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Preliminary Ecological Appraisal

July 2024

Project Reference: PR-0209-24

Rutland Street

Heywood

OL10 4JJ

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Executive Summary

As part of a proposed planning application at Rutland Street, Tyrer Ecological Consultants carried out a Preliminary Ecological Appraisal (PEA) in June 2024. The PEA was commissioned by Mr Lawrence Owen; proposals entail the development of 3No. houses and 1No. Bungalow to an area located in Heywood. Extensive findings, conclusions and recommendations are presented throughout the report; however, the reader should be aware of the following further surveys and key recommendations.

Key recommendations:

Biodiversity Net Gain

Based on the information gathered during the diurnal assessment, Rutland Street is **not exempt** from the Biodiversity Gain Planning Condition.

Review of Google Earth historical map viewer revealed that habitat removal took place within the site in the year 2019; this removal is before the relevant date of 30th January 2020 which means the baseline value of the site has been taken from its current condition.

The site is host to the following biodiversity value:

- *Habitat: 0.35*
- *Hedgerow: 0.01*
- *Watercourse: 0.00*

Birds

Regarding breeding bird species, there are limited but viable nesting platforms within the site boundary, including the trees and bramble scrub, which could provide suitable nesting locations within the nesting bird season of March – August, inclusive.

Given that all birds are protected when at the nest, it is recommended that any vegetation clearance on site are carried out outside of the breeding bird season (March – August inclusive). For any works within the breeding bird season, a pre-commencement check of any impacted habitats able to support nesting birds (inclusive of the hedgerow, trees, scrub and pond) will need to be carried out by a suitably qualified ecologist / ornithologist in order to determine whether or not active nests are present. This will need to be carried out within 48 hours or less prior to works commencing.

Terrestrial fauna

The site provides suitable habitat for occasional use by small terrestrial mammals such as hedgehogs, as well as common, robust amphibians; as such these species have the potential to be impacted upon by the works.

See Section 7.0 for further information on Reasonable Avoidance Measures (RAMs) recommended to be implemented during development works.

Biodiversity enhancement:

As a means of improving biodiversity value / enhancing the site any new landscaping should aim to incorporate majority use of native species as opposed to non-native exotic species which offer significantly fewer benefits to our native fauna. Suitable species for native landscaping have been provided in **Appendix III**. Examples of suitable measures in respect of faunal species are also provided in **Appendix III**.

Table of Contents

- 1.0** Introduction & Scope
- 2.0** Legislation & Policy
- 3.0** Methodology
- 4.0** Limitations
- 5.0** Desk Study Results
- 6.0** Field Study Results
 - 6.1** Habitat Survey
 - 6.2** Vegetation
 - 6.3** Bats
 - 6.4** Breeding Birds
 - 6.5** Other Terrestrial Mammals
 - 6.6** Herpetofauna
 - 6.7** Invertebrates
- 7.0** Conclusions & Recommendations
- 8.0** Bibliography

Appendix I: Site Photographs

Appendix II: Condition Assessment Sheets

Appendix III: Botanical Species List

Appendix IV: Biodiversity Enhancement: General Recommendations

Appendix V: UK Habitats Map

External Appendix: Rutland Street Statutory Biodiversity Metric Calculator

- Identify, measure and map habitats using UK Habitat Classification – Habitat Definitions Version 2.0 (2023) habitats,
- 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 measures likely to be required in line with the mitigation hierarchy (i.e. impact avoidance > minimisation > mitigation > compensation),
- Identify additional survey requirements,
- Identify enhancement opportunities for biodiversity in line with national and local planning policy.
- Set out any requirements for post-development monitoring, management, or other commitments, and how they can be secured, where required.

1.5 As a functioning component of this specific ecological appraisal:

- Habitats on site were identified, measured and mapped using the UK Habitat Classification – Habitat Definitions Version 2.0 (2023),
- Baseline value was assessed using the Biodiversity Net Gain Statutory Metric with the area baseline units highlighted,
- Any structures and trees, where present, were subject to preliminary roost assessment (PRA) for Bats and scored against the bat roost suitability parameters defined in the Bat Conservation Trust – Bat Surveys for Professional Ecologists: Good Practice Guidelines, 4th ed. (2023).

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

1.7 The Applicant should be aware then 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 / communities / 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 protected species were subsequently found either during appraisal or 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 (LPAs), 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 negating 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 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:

- Biodiversity Net Gain: Good practice principles for development (2019),
- BS 42020:2013 Biodiversity – Code of Practice for Planning and Development (2013),
- Conservation of Habitats and Species Regulations (2017) (as amended),
- Countryside Rights of Way (CRoW) Act (2000),
- Natural Environment and Rural Communities (NERC) Act (2006),
- National Planning Policy Framework (2023) (as last revised),
- Protection of Badgers Act (1992),
- The Hedgerow Regulations (1997),
- The Invasive Alien Species (Enforcement and Permitting) Order 2019
- Town and Country Planning Act (1990),
- Wild Mammals Protection Act (1996),
- Wildlife and Countryside Act (1981) (as amended).

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, 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)	<u>Illegal to:</u> Wilfully kill, injure or take a badger (or attempt to do so), cruelly ill-eradicate 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 (2017) (as amended) 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.

Species Group / Species	Relevant Legislation	Level of Protection
Birds	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 (2017) (as amended) 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) The Invasive Alien Species (Enforcement and Permitting) Order 2019	Species listed within Schedule 9/Schedule 2 as invasive, including Japanese knotweed (<i>Reynoutria japonica</i>) and Himalayan balsam (<i>Impatiens glandulifera</i>), for example, carry notoriety regarding development. The Acts make 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 (2017) (as amended) – SL/SS Wildlife and Countryside Act (1981) (as amended) 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).

Relevant Policy

- 2.4 Guidance for Local Authorities: Extract from Office of the Deputy Prime Minister – Circular 06/2005:

“It is essential that the presence or otherwise of protected species, and the extent that they may be affected by the proposed development, is established before planning permission is granted, otherwise all relevant material considerations may not have been addressed in making the decision”.

- 2.5 Paragraph 186 of the National Policy Planning Framework (as revised in December 2023) states:

“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.”

- 2.6 This national focus on protecting habitats and protected species is echoed in Policy G7 of the Rochdale Local Plan 2016 which states¹:

“We will ensure that sites and features of biodiversity and geodiversity importance are given full and appropriate recognition and protection. Opportunities for enhancing biodiversity and geodiversity, creating new sites and features of interest and improving opportunities for public enjoyment will be supported. No development should result in a net loss of biodiversity or geodiversity interest in the borough and overall development in the borough should result in a net gain”.

Priority Habitats & Species

- 2.7 In the United Kingdom, legal protection and otherwise legislative recognition is afforded to particular habitats and species based on a variety of ecological factors. These are typically referred to as priority habitats and species, and can be identified under a variety of legislation and local policy, notably the UK Biodiversity Action Plan (UKBAP), Section 41 (s.41) of the NERC Act as well as under Local Biodiversity Action Plans (LBAPS).

Biodiversity Net Gain

- 2.8 The National Planning Policy Framework (NPPF), revised in December 2023, legislates net gain in biodiversity through paragraphs 180(d), 185(b) and 186(d). An effort should be made, therefore, through the development design to provide ecological enhancement in order to deliver an overall increase in biodiversity, and opportunities to incorporate biodiversity in and around developments should be encouraged.
- 2.9 The Environment Act 2021 ('The Act') came into force in November 2021. Aspects of the Act relating to BNG came into force on the 12th February 2024, whereby BNG is mandatory under Schedule 7A of the Town and Country Planning Act 1990 (as inserted by Schedule 14 of the Environment Act 2021).

¹ See: <https://www.rochdale.gov.uk/downloads/download/266/core-strategy>

2.10 The Act is supported by secondary legislation, consisting of six statutory instruments laid within law, of which the relevant legislation includes:

- The Environment Act 2021 (Commencement No. 8 and Transitional Provisions) Regulations 2024²
- The Biodiversity Gain Site Register Regulations 2024³
- The Biodiversity Gain Site Register (Financial Penalties and Fees) Regulations 2024⁴
- The Biodiversity Gain Requirements (Exemptions) Regulations 2024⁵
- The Biodiversity Gain Requirements (Irreplaceable Habitat) Regulations 2024⁶
- The Biodiversity Gain (Town and Country Planning) (Modifications and Amendments) (England) Regulations 2024⁷

² <https://www.legislation.gov.uk/ukSI/2024/44/contents/made>

³ <https://www.legislation.gov.uk/ukSI/2024/45/contents/made>

⁴ <https://www.legislation.gov.uk/ukSI/2024/45/contents/made>

⁵ <https://www.legislation.gov.uk/ukSI/2024/47/contents/made>

⁶ <https://www.legislation.gov.uk/ukSI/2024/48/contents/made>

⁷ <https://www.legislation.gov.uk/ukSI/2024/50/contents/made>

3.0 Methodology

- 3.1 As part of the ecological appraisal report, a desk-top and field-based study is conducted. Methods for both components of the appraisal are given below.

Desktop Study

- 3.2 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 for nature conservation within 2.0 kilometres of the site boundary. To do so, the Multi Agency Geographic Information for the Countryside (MAGiC – provided by DEFRA) was accessed to gather such information; this particular interactive mapping service was also used to locate any locally granted European Protected Species Mitigation Licenses (EPSML) and species records to further inform conclusions concerning such species in the context of the study site and its proposed development.
- 3.3 Historic satellite imagery was reviewed using sources such as Google Earth (© 2023/24) 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.
- 3.4 In addition, the LPA 'Search planning applications' online 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.
- 3.5 A commercial data request to the Local Environment Records Centre serving the area, in this case Greater Manchester Ecology Unit (GMEU) has not been sourced at this time, with the combination of online EPSML data, extensive company records and the daytime survey data available to the ecologist considered to contain enough information in relation to the protected species likely to be present on site. **If, however, 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.**

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, 2nd Edition (CIEEM, 2017) also 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.”

Field Survey

- 3.6 A daytime preliminary ecological appraisal (PEA) was conducted on the 17th June 2024 in clear conditions (10°C), average wind 2/12 (Beaufort scale), average 30% cloud cover, by the following surveyor (see **Table 3.1**).

Table 3.1 – Site surveyor credentials

Name	Description of most relevant credentials
Mr. D. Burrows Qualifying CIEEM	• Project Ecologist with 5 years of training and experience • Relevant Degree: BSc (hons) Wildlife Conservation; MSc Conservation and Biodiversity • Licensed for Great Crested Newt: CL08 (Great Crested Newt Survey Level 1) – 2022-10604-CL08-GCN. • Accredited agent on the (Class 2) Natural England bat license of Mrs. K. Wilding (CLS-14227). • Botanical FISC Level 3 qualified • Trained in UK Habs / Statutory Metric condition assessments

Floristic assessment

- 3.7 The survey followed the UK Habitat Classification Version 2.0 (UKHabs, 2023) methodology, an updated and improved version of the UK Habitat Classification Version 1.1, which was introduced as the successor to the Joint Nature Conservation Committee (JNCC) Phase 1 Habitat Methodology standards (JNCC, 2010) in conjunction with the nationwide roll out of Biodiversity Net-gain. Survey techniques were also carried out with reference to the Chartered Institute of Ecology and Environmental Management (CIEEM) Technical Guidance Series “Guidelines for Preliminary Ecological Appraisal, 2nd Edition” (CIEEM, 2017).
- 3.8 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 Regulations (2017) (as amended). Species nomenclature follows Stace, C. (2019) – definitive English names.
- 3.9 In addition 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 value on a geographical scale which is adopted on a site-to-site basis (*International – National – Regional – County/Vice-County – Local*). For botanical species list compiled in full, see **Appendix II**.

- 3.10 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) and Schedule 2 of The Invasive Alien Species (Enforcement and Permitting) Order 2019 (IASO).

The Statutory Biodiversity Metric – Baseline Assessment

- 3.11 Assessment of baseline Area Habitat / Hedgerow / Watercourse units have been carried out and assessed separately in accordance with the guidance, principles, and rules – where present on site.
- 3.12 Measurement of habitats was carried out using a combination of desktop software – QGIS, Google Earth and MAGiC Maps 2023/24, whilst physical habitat measurements were also taken in the field during ground truthing, where necessary.

Faunal assessment

- 3.13 During the site walkover, direct presence and / or evidence of priority fauna encountered was documented, whilst in tandem the area was assessed for the potential to support the priority species discussed in **Section 6.0**. The walkover also aimed to identify any ephemeral pools or unmapped waterbodies.

Bats

- 3.14 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, 4th ed. (2023) (see **Figures 3.1 – 3.3**).
- 3.15 The site was assessed for bats; a daytime bat walkover (DBW) was undertaken to observe, assess and record any habitats or features suitable for usage by bats, either as commuting, foraging or roosting provision. Wider connectivity to other habitats was also considered during the DBW.
- 3.16 Buildings and other permanent / semi-permanent structures (where present) were subject to a preliminary roost assessment (PRA), to identify potential areas which may be of value to bats and to determine evidence of use. This typically involves a systematic search of the external aspects of any structure(s), comprising an investigation of features known to be used by bats (for example roofing material, soffits, fascia, lead flashing hanging tiles) using a high-powered torch and close-focus binoculars, where necessary. An internal assessment of the structure(s) was also carried out, with the aid of a high-powered torch and endoscope, where necessary, to identify any evidence of bat use of a structure. Field signs of bats typically comprise bat droppings, urine splashing, fur-oil staining, incidental animal presence, dead specimens and / or the presence of prey items, such as moth wings.
- 3.17 Trees (where present) would be subject to a ground level tree assessment (GLTA) using equipment such as close-focus binoculars and a high powered-torch. Potential roost features (PRFs) 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 climbing species with stem diameters in excess of 50mm or pre-existing bat / bird boxes. These PRFs can then be determined as PRF-I or PRF-M, dependent on their suitability for individual / low numbers of bats or their capability to host multiple bats.

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.

Potential suitability	Description	
	Roosting habitats in structures	Potential flight-paths and foraging habitats
None	No habitat features on site likely to be used by any roosting bats at any time of the year (i.e. a complete absence of crevices/suitable shelter at all ground/underground levels).	No habitat features on site likely to be used by any commuting or foraging bats at any time of the year (i.e. no habitats that provide continuous lines of shade/protection for flight-lines, or generate/shelter insect populations available to foraging bats).
Negligible ^a	No obvious habitat features on site likely to be used by roosting bats; however, a small element of uncertainty remains as bats can use small and apparently unsuitable features on occasion.	No obvious habitat features on site likely to be used as flight-paths or by foraging bats; however, a small element of uncertainty remains in order to account for non-standard bat behaviour.
Low	A structure with one or more potential roost sites that could be used by individual bats opportunistically at any time of the year. However, these potential roost sites do not provide enough space, shelter, protection, appropriate conditions ^b 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 and not a classic cool/stable hibernation site, but could be used by individual hibernating bats ^c).	Habitat that could be used by small numbers of bats as flight-paths 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 with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions ^b and surrounding habitat but unlikely to support a roost of high conservation status (with respect to roost type only, such as maternity and hibernation – the categorisation described in this table is 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 flight-paths 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 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 ^b and surrounding habitat. These structures have the potential to support high conservation status roosts, e.g. maternity or classic cool/stable hibernation site.	Continuous, high-quality habitat that is well connected to the wider landscape that is likely to be used regularly by bats for flight-paths 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 Negligible is defined as 'so small or unimportant as to be not worth considering, insignificant'. This category may be used where there are places that a bat could roost or forage (due to one attribute) but it is unlikely that they actually would (due to another attribute). b For example, in terms of temperature, humidity, height above ground level, light levels or levels of disturbance. c 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 <i>et al.</i>, 2016 and Jansen <i>et al.</i>, 2022). Common pipistrelle swarming has been observed in the UK (Bell, 2022 and Tomlinson, 2020) and winter hibernation of numbers of this species has been detected at Seaton Delaval Hall in Northumberland (National Trust, 2018). 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 prominent buildings in the landscape, urban or otherwise.		

Figure 3.1 – BCT guidelines extract

Table 4.2. Guidelines for assessing the suitability of trees on proposed development sites for bats, to be applied using professional judgement.	
Suitability	Description
NONE	Either no PRFs in the tree or highly unlikely to be any
FAR	Further assessment required to establish if PRFs are present in the tree
PRF	A tree with at least one PRF present

Figure 3.2 – BCT extract on tree roost suitability criteria

Table 6.2. Guidelines for categorising the potential suitability of PRFs on a proposed development site for bats, to be applied using professional judgement.	
Suitability	Description
PRF-I	PRF is only suitable for individual bats or very small numbers of bats either due to size or lack of suitable surrounding habitats.
PRF-M	PRF is suitable for multiple bats and may therefore be used by a maternity colony.

Figure 3.3 – BCT extract on tree roost categorisation criteria

3.18 Factors considered during the preliminary roost assessment include:

- Practical experience of the surveyor,
- Knowledge of bat species relevant to the site location and geographical range,
- Nature of the immediate / surrounding habitat in relation to foraging opportunities,
- Presence / absence of roost potential,
- Value and types of roost potential, if present (i.e. – maternity, hibernation, transitional).

Breeding birds

3.19 The site was inspected for evidence of nesting 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 – this can take the form of searching structures, woody vegetation, semi-aquatic vegetation such as reeds and / or ground flora. Elevations of any buildings or structures on site were inspected for evidence of birds that show a high dependency upon built structures, many of which are in a state of decline. These might include the following species for example (list non-extensive):

- House martin (*Delichon urbica*): Birds of Conservation Concern (BoCC) red status,
- House sparrow (*Passer domesticus*): BoCC red status,
- Starling (*Sturnus vulgaris*): BoCC red status,
- Swift (*Apus apus*): BoCC red status.

3.20 Additional to the site's capacity to support generally common species for breeding, the area was also subject to an assessment for wider capacity to support species with extra protection under Schedule 1 of the Wildlife & Countryside Act (1981) (as amended) and other priority species.

Terrestrial mammals

- 3.21 The walkover included an assessment for the presence / suitability of badger (*Meles meles*), which includes signs of activity such as prints, hairs, digging, setts, 'runs' leading to and from a sett and the existence of latrines or 'snuffle' holes where badgers have foraged in the ground.
- 3.22 The site was also assessed for the presence / suitability of European hedgehog (*Erinaceus europaeus*) and other priority mammals.

Herpetofauna

- 3.23 During desktop assessment, a 250 metres radial 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 newt (GCN) (*Triturus cristatus*) within feasible connectivity to the site. 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.*

- 3.24 Following current best practice considering the partial 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. Where a development is anticipated to affect GCN the search can be extended up to 500m or more.

Wider amphibians

- 3.25 The site and surrounding habitats were also assessed relative to their potential to offer suitability for wider, generalist amphibians, in addition to great crested newt, for example common toad (*Bufo bufo*) and common frog (*Rana temporaria*).
- 3.26 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, leaf litter, 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 lizard (*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 grasslands, gardens and derelict road.
- 3.27 In assessment of a site for reptiles several important habitat characteristics are considered, outlined in **Table 3.2** below, as derived from the Reptile Habitat Management Handbook (Edgar, 2010).

Table 3.2 – 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

3.28 The 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.

Quality Assurance (QA)

3.29 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.

3.30 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 the surveyor Mr. D. Burrows.

4.0 Limitations

- 4.1 This report does not contain a comprehensive list entailing the totality of botanical taxa on site. Species listed within **Appendix II** are recorded from a combination of the seasonal timing that the survey took place and botanical identification skills of the surveyor. Many plant species are only evident at certain times of the year; consequently, it is possible that some plant species may have gone undetected.
- 4.2 The optimal time of the year to carry out a preliminary ecological appraisal / UK Habitats survey is April to October; therefore, the survey was undertaken within the optimal period for habitat identification, with timing therefore not considered a constraint.
- 4.3 The survey similarly occurred within the optimal time to undertake roost assessments in relation to bats (May-August) and to assess suitability for breeding birds (March-August); however, it is acknowledged that PRFs for bats can sometimes be obscured by dense foliage during summer.
- 4.4 An area of grassland was inaccessible to the surveyor at the time of the survey due to it appearing to lie within residential boundaries; the surveyor was able to inspect the grassland from over the fence, however, was not able to carry in-depth plant identification. Due to the urban nature of the site, it is considered likely that the species present within the accessible areas of the site are also present within the inaccessible areas of the site, therefore the reasonable assumption that both grasslands share similar species composition has been made.
- 4.5 Small storage buildings are present within the boundary for which the surveyor was unable to gain internal access; however, due to the nature of the buildings and the experience of the surveyor, it is possible to assumptions as to the internal conditions of the structures based on their external conditions.
- 4.6 In considering possible survey constraints, no significant limitations were experienced that might adversely influence the results, conclusions, and recommendations of this report.

5.0 Desk Study Results

- 5.1 The site is located directly adjacent to Rutland Street, within Heywood town. The site is situated to the north of the A58 which connects Heywood east to west, with the site being located within a mosaic of urban residential and commercial properties.



Figure 5.1 – Location of the site (red boundary) within the surrounding landscape © Google Earth Pro 2024

- 5.2 The immediate environment (500 metre radius) is distinctly urban, located within Heywood town centre, with a number of built environments including a mosaic of road networks that isolate the site on the northern, eastern and southern aspects. To the west of the site lies an area of semi-natural public greenspace, connected to Queens Park to the north, which comprises various features including treelines and grassland. A more established park (Queens Park) is located to the north, beyond Starkey Street; urban development is more prevalent in all other directions.

Relevant planning history

- 5.3 A search of the Rochdale Council Planning Portal, using the search term 'OL10 4JJ', returned no relevant or recent planning applications for the site within up to 5 years; furthermore, no applicable planning applications were identified within the zone of influence of the site within a similar period.

Designated sites

- 5.4 There are no statutory designated sites for nature conservation within 2.0 kilometres of the site. The site falls within the Impact Risk Zone (IRZ) for Rochdale Canal SSSI at a distance of 2.5 kilometres to the east; however, upon review of the IRZ criteria, the application does not constitute the requirement for Natural England to be consulted regarding a Habitats Regulations Assessment.

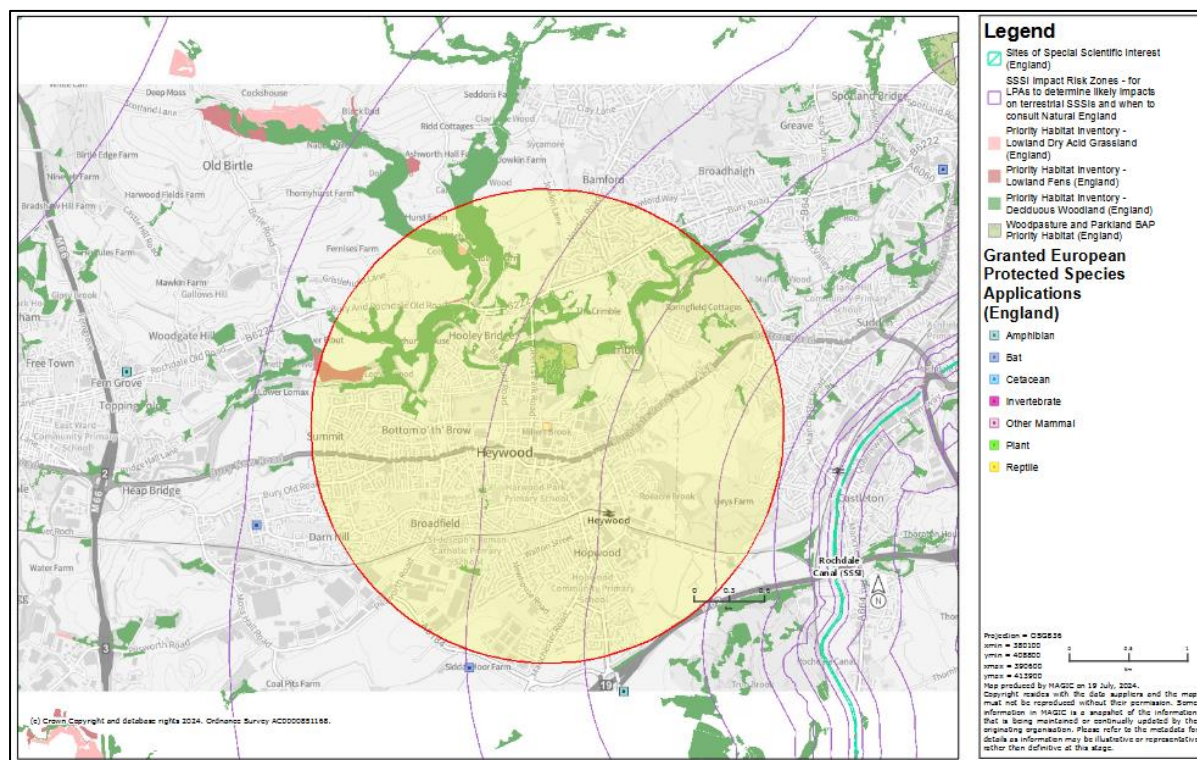


Figure 5.2 – Protected species, priority habitat and designated site data for the area within 2.0 kilometres of the application site © MAGiC Maps 2024

- 5.5 Collectively, there is poor terrestrial connectivity within the immediate landscape due to the urban nature of the region, resulting in the site being partially isolated by road networks and built infrastructure; the adjacent semi-natural habitat to the west of the site itself is isolated from the wider ecological network due to the presence of road networks limiting accessibility for ground moving species. To the north, beyond Starkey Street, lies more complex semi-natural habitat within the publicly accessible greenspace of Queens Park which offers foraging and commuting opportunities due to the presence of deciduous woodland (circa. 0.25km northeast). Therefore, it is assessed that connectivity for terrestrial species is restricted due to the presence of various barrier to dispersal, whilst avian species may be able to utilise flight corridors due to the presence of notable treelines.

Biodiversity Net Gain

- 5.6 The Rochdale Council 'Heywood proposed environment sites and designations' map which displays spatial data for policies and land use priorities in accordance with the Local Plan for Rochdale (Heywood) was accessed and used to help assess the strategic significance of habitats present within the site. The site lies adjacent to an area designated as 'Local Urban Open Space', but does not fall within the boundary; therefore, the site is not located within any layers specially protected by any policies on the local plan.

Habitats

- 5.7 Four UK priority habitats, as identified with the Priority Habitat Inventory layer on MAGiC Maps, occur within 2.0km of the site; a list of which is presented within **Table 5.1**:

Table 5.1 – List of Priority Habitats identified within 2.0km of the site.

Priority Habitats
Deciduous woodland
Wood pasture and Parkland

Priority Habitats
Lowland fen
Lowland acid grassland

Vegetation

- 5.8 The site is positioned within a 'moderate' zone of the 'summarised botanical value map 2022⁸' on MAGiC Maps 2024, indicating that the area is host to a moderate amount of Rare, Scarce and Threatened (RST) botanical species and/or has a moderate proportion of species indicative of priority habitats.

Bats

- 5.9 An online search of MAGiC maps revealed that no European Protected Species Mitigation Licenses (EPSMLs) in relation to bats have been granted within a 2.0km radius of the site.
- 5.10 The immediate habitat is considered to offer moderate value habitat to bats adapted to urbanisation in relation to commuting and foraging, owing to the presence of the local woodlands, tree lines, and local waterways.

Birds

- 5.11 The site does not fall within any breeding bird zones as highlighted on the MAGiC maps 'Arable assemblage farmlands birds (England)' & 'Grassland Assemblage Farmland Birds (England)' layers. The surrounding urban landscape is unlikely to support farmland species, however, it may support urbanised birds such as house martins (*Delichon urbica*) and house sparrows (*Passer domesticus*).

Terrestrial mammals

- 5.12 The site is situated within an urban environment, with connectivity to semi-natural habitat restricted to opportunities from the neighbouring amenity greenspace. The site offers limited value in relation to badgers owing to its confined and urban nature, though species such as European hedgehogs (*Erinaceus europaeus*) are likely to be present owing to the presence of various habitat parcels within the site and the species adaptation to urbanisation.

Herpetofauna

- 5.13 No EPSMLs pertaining to GCN occur within the 2.0km radius of the site. In addition, no 'GCN Class Survey Licence Returns' or 'GCN Pond Surveys 2017 – 2019' are present within the search buffer.
- 5.14 Based on the desk study, using Google Earth Pro 2023/24, MAGiC Maps 2023/24 as well as Ordnance Survey (OS) map data, no waterbodies were identified within the site boundary or within feasible connectivity to the site up to 250m.
- 5.15 The majority of the surrounding landscape is considerably urbanised, with pockets of viable habitat fragmented by urbanisation inclusive of road networks and buildings, which likely reduce the sites overall suitability to reptiles. However, Queens Park to the north of the site may provide viable opportunities to reptiles which could sustain populations (if present).

⁸ Further information available <https://www.data.gov.uk/dataset/86b755f2-b28f-48c9-b5b6-648d6bab6c40/summarised-botanical-value-map>

Invertebrates

- 5.16 The largely urbanised habitats surrounding the site are considered highly unlikely to support a diverse or specially protected assemblage of invertebrates.

6.0 Field Survey Results

6.1 Habitat survey

6.1.1 See **Table 6.1.1** (below) for baseline information and habitat descriptions; refer to **Appendix I** for any supporting imagery; additional scientific names are given in **Appendix III**. Refer to **Appendix V – UK Habitats Map** for the location of described habitats. Refer to **Appendix II** for full condition assessment criteria on which habitats were scored; **External Appendix** for the statutory biodiversity metric calculator.

Table 6.1.1 – UK Habitat types within the survey area

Area habitat	Sec. Codes	Description
g3c Other neutral grassland 'Grassland 1'	10 Scattered scrub 16 Tall forbs 82 Vacant or derelict land	The majority of the site is comprised of unmanaged tussocky neutral grassland with a number of ruderal/ ephemeral species due to the disturbed nature of the site and likely enrichment from dogs. Typical species that were most abundant included false oat-grass (<i>Arrhenatherum elatius</i>), cleavers (<i>Galium saxatile</i>), horsetail (<i>Equisetum sp.</i>), rosebay willowherb (<i>Chamaenerion angustifolium</i>), garden lady's mantle (<i>Alchemilla mollis</i>), rough meadow-grass (<i>Poa trivialis</i>), stinging nettle (<i>Urtica dioica</i>), Yorkshire-fog (<i>Holcus lanatus</i>) and herb-Robert (<i>Geranium robertianum</i>).
	128 Tall or tussocky sward 519 Abandoned	Condition: Poor Habitat Area: 0.048ha Strategic Significance: Area / compensation not in local strategy / no local strategy Area Unit Value: 0.19
g3c Other neutral grassland 'Grassland 2'	106 Mown	A smaller grassland, located behind fence panelling, was found within the boundary of the site and appeared to be managed for amenity use. Species composition is expected to be the same as 'Grassland 1', however, less ruderal species were present. Obvious grass species included false oat grass, Yorkshire-fog and cock's-foot (<i>Dactylis glomerata</i>).
		Condition: Poor Habitat Area: 0.009ha Strategic Significance: Area / compensation not in local strategy / no local strategy Area Unit Value: 0.04
h3d Bramble scrub	-	Two distinct patches of bramble (<i>Rubus fruticosus agg.</i>) scrub exist within the boundary.
		Condition: N/A Habitat Area: 0.014ha

		Strategic Significance: Area / compensation not in local strategy / no local strategy Area Unit Value: 0.06
Individual trees (Small)	-	Two individual trees exist within the site boundary, an ash (<i>Fraxinus excelsior</i>) (T1) and a juniper tree (<i>Juniperus communis</i>) (T2). Both trees are located on boundary features with canopies over vegetation. Both trees appeared to be in similar condition. Condition: Moderate Habitat Area: 0.0081ha Strategic Significance: Area / compensation not in local strategy / no local strategy Area Unit Value: 0.06
u1b6 Other developed land	-	Areas of developed hardstanding are present within the site, used for vehicle and pedestrian access. Condition: N/A Habitat Area: 0.028ha Strategic Significance: Area / compensation not in local strategy / no local strategy Area Unit Value: 0.00
u1b5 Buildings	-	Five sheds exist within the boundary; refer to section 6.3 for more detail. Condition: N/A Habitat Area: 0.006ha Strategic Significance: Area / compensation not in local strategy / no local strategy Area Unit Value: 0.00
Linear Habitats	Sec. Codes	Description
h2b Non-native and ornamental hedgerow	-	A small length of privet (<i>Ligustrum ovalifolium</i>) hedgerow exists to the north of the site, acting as a boundary feature. Condition: Poor Habitat Length: 9.5 metres (0.009km) Strategic Significance: Area / compensation not in local strategy / no local strategy Area Unit Value: 0.01
u1e	-	The entire perimeter of the site is secured by a form of metal fencing.

Built linear feature (Fence)		Condition: N/A Habitat Length: 0.194km Strategic Significance: Area / compensation not in local strategy / no local strategy Area Unit Value: 0.00
Target Notes		Description
TN1 – Japanese knotweed		Stand of Japanese Knotweed

6.1.2 No priority habitats were identified on the site during the daytime assessment.

6.2 Vegetation

Notable species

6.2.1 No species of conservation importance were located anywhere within the site during the appraisal.

Invasive non-native species (INNS)

6.2.2 A single INNS, listed as such under Schedule 9 (Part II) of the Wildlife & Countryside Act (1981) were identified on the site in the form of Japanese knotweed; the located of this species is highlighted on **Appendix IV**.

6.3 Bats

6.3.1 The only built structures present within the boundary of the site are single storey sheds of differing material constructions, however, all of similar size and features; a total of five sheds are found within the boundary, two adjacent to Rutland Street (Plot A; **Figure 6.3.1**) and three behind fence panelling seemingly accessible by residential premises abutting the site (Plot B). For the purposes of this report all of the shed buildings have been aggregated into a single assessment. The sheds are built of a mixture of wooden and corrugated panels, with pitched roofs and with windows present on two within Plot B with the remaining sheds absent of windows. The average dimensions of the structures are 4.0 x 2.5 x 2.0 metres (Length x Width x Height); the aesthetic conditions of the sheds were all consistently fair with areas of deterioration to the exterior, but nothing apparently structural.

6.3.2 No access was achieved to any of the sheds; however, a general assumption can be made (based on the surveyor's experience) that the sheds have no suitable internal void, with climatic conditions likely to be similar to those outside due to a lack of insulating materials; furthermore, it is likely the space is used for storage and would therefore restrict free flight. Based on the available evidence the small, uninsulated sheds are deemed unsuitable for the breeding requirements of loft dwelling species such as brown long-eared bats.

6.3.3 It was assessed that bitumen 1F underlining was likely not present within any of the sheds due to their simple construction; where present, underfelt or other such roof lining typically improves a buildings value to bats, notably for crevice-dwelling bats or the *Pipistrellus* genus, whereby the bats roost between the overlaps of the bitumen and other material. No evidence of bats was identified on the day of the survey; however, no internal access to undertake a meticulous search was provided.

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 do not need the same conditions as a maternity colony.

- 6.3.4 Externally, the sheds had very limited features that would be suitable for bats; no features were obvious that would provide crevice dwelling opportunities, with any gaps appearing to be mostly too wide to provide shelter, and non-extensive. Furthermore, the materials used on the corrugated structures likely reduce the applicable use by bats due to unsuitable thermal conditions and reduced surface suitability. All other external features were found to be tight fitting with features such as roof eaves being well sealed.
- 6.3.5 Consequently, despite stated access limitations, based upon the general condition of the sheds with an apparent absence of identified PRFs in-combination with the distinctly urban setting, the sheds within the Rutland Street development are duly categorised as pertaining to a bat roost suitability of '**None**' in accordance with Bat Conservation Trust – Bat Surveys for Professional Ecologists: Good Practice Guidelines, 4th ed. (2023).



Figure 6.3.1 – Plots in relation to location of sheds

- 6.3.6 There are two trees within the site boundary, both of which were subject to a GLTA. No features were identified within any of the trees that would suggest bats could roost within them. All of the trees within the site boundary were assessed as pertaining to a bat roost suitability of '**None**' in accordance with Bat Conservation Trust – Bat Surveys for Professional Ecologists: Good Practice Guidelines, 4th ed (2023).
- 6.3.7 From a habitat suitability assessment, the site holds some value for foraging and commuting habitat, in relation to the semi mature trees providing landmarks for navigation and foci around which invertebrate prey species gather; furthermore, the site may provide valuable foraging hotspots within an urban landscape which may increase the sites inherent value.

6.4 Birds

- 6.4.1 In relation to WCA Schedule 1 specially protected bird species, such as black redstart (*Phoenicurus ochruros*), no evidence was found to suggest any form of site use or historic nesting. Similarly, no evidence of any other specially protected bird species was noted.
- 6.4.2 The site consists of mainly unmanaged neutral grassland with ruderal growth and pockets of bramble which provides minimal opportunities for nesting bird species. No nests, nesting behaviour or evidence of the presence of nesting birds was identified at the time of the survey, however the pockets of bramble scrub in combination with adjacent tree lines may provide nesting habitat for small passerine species.

6.5 Other terrestrial mammals

Badger & hedgehog

- 6.5.1 No field signs of badger, such as latrines, pathways, hairs, footprints, or feeding signs, for example snuffle holes and scratched trees / logs, were located within the application site boundary. The site habitats afford no viable opportunities for this species, with connectivity to the wider ecological network restricted by the urban landscape. Therefore, this species can be discounted as a material consideration with respect to this assessment.
- 6.5.2 Whilst no direct evidence of hedgehog was identified, the site habitats provide suitable refuge with scrub and grassland providing suitably protected areas for rest, and foraging. Their presence within the site is therefore considered likely.

6.6 Herpetofauna

Great crested newt (GCN)

- 6.6.1 Important elements to consider when assessing likely impacts against GCN includes:
- The scale, nature and magnitude of proposals,
 - Site proximity to a potential breeding pond and to any additional ponds,
 - Habitat linkage / barriers between potential breeding ponds and the site,
 - Nature and extent of available terrestrial habitat around the pond,
 - Area of site habitat loss,
 - Nature of habitat to be lost and potential value to GCN,
 - Most up to date Government guidance considering EPS.
- 6.6.2 As derived from the desktop assessment:
- No granted EPSMLs for GCN within 2.0 kilometres,
 - No 'Present' Class Survey Licence Returns within the search range,
 - No 'Present' ponds survey within the considered search range (Great Crested Newt Pond Surveys 2017 - 2019),
 - No waterbodies within 250 metres of the site.
- 6.6.3 In respect of great crested newt (GCN), no ponds exist within the red line boundary of the site, or within a 250-meter radial buffer surrounding the application site based on desktop study.
- 6.6.4 In a terrestrial contextual assessment, the general condition of the site provides limited opportunity for this species due to the presence of small pockets of bramble scrub and neutral grassland. However, when considering the connectivity of this site to the wider ecological network, it is deemed unlikely that GCN would occupy the on-site habitats owing to the presence of significant barriers to dispersal in the form of extensive surrounding road networks and residential properties.

Wider amphibians

- 6.6.5 Given the lack of standing waterbodies within 250m as well as the heavily urbanised surroundings, the likelihood of even more robust amphibians such as common frog (*Rana temporaria*) being present is also considered unlikely.

Reptiles

- 6.6.6 The site generally lacks typical features favoured by reptiles, such as basking areas and ecotones between habitats, with no viable connectivity between the site and surrounding ecological networks. It is deemed unlikely that reptiles exist within the boundary of the site.

6.7 Invertebrates

- 6.7.1 The site is not considered locally notable for invertebrates, with habitats commonplace throughout the local environment.

7.0 Conclusions & Recommendations

Designated sites

- 7.1 There are no statutory designated sites for nature conservation within 2.0 kilometres of the site. The site falls within the Impact Risk Zone (IRZ) for Rochdale Canal SSSI at a distance of 2.5 kilometres to the east; however, upon review of the IRZ criteria, the application does not constitute the requirement for Natural England to be consulted regarding a Habitats Regulations Assessment.

Habitats

- 7.2 No habitats of national or local priority status were located within the site boundary during the diurnal appraisal to warrant any specific intervention measures.
- 7.3 Construction works pose a risk of impact to the site-adjacent public greenspace which includes mature trees to the west of the site. It is therefore recommended that protective measures are enacted at the site prior to any works to ensure that no negative impacts will occur.

Vegetation

- 7.4 No priority vegetative species were identified on the site by the surveyor during the diurnal appraisal to warrant any specific intervention measures.
- 7.5 A single INNS, listed as such under Schedule 9 (Part II) of the Wildlife & Countryside Act (1981) were identified on the site in the form of Japanese Knotweed.
- 7.6 Whilst not illegal to host any species designated as INNS within a site, it is an offence, under current legislature, to knowingly permit the spread of INNS beyond the confines of your site, either via allowing it to grow unchecked or through the irresponsible removal and dumping of waste/ plant matter.
- 7.7 To prevent the spread of these species into the surrounding landscape, it is recommended that these species are eradicated from the site prior to development. A Method Statement should be collated by a suitably qualified invasive species specialist outlining how these species will be removed pre-works, including details regarding site biosecurity protocols.
- 7.8 Two semi-mature trees are to be lost to facilitate the development. As a consequence of the loss, it is recommended that any tree loss follows advice from a suitably qualified arboricultural consultant, and, in an ecological sense, is suitably compensated for at a 2:1 ration on site or adjacent to site. Any loss can be accounted for within the BNG strategy.
- 7.9 Any landscaping or planting carried out during the works should consider local soil types and habitats, and as such should prioritise native species which will better tolerate the soil type present on site and provision for faunal species present in the immediacy.

Bats

- 7.10 Based upon the assessment of the five sheds within the site boundary, in combination with the DBW, covered through sections 5.0 – 6.0 of the report and supported by **Appendix I**, the sheds are duly categorised as holding a potential value of '**None**', in accordance with Bat Conservation Trust – Bat Surveys for professional Ecologists: Good Practice Guidelines, 4th ed. (2023). See **Figure 7.1** overleaf for an extract on roost suitability criteria – however no further surveys are recommended on the buildings in relation to bats.

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.		
Potential suitability	Description	
	Roosting habitats in structures	Potential flight-paths and foraging habitats
None	No habitat features on site likely to be used by any roosting bats at any time of the year (i.e. a complete absence of crevices/suitable shelter at all ground/underground levels).	No habitat features on site likely to be used by any commuting or foraging bats at any time of the year (i.e. no habitats that provide continuous lines of shade/protection for flight-lines, or generate/shelter insect populations available to foraging bats).

Figure 7.1 – BCT extract on 'None' suitability criteria

- 7.11 Bat are a transient species group, and buildings can develop PRFs over time or following period of damaging weather. Should the planning application be subject to an extensive time delay (typically 12 – 18 months), then an updated diurnal assessment should be carried out to assess the ecological status of the site, and whether any significant changes have occurred. Indicative evidence of bats is provided in **Figure 7.2**.



Figure 7.2 – Indicative evidence of bats: droppings on the left / a common pipistrelle bat on the right

- 7.12 Installation of overly harsh artificial lighting as part of any development that exceeds current levels may have a negative impact upon foraging / commuting bats in the landscape, subject to their presence, particularly if increased light spillage occurs in areas of that are currently free from illumination, particularly including the aforementioned trees. A bat-sensitive lighting plan is therefore recommended in order to avoid potential impacts to bats. Several options to consider have been listed overleaf, though the reader is referred to the Bat Conservation Trust's 'Bats and Artificial Lighting at Night' guidelines (August 2023) for further information:

Appropriate luminaire specifications: Light sources, lamps, LEDs and their fittings come in a myriad of different specifications which a lighting professional can help to select. However, the following should be considered when choosing luminaires and their potential impact on Key Habitats and features:

- All luminaires should lack UV elements when manufactured. Metal halide, compact 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.
- A warm white light source (2700Kelvin or lower) should be adopted to reduce blue light component.
- Light sources should feature peak wavelengths higher than 550nm to avoid the component of light most disturbing to bats (Stone, 2012).
- Internal luminaires can be recessed (as opposed to using a pendant fitting) where installed in proximity to windows to reduce glare and light spill.
- Waymarking inground markers (low output with cowls or similar to minimise upward light spill) to delineate path edges.
- Column heights should be carefully considered to minimise light spill and glare visibility. This should be balanced with the potential for increased numbers of columns and upward light reflectance as with bollards.
- Only luminaires with a negligible or zero Upward Light Ratio, and with good optical control, should be considered - See ILP GN01.
- Luminaires should always be mounted horizontally, with no light output above 90° and / or no upward tilt.
- Where appropriate, external security lighting should be set on motion-sensors and set to as short a possible a timer as the risk assessment will allow. For most general residential purposes, a 1 or 2 minute timer is likely to be appropriate.
- Use of a Central Management System (CMS) with additional web-enabled devices to light on demand.
- Use of motion sensors for local authority street lighting may not be feasible unless the authority has the potential for smart metering through a CMS.
- The use of bollard or low-level downward-directional luminaires is strongly discouraged. This is due to a considerable range of issues, such as unacceptable glare, poor illumination efficiency, unacceptable upward light output, increased upward light scatter from surfaces and poor facial recognition which makes them unsuitable for most sites. Therefore, they should only be considered in specific cases where the lighting professional and project manager are able to resolve these issues.
- Only if all other options have been explored, accessories such as baffles, hoods or louvres can be used to reduce light spill and direct it only to where it is needed. However, due to the lensing and fine cut-off control of the beam inherent in modern LED luminaires, the effect of cowls and baffles is often far less than anticipated and so should not be relied upon solely.

Birds

- 7.13 No impacts are applicable in relation to any Sch.1 (WCA) specially protected bird species such as black redstart, and no further surveys or recommendations are necessary in relation to specially protected birds, with no viability of nesting within the site boundary.
- 7.14 Regarding wider breeding bird species, there are a some limited viable nesting platforms within the site boundary, namely the bramble scrub, which could provide suitable nesting locations within the nesting bird season of March – August, inclusive.

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.*

- 7.15 Given that all birds are protected when at the nest, it is recommended that any vegetation clearance works are carried out outside of the breeding bird season (March – August inclusive). For any works within the breeding bird season, a pre-commencement check of any impacted habitats able to support nesting birds (inclusive of the trees, scrub and woodland) will need to be carried out by a suitably qualified ecologist / ornithologist in order to determine

whether or not active nests are present. This will need to be carried out within 48 hours or less prior to works commencing.

Point 3.24 of the British Standards Publication 42020:2013 defines a professional ecologist as: *"a person who has, through relevant education, training or experience, gained recognised qualifications and expertise in the field of ecology and environmental management."*

- 7.16 Where / if active nests are located by the Ecologist, then any works which may affect them would have to be delayed until the young have fledged and the nest has been abandoned naturally, this can be aided, for example, via implementation of appropriate buffer zone(s) around the nest site (species dependent) in which no disturbance is permitted until the nest is no longer in use. This would have to be coordinated through the expert judgement of the professional ecologist and species pending.

Other terrestrial mammals

Badger & hedgehog

- 7.17 No badger setts or field signs were located during the survey, and the proposals are considered to pose negligible risks to badgers. No further recommendations are applicable.
- 7.18 Hedgehogs could occasionally utilise the site for occasional foraging, commuting or refuge owing to the habitat features as described. It is therefore recommended that a detailed Method Statement outlining Reasonable Avoidance Measures (RAMs) is produced for this species to avoid any impacts.
- 7.19 RAMs to minimise construction impacts and prevent harm or injury to hedgehog should include, as a minimum:
- All working hours should be limited to daylight (dawn – sunset, or dawn – 6pm in winter) to avoid disturbing any hedgehog in vicinity of the development area.
 - A pre-commencement check of the site, any stored materials and the immediate vicinity of development footprint will be carried out prior to any works each morning in order to check for the presence of hedgehog.
 - Materials that may cause entrapment such as plastic / metal fencing, as well as those which could be potentially harmful to terrestrial mammals such as chemicals, should not be left around the site following the cessation of daytime work.
 - No bulky equipment / general construction aggregates should be left around the development area, instead leave them on bare ground away from the risk zone.
 - Stock piling of spoil material MUST be left un-compacted and not allowed to grass over, as if grassed over and compacted, terrestrial mammals may be encouraged to excavate new areas for refuge.
 - Fires must not be used as a means of the disposing of waste materials.
 - Any trenches or excavations must either be covered at the end of each working day, or a low angle (no more than 45°) sloping board of approximately 300mm width should be provisioned within any uncovered excavations to provide a means of escape for any terrestrial mammals.

Herpetofauna

Great crested newt (GCN)

- 7.20 Regarding great crested newt (GCN), the results of both the desktop and field study suggest that the likelihood of this species being present on site is unlikely.
- 7.21 No ponds are present within the site itself, and whilst there are some suitable terrestrial features on site such as the dense vegetation, the general lack of connectivity to the site from the surrounding landscape ensued from the urban mosaic indicates that impacts to GCN are considered negligible.

Wider herpetofauna

- 7.22 It is considered possible that more robust amphibian species could exist in proximity to the site, though likely only on occasional basis as they commute to more favourable environs.
- 7.23 Any works on site should therefore have due regard to local wildlife as discussed, and the RAMs detailed previous for terrestrial mammals should be extended to cover common amphibians.
- 7.24 Should any frogs or toads be encountered within the works area, they should be handled with wet gloves to prevent impact / injury and moved to an area of like for like habitat outside of the works area away from potential harm. The applicant and all contractors would be aware that if at any stage newts are encountered during works, or at any other stage of the programme of works, such works would be required to immediately cease and the Ecologist / ECoW would be made aware as to provide further guidance, if an Ecologist is not already present.
- 7.25 Based on the assessment given within section 6.0, it is deemed that impacts to reptiles are considered negligible, given the significant barriers to dispersal afforded from the surrounding urban mosaic making access to the site unlikely.

Invertebrates

- 7.26 The site is not considered to be locally distinct for this species group and no specific intervention measures apply. Enhancement options have been presented in **Appendix III**.

Biodiversity Enhancement

- 7.27 As a means of improving biodiversity value / enhancing the site any new landscaping should aim to incorporate majority use of native species as opposed to non-native exotic species which offer significantly fewer benefits to our native fauna. Suitable species for native landscaping have been provided in **Appendix III**. Examples of suitable measures in respect of faunal species are also provided in **Appendix III**.

8.0 Biodiversity Statement

- 8.1 Based on the information gathered during the diurnal assessment, Rutland Street is not exempt from the Biodiversity Gain Planning Condition.
- 8.2 The site is host to the following biodiversity value:
- Habitat: **0.35**
 - Hedgerow: **0.01**
 - Watercourse: **0.00**
- 8.3 Review of Google Earth historical map viewer revealed that habitat removal took place within the site in the year 2019; this removal is before the relevant date of 30th January 2020 which means the baseline value of the site has been taken from its current condition.
- 8.4 This Section should be read in conjunction with the hard copy of the Statutory Biodiversity Metric tool – see external **Appendix**.

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Appendix I: Site Photographs



Plate 1 – *Character of the neutral grassland with scrub growth*



Plate 2 – *Characteristic of the site showing part of the corrugated shed (blue)*



Plate 3 – *Identified Japanese knotweed*

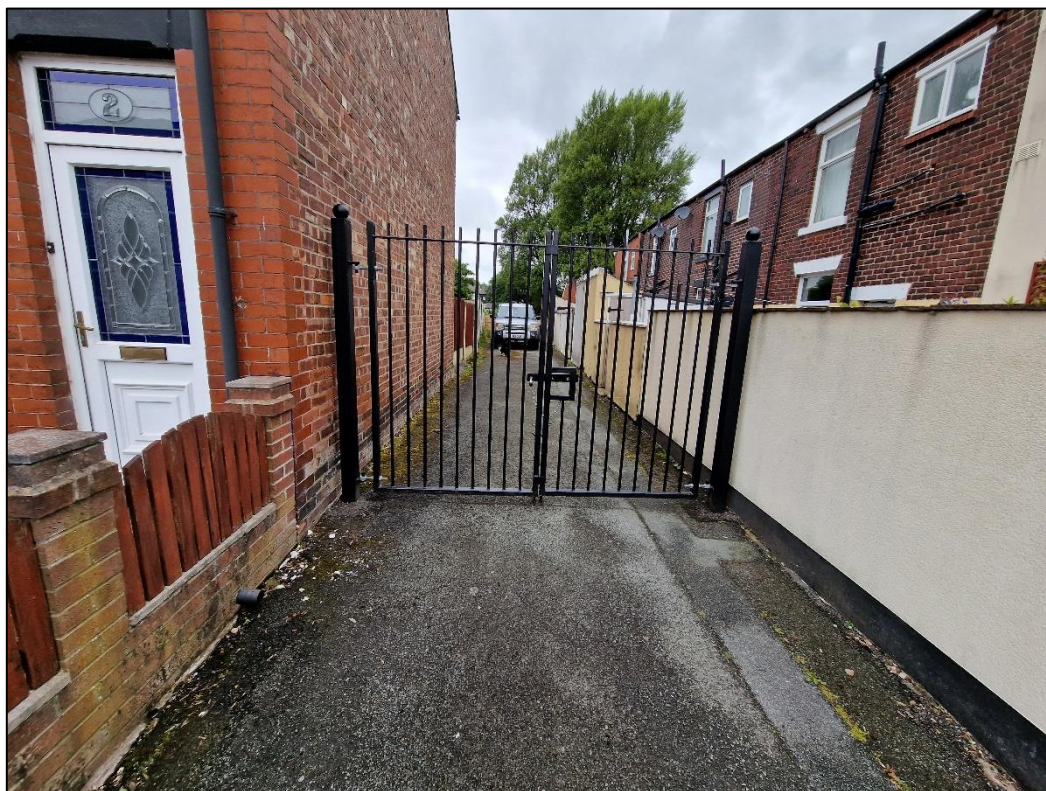


Plate 4 – *Hardstanding access*



Plate 5 – *Additional perspective of the grassland facing north*



Plate 6 – *Identified trees T1 (green) & T2 (red)*



Plate 7 – *Partial character of the sheds adjacent to the grassland*

Appendix II: Condition Assessment Sheets

Condition Assessment Score – Grassland (Medium – V.high distinctiveness)

Condition Assessment Criteria		g3c (Grassland 1)	g3c (Grassland 2)
A	The parcel represents a good example of its habitat type, with a consistently high proportion of characteristic indicator species present relevant to the specific habitat type. Note - this criterion is essential for achieving Moderate or Good condition for non-acid grassland types only.	N	N
B	Sward height is varied (at least 20% of the sward is less than 7 cm and at least 20% is more than 7 cm) creating microclimates which provide opportunities for vertebrates and invertebrates to live and breed.	Y	N
C	Cover of bare ground is between 1% and 5%, including localised areas, for example, rabbit warrens.	Y	Y
D	Cover of bracken <i>Pteridium aquilinum</i> is less than 20% and cover of scrub (including bramble <i>Rubus fruticosus</i> agg.) is less than 5%.	N	Y
E	Combined cover of species indicative of suboptimal condition ³ and physical damage (such as excessive poaching, damage from machinery use or storage, damaging levels of access, or any other damaging management activities) accounts for less than 5% of total area. If any invasive non-native plant species (as listed on Schedule 9 of WCA) are present, this criterion is automatically failed.	N	Y
F	There are 10 or more vascular plant species per m ² present, including forbs that are characteristic of the habitat type. Note - this criterion is essential for achieving Good condition for non-acid grassland types only.	N	N
Total Score		2	3
Condition Assessment Result		Condition Assessment Score	
Passes 6 or 7 criteria including passing essential criterion A		Good	
Passes 4 or 5 criteria including passing essential criterion A		Moderate	
Passes 3 or fewer criteria; OR Passes 4 - 6 criteria (excluding criterion A)		Poor	

Condition Assessment Score – Individual Tree

Condition Assessment Criteria		T1	T2
A	The tree is a native species (or at least 70% within the block are native species).	Y	Y
B	The tree canopy is predominantly continuous, with gaps in canopy cover making up <10% of total area and no individual gap being >5 m wide (individual trees automatically pass this criterion).	Y	Y
C	The tree is mature (or more than 50% within the block are mature).	N	N
D	There is little or no evidence of an adverse impact on tree health by human activities (such as vandalism, herbicide or detrimental agricultural activity). And there is no current regular pruning regime, so the trees retain >75% of expected canopy for their age range and height.	N	N
E	Natural ecological niches for vertebrates and invertebrates are present, such as presence of deadwood, cavities, ivy or loose bark.	N	N
F	More than 20% of the tree canopy area is oversailing vegetation beneath.	Y	Y
Total Score		3	3
Condition Assessment Result		Condition Assessment Score	
Passes 5 or 6 criteria		Good	
Passes 3 or 4 criteria		Moderate	
Passes 2 or fewer criteria		Poor	

Appendix III: Botanical Species List

Species nomenclature follows Stace, C (2019) – definitive English names; scientific names for given flora are presented below. Any invasive non-native species are denoted by the acronym (INNS).

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*

Common Name	Scientific Name	Abundance
Ash	<i>Fraxinus excelsior</i>	R
Bramble	<i>Rubus fruticosus agg.</i>	F
Butterfly-bush	<i>Buddleja davidii</i>	O
Cleavers	<i>Galium saxatile</i>	F
Common ragwort	<i>Jacobaea vulgaris</i>	O
Creeping buttercup	<i>Ranunculus repens</i>	O
Cut-leaved crane's-bill	<i>Girenaium dissectum</i>	F
False oat-grass	<i>Arrhenatherum elatius</i>	A
Field bindweed	<i>Convolvulus arvensis</i>	O
Forget-me-not	<i>Myosotis sp.</i>	O
Herb Robert	<i>Geranium robertianum</i>	O
Juniper	<i>Juniperus communis</i>	R
Lady's mantle	<i>Alchemilla sp.</i>	O
Privet	<i>Ligustrum ovalifolium</i>	R
Rosebay willowherb	<i>Chamaenerion angustifolium</i>	F
Rough meadow-grass	<i>Poa trivialis</i>	O
Stinging nettle	<i>Urtica dioica</i>	F
Sycamore	<i>Acer pseudoplatanus</i>	R
Wood avens	<i>Geum urbanum</i>	O
Yorkshire-fog	<i>Holcus lanatus</i>	F

Appendix IV: Biodiversity Enhancement: General Recommendations

Bats

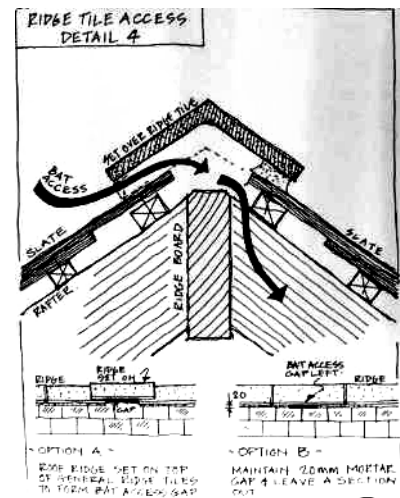
Integrated bat box

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.



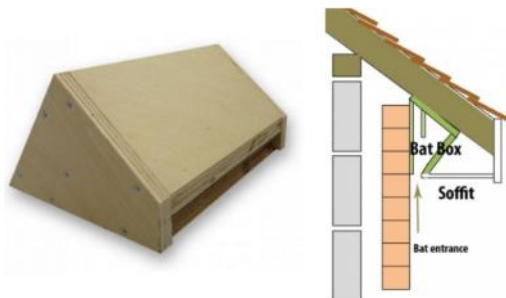
Ridge access

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.



Soffit access

Where soffits are installed at gable elevations, roost provision may be installed 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 Eco Kent Bat Box.



Breeding Birds – House Sparrow

The sparrow terrace has been designed to help redress the balance of falling house sparrow numbers. The current UK population is now half of what it previously was in 1980 and this is widely attributed to habitat destruction and lack of suitable nesting spaces. House sparrows are social birds and like to nest in company, therefore, this terrace provides ideal nesting opportunities for three families. The terrace can be fixed on to the surface of a suitable wall or incorporated into the wall. It is suitable for all types of buildings.



Breeding Birds – Other

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.



Hedgehog Home

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.

Amphibians – hibernacula

Hibernacula are underground chambers that amphibians and reptiles use throughout the winter to protect themselves from the cold. Creating a hibernaculum will provide a safe space for amphibians and reptiles to hibernate over winter, as well as a spot for solitary bees to soak up the sun and for birds to relax. These habitats can be integrated into a wide variety newly created or enhanced habitats and attract herps to new areas.

You will need:

- A spade
- Logs and branches
- Rocks and bricks
- 2-3 drainpipe cut-offs or cement pipes (if using plastic drainpipes, roughen the insides with sandpaper, so that they are not too slippery for animals to climb)
- Turf or meadow flower seeds (optional)

How to make your hibernaculum yourself:

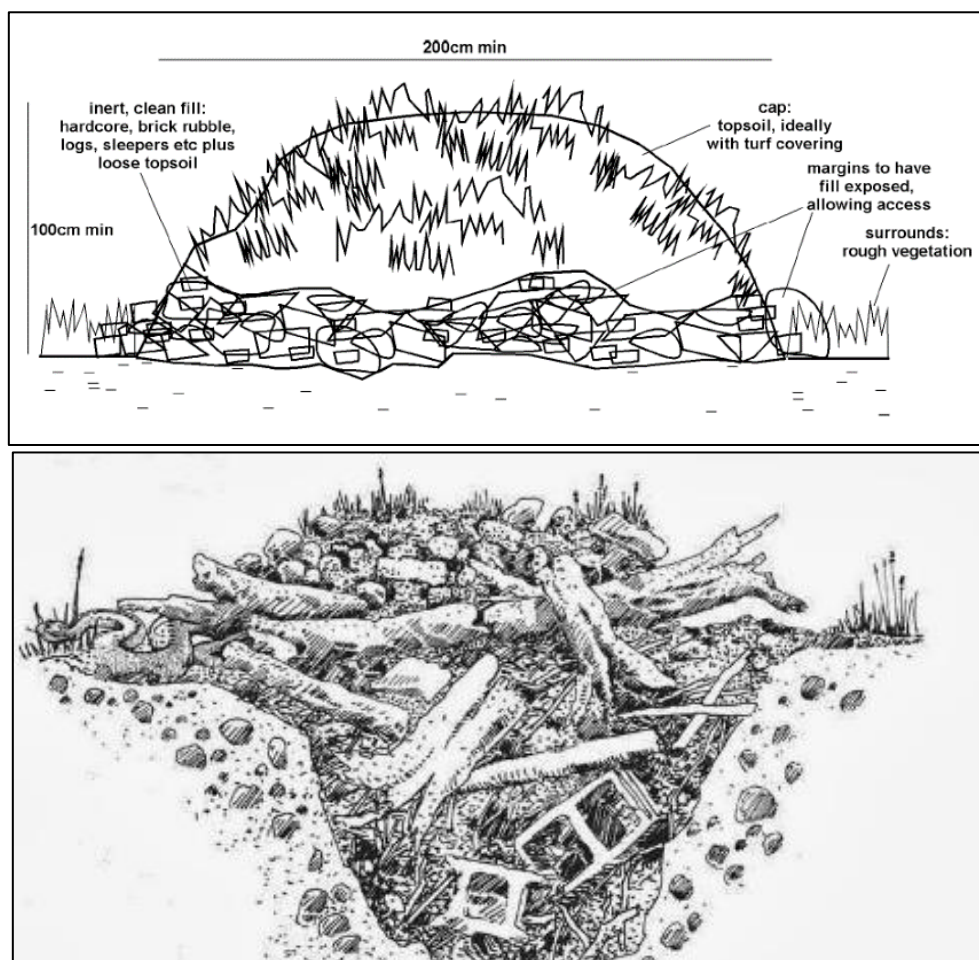
- In a sunny spot, dig a hole about 50cm deep and 1.5 metres across.

- Fill with logs, branches, bricks and rocks, leaving plenty of gaps in between.
- Insert entrance tubes (drainpipes) at ground level into the hole.
- Cover the pile with soil (to about 50cm high).
- Plant meadow seeds or long grasses over the mound to create a feast for summer pollinators.

To construct a hibernaculum to Natural England standard:

- In desired areas, remove the turf from the footprint of the hibernaculum and set aside.
- On well-drained soil excavate to a depth of approximately 500 mm and set aside spoil (this is unnecessary on poorly drained soils).
- Fill the footprint or pit with core material. Materials likely to retain moisture are preferable, such as cut timber, brash and grubbed up tree roots. Other material such as inert hardcore, bricks, rocks, and building rubble may also be used. Materials that will decompose should not be placed beneath heavy components such as bricks or rocks, to reduce the risk of collapse.
- Pack the larger spaces within the core materials with wood chippings, loose topsoil or spoil.
- Cover the hibernaculum with the turves removed from the footprint.
- Take care not to create structures that might attract rodents, such as piles of rubble with many entrance holes. There has been no rigorous investigation of the optimum size of hibernacula, but larger hibernacula are probably more useful than small constructions because they contain a variety of different microhabitats and are more likely to maintain stable conditions.
- A suggested minimum size is 4.0 m long by 2.0 m wide by 1.0 m deep. 2.0 x 2.0 x 1.0 metres (length x width x height) as a minimum.

Illustrative aid for hibernaculum:



Invertebrates – Insect Hotels

Insect hotels provide a habitat for a variety of insects. Designs can be small or large enough to create a focal point in a wildlife garden and sturdy enough to last for years. Ensure hotels are made from untreated wood, which is important as insects need natural materials to thrive, and split into sections that each contain a different nesting material. There should be pine cones for ladybirds, wood slits for butterflies and moths, bamboo canes for solitary bees, and loose pieces of wood for beetles. Placement: Size against walls or fences and fix to prevent toppling. The feet keep the main body off the damp ground. You could push bricks against them to keep the bug hotel upright, which would also encourage woodlice and even frogs that enjoy cool stone conditions.



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

Native Planting and/or Landscaping

The below species have been assessed against the local soil and habitat types and are deemed suitable for the site. All plant material should comply with the minimum requirements in BS 3936-1: 1992 Specification for trees and shrubs and BS 3936-4: 2007 Specification for forest trees and BS 8545: 2014 Trees from Nursery to Independence in the Landscape. Any plant material, which in the opinion of the appointed Landscape Architect, does not meet the requirements of the Specification, or is unsuitable, or defective in any other way, will be rejected. The minimum specified sizes in the plant schedule will be strictly enforced. The contractor should replace all plants rejected at own cost. New hedgerows should be primarily comprised of blackthorn, hawthorn, hazel, and holly, whilst climbers/creepers such as hops and honeysuckle can be planted at the base of boundary features such as fences and walls, and new tree planting should include species such as pedunculate oak, wild cherry, and alder buckthorn.

	Common Name	Scientific Name	Planting Preference
Ferns	Male Fern	<i>Dryopteris filix-mas</i>	Semi-shade or shaded
	Soft Shield-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	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>	-
	Wych Elm	<i>Ulmus glabra</i>	-

