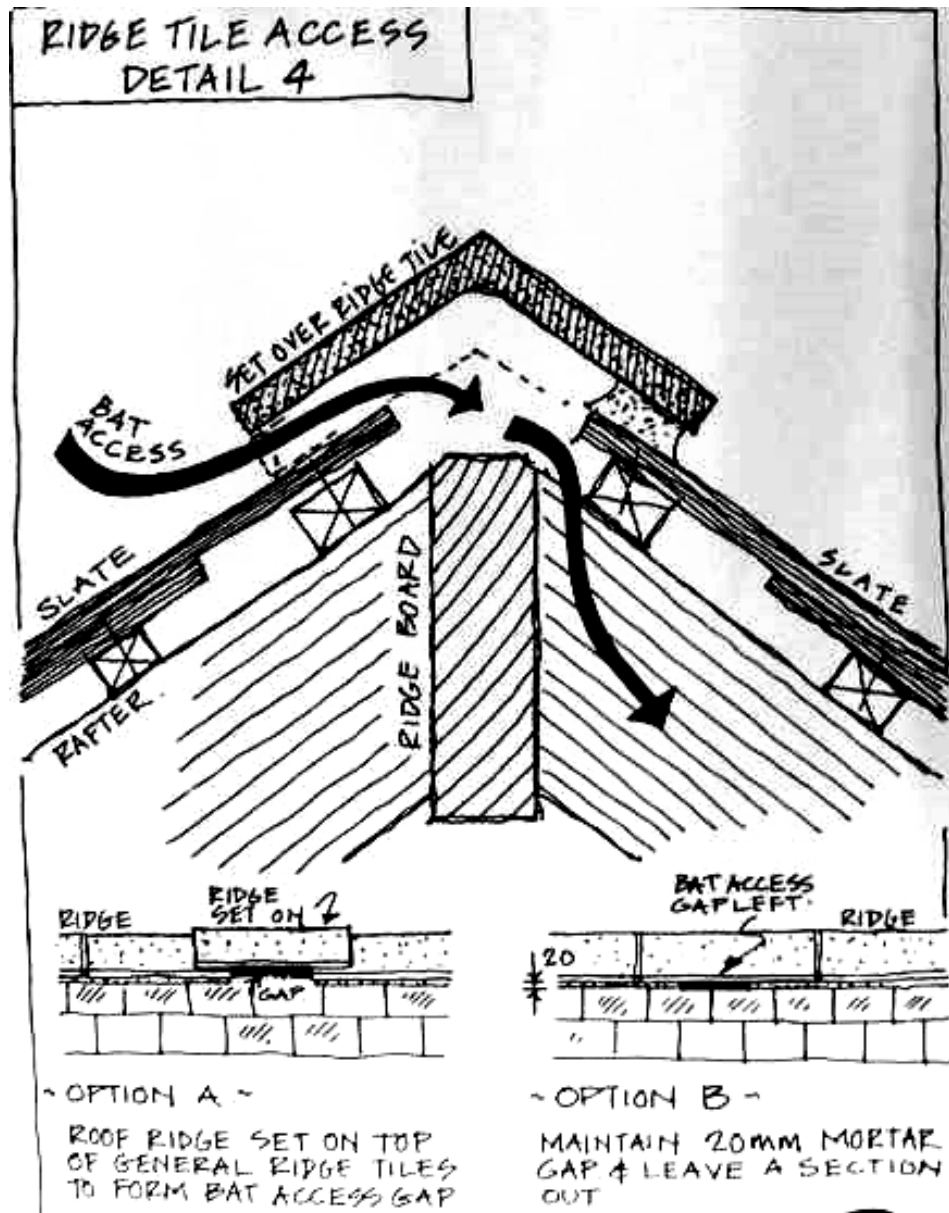


Ridge access

Where appropriated, ridge tile access should be made with the incorporation of traditional Bitumen 1F underfelt immediately beneath ridge tiles. Breathable BRM membrane can cause significant problems where bats are in contact with it, whereby their fine claws become entangled within the fibres of the membrane, entrapping and killing bats.

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Enhancing a development site for Breeding Birds

Nesting Birds - Common/Woodland/Garden

This traditional design has proved to be highly effective in attracting robins, as well as other small species such as black redstart, spotted flycatcher and wren. It is designed to be installed on the walls of houses, barns, garden sheds or other buildings and should be hung so that the entrance is to one side (at an angle of 90° to the wall). The front panel can be easily removed for cleaning.

This type of box should not be made conspicuous on a tree or bush because small predators can enter through the unprotected opening. By hanging on a wall, predators won't be able to reach the box. Alternatively hide the box in ivy, honeysuckle or other climbing plants.



See -**Error! Hyperlink reference not valid.**

Enhancing a development site for Invertebrates

Bee bricks

The Bee Brick can be used in place of a standard brick or block in construction to create habitat for solitary bees. Alternatively, it can be used as a standalone bee house in your garden or wild patch. It will provide much needed nesting space for solitary bee species such as red mason bees and leafcutter bees, both of which are non-aggressive.

Each Bee Brick contains cavities in which solitary bees can lay their eggs before sealing the entrance with mud and chewed-up vegetation. The offspring will emerge the following spring and the cycle will begin again. Each cavity goes part way into the brick, which is solid at the back. Bee Bricks should be placed in a warm sunny spot on a south-facing wall at a minimum height of 1m, with no vegetation obstructing the holes. It is highly recommended that bee-friendly plants should be located nearby so that the bees using the bricks have food, otherwise it is unlikely that the brick will be used.

Available in a choice of four colours: white grey, dark grey, yellow and red.

Specification

- * Material: Concrete
- * Origin: Cornwall, UK
- * Dimensions: W 215mm x D 105mm x H 65mm
- * Weight: 2.9kg
- * Colours: White grey, yellow, dark grey and red



Proposed – Enhancement for Hedgehog

Hedgehog Home

Specification:

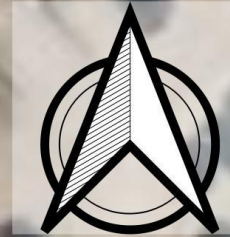
Exterior quality 12mm resin bonded ply. The box remains untreated on the inside. Best situated in a quiet corner of the garden, and covered with leaves and other garden debris. Removable lid for cleaning purposes and reinforced corners, manufactured with surface sunk nails to resist rusting.



Nest box size: Height 22cm x Width 38cms x Length 47cm

Environmentally positive: Direct action to help hedgehog survival rates, encouraging biodiversity; FSC timber; Zero carbon footprint in use.

1NQ, Tariff Street



UK Habitats Key

-  u1e - built linear feature
-  68 - Mortared Wall
-  Boundary
-  u1b - developed land. sealed surface
-  17 - Ruderal/ephemeral
-  89 - Car Park
-  u1b5 - buildings
-  u1c - artificial unvegetated unsealed surface
-  17 - Ruderal/ephemeral
-  89 - Car Park

Survey Date: 17/10/2022
Drawn: Mr. H. Mulligan
Date Drawn: 17/10/2022
Checked & Approved: Mrs. K. Wilding
Size: A3
Scale: 600:1

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Contains imagery courtesy of Bing Maps

