

Preliminary Ecological Appraisal

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The Clock Face

Derby Street,
Prescot,
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Executive Summary

As part of a proposed planning application at The Clock Face, Prescott, Tyrer Ecological Consultants Ltd carried out a Preliminary Ecological Appraisal (PEA) in October 2022.

The PEA was commissioned by IMD and Associates Ltd; proposals are understood to involve the conversion of an existing Grade II listed Stable Block, as well as the development of a number of buildings to the north of the existing structures within a currently unutilised area of open space.

Extensive findings, conclusions and recommendations are presented throughout the report; however, the reader should be aware of the following further surveys necessary and wider key recommendations.

Recommended following PEA:

- **Invasive Species:** One Schedule 9 (WCA) INNS was recorded on the site; namely Wall Cotoneaster. Whilst it is not illegal to host any species designated as such 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.

To prevent incidental spread of this species during the proposed works it is recommended that a precautionary working method statement with appropriate biosecurity protocol is instated prior to commencement of site works.

- **Bats:** Based upon the findings of the survey, covered through sections 6.0 – 7.0 of the report and supported by Appendix I, building B2 (the Grade II Listed Stable block) is determined to offer '**Moderate**' bat roost potential in accordance with Bat Conservation Trust – Bat Surveys for Professional Ecologists: Good Practice Guidelines, 3rd ed. (2016), which triggers the need for further survey effort prior to the proposed works taking place. Buildings B2a and B3 are determined to offer '**Negligible**' potential, and no further surveys are recommended on either of these structures.

Table 7.3 Recommended minimum number of survey visits for presence/absence surveys to give confidence in a negative result for structures (also recommended for trees but unlikely to give confidence in a negative result).		
Low roost suitability	Moderate roost suitability	High roost suitability
One survey visit. One dusk emergence or dawn re-entry survey ^a (structures). No further surveys required (trees).	Two separate survey visits. One dusk emergence and a separate dawn re-entry survey ^a	Three separate survey visits. At least one dusk emergence and a separate dawn re-entry survey. The third visit could be either dusk or dawn. ^b

Two dusk and / or dawn emergence / re-entry surveys are recommended to be conducted at the site during the active season of bats (May – August, extending into September), in order to establish if / how the building is being used by bats, and if so, identify the species present, abundance, roost locations and flight lines around the site following emergence/re-entry. Three surveyors would be required to monitor the potential roost features described at the building.

- **Breeding Birds:** In relation to common birds, several nests were identified, and the buildings, woodland and the vegetation present offer small birds a plethora of nesting opportunities, particularly during the breeding bird season.

Given that all birds are protected when at the nest, it is therefore recommended that any demolition, tree felling / pruning and vegetation clearance works on site are carried out outside of the breeding bird season (March – August inclusive). For works undertaken

within the breeding bird season, any areas that can support nesting birds such as the buildings, dense scrub and woodland should be checked by a professional Ecologist for nesting birds within 48 hours or less prior to works commencing. 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 (typically 5 – 10 metres) 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.

- **Hedgehog:** The presence of this species on the site cannot be ruled out, with areas suitable for shelter and foraging.

Therefore, enhancement measures are recommended to be built into the new development.

- **Wider herpetofauna:** Given the habitats surrounding the application site, the presence of common, robust amphibian species such as the Common Frog (*Rana temporaria*) within the application site cannot be ruled out.

An appropriate working Method Statement is therefore recommended to be created by a suitably qualified Ecologist/Ecological Clerk of Works (ECoW), detailing a list of Reasonable Avoidance Measures (RAMs) to prevent risk of impact to such species.

- **Enhancement for Biodiversity:** The site offers potential for a number of protected species groups, therefore a programme of biodiversity enhancement is recommended to be implemented into the proposed development. General measures can be found below, in accordance with the principles of ‘Biodiversity Net Gain: Good practice principles for development’ (CIEEM et. al., 2019).

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1.0 Introduction & Scope

- 1.1 As part of a proposed planning application at The Clock Face, Prescott, Tyrer Ecological Consultants Ltd carried out a Preliminary Ecological Appraisal (PEA) in October 2022. See Figure 1.1 below for an existing site plan.

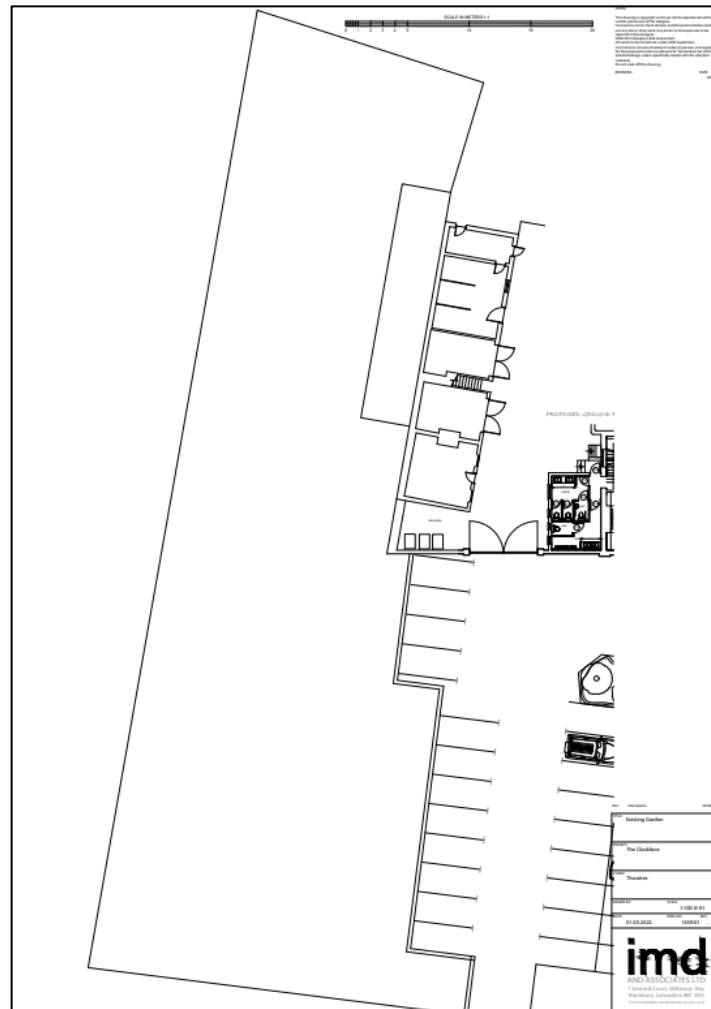


Figure 1.1 – The existing site plan (© IMD and Associates Ltd)

- 1.2 The PEA was commissioned by IMD and Associates Ltd; proposals are understood to involve the conversion of an existing Grade II listed Stable Block, as well as the development of a number of buildings to the north of the existing structures within a currently unutilised area of open space.
- 1.3 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 habitats or species are, or may be present, that could be affected by the proposals for which the application seeks consent.
- 1.4 The PEA was carried out in accordance with the 'Guidelines for Preliminary Ecological Appraisal, 2nd Edition' (CIEEM, 2017) and all site associated 'CIEEM Competencies for Species Survey (CSS)', whilst this report has been presented in accordance with the British Standard 42020:2013.

Aims & Objectives

- 1.5 The appraisal aims to ascertain the baseline nature of the site 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 and present baseline ecological information on site/off site (as necessary) within a suitable report,
 - Identify, measure and map habitats using UK Habitat Classification – Habitat Definitions Version 1.1 (2020) 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,
 - Aim to achieve no 'net loss' of habitat biodiversity units,
 - Identify 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),
 - Set out any requirements for post-development monitoring, management, or other commitments, and how they can be secured, where required.
- 1.6 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 1.1 (2020);
 - Buildings 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, 3rd ed. (2016).
- 1.7 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.
- 1.8 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.

- 1.9 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.
- 1.10 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.
- 1.11 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:
- 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, 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 (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 as invasive, including Japanese Knotweed (<i>Reynoutria japonica</i>) and Himalayan Balsam (<i>Impatiens glandulifera</i>), for example, carry notoriety regarding development. 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).

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 180 of the National Policy Planning Framework (as revised in July 2021) 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 Policy CS8 of the Adopted Knowsley Local Plan, titled Green Infrastructure, echoes this national focus on preservation of biodiversity, stating:

1) Knowsley's existing Green Infrastructure and its beneficial functions will be protected, managed and/or enhanced, primarily to:

- a) Ensure more attractive and cleaner residential neighbourhoods;*
- b) Sustain and promote biodiversity (including designated sites, priority habitats and protected and endangered species) in accordance with importance and contribution to ecological networks;*
- c) Preserve the character and function of historic environments and valued landscapes;*
- d) Mitigate the effects of climate change and flood risk;*
- e) Mitigate air, water and noise pollution;*
- f) Provide local opportunities for sport, recreation and allotments; and*
- g) Provide sustainable transport linkages between residential neighbourhoods and easy access to employment and services.*

Point 5.87 delves further into the priorities of the council, and states:

The key priorities for natural assets and geology in the Liverpool City Region are:

- To manage the natural assets better – to protect the integrity of nature sites of international importance, and to protect the city region's nature and geodiversity assets; and*
- To make sure there is no net loss of these natural assets and to extend and enhance the city region's Ecological Network and natural assets.*

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, connectivity, 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 Section 41: Habitats of Principal Importance in England and Section 41: Species of Principal Importance in England are considered potentially relevant to the appraisal:

Habitats:

- Hedgerows.

Species:

- **Bats:** Brown Long-eared (*Plecotus auritus*), Soprano Pipistrelle (*Pipistrellus pygmaeus*), Common Pipistrelle (*Pipistrellus pipistrellus*), Noctule (*Nyctalus noctula*) for e.g.,
- **s.41 bird species** that include but not limited to: Bullfinch (*Pyrrhula pyrrhula*), Grey Partridge (*Perdix perdix*), House Sparrow (*Passer domesticus*), Linnet (*Carduelis cannabina*), Song Thrush (*Turdus philomelos*), Starling (*Sturnus vulgaris*), Tree Sparrow (*Passer montanus*), Willow Tit (*Poecile montanus*) for e.g.,
- **Land mammals** that include: Hedgehog (*Erinaceus europaeus*) for e.g.,
- **Herpetofauna** that includes: Great Crested Newt (GCN) (*Triturus cristatus*), Slow-worm (*Anguis fragilis*), Common Toad (*Bufo bufo*), Common Lizard (*Zootoca vivipara*), for e.g.,
- **Botanical species** that includes Purple rampion (*Fumaria purpurea*), Bluebell (*Hyacinthoides non-scripta*), Cornflower (*Centaurea cyanus*) for e.g.

Regional Context

- 3.4 Local Biodiversity Action Plans (LBAP's) are a way of encouraging people to work together to 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.
- 3.5 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.
- 3.6 The North Merseyside Biodiversity Action Plan (NMBAP) outlines 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. Some are partially or completely covered by Habitat Action Plans (HAPS), whilst others are covered by Species Action Plans (SAPS). In addition to the

national priority habitats and species above, potential presence / impacts for the following local plans was also considered as part of this study.

- Bats;
- Song Thrush;
- Swift (*Apus apus*).

4.0 Methodology

- 4.1 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

- 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 2.0 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.
- 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, in this case Merseyside BioBank, 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.

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

- 4.6 A daytime preliminary ecological appraisal was conducted on the 18th October 2022 in sunny, dry conditions (9°C), average wind 0/12 (Beaufort scale), average 5% cloud cover, by the following surveyor (see Table 4.1).

Table 4.1 – Site Surveyor credentials

Name	Description of most relevant credentials
Mr. B. Richards Qualifying CIEEM (Junior Ecologist)	- Junior Ecologist with a range of training and experience, - MBiolSci in Biological Sciences (Zoology), - Qualifying CIEEM, - Accredited agent on the Natural England Great Crested Newt: CL08 Class 1 licence (2018-34062-CLS-CLS) of Mr. M. Pritchard.

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 value on a geographical scale which is adopted on a site-to-site basis (see Figure 4.1).

For botanical species list compiled in full, see Appendix II.

- 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).

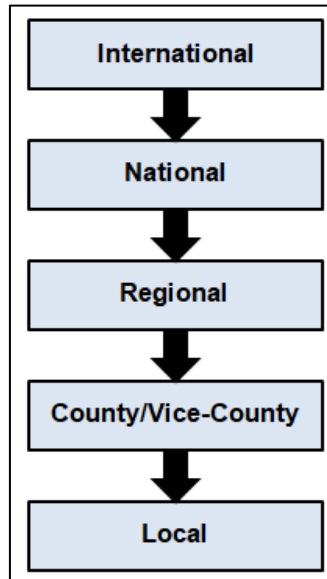


Figure 4.1 – Geographic Frame of Reference entailing degrees of conservation importance

Faunal assessment

- 4.11 During site walkover, the identification and/or evidence of priority fauna encountered was documented, whilst in tandem the area was assessed for the potential to support the priority species in section 3.0. The walkover also aimed to identify any ephemeral pools or unmapped waterbodies.

Bats

- 4.12 The site was 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. The surrounding habitat was also considered in terms of general suitability.
- 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.
- 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,
- Presence / absence of roost potential,
- Value and types of roost potential, if present (i.e. - maternity, hibernation, transition).

Breeding Birds

4.16 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 the ground. 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:

- 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.

4.17 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.

Other Terrestrial Mammals

- 4.18 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. The site was also assessed for the presence / suitability of Hedgehogs (*Erinaceus europaeus*) and other priority mammals.

Great Crested Newt (GCN)

- 4.19 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 Newts (GCN) (*Triturus cristatus*). 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.*

- 4.20 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. Where a development is anticipated to affect GCN the search can be extended up to 500m or more.
- 4.21 Based on the desk study, using Google Earth Pro 2021/22, MAGiC Maps 2022 as well as Ordnance Survey (OS) map data, zero standing water bodies were identified within the site itself as well as within the 250 metre radial buffer of the site,

Reptiles

- 4.22 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 Lizards (*Zootoca vivipara*) use a variety of habitats from woodland glades to heaths, walls and pastures, as well as brownfield sites,
 - Slow-worm (*Anguis fragilis*) use similar habitats to Common Lizards, and are often found in rank grassland, gardens and derelict land under refugia,
- 4.23 In assessment of a site for reptiles several important habitat characteristics are considered, outlined in Table 4.2 below, 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

4.24 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.

4.25 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.

4.26 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. Richards.

5.0 Limitations

5.1 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.

5.2 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.

5.3 The survey took place outside of the typical bat and bird ‘active / breeding’ seasons; the probability of encountering direct evidence or field signs of either of these species is therefore decreased. Signs of use for both of these species are readily visible all year round however, and, in the case of bats, roost potential and suitability of potential roost features can be adjudged as decisively as within the active season of bats, saving time and unnecessary delay to applicants, thus frequently the assessment can be as conclusive as if it was carried out in the active season. Timing is, therefore, not considered a constraint in this instance.

- 5.4 No access was possible to several areas around the site. The upper floor of the Grade II listed stable block was inaccessible, with one door leading to the top floor being screwed shut, and no access into the eastern-most portion of the structure. As such, the internal characteristics and atmospheric conditions within these sections of the building were unable to be determined. The robust nature of the external investigation is considered to have nullified this constraint as it allowed a thorough assessment of the building against its likely value to host bats. Further information is provided in section 7.0.
- 5.5 In considering all possible survey constraints, though access issues were experienced, no significant limitations were experienced that might adversely influence the results, conclusions, and recommendations of this report.

6.0 Desk Study Results

- 6.1 The application site can be broadly described as a public house with associated outbuildings and land, including an area of waste ground and a car park, which total an estimated 0.37 hectares. The site is situated to the north of Derby Street in Prescott, circa 0.54 kilometres west of Prescott town centre (see Figure 6.1).



Figure 6.1 – Location of the application site (red boundary) within the landscape (Source: Google Earth Pro 2021/22)

- 6.2 Currently existing within the site are three buildings, as well as a number of habitats, including 'mixed scrub' along the southern boundary, 'other developed land' to the west and east of the site, 'artificial unvegetated unsealed surface' to the north, 'other woodland mixed' in pockets within the car park, and 'built linear features' encompassing the site. No water

bodies were identified within the site boundary, and the northern region has been left unmanaged for some time.

- 6.3 The immediate habitat is part sub-urban and part semi-rural in nature, with anthropogenic expansion in line with the former located to the south and the east, with areas of residential development in the form of detached and semi-detached properties with associated landscaped gardens with linear hedgerows and tree lines. To the west of the application site a large garden centre is located, with extensive development and clearance observed by the surveyor at the time of survey. Semi-natural habitats are present in the immediacy, with areas of Priority Habitat Inventory – Deciduous woodland to the west and south-west, which are linked to the application site via the aforementioned hedgerows and tree lines.
- 6.4 The extending environment is largely similar to that of the immediate, with further areas of urbanisation to the south and east, served by amenities including churches, commercial premises, eateries and retail estates. The site is linked to other boroughs of the City of Liverpool via transport routes such as the busy M57 motorway, which passes circa 0.53 kilometres to the west, as well as the Liverpool – Wigan railway line, which runs perpendicular to the motorway an estimated 0.99 kilometres to the south. Semi-natural habitats are somewhat more prominent in the contiguous landscape, with further regions of Priority Habitat Inventory – Deciduous woodland dotted around the landscape, but more notably to the north of the site, within the grounds of both Knowsley Safari Park and Knowsley Hall, with the latter also being host to Priority Habitat Inventory – Good quality semi-improved grassland and Lowland Fens.
- 6.5 Collectively, these areas of natural and semi-natural habitat provide an assortment of opportunities to a variety of protected species groups, with the group most typically associated with the habitat types described being bats, namely the Common Pipistrelle (*Pipistrellus pipistrellus*) bat, which are typically associated with roosting in buildings set in sub-urban environments, and Brown Long-eared bats (*Plecotus auritus*), which are commonly associated with woodland and more semi-natural environs, alongside several bird species known to be present in the wider landscape. Terrestrial mammals such as hedgehog are also likely to utilise the aforementioned linear features for commuting.

NB: *Where quality habitat is present close to buildings then the percentage use of those buildings, by bats, increases given that roost opportunities are available and vice versa.*

- 6.6 There are no statutory designated sites for nature conservation within 2.0 kilometres of the application site.
- 6.7 No ponds were scored using the industry standard HSI assessment tool, with no ponds within a 250 metre radial buffer of the site.

Notable species records

- 6.8 An online search of MAGiC maps revealed that the following European Protected Species Mitigation Licences (EPSMLs) have been granted within a 2.0 kilometres radius of the application site (see Table 6.1 for details and Figure 6.2 for a visual representation).

Table 6.1 – EPSML data records from MAGiC Maps

Case Reference	Distance from Site	Context (where relevant)
2017-28128-EPS-MIT	0.83 kilometres north-east	GCN positive pond record, non-breeding pool
2017-28690-EPS-MIT-1	1.04 kilometres west	Non-breeding Common Pipistrelle and Brown Long-eared roost
2018-38343-EPS-MIT	1.50 kilometres west	Non-breeding Common Pipistrelle roost

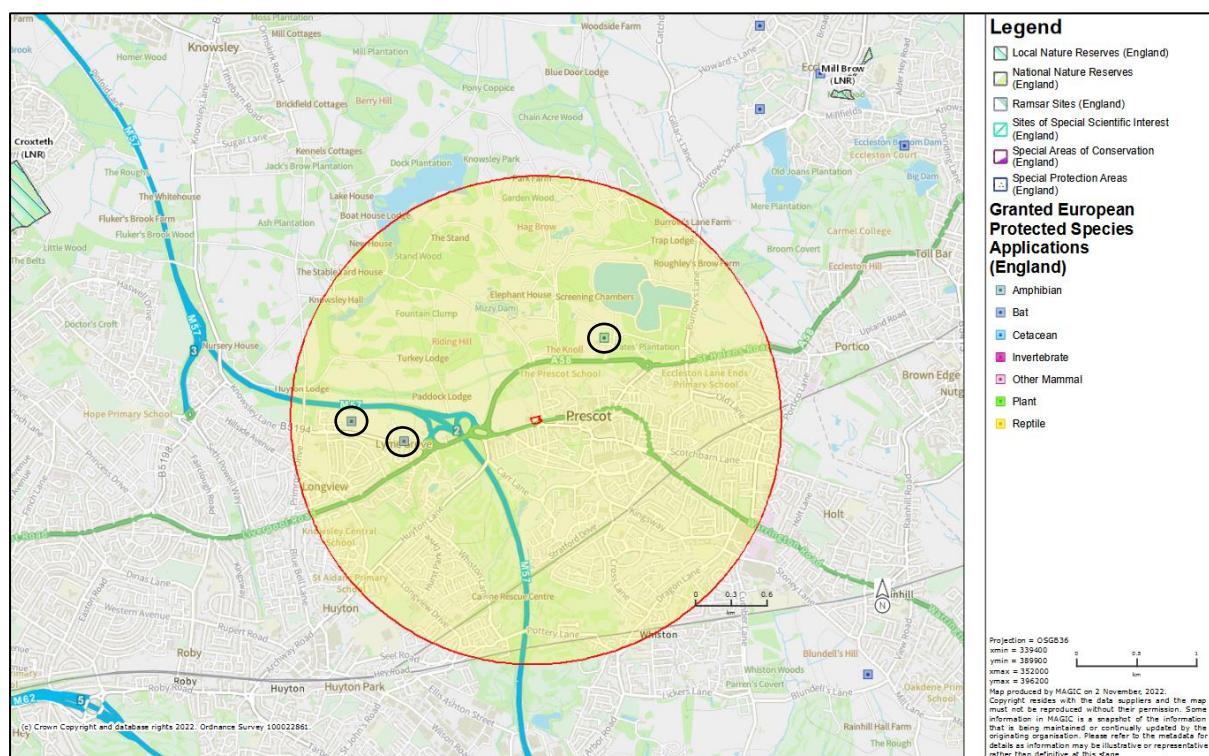


Figure 6.2 – EPSML and designated site data for the area within 2.0 kilometres of the application site, with granted EPSMLs circled in black (Source: MAGiC Maps 2022)

6.9 Tyrer Ecological Consultants Ltd have previous and ongoing projects involving bats within the 2.0 kilometre area surrounding the application site – as such, the following biological data (see Table 6.2) is readily available to the Ecologist from the company database – all data has been previously submitted to the LERC serving the area, which, in this case, is Merseyside BioBank.

Table 6.2 – LERC submitted biological data records collected by Tyrer Ecological Consultants Ltd

Year	Distance from Site	Context (where relevant)
2015	1.75 kilometres south-east	Foraging / commuting by a single Common Pipistrelle
2022	0.71 kilometres west	x6 Common Pipistrelle day roosts, x1 Brown Long-eared day roost

7.0 Field Survey Results

7.1 Habitat Survey

7.1.1 See Table 7.1 (below) for baseline information and habitat descriptions; refer to Appendix I for any supporting imagery; scientific names are given in Appendix II. Refer to Appendix IV – UK Habitats Map for the location of described habitats & Target Notes (TN).

Table 7.1.1 – UK Habitat types within the survey area

Area Habitats	Sec. Codes	Description
h3h – Mixed scrub	11 – Scattered trees	There are several patches of mixed scrub around the site, totalling circa 0.006 hectares, with primarily introduced shrub species such as Buddleia, Firethorn and Japanese Laurel, with Wall Cotoneaster INNS also present, denoted by Target Note 1.
	16 – Tall herb	
	17 – Ruderal / ephemeral	Several trees are present within the habitat, but not abundantly, with species including Sycamore, Cherry species and a Cypress, being interspersed irregularly within the habitat. Low ground cover is constituted largely of ruderal species such as Common Nettle and Common Ragwort, tall herbs comprising of Willowherbs, with rare incidences of Bramble and Hedge Bindweed also.
	48 – Non-native	
	73 – Bare ground	Large patches of bare ground can be observed within the habitat, where colonising vegetation is beginning to establish.
u1b5 – Buildings	n/a	There are three buildings within the red line boundary of the site, with an active pub, a stable block and a water-related structure. See Table 7.3.1 for further information.
u1b6 – Other developed land	n/a	The western region of this habitat totals approximately 0.119 hectares, and is utilised as a car park for the existing pub. The car park is well maintained, with no obvious gaps in the hardstanding which might allow for the establishment of hardier, more robust plant species.
u1b6 – Other developed land	16 – Tall herb	The eastern portion of this habitat, with an estimated size of 0.026 hectares, contrasts to the car park, and is made up of flagstones and cobble, with large areas of emergent vegetation growing through the gaps between the stone. Graminoid species include occasional Creeping Bent and rare Annual Meadow-grass, with a variety of forb species including Cleavers, Fools Parsley, Greater Plantain, Herb-robert, Hoary Willowherb, Petty Spurge, Shepard's-purse, White Clover and Yarrow. Ivy-leaved Toadflax is present in localised abundances, with Rhododendron INNS also identified within this habitat, but entirely contained within pots / planters, and as such no further recommendations need be made.
	17 – Ruderal / ephemeral	

u1c – Artificial unvegetated unsealed surface	11 – Scattered trees	The northern region of the site, with an estimated area of 0.112 hectares, falls under this categorisation.
	16 – Tall herb	The ground surface is made up of disturbed, waste land, with clear evidence of management but not recently / within the last 10 years, which aligns with the satellite imagery for the site. Whilst vegetation has clearly grown through the disturbed land, this habitat code is considered to best represent the area, and the secondary codes should be considered when assessing the value of the habitat.
	17 – Ruderal / ephemeral	
	73 – Bare ground	Species typical of this habitat are present, characterised by a distinct lack of graminoid dominance and high forb diversity, with abundant Black Medick and Rosebay Willowherb alongside occasional Common Ragwort, Creeping Thistle and a Toadflax species. Bramble, Broad-leaved Dock, Cock's-foot, Dandelion, Field Horsetail, Meadow Buttercup, Narrow-leaved Ragwort and Prickly Sow-thistle.
	77 – Neglected	
w1h – Other woodland mixed	48 – Non-native	Several small regions of this habitat were observed within the car park of the pub, with species largely being non-native, such as Bay Laurel, Cultivated Pear, Horse Chestnut and Sycamore, typical of introduced pockets of woodland in this part of the UK. Other species identified in the habitat include Ash, Beech, a Cherry species, Elder, Holly and a Willow species.
Linear Habitats	Sec. Codes	Description
u1e – Built linear feature	68 – Mortared wall	A stone wall with mortar formed the boundary of the car park, with the exception of the entryway.
u1e – Built linear feature	69 – Fence	A fence ran around the northern and eastern boundary of the site.
Target Notes		
1	Location of Wall Cotoneaster INNS	

7.2 Vegetation

Notable species

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

Invasive Non-Native Species (INNS)

- 7.2.2 One INNS, listed as such under Schedule 9 (Part II) of the Wildlife & Countryside Act (1981), was located within the red line boundary of the site during the diurnal appraisal. See Figure 7.2.1 below for an approximate location.

- **Wall Cotoneaster** (*Cotoneaster horizontalis*) – found at a single location within the shrubbery along the southern border of the site.

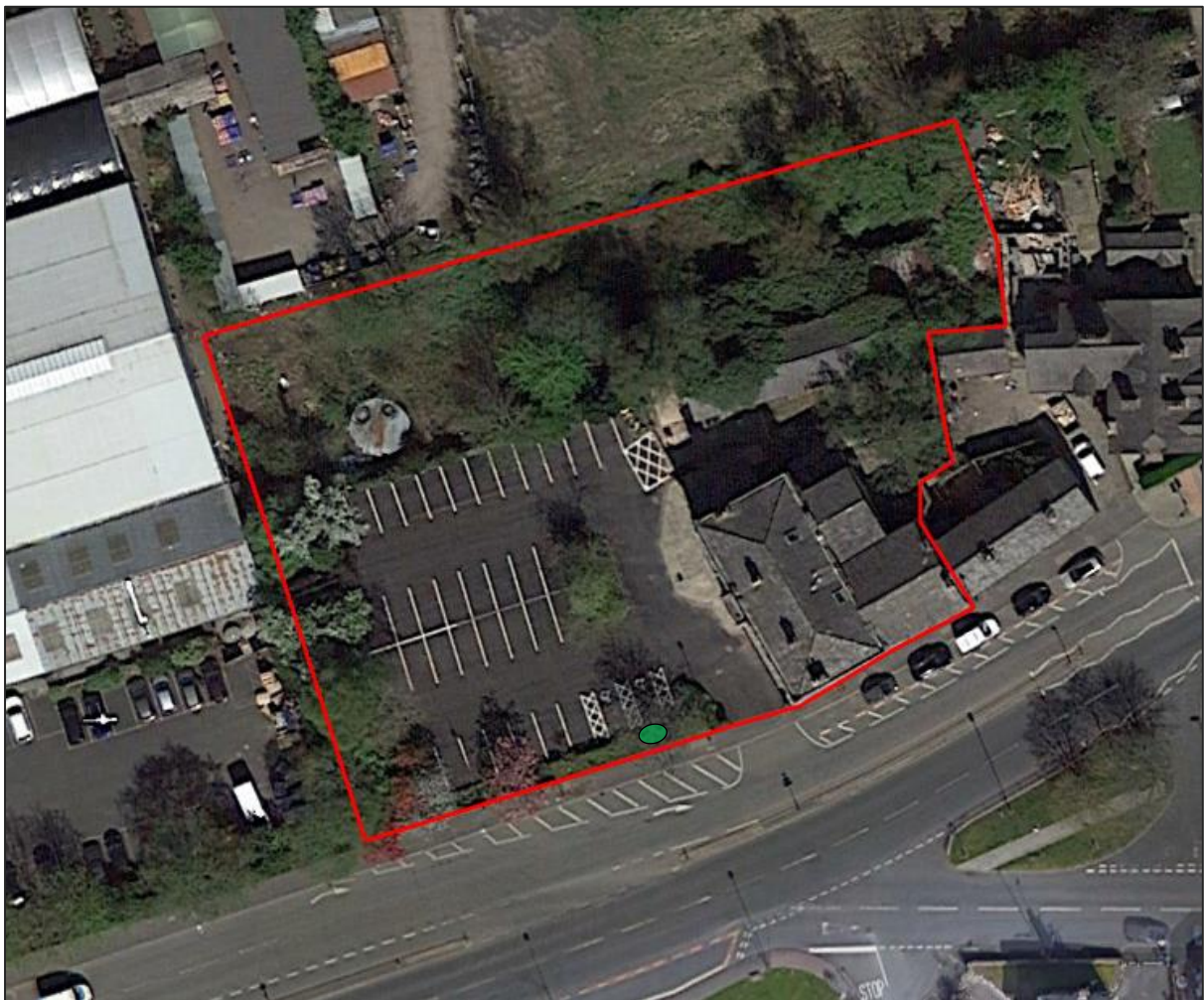


Figure 7.2.1 – Approximate location of Wall Cotoneaster on the site (Adapted from Google Earth Pro 2021/22)

7.3 Bats

- 7.3.1 Figure 7.3.1 shows the respective locations of the buildings within the application site boundary; Table 7.3.2 below describes each building in respect to their potential to offer roost features for bats (both internally and externally) and includes further information regarding evidence or lack of evidence of bats where applicable.



Figure 7.3.1 – Locations of the buildings within the red line boundary (Adapted from Google Earth Pro 2021/22)

Table 7.3.1 – Building descriptions at the application site with included bat assessments

Building B1
The active Grade II Listed pub, The Clock Face. Given that no works are planned to this structure as a part of the proposals, the building was not surveyed with respect to its potential to offer roosting locations for bats. NOT SURVEYED.
Building B2
Building B2 is a Grade II Listed former Stables block under ownership of the pub. The building is brick-built, part single storey and part two storey with a pitched slate roof and has approximate maximum dimensions of 25 metres x 11 metres x 6 metres (Length x Width x Height). Collectively, the building features components such as timber doors, windows and lintels, concrete sills, plastic capping to the western gable end, lead flashing between the single- and two-storey sections as well as coping stones on the corners of the structure. In respect of its condition, the surveyor is not qualified to assess structural state, however the aesthetic condition of the building was adjudged to be reasonable, with some deterioration noted to the capping, to some of the brickwork as well as to the roof, particularly where a creeper had, until recently, been growing on the southern elevation. The northern part of the building was heavily damaged and in poor condition, with elements of roof

collapse and a large Ivy specimen growing throughout the structure.

Internally, only the loft space above the single storey element of the building was able to be fully accessed. This space was insulated with lath and plaster, and was cool, slightly draughty, heavily cobwebbed and dark with no light ingress, having an apex height of circa 1 metre. The central region of the building was unable to be accessed, and as such it is not known if a loft space is present, however at the eastern end of the structure no loft space was identified, and rather the upper floor of the building rises to the roof timbers. The space here was cool, slightly draughty, heavily cobwebbed, and somewhat dark with slight light ingress from an open circular window.

Building B2 is therefore considered partly suitable for the breeding purposes of loft-dwelling species such as Brown Long-eared bats, which require open space in which to raise their young, which this loft provides. In contrast with the space in the structure, typical BLE maternity roosts are situated in areas which are dark with consistent thermal characteristics. No evidence of these bats was located, for example droppings or prey items, despite the immediate environment providing some levels of connectivity to wider suitable foraging environs.

A lath and plaster underlining was present above the single storey section of the building, whilst the underlining beneath the two storey section was unable to be determined. Where present, a traditional bitumen 1F underfelt 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. No evidence of such bats was found; however, this is often the case due to the crevice-dwelling nature of these species.

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.*

Externally, there were a number of potential roosting features, located beneath the plastic capping on the westernmost gable end, at wall plate level and within the brickwork on the southern elevation of the two storey section, with the Ivy obscuring much of the eastern section of the structure. The open window on the same elevation could also provide entry to the space.

Taking into account the number of PRFs, the crevice opportunities as well as the open loft space, B2 is duly categorised as offering 'Moderate' bat roost suitability, in accordance with Bat Conservation Trust – Bat Surveys for Professional Ecologists: Good Practice Guidelines, 3rd ed. (2016).

Building B2a

This structure is adjoined to B2, however it has a distinct build style, being an L-shaped building constructed of timber, with a mono-pitched corrugated metal roof, having approximate maximum dimensions of 16 metres x 12.5 metres x 3 metres. The condition of the building was adjudged to be very poor, with large amounts of Ivy covering the structure and clear degradation noted to the timber elements, both the cladding and the supporting beams.

Internally, the structure is largely open to the elements, with parts of the roof missing and doors / windows damaged or missing entirely, and clear evidence that water is entering the building with damp rot and vegetation growing within, alongside rotting timber elements.

The space is therefore entirely correlated to the external temperature, and as such can be very cold or very warm, with no stability in the thermal characteristics, which is further exacerbated by the

strong draught which flows through the space. No underlining is present beneath the corrugated metal roof.

The building is therefore considered unsuitable for both loft-dwelling bats as well as crevice dwelling species, due to the atmospheric conditions and lack of roosting opportunities.

Taking into account the above, B2a is duly categorised as offering '**Negligible**' bat roost suitability, in accordance with Bat Conservation Trust – Bat Surveys for Professional Ecologists: Good Practice Guidelines, 3rd ed. (2016).

Building B3

This is a small, circular structure built of corrugated plastic which serves to circulate water of some sort, however it is not known what for. No PRFs are present on the building, and it is considered wholly unsuitable for both loft-dwelling bats as well as crevice dwelling species.

Duly categorised as offering '**Negligible**' bat roost suitability, in accordance with Bat Conservation Trust – Bat Surveys for Professional Ecologists: Good Practice Guidelines, 3rd ed. (2016).

- 7.3.2 There are small number of trees within the red line boundary of the site, within the mixed woodland pockets as well as scattered in some of the other habitats. Whilst the majority of these trees were thought to be unaffected by the proposed works, they were all investigated relative to their potential to offer roosting features for bats. None of the trees on site were adjudged to offer any PRFs concerning bats, and as such no further recommendations have been made.

7.4 Breeding Birds

- 7.4.1 In relation to WCA Schedule 1 specially protected bird species, such as Barn owl, no evidence was found to suggest any form of site use or historic nesting, and the setting offers no real feeding value to this species.
- 7.4.2 In relation to wider breeding birds, a single historical House Sparrow nest was identified within the northern section of B2, alongside a nest located within the dead Ivy on the southern elevation of the same structure, thought to be that of a Woodpigeon (*Columba palumbus*) or corvid such as a Magpie (*Pica pica*). The site also provides a plethora of viable nesting opportunities for smaller birds in the form of trees, other vegetation as well as the buildings within the red line boundary. As breeding birds are protected during nesting / when at the nest, timing implications are therefore applicable in order to avoid disturbing or injuring breeding birds.
- 7.4.3 The following bird species were observed during the survey (see Table 7.4.1 overleaf):

Table 7.4.1 – Bird species encountered during the survey

Species	Scientific Name	Status	Context (where relevant)
Collared Dove	<i>Streptopelia decaocto</i>	Green	Commuted over site
Magpie	<i>Pica pica</i>	Green	Seen in waste ground to north
Woodpigeon	<i>Columba palumbus</i>	Amber	Seen in trees to south of site
Wren	<i>Troglodytes troglodytes</i>	Amber	Seen in waste ground to north
S.41 – a bird listed on section 41 of the Natural Environment Rural Communities Act 2006 (NERC Act) LBAP – a local biodiversity action plan listed species Q – qualifying species of nearby SSSI site(s) SPEC - a species of conservation concern, Amber or Red, Red being the highest conservation priority			

7.5 Other Terrestrial Mammals

Badger & Hedgehog

- 7.5.1 The surrounding habitat provides somewhat suitable habitat for badger, with some small areas of woodland in the wider landscape, however no field signs were observed on site which may indicate the presence of this species, including any setts, latrines, pathways, hairs, footprints or feeding signs such as snuffle holes and scratched trees/logs; whilst woodland is present on the application site, the isolated nature and small size of the woodland pockets and their position within the car park of the site reduces the suitability of the habitat for members of this species.
- 7.5.2 In respect of hedgehogs, the site provides some foraging habitat in the form of open land to the north, as well as sheltering opportunities within the dense vegetation and the areas of woodland around the car park of the site. The presence of this species within the site is therefore considered possible.

7.6 Herpetofauna

GCN

- 7.6.1 Important elements to consider when assessing likely impacts against GCN includes:

1. The scale, nature and magnitude of proposals,
2. Site proximity to a potential breeding pond and to any additional ponds,
3. Habitat linkage / barriers between potential breeding ponds and the site,
4. Nature and extent of available terrestrial habitat around the pond,
5. Area of site habitat loss,
6. Nature of habitat to be lost and potential value to GCN,
7. Most up to date Government guidance considering EPS.

- 7.6.2 As derived from the desktop assessment, evidence of GCN in the locale included:

- No existing ponds on the site,
- No ponds within 250 metres, situated 246 metres to the west,
- No 'Present' ponds survey within the considered range,
- A single GCN EPSML, situated 0.83 kilometres north-east of the site.

7.6.3 The application site itself offers unfavourable habitat with regard to this species, with its homogenous sparsely vegetated nature providing little in the way of shelter for members of this species. The loss of this habitat in the proposed works area would, therefore, be of little consequence for GCN subject to their presence in the wider landscape.

7.6.4 The unsuitability of the application site for GCN, the absence of connectivity to suitable breeding ponds, the lack of GCN records in the immediate and wider landscape, alongside the small scale and localised nature of the proposed development, means that it is highly unlikely that there will be any impacts from the proposed works on this species.

Wider herpetofauna

7.6.5 Given the surrounding habitats, which include woodland and irrigation systems, the application site could be used by generalist, more robust common amphibians including Common Frog (*Rana temporaria*) and Common Toad (*Bufo bufo*), subject to their presence in the landscape.

7.6.6 With regards to reptiles, the application site is a predominantly homogenous habitat with low levels of structural diversity and an absence of any ecotones or refuge opportunities suitable for the foraging, basking and hibernating requirements of common reptile species present in the UK such as Grass Snake and Slow Worm. Whilst the absence of commonly associated suitable features for reptiles does not necessarily indicate the absence of reptiles, it does suggest that they are unlikely to be present; no further recommendations are given with regard to reptiles.

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 features 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 & Vegetation

- 8.1 No habitats or species of conservation importance were identified within the application site boundary. 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.
- 8.2 One Schedule 9 (WCA) INNS was recorded on the site; namely Wall Cotoneaster. Whilst it is not illegal to host any species designated as such 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.
- 8.3 To prevent incidental spread of this species during the proposed works it is recommended that a precautionary working method statement with appropriate biosecurity protocol is instated prior to commencement of site works.

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, building B2 (the Grade II Listed Stable block) is determined to offer **'Moderate'** bat roost potential in accordance with Bat Conservation Trust – Bat Surveys for Professional Ecologists: Good Practice Guidelines, 3rd ed. (2016), which triggers the need for further survey effort prior to the proposed works taking place. Buildings B2a and B3 are determined to offer **'Negligible'** potential, and no further surveys are recommended on either of these structures.

Table 7.3 Recommended minimum number of survey visits for presence/absence surveys to give confidence in a negative result for structures (also recommended for trees but unlikely to give confidence in a negative result).		
Low roost suitability	Moderate roost suitability	High roost suitability
One survey visit. One dusk emergence or dawn re-entry survey ^a (structures). No further surveys required (trees).	Two separate survey visits. One dusk emergence and a separate dawn re-entry survey. ^b	Three separate survey visits. At least one dusk emergence and a separate dawn re-entry survey. The third visit could be either dusk or dawn. ^b

Figure 8.1 – BCT extract on Moderate roost potential requirements

- 8.5 It is recommended that two dusk and / or dawn emergence / re-entry surveys are conducted at the site during the active season of bats (May – August, extending into September), in order to establish if / how the building is being used by bats, and if so, identify the species present, abundance, roost locations and flight lines around the site following emergence/re-entry. Three surveyors would be required to monitor the potential roost features described at the building.
- 8.6 The applicant should be aware that, if during further surveys, evidence is gathered by the Ecologist that confirms bat(s) or their roost(s) are found and will be impacted upon, then an EPSML may be required to legally commence with the proposals.
- 8.7 Natural England provides information and guidance about licensing and the following extract is included in that guidance: -

"If you intend to apply for a licence for development, you are advised to seek the guidance of a consultant ecologist. Natural England's view is that a licence is needed if the consultant

ecologist, based on survey information and specialist knowledge of the species concerned, considers that on balance the proposed activity is reasonably likely to result in an offence under the Conservation of Habitats & Species Regulations 2019 (as amended).

If the consultant Ecologist, on the basis of survey information and specialist knowledge of the species concerned, considers that on balance the proposed activity is reasonably unlikely to result in an offence being committed then no licence is required. However, in these circumstances Natural England would urge that reasonable precautions be taken to minimise the effect on European protected species should they be found during the course of the activity. If European protected species are found, cease the work until you have assessed whether you can proceed without committing an offence. A licence should be applied for if an offence/s is unavoidable, and the work should not commence until a licence is obtained.

The application should be completed by the developer and a consultant ecologist. The ecologist will need to be able to demonstrate to the satisfaction of Natural England that they have the relevant skills and knowledge of the species concerned.

- 8.8 Where more detailed bat surveys are recommended by the Ecologist, following an initial daytime investigation, then Local Planning Authorities, on the advice of their ecological advisors, may not determine the application until such time that **all relevant information is gathered, i.e., by conducting dusk/dawn surveys**. The advice that is provided by the ecological advisors is also in accordance with the obligations placed upon Local Authorities by way of its duties under the Conservation of Habitats & Species Regulations 2019 (as amended). Therefore, it would be prudent to make enquiries to the relevant departmental Planning Officer before submitting a Planning Application that includes an ecological survey report that recommends more detailed surveys.
- 8.9 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. A bat-sensitive lighting plan is therefore recommended in order to avoid potential impacts to bats that may use the surrounding treelines. 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

- 8.10 In relation to WCA Schedule 1 specially protected bird species, no evidence to suggest any form of breeding behaviour or any usage of the site whatsoever was encountered. Any impacts which may arise from the development proposals to these specially protected birds can, therefore, be safely ruled out.
- 8.11 In relation to common birds, several nests were identified during the appraisal, and the buildings, woodland and the vegetation present offer small birds a plethora of nesting opportunities, particularly during the breeding bird season.
- 8.12 Given that all birds are protected when at the nest, it is therefore recommended that any demolition, tree felling / pruning and vegetation clearance works on site are carried out outside of the breeding bird season (March – August inclusive). For works undertaken within the breeding bird season, any areas that can support nesting birds such as the buildings, dense scrub and woodland should be checked by a professional Ecologist for nesting birds within 48 hours or less prior to works commencing.
- 8.13 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 (typically 5 – 10 metres) 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.

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."*

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.*

Other Terrestrial Mammals

- 8.14 Whilst no direct evidence of badger, hedgehog, or other terrestrial mammals was identified anywhere within the survey boundary, the habitat present is considered suitable for foraging and commuting and occasional sheltering by European Hedgehog, with enhancement measures recommended to be built into the new development as well as any associated developments in the area.

Herpetofauna

GCN

- 8.15 Having carefully considered the results derived, the risk of impacts to Great Crested Newts can be ruled out, and their presence within the application site is considered to be highly unlikely, owing to the unfavourable nature of the terrestrial habitat in the works area in regard to GCN, and of the distance from and barriers to dispersal present between the application site and the nearest EPSML for GCN.

Wider herpetofauna

- 8.16 The presence of more robust amphibian species is possible, and a detailed working Method Statement should therefore be applied outlining key reasonable avoidance measures (RAMs) and working protocols to be in effect during all proposed works to effectively safeguard amphibians, and to be written by a competent ecologist/Ecological Clerk of Works (ECoW).

Upon gaining understanding of the details contained within the RAMs and signing the audit form the applicant would be expected to comply with the measures recommended by the ecologist/ECoW. It is recommended this should be stipulated as a pre-commencement planning condition. This would be subject to the approval of the local planning authority – following approval, strict adherence to the terms of the RAMs would be a requirement of the named authority and the applicant would be the liable party, with the ecologist/ECoW acting for and on behalf of the applicant.

- 8.17 The site is unlikely to support reptiles, lacking the required size, value, mosaic, permanence, heterogeneity, structure, surface geology and overall good habitat quality for reptiles to be found. Risk of impacts to reptiles is considered negligible and no further surveys, or intervention recommendations, need be recommended.

Invertebrates

- 8.18 No impacts to local populations of invertebrates are foreseen; as such, no further surveys are recommended, however enhancement measures for invertebrates have been provided within Appendix III which could be incorporated into the development.

Biodiversity Enhancement

- 8.19 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 southern elevation of Building B2, The Stable Block, Grade II Listed*



Plate 2 – *Further angle of the same elevation*

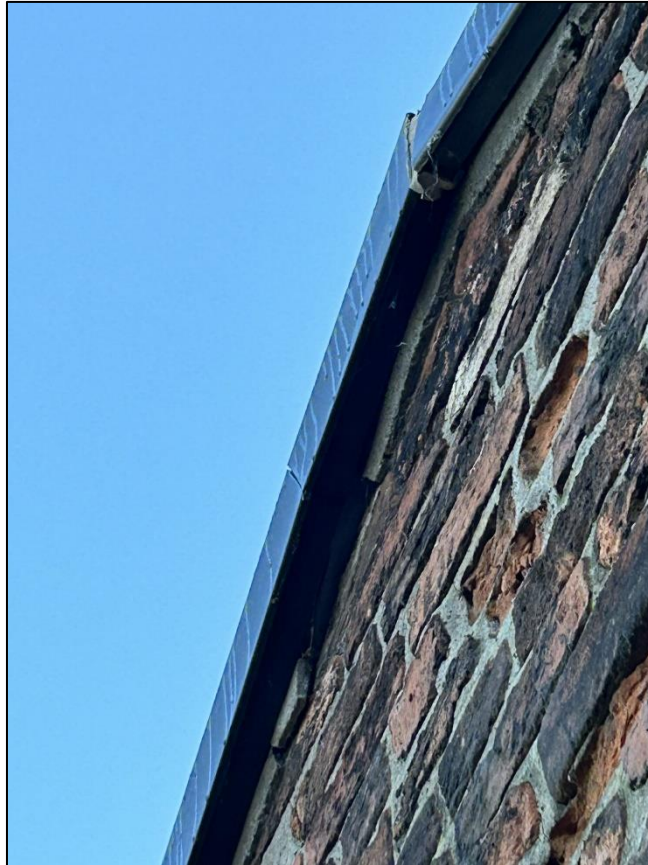


Plate 3 – *Gaps beneath the plastic capping on the western elevation*



Plate 4 – *Indicative entry points at wall plate level on the southern elevation*



Plate 5 – *Birds nest in the deceased Ivy*



Plate 6 – *Northern elevation of B2*



Plate 7 – B2a



Plate 8 – Loft space above the single storey region of B2



Plate 9 – *Building B6*



Plate 10 – *The disturbed waste ground to the north of the site*



Plate 11 – *Cobbled area with emergent vegetation growth*



Plate 12 – *Woodland block to the north-west of car park*



Plate 13 – *The car park itself*



Plate 14 – *Wall Cotoneaster along the southern boundary*



Plate 15 – *Further angle of the waste ground*

Appendix II: 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*

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

Abundance	Scientific Name	Common Name
LA	<i>Urtica dioica</i>	Common Nettle
R	<i>Poa annua</i>	Annual Meadow-grass
R	<i>Fraxinus excelsior</i>	Ash
R	<i>Laurus nobilis</i>	Bay Laurel
R	<i>Fagus sylvatica</i>	Beech
A	<i>Medicago lupulina</i>	Black Medick
R	<i>Rubus 'fruticosus'</i>	Bramble
R	<i>Rumex obtusifolius</i>	Broad-leaved Dock
A	<i>Buddleja davidii</i>	Buddleia
R	<i>Prunus sp.</i>	Cherry species
R	<i>Galium aparine</i>	Cleavers
R	<i>Dactylis glomerata</i>	Cock's-foot
LO	<i>Tussilago farfara</i>	Colt's-foot
O	<i>Senecio jacobaea</i>	Common Ragwort
O	<i>Agrostis stolonifera</i>	Creeping Bent
O	<i>Cirsium arvense</i>	Creeping Thistle
R	<i>Pyrus communis</i>	Cultivated Pear
R	<i>Cupressus sp.</i>	Cypress species
R	<i>Taraxacum officinale agg.</i>	Dandelion species
R	<i>Sambucus nigra</i>	Elder
R	<i>Arrhenatherum elatius</i>	False Oat-grass
R	<i>Equisetum arvense</i>	Field Horsetail
R	<i>Pyracantha sp.</i>	Firethorn
R	<i>Aethusa cynapium</i>	Fools Parsley
R	<i>Digitalis purpurea</i>	Foxgloves
LO	<i>Chelidonium majus</i>	Greater Celandine
R	<i>Plantago major</i>	Greater Plantain
R	<i>Senecio vulgaris</i>	Groundsel
R	<i>Calystegia sepium</i>	Hedge Bindweed
O	<i>Geranium robertianum</i>	Herb-robert

O	<i>Epilobium parviflorum</i>	Hoary Willowherb
R	<i>Ilex aquifolium</i>	Holly
R	<i>Aesculus hippocastanum</i>	Horse Chestnut
LA	<i>Hedera helix</i>	Ivy
LA	<i>Cymbalaria muralis</i>	Ivy-leaved Toadflax
R	<i>Aucuba japonica</i>	Japanese Laurel
R	<i>Persicaria maculosa</i>	Lady's-thumb
R	<i>Acer sp.</i>	Maple species / cultivar
R	<i>Ranunculus acris</i>	Meadow Buttercup
R	<i>Senecio inaequidens</i>	Narrow-leaved Ragwort
O	<i>Euphorbia peplus</i>	Petty Spurge
R	<i>Matricaria discoidea</i>	Pineapple-weed
R	<i>Sonchus asper</i>	Prickly Sow-thistle
R	<i>Rhododendron ponticum</i>	Rhododendron INNS
R	<i>Plantago lanceolata</i>	Ribwort Plantain
A	<i>Chamerion angustifolium</i>	Rosebay Willowherb
R	<i>Prunella vulgaris</i>	Selfheal
R	<i>Capsella bursa-pastoris</i>	Shepherd's-purse
O	<i>Acer pseudoplatanus</i>	Sycamore
O	<i>Linaria sp.</i>	Toadflax species
R	<i>Cotoneaster horizontalis</i>	Wall Cotoneaster INNS
O	<i>Trifolium repens</i>	White Clover
R	<i>Salix sp.</i>	Willow species
LA	<i>Achillea millefolium</i>	Yarrow

Appendix III: Biodiversity Enhancement: General Recommendations

Breeding Bids – 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

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.

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



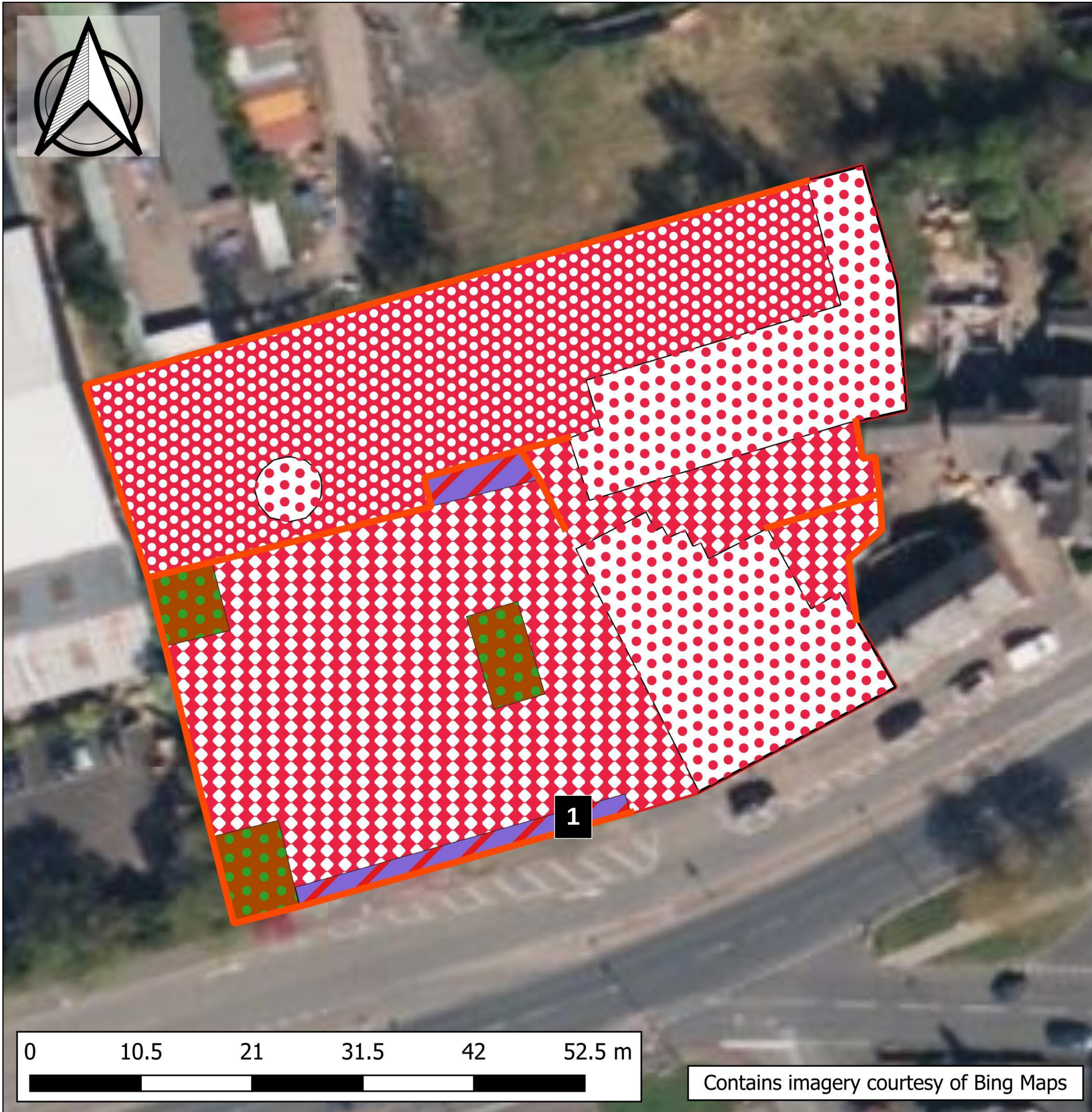
Native Planting and/or Landscaping - recommended species

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 (*Prunus spinosa*), Hawthorn (*Crataegus monogyna*), Hazel (*Corylus avellana*), and Holly (*Ilex aquifolium*), whilst climbers/creepers such as Hops (*Humulus lupulus*) and Honeysuckle (*Lonicera periclymenum*) 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 (*Quercus robur*), Wild Cherry (*Prunus avium*), and Alder Buckthorn (*Frangula alnus*).

	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

The Clock Face, Derby Street, Prescott, L34 3LL
Preliminary Ecological Appraisal

Woody Shrubs	Dogwood	<i>Cornus sanguinea</i>	-
	Gelder 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>	-



UK Habitats Key

-  u1e - Built Linear Feature
 - 68 - Mortared wall
 - 69 - Fence
-  h3h - Mixed Scrub
 - 11 - Scattered trees
 - 16 - Tall herb
 - 17 - Ruderal / ephemeral
 - 48 - Non-native
 - 73 - Bare ground
-  u1b5 - Buildings
-  u1b6 - Other Developed Land
-  u1c - Artificial Unvegetated Unsealed Surface
 - 11 - Scattered trees
 - 16 - Tall herb
 - 17 - Ruderal / ephemeral
 - 73 - Bare ground
 - 77 - Neglected
 - 48 - Non-native
-  w1h - Other Woodland Mixed
 - 48 - Non-native
-  Boundary

Target Notes:
1 - Location of Wall Cotoneaster INNS

The Clock Face

Survey Date: 18/10/2022
Drawn: Mr. B. Richards
Date Drawn: 02/11/2022
Checked & Approved: Mrs. K. Wilding
Size: A3
Scale: 1:500

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