Elite Ecology

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R and R Engineering Ltd.,
Wrexham



Preliminary Ecological Appraisal

September 2025

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0. Executive Summary

This report has been prepared at the request of R&R Properties (Wrexham) Ltd. It relates to the proposed re-development works at R & R Engineering, Oak Road, Wrexham, Wales, LL13 9RG (Central OS Grid Reference: SJ 39050 49136). This survey effort involved both a desktop study and field survey being undertaken.

Under the current proposals, four buildings (**B1**-**B4**) are to be demolished, and a new workshop is to be constructed in their place, see **Appendix A** for illustrated site plans.

Cofnod was commissioned to carry out an ecological data search of all protected species and sites recorded within a 2km radius of the site. No records lay on the proposed re-development site itself, although a number of records are present in close proximity. Please see **Section 3** for a review of the records revealed.

The preliminary ecological appraisal survey revealed multiple habitats on site. The phase 1 habitat map, habitat codes and target notes for the site are located within **Appendix D**. The following habitats were recorded on site (in habitat code order):

- **h2a 11 – Native Hedge with Trees**
- **h3h – Mixed Scrub**
- **u1b – Developed Land; Sealed Surface**
- **u1b5 – Buildings**
- **u1c – Unsealed Surface**
- **u1e – Built Linear Features**
- **u1f – Sparsely Vegetated Urban Land**

Designated Sites:
No designated sites that were revealed by the ecological data search provided by MAGIC Maps fell on the proposed re-development site itself, nor were any revealed immediately adjacent to the site. Therefore, the proposed re-development will have no impact upon any local designated sites as the works are due to remain within the site boundary.

Habitats:
Priority Habitats: No habitats of conservation concern were located on the site itself. Therefore, the proposed scheme of works will not impact upon any rare or valuable habitats.

Species:

Amphibians (including great crested newts): The site could be used by commuting amphibians as it is connected to the surrounding landscape and has two ditches within a 500m radius, with some connectivity between them and the site. The road present immediately to the north of the site is likely to be busy and thus may serve as a deterrent, but it is not impossible for amphibians to cross. In addition, there is a hedgerow and mixed scrub on site that may be utilised by amphibians in their terrestrial phases. Therefore, a herptile method statement is required to ensure no harm to any specimens that may be using the site during the construction phase.

Badgers (*Meles meles*): During construction works, excavations should be left closed overnight, or a mammal ladder installed. The ladder needs to be of a size suitable for badgers and can be constructed out of a piece of wood/timber.

Birds: Due to there being suitable bird breeding habitat within the site all building works should be undertaken outside of the bird breeding season (March to August). If vegetation is required to be removed during the bird breeding season, then a further inspection by a suitably qualified ecologist is required no more than twenty-four hours before these are to be removed. This is to ensure that no active nest site is illegally destroyed, due to the protection afforded to all active bird nests under the Wildlife and Countryside Act 1981. If an active nest is found by a site inspection, an exclusion zone around the nest will be necessary, where no vegetation removal can take place, to preserve this feature until the chicks have fledged the nest.

Hedgehogs (*Erinaceus europaeus*): If hedge or dense vegetation is cleared between the 1st of November and the 31st of March, then an inspection by a suitably qualified ecologist is required to ensure no hibernating hedgehogs are present on site. It is recommended that precautionary measures are incorporated if construction is undertaken at other times of the year. This will be to create provisions for hedgehogs to escape from all trenches dug into the ground, by creating slopes or providing ramps at the end of each working day. Additionally, any pipework left on site that is greater than 150mm in diameter will need to be planked off. Should this information be strictly adhered to, then the development works will not negatively impact on the local mammal populations.

Reptiles: The presence of suitable habitat onsite for commuting reptiles makes it necessary to undertake a herptile method statement to ensure no harm to any specimens that may be using the site during the construction phase.

Site Enhancements:

For the proposed site enhancements, please see **Section 5.4** of this report.

Biodiversity Net Gain:

Biodiversity net gain needs to be ensured within the scheme of work, and this will be devised utilising the latest DEFRA metric.

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1. Introduction

1.1 Report Rationale

This report has been prepared at the request of R&R Properties (Wrexham) Ltd. on behalf of Mr. Steve Wingett (developer). It relates to the proposed re-development works at R & R Engineering, Oak Road, Wrexham, Wales, LL13 9RG (Central OS Grid Reference: SJ 39050 49136). This survey effort involved both a desktop study and field survey being undertaken.

The main purpose of this assessment was to identify the broad habitats (as stated in the UK Habitat Classification Version 2.0) and the flora species present within the survey area, with any further evidence of protected species usage and/or features of potential ecological interest also included.

The field survey was carried out on the 21st of August 2025 by **Mr. Mathew Cotterill:** PG Dip, Ecologist, and **Miss. Katherine Ward:** MSc, Assistant Ecologist.

1.2 Site Description and Works

The site is situated on the outskirts of the Wrexham Industrial Estate located approximately 5.7km to the east of the city centre of Wrexham.

The site measures approximately 1.97ha and contains a number of habitats. These include buildings, built linear features, developed land, mixed scrub, native hedge with trees, and sparsely vegetated urban land. The habitats on site could have the potential to support a number of protected species. The photographs of the site are found within **Appendix E**.

Within the wider landscape further habitats are present. These come in the form of arable land, hard standing ground, hedgerows, improved grassland, pastureland, residential dwellings (and their associated gardens/yards), scattered trees, standing water, and woodland. This shows that the habitats in the area surrounding the site have the potential to support protected species.

Under the current proposals, four buildings (**B1**-**B4**) are to be demolished, and a new workshop is to be constructed in their place. Please refer to **Appendix A** for the site plans.

Figure 1: An aerial map showing the boundary of the site at R and R Engineering Ltd., Wrexham (as shown by the red outline).



Figure 2: An aerial map showing the location of the site (illustrated by the Yellow star) in relation to the local landscape at R and R Engineering Ltd., Wrexham .



Figure 3: An OS map obtained from Bing showing the location of R and R Engineering Ltd., Wrexham (as shown by the yellow star).



2. Survey Methodology

2.1 Desktop Survey

A variety of resources were independently consulted to assess the known local records within the nearby area and the importance of the site within the local landscape from an ecological perspective. The resources used were the Local Records Centre, www.naturalengland.org.uk, www.ordnancesurvey.co.uk, Google Maps, Google Earth, and Bing Maps. A search of other relevant nature conservation information was made through the use of the Multi-Agency Geographic Information for the Countryside (MAGIC) database.

The local records centre was contacted to provide data on all protected species and sites within 2km of the proposed development site. Cofnod was the relevant local record centre for this project.

2.2 Field Survey

A Preliminary Ecological Appraisal (previously referred to as an Extended Phase 1 Habitat Survey) was carried out using the method outlined in The UK Habitat Classification Version 2.0. This method aims to map and describe the broad habitat types and notable features present on the surveyed site.

The classification of the habitats themselves was done using the definitions outlined in UK Habitat Classification (UKHab) in *The UK Habitat Classification Version 2.0 (2023).*

As part of the field survey, the floral species will be identified and noted down. This will consider the dominant, abundant, frequent, occasional, and rare (DAFOR) species within each habitat on the survey site. The impacts of the proposed development scheme will be assessed by this report.

Each habitat will be assessed for the presence and/or the potential presence of protected species. The impacts of the proposed scheme of works on all potential protected species on site will be assessed. From this, either remedial action or recommended phase 2 presence/absence surveys will be devised.

Habitat Surveys can be carried out at any time of the year, with the optimal time period falling between the months of April through until September. This survey was carried out in September 2025, which is inside the optimal time period for flora surveys. Elite Ecology feels confident that this report reflects an accurate representation of the site's suitability for protected species to be present.

All sites surveyed by Elite Ecology will be run against the relevant Local Wildlife Site Criteria to assess whether or not they meet the required standards.

3. Desktop Survey Results

3.1 Statutory Sites

The ecological data received from MAGIC Maps revealed no statutory protected sites (e.g., LNR, SSSI, SPA, SAC, or Ramsar) were found within the 2km radius of the site.

3.2 Non-statutory Sites

The ecological data received from Cofnod revealed two non-statutory protected sites within 2km of the site. These were both Sites of Local Nature Reserves (LNR):

Site Name	Designation	Approx. Distance (m)	Heading
Petre's Dingle	LNR	900	Unknown
Wrexham Industrial Estate	LNR	30	N/A

3.3 Woodland Sites

The information provided by Cofnod revealed one Ancient and Semi-natural Woodland (ASNW) around 914m from the site and one restored ancient woodland around 1,501m from the site within the 2km search radius.

3.4 Regionally Important Geological Sites (RIGS)

The information provided by Cofnod revealed one RIGS within the 2km search radius. This was Sutton Green Round Barrow approximately 1,668m from the site.

3.5 Priority Habitat

The information provided by MAGIC Maps revealed no priority habitats within 500m of the site boundary.

3.5 Species Records

3.5.1 Amphibians

Within the ecological data search provided by Cofnod, five amphibian species were revealed within 2km of the survey site. These were common frog (*Rana temporaria*), common toad (*Rana temporaria*), great crested newt (*Triturus cristatus*), palmate newt (*Lissotrition helveticus*), and smooth newt (*Lissotriton vulgaris*). The closest record to the site was of great crested newt, recorded approximately 147m to the north of the site centroid.

According to MAGIC Maps no great crested newt pond survey licences or protected species licenses have been permitted within 2km of the site.

3.5.2 Birds

Within the ecological data search provided by Cofnod, Seventy-six bird species were revealed. The closest record to the site was of bullfinch (*Pyrrhula pyrrhula*), located approximately 261m to the south of the site centroid.

A table with the collated bird species recorded can be found within **Appendix B**.

3.5.3 Crustaceans

Within the ecological data search provided by Cofnod, no records relating to crustacean species were revealed within 2km of the site.

3.5.4 Fish

Within the ecological data search provided by Cofnod, three fish species were revealed. These were Atlantic salmon (*Salmo salar*), brown/sea trout (*Salmo trutta*), and eel (Anguilla aguilla). The closest occurrence was of Atlantic salmon and eel, both recorded approximately 965m to the south-east of the site centroid.

3.5.5 Flora

Within the ecological data search provided by Cofnod, 147 floral species have been revealed. These included buddleia (*Buddleja davidii*), giant hogweed (*Heracleum mantegazzianum*), Himalayan balsam (*Impatiens glandulifera*), and Japanese knotweed (*Reynoutria japonica*), which are invasive. The closest occurrence was of stone parsley (*Sison amomum*), recorded approximately 234m to the west of the site centroid.

A table with the collated flora species recorded can be found within **Appendix B**.

3.5.6 Fungi

Within the ecological data search provided by Cofnod, sixteen fungal species have been revealed, of which none are invasive. The closest occurrence was of Blackening waxcap (*Hygrocybe conica*), recorded approximately 1,070m to the north-west of the site centroid.

A table with the collated fungi species recorded can be found within **Appendix B**.

3.5.7 Invertebrates

Within the ecological data search provided by Cofnod, forty-eight invertebrate records have been identified within a 2km radius of the site. The closest occurrence was of dingy skipper (*Erynnis tages*), recorded approximately 218m to the east of the site centroid.

A table with the collated bird species recorded can be found within **Appendix B**.

3.5.8 **Mammals**

centroid.

Bats

Within the ecological data search provided by Cofnod, eight known species of bat were revealed within the 2km search radius.

The UKBAP species recorded in the search were, brown long-eared (*Plecotus auritus*), noctule (*Nyctalus noctula*), lesser horseshoe (*Rhinolophus hipposideros*), and soprano pipistrelle (*Pipistrellus pygmaeus*). The non-BAP species recorded in the search were Brant's (*Myotis brandtii*), common pipistrelle (*Pipistrellus pipistrellus*), Daubenton's (*Myotis daubentonii*), and Natterer's bats (*Myotis nattereri*). In addition to this, some records of unidentified bat species were revealed.

The closest records to the survey site were of common pipistrelle, noctule, and soprano pipistrelle bats found approximately 624m to the south-west of the site centroid.

According to Magic Maps no protected mammal mitigation licences or protected species licence returns have been granted within a 2km radius of the site.

Other Mammals

Within the ecological data search provided by Cofnod, revealed eight other mammal species within the 2km search radius. These were brown hare (*Lepus europaeus*), Eurasian badger (*Meles meles*), grey squirrel (*Sciurus carolinensis*), otter (*Lutra lutra*), polecat (*Mustela putorius*), stoat (*Mustela erminea*), weasel (*Mustela nivalis*), and west European hedgehog (*Erinaceus europaeus*).

3.5.9 **Molluscs**

Within the ecological data search provided by Cofnod, no mollusc records were identified within 2km of the site.

3.5.10 **Reptiles**

Within the ecological data search provided by Cofnod, four reptile species were identified within 2km of the survey site. These were of adder (*Vipera berus*), common lizard (*Zootocaa vivpara*), grass snake (*Natrix helvetica*), and slow worm (*Anguis fragilis*), all recorded approximately 1,110m to the north-east of the site centroid.

4. Field Survey

4.1 Habitats

The preliminary ecological appraisal survey revealed multiple habitats on site. The phase 1 habitat map, habitat codes and target notes for the site are located within **Appendix D**. The following habitats were recorded on site and in the surrounding area (in habitat code order):

On Site:

4.1.1 h2a 11 – Native Hedgerow

UKHAB Secondary Code(s)	Definition
11	Hedgerow with Trees

The northern and eastern margin of the site features a native hedgerow. This habitat features abundant occurrences of hawthorn (*Crataegus monogyna*), with frequent occurrences of eared sallow (*Salix aurita*) and grey willow (*Salix cinerea*), and rare occasions of Chinese barberry (*Berberis julianae*), dog rose (*Rosa canina*), downy birch (*Betula pubescens*), elder (*Sambucus nigra*), and oak (*Quercus robur*). This habitat has the potential to support a variety of protected species in foraging, commuting, and as refugia.

4.1.2 h3h – Mixed Scrub

The northern and western margin of the site features mixed scrub. This habitat has frequent occurrences of grey willow (*Salix cinerea*) and bramble (*Rubus fruticosus* agg.), and occasional occurrences of hawthorn (*Crataegus monogyna*) and rosebay willowherb (*Chamaenerion angustifolium*). Within this habitat fifteen species occur rarely, basket willow (*Salix viminalis*), bristly oxtongue (*Helminthotheca echioides*), cocks foot (*Dactylis glomerata*), common hogweed (*Heracleum sphondylium*), common horsetail (*Equisetum arvense*), creeping thistle (*Cirsium arvense*), dog rose (*Rosa canina*), giant hogweed (*Heracleum mantegazzianum*), great hairy willowherb (*Equilobium hirsutum*), knapweed (*Centaurea nigra*), nettle (*Urtica dioica*), mugwort (*Artemisia vulgaris*), oxeye daisy (*Leucanthemum vulgare*), small fleabane (*Pulicaria dysenterica*), and Yorkshire fog (*Holcus lanatus*). This habitat has the potential to support a wide variety of protected species in foraging, commuting, and as refugia.

4.1.3 u1b – Developed Land; Sealed Surface

Several areas of developed land are present across the site. Within this site, this habitat features no occurrences of vegetative species. This habitat is of no ecological significance.

4.1.4 u1b5 – Buildings

Eight buildings are present on site. These consist of three detached industrial buildings (**B1, B2**, and **B5**), containers (**B3, B4**, and **B7**), an office (**B6**) and a shed (**B8**).

It should be noted that the buildings present on site are in constant use daily, and as such, the degree of anthropogenic disturbance within them is high.

Figure 4: An aerial map of the site at R and R Engineering, Wrexham with the locations of the two buildings (**B1** through to **B8**) shown (red outline) and onsite containers (blue outline).



B1

External Inspection

B1 is a detached industrial building found at the south of the site. The roof is predominantly gabled and is constructed of corrugated metal, with a lean-to section also constructed of corrugated metal being present on the western elevation. The walls of this building are partly constructed of breezeblocks at the bottom, and of corrugated metal above these. There is a hole in the breezeblock of the wall present on the southern elevation of the building, which may serve as an access point for bats and birds. Doors constructed of metal are present across the building, as are windows constructed of uPVC. Furthermore, skylights are present within the roof of the building, allowing natural light to permeate in the internal. There is a hole in a window on the western elevation, which again may serve as a potential access point.

Additionally, sensored artificial lighting is present across the building. There was no physical evidence of externally nesting birds or roosting bats on this building.

Internal Inspection

The ceiling of this building is constructed of corrugated metal and is supported by steel beams and the internal walls are constructed of breezeblock, concrete, and metal. Both artificial and natural light are present internally and there was no physical evidence of bats and birds internally.

B2

External Inspection

B2 is a detached industrial building present just east of **B1**. The roof of this building is gabled, with a small, sloped roof section present at the north of the western elevation. Both of these roof styles are constructed of corrugated metal. The walls of the building are also constructed of corrugated metal. Windows set in metal panes are present across the building, and there are holes present in the windows on the western elevation, which could potentially be used by bats and birds. In addition, metal doors were present across the building. Sensored artificial lighting was present on the northern elevation of the building. No physical external evidence of nesting birds or roosting bats was identified on the building.

Internal Inspection

The ceiling of the building is constructed of concrete and the internal walls are constructed of metal. Artificial lighting is present internally and there was no physical evidence of internally nesting birds or roosting bats within the building.

B3

External Inspection

B3 is a detached container present to the east of **B2.** The roof of this building is flat and constructed of metal, and the walls are also constructed of metal. There are no windows present on this building, and there is a metal door in good condition present on the building. There are no further external features of note present on this building, and no physical evidence of externally nesting birds or roosting bats was identified on this building.

Internal Inspection

No internal inspection was carried out on this building due to a lack of access.

B4

External Inspection

B4 is a metal container adjoining the southern elevation of **B1**. The roof of this building is flat and constructed of metal, and the walls are also constructed of metal. There are no windows present on this building, and there is a metal door present on the building, all of which are in good condition. There are no further external features of note present on this building, and no physical evidence of externally nesting birds or roosting bats was identified on this building.

Internal Inspection

The ceiling of this building is constructed of metal, as are the internal walls. No artificial lighting is present in the building, but the door is left open and thus natural light permeates the internal. Additionally, there was no physical internal evidence of nesting birds or roosting bats.

B5

External Inspection

B5 is a detached industrial building present in the centre of the site. The roof is predominantly gabled with a lean-to section on the southern elevation, and the entire roof is constructed of corrugated metal. The walls are constructed of corrugated metal and cavity brick and covered with plastic sheeting. Doors constructed of metal and windows set in metal panes in good condition are present across the building, as well as sensored artificial lighting. There were no further external features that were identified as part of the survey, and no physical evidence of externally nesting birds or roosting bats were identified on this building.

Internal Inspection

No internal inspection was carried out on this building due to a lack of access.

B6

External Inspection

B6 is a detached office building found at the north of the site. The roof is gabled and constructed of corrugated metal, with the external walls also being constructed of corrugated metal. There are metal doors and windows set in wooden panes in good condition present across the building. Artificial lighting is present across the external of the building, and there are no further external features present. In addition, there was no physical external evidence of nesting birds or roosting bats present in **B6**.

Internal Inspection

No internal inspection was carried out on this building due to a lack of access.

B7

External Inspection

B7 is a series of containers at the west of the site. The roof of this building is flat and constructed of metal, and the walls are also constructed of metal. There are no windows present on this building, and there is a metal door present on the building, all of which are in good condition. There are no further external features of note present on this building, and no physical evidence of externally nesting birds or roosting bats was identified on this building.

Internal Inspection

No internal inspection was carried out on this building due to a lack of access.

B8

External Inspection

B8 is a shed located at the east of the site. The roof of the building is sloped and constructed of corrugated metal, and the external walls are also constructed of corrugated metal. There were metal doors and windows set in metal panes in good condition present on the building. Artificial lighting is present across the external of the building, and there are no further external features present. In addition, there was no physical external evidence of nesting birds or roosting bats present on **B8**.

Internal Inspection

No internal inspection was carried out on this building due to a lack of access.

Summary of Building Inspection

Due to the amount of potential ingress/egress points and suitable roosting features, the structures of **B1** through to **B8** at R and R engineering, Wrexham were deemed as having the following bat and bird potentials. It should be noted that no further bat activity surveys are required for these buildings as they are not set to be affected by the works.

Building Reference	Bat Potential	Bird Potential	Number of bat activity surveys required	Number of surveyors required
B1	**Negligible**	**Negligible**	N/A	N/A
B2	**Negligible**	**Negligible**	N/A	N/A
B3	**Negligible**	**Negligible**	N/A	N/A
B4	**Negligible**	**Negligible**	N/A	N/A
B5	**Negligible**	**Negligible**	N/A	N/A
B6	**Negligible**	**Negligible**	N/A	N/A
B7	**Negligible**	**Negligible**	N/A	N/A
B8	**Negligible**	**Negligible**	N/A	N/A

Table 1: Low/Moderate/High potential building(s) survey recommendations. The full guidance can be found in the Bat Conservation Trust Good Practice Survey Guidelines. These guidelines are what all local authorities abide by.

Table 7.2. 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 or PRF-I	Moderate roost suitability	High roost suitability or PRF-M
One survey visit. One dusk emergence survey[a] (structures). No further surveys required (trees).	Two separate dusk emergence survey visits[b].	Three separate dusk emergence survey visits[b].

a Structures that have been categorised as low potential can be problematic and the number of surveys required should be judged on a case-by-case basis (see para 5.2.44). In some cases, more than one survey may be needed, particularly where there are several buildings in this category.

b Multiple survey visits should be spread out to sample as much of the recommended survey period (see Table 7.1) as possible; it is recommended that surveys are spaced at least three weeks apart, preferably more.

4.1.5 u1c – Developed Land; Unsealed Surface

This habitat covers the majority of the site and contains rare occurrences of annual sow thistle (*Sonchus oleraceus*), cock's foot (*Dactylis glomerata*), dandelion (*Taraxacum officinale*), downy birch (*Betula pubescens*), herb Robert (*Geranium robrtianum*), and knapweed (*Centaurea nigra*). This habitat is of no ecological significance.

4.1.6 u1e 612 – Built Linear Features

UKHAB Secondary Code(s)	Definition
612	Fence

The entire boundary of the site has a metal fence with metal gates for entry to the north-east of the site. It cannot be determined if this is likely to prevent protected species from accessing the site due to dense vegetation. This habitat is of no ecological significance.

4.1.7 u1f – Sparsely Vegetated Urban Land

To the south-east of the site there is a small patch of sparsely-vegetated urban land. This habitat has rare occurrences of birds-foot trefoil (*Lotus corniculatus*), bramble(*Rubus fruiticosus*), bristly-oxtongue (*Helminthotheca echioides*), creeping cinquefoil (*Potentilla reptans*), climbing nightshade (*Solanum dulcamara*), cock's foot(*Dactylis glomerata*), knapweed (*Centaurea nigra*), creeping thistle (*Cirsium arvense*), curly dock(*Rumex crispus*), dandelion (*Taraxacum officinale*), downy birch (*Betula pubescens*), eared sallow (*Salix aurita*), elder (*Sambucus nigra*), hawthorn (*Crataegus monogyna*), herb Robert (*Geranium robrtianum*), common hogweed (*Heracleum sphondylium*), nettle (*Urtica dioica*), oak (*Quercus robur*), oxeye daisy (*Leucanthemum vulgare*), red clover (*Trifolium pratense*), rosebay willowherb

(*Chamaenerion angustifolium*), and small fleabane (*Pulicaria dysenterica*). This habitat could be utilised by local invertebrate populations.

4.2 Species

The preliminary ecological appraisal survey revealed that the habitats that have been outlined for the proposed development area do contain protected species potential. The following assessment has also considered the adjacent habitats and connectivity to the wider landscape for all protected and rare species.

4.2.1 Amphibians (including great crested newts)

There are habitats on site that have the potential to support amphibians whilst in their terrestrial phases, such as the hedgerow and scrubland habitats. In addition, two ditches are present within 500m of the site and have good connectivity between them and the site (please see **Figure 5**). As such, the site has the potential to contain amphibians, and further action is required to ensure that no amphibians are harmed during the construction phase (please see **Section 5.3**).

Figure 5: An aerial map of the site at R and R Engineering Ltd., Wrexham (red outline) showing the location of ponds (blue fill) and ditches (blue lines) within a 500m buffer zone (yellow outline) of the site.



4.2.2 Badgers (*Meles meles*)

No evidence of badgers (e.g. latrines, paths, setts, etc) were identified on site or within 50m of it.
in the ecological data search provided by Cofnod. In addition, several of the habitats such as the mixed scrub have the potential to be utilised as sett creation features. Badgers could commute through the site, and as such, further survey action and precautionary measures are required (please see **Section 5.3**).

4.2.3 Bats

The site contains several features to support foraging and commuting bats, such as the hedge with trees. However, none of the buildings that were surveyed on site had any potential to support roosting bats. As such, no further survey action is required for these buildings.

4.2.4 Birds

Due to the presence of scrub and tree habitats on site, there is a **high** potential to support breeding birds. Due to this, further precautionary measures are required to ensure that no birds are harmed during the construction phase (please see **Section 5.3**).

4.2.5 Crustaceans

Due to the habitats on site the potential to support rare or protected crustaceans is **negligible**, meaning no further survey effort is required.

4.2.6 **Fish**

Due to the habitats on site the potential to support rare or protected fish is **negligible**, meaning no further survey effort is required.

4.2.7 **Flora**

The site contains no protected floral species, and the habitats are not considered likely to support any protected floral species. Furthermore, it is unlikely that the site will contain rare floral species in the flowering season. As such, the potential for protected flora species to be affected is **negligible**.

4.2.8 **Hedgehogs (*Erinaceus europaeus*)**

The site has several habitats that have the potential to support hedgehogs in foraging and commuting, and as refugia. In addition, hedgehogs were recorded as present in the local landscape in the ecological data search provided by Cofnod. As such, further precautionary action is required to ensure that hedgehogs that may be utilising the site are not harmed during the construction phase (please see **Section 5.3**).

4.2.9 **Invertebrates**

The habitats on site have the potential to support a variety of common invertebrate species. However, there is no significant vegetation to support rare or protected species, therefore, no further survey effort is required.

4.2.10 **Molluscs**

Due to the habitats on site the potential to support rare or protected molluscs is **negligible**, meaning no further survey effort is required.

4.2.11 **Otters (*Lutra lutra*)**

The site is not well connected to any water ways that are likely to be utilised by otters as such the site us unlikely to be used by foraging and commuting otters. No otter signs (e.g. holts, paths, etc) were identified on site or within 30m of it. Therefore, no further action is required.

4.2.12 **Reptiles**

The habitats on site such as the hedgerows have the potential to support commuting/dispersing reptile species. As such, further survey action is required to fully assess how reptiles are utilising the site (please see **Section 5.3**).

4.2.13 **Water Voles (*Arvicola amphibius*)**

No water vole signs (e.g. burrows, feeding signs, etc) were identified on site or within 50m of it. Therefore, no further action is required.

4.3 Potential Impacts of the Works

Based upon the results from the desktop survey, field survey and using a degree of academic supposition, the uncompensated development impacts have been summarised as follows:

Species	Impact & Justification	
	Construction Phase	Operational Phase
Amphibians	**Low** The hedgerow and scrubland onsite have the potential to support amphibians in their terrestrial phases.	**Negligible** Little to no adverse impacts to amphibians during the operational phase.
Badgers	**Low** None of the habitats on-site are suitable to support badgers and they are unlikely to commute onto the site due to the heavily urbanised surrounding area.	**Negligible** Little to no adverse impacts to badgers during the operational phase.
Bats	**Negligible** None of the buildings on-site are likely to support bat roosts. Furthermore, works will have little impact on foraging habits asl the wider landscape contains more suitable habitat.	**Negligible** Little to no adverse impacts to badgers during the operational phase.
Birds	**High** Possible risk of destruction and/or disturbance of active bird nest(s) within the hedge habitats during construction.	**Negligible** The habitats used by birds are not being changed as part of the proposed plans.
Crustaceans	**Negligible** The works will not impact any crustaceans or crustacean habitats.	**Negligible** Little to no adverse impacts to crustaceans during the operational phase.
Fish	**Negligible** The works will not impact any fish or fish habitats.	**Negligible** No adverse impacts to fish during the operational phase
Flora (Invasive)	**Negligible** No Wildlife and Countryside Act Schedule 9 invasive flora identified on site.	**Negligible** No Wildlife and Countryside Act Schedule 9 invasive flora identified on site.
Flora (Protected)	**Negligible** Little to no risk of adverse effects to protected flora during construction.	**Negligible** Little to no adverse impacts to protected flora during the operational phase.
Hazel dormice	**Negligible** Site is outside natural geographic distribution of this species and so proposals will have no impact to them.	**Negligible** Site is outside natural geographic distribution of this species and so proposals will have no impact to them.
Hedgehogs	**Low** There are habitats on site that are likely to be utilised by hedgehogs such as the mixed scrub and hedge.	**Negligible** Little to no risk of adverse effects to hedgehogs during the operational phase.

Invertebrates	**Negligible** Little to no risk of adverse effects to protected invertebrates during construction.	**Negligible** Little to no risk of adverse effects to protected invertebrates during the operational phase.
Molluscs	**Negligible** The works will not impact any molluscs or mollusc habitats.	**Negligible** Little to no adverse impacts to molluscs during the operational phase.
Otters	**Negligible** The works will not impact any otters or otter habitats.	**Negligible** Little to no risk of adverse effects to otters during the operational phase.
Reptiles	**Low** Commuting reptiles may use some of the habitats onsite such as the hedgerows.	**Negligible** Little to no risk of adverse effects to reptiles during the operational phase.
Water voles	**Negligible** The works will not impact any water voles or water vole habitats.	**Negligible** Little to no risk of adverse effects to water voles during the operational phase.

5. Recommendations

5.1 Designated Sites

No designated sites that were revealed by the ecological data search provided by Cofnod fell on the proposed re-development site itself, nor were any revealed immediately adjacent to the site. Therefore, the proposed re-development will have no impact upon any local designated sites as the works are due to remain within the site boundary.

5.2 Habitats

No habitats of conservation concern were located on the site itself. Therefore, the proposed scheme of works will not impact upon any rare or valuable habitats.

5.3 Species

The site was found to contain the potential to support protected and/or rare species. Therefore, the following recommendations are required for the site:

5.3.1 Amphibians (including great crested newts)

The site could be used by commuting amphibians as it is connected to the surrounding landscape and has two ditches within a 500m radius, with some connectivity between them and the site. The road present immediately to the north of the site is likely to be busy and thus may serve as a deterrent, but it is not impossible for amphibians to cross. In addition, there is a hedgerow and mixed scrub on site that may be utilised by amphibians in their terrestrial phases. Therefore, a herptile method statement is required to ensure no harm to any specimens that may be using the site during the construction phase.

5.3.2 Badgers (*Meles meles*)

At the time of surveying no setts, latrines, or snuffle holes were found on site, hanks to the ecological data search provided by Cofnod, an updated badger survey should be undertaken if the works do not commence within six months of the survey date (21st August 2025).

Additionally, during construction works, excavations should be left closed overnight, or a mammal ladder installed. The ladder needs to be of a size suitable for badgers and can be constructed out of a piece of wood/timber.

Precautionary measures are also recommended to be undertaken during the construction phase to ensure no harm comes to any badgers that may be utilising the site.

5.3.3 Birds

Due to there being suitable bird breeding habitat within the site all building works should be undertaken outside of the bird breeding season (March to August). If vegetation is required to be removed during the bird breeding season, then a further inspection by a suitably qualified ecologist is required no more than twenty-four hours before these are to be removed. This is to ensure that no active nest site is illegally destroyed, due to the protection afforded to all active bird nests under the Wildlife and Countryside Act 1981.

If an active nest is found by a site inspection, an exclusion zone around the nest will be necessary, where no vegetation removal can take place, to preserve this feature until the chicks have fledged the nest.

5.3.4 Hedgehogs (*Erinaceus europaeus*)

If hedge or dense vegetation is cleared between the 1st of November and the 31st of March, then an inspection by a suitably qualified ecologist is required to ensure no hibernating hedgehogs are present on site.

It is recommended that precautionary measures are incorporated if construction is undertaken at other times of the year. This will be to create provisions for hedgehogs to escape from all trenches dug into the ground, by creating slopes or providing ramps at the end of each working day.

Additionally, any pipework left on site that is greater than 150mm in diameter will need to be planked off. Should this information be strictly adhered to, then the development works will not negatively impact on the local mammal populations.

5.3.5 Reptiles

The presence of suitable habitat onsite for commuting reptiles makes it necessary to undertake a herptile method statement to ensure no harm to any specimens that may be using the site during the construction phase.

5.4 Site Enhancements

For the proposed development works, the following site enhancement measures could be incorporated into the site post-development. These measures are optional but are bespoke to the site surveyed for the enhancement of biodiversity. Once the options have been finalised, the locations of these features should be placed on a master plan.

5.4.1 Birds

The site could be enhanced for birds by installing a variety of bird boxes on site, such as an Apex Bird Box and an Apex Robin Box. Boxes can be ordered by contacting Elite Ecology at: admin@eliteecology.co.uk.

5.4.2 Invertebrates

At present, the site is not considered to be of any importance to local invertebrate populations. It is recommended that the site could benefit from the addition of two Bumblebee Boxes, along with two Bug Hotels. These can be ordered by contacting Elite Ecology at: admin@eliteecology.co.uk. This will enhance the site for the local invertebrate populations, which will thus attract species further up in the trophic level.

The site would benefit from plants rich in a pollen source throughout the year to enhance the area for the potential of bees. In order to ensure a nectar source year-round it is important to use plants that are relevant to the season. The table below includes just a few examples of which plants thrive through the different seasons to ensure a bee friendly area.

SPRING	SUMMER	AUTUMN	WINTER
• Alliums Bugle • Crab Apple • Daffodils • Flowering Cherry • Hawthorn • Sea Thrift	• Angelica sylvestris • Campanula latifolia • Comfrey • Echinops • Foxgloves • Scabious	• Aster tripolium • Common Ivy • Sedums	• Hellebores foetidus, • Salix aegyptica • Salix caprea • Winter-flowering heather

5.5 Biodiversity Net Gain

Biodiversity net gain needs to be ensured within the scheme of work, and this will be devised utilising the latest DEFRA metric.

6. References

Bat Conservation Trust (2023). Bat Surveys – Good Practice Guidelines. 4th Edition. Bat Conservation Trust: London.

Berthinussen, A. & Altringham, J.D. (2012). The effect of a major road on bat activity and diversity. Journal of Applied Ecology 49: p.p. 82–89.

Bickmore, C. J. (2002). Hedgerow Survey Handbook. London: DEFRA

Biodiversity 2020: A strategy for England's wildlife and ecosystem services (2011).

Circular 06/05 Biodiversity and Geological Conservation – Statutory Obligations and Their Impact System (2005).

Countryside and Rights of Way Act 2000 (c.37). London: HMSO.

Defra (2007a) Securing a Healthy Natural Environment: an action plan for embedding an ecosystems approach. PB12853. Defra London.

Defra (2007b) An Introductory Guide to Valuing Ecosystems Services. PB12852. Defra London.

Dietz, C., von Helversen, O. & Nill, D. (2009) Bats of Britain, Europe and Northwest Africa. London: A. C. Black.

Hutson, A.M., Spitzenberger, F., Aulagnier, S., Coroiu, I., Karataş, A., Juste, J., Paunovic, M., Palmeirim, J. & Benda, P. (2008) Pipistrellus pipistrellus. In: IUCN 2012. IUCN Red List of Threatened Species. Version 2012.1.

Institute of Ecology and Environmental Management, Professional Guidance Series.

Institute of Ecology and Environmental Management (2006), Guidelines for Ecological Impact Assessment in the United Kingdom.

Institute of Environmental Assessment (1995). Guidance for Baseline Ecological Assessment.

Joint Nature Conservation Committee (2005). The Marine Habitat Classification for Britain and Ireland, Version 04.

Joint Nature Conservation Committee (2010). Handbook for Phase 1 Habitat Survey – a technique for environmental audit.

Millennium Ecosystem Assessment (2005).

National Planning Policy Framework (2018).

The Conservation of Habitats and Species Regulations 2017 (Ammendment). SI 2017/1012.

The Conservation (Natural Habitats, etc.) (Amendment) Regulations 2007. SI 2007/1843, London: HMSO.

The natural choice: securing the value of nature (2011) (Natural Environment White Paper).

Natural Environment and Rural Communities (NERC) Act 2006.

RSPB (2002). The Population Status of Birds in the UK.

RSBP (2009). Birds of Conservation Concern 3.

Rydell J & Racey, P A (1993) Street lamps and the feeding ecology of insectivorous bats. Recent Advances in Bat Biology, Zool Soc Lond Symposium abstracts.

UK Biodiversity Action Plan (2007). UK List of Priority Species. Joint Nature Conservation Committee.

Wildlife and Countryside Act 1981 (and amendments) (c.69). London: HMSO.

7. Appendices

Appendix A: Site Plans

Appendix B: Desktop Study Table

Appendix C: Desktop Study Maps

Appendix D: Phase 1 Habitat Map

Appendix E: Site Photographs

Appendix F: Biodiversity Legislation and Policy

Appendix G: Bat and Artificial Light

Appendix A: Site Plans



Appendix B: Desktop Study Tables

The results within the following table are a collation of the species identified within the desktop search, undertaken by Cofnod.

Birds	
Common Name	**Latin Name**
Barn Owl	*Tyto alba*
Black-headed Gull	*Chroicocephalus ridibundus*
Brambling	*Fringilla montifringilla*
Bullfinch	*Pyrrhula pyrrhula*
Canada Goose	*Branta canadensis*
Cettis Warbler	*Fingilla montifringilla*
Chaffinch	*Fringilla coelebs*
Coal Tit	*Periparus ater*
Collared Dove	*Streptopelia decaocto*
Common Gull	*Laruc canus*
Common Sandpiper	*Actitis hypoleucos*
Cormorant	*Phalacrocorax carbo*
Crossbill	*Loxia curvirostra*
Cuckoo	*Cuculus canorus*
Dunnock	*Prunella modularis*
Fieldfare	*Turdus pilaris*
Gold Crest	*Reguls regulus*
Goshawk	*Accipiter gentilis*
Grasshopper Warbler	*Locustella naevia*
Great Black-backed Gull	*Larus marinus*
Great-crested Grebe	*Podiceps cristatus*
Green Woodpecker	*Picus viridis*
Greenfinch	*Chloris chloris*
Grey Herron	*Ardea cinerea*
Grey Wagtail	*Motacilla cinerea*
Greylag Goose	*Anser anser*
Herring Gull	*Larus argentatus*
Hobby	*Falco subbuteo*
House Martin	*Delichon urbicum*
House Sparrow	*Passer domesticus*
Jack Snipe	*Lymnocryptes minimus*
Kestrel	*Falco tinnunculus*
Kingfisher	*Alcedo atthis*
Lapwing	*Vanellus vanellus*
Lesser Black Backed Gull	*Larus fuscus*

Lesser Redpoll	*Acanthis Cabaret*
Lesser Spotted Woodpecker	*Dryobates minor*
Linnet	*Linaria cannabina*
Little Ringed Plover	*Charadrius dubius*
Magpie	*Pica pica*
Mallard	*Anas platrynchos*
Mandarin Duck	*Aix galericulata*
Meadow Pipit	*Anthus pratensis*
Mistle Thrush	*Turdus viscivorus*
Moorhen	*Gallinula cholopus*
Peregrine	*Falco peregrinus*
Pink-footed Goose	*Anser brachyrhynchus*
Red Kite	*Milvus milvus*
Redstart	*Phoenicurus phoenicurus*
Redwing	*Turdus iliacus*
Reed Bunting	*Emberiz schoeniclus*
Rook	*Corvus frugilegus*
Sedge Warbler	*Acrocephalus schoenobaenus*
Shelduck	*Tadorna tadorna*
Skylark	*Alauda arvensis*
Snipe	*Gallinago gallinago*
Snow Goose	*Anser caerulescens*
Song Thrush	*Turdus philomelos*
Sparrowhawk	*Accipiter nisus*
Spotted Flycatcher	*Muscicapa striata*
Starling	*Sturnus vulgaris*
Swift	*Apus apus*
Tawny Owl	*Strix aluco*
Teal	*Anas crecca*
Tree Sparrow	*Passer montanus*
Water Rail	*Rallus aquaticus*
Wheatear	*Oenanthe Oenanthe*
Whinchat	*Saxicola rubetra*
Whitethroat	*Curruca communis*
Wigeon	*Mareca Penelope*
Willow Warbler	*Phyllosocopus trochilus*
Woodcock	*Scolopax rusticola*
Woodpigeon	*Coluba palumbus*
Wren	*Troglodytes troglodytes*
Yellow Wagtail	*Motacilla flava*
Yellowhammer	*Emberiza citrinella*

Flora	
Common Name	Latin Name
	Salix caprea x cinerea = S. x reichardtii
	Dactylorhiza fuchsii x praetermissa = D. x grandis
	Juncus conglomeratus x effusus = J. x kern-reichgeltii
Adder's-tongue	*Ophioglossum vulgatum*
Amphibious Bistort	*Persicaria amphibia*
Annual Pearlwort	*Sagina apetala*
Aspen	*Populus tremula*
Bee Orchid	*Ophrys apifera*
Bistort	*Bistorta officinalis*
Black Mustard	*Brassica nigra*
Black-grass	*Alopecurus myosuroides*
Black-poplar	*Populus nigra*
Black-poplar	*Populus nigra subsp. betulifolia*
Blue Fleabane	*Erigeron acris*
Bluebell	*Hyacinthoides non-scripta*
Box	*Buxus sempervirens*
Brook-side Feather-moss	*Hygroamblystegium fluviatile*
Butterbur	*Petasites hybridus*
Butterfly-bush	*Buddleja davidii*
Canadian Waterweed	*Elodea canadensis*
Canadian Waterweed	*Elodea canadensis*
Caper Spurge	*Euphorbia lathyris*
Carline Thistle	*Carlina vulgaris*
Celery-leaved Buttercup	*Ranunculus sceleratus*
Charlock	*Sinapis arvensis*
Cherry Laurel	*Prunus laurocerasus*
Chicory	*Cichorium intybus*
Common Fleabane	*Pulicaria dysenterica*
Common Spotted-orchid	*Dactylorhiza fuchsii*
Common Water-starwort	*Callitriche stagnalis*
Corn Mint	*Mentha arvensis*
Cowslip	*Primula veris*
Creeping-Jenny	*Lysimachia nummularia*
Crosswort	*Cruciata laevipes*
Cyperus Sedge	*Carex pseudocyperus*
Dyer's Greenweed	*Genista tinctoria*
Early-purple Orchid	*Orchis mascula*
English Elm	*Ulmus procera*
Feverfew	*Tanacetum parthenium*
Field Madder	*Sherardia arvensis*

Field Maple	*Acer campestre*
Field Pansy	*Viola arvensis*
Field Pepperwort	*Lepidium campestre*
Fig-leaved Goosefoot	*Chenopodium ficifolium*
Flattened Meadow-grass	*Poa compressa*
Giant Hogweed	*Heracleum mantegazzianum*
Goat's-beard	*Tragopogon pratensis*
Grass Vetchling	*Lathyrus nissolia*
Great Horsetail	*Equisetum telmateia*
Great Yellow-cress	*Rorippa amphibia*
Greater Burdock	*Arctium lappa*
Greater Periwinkle	*Vinca major*
Green Field-speedwell	*Veronica agrestis*
Guelder-rose	*Viburnum opulus*
Hairy St John's-wort	*Hypericum hirsutum*
Hairy-brome	*Bromopsis ramosa*
Hard Rush	*Juncus inflexus*
Hedge Bedstraw	*Galium album*
Himalayan Balsam	*Impatiens glandulifera*
Himalayan Balsam	*Impatiens glandulifera*
Himalayan Cotoneaster	*Cotoneaster simonsii*
Himalayan Cotoneaster	*Cotoneaster simonsii*
Hoary Ragwort	*Jacobaea erucifolia*
Hoary Willowherb	*Epilobium parviflorum*
Hybrid Campion	*Silene dioica x latifolia = S. x hampeana*
Ivy-leaved Duckweed	*Lemna trisulca*
Jacob's-ladder	*Polemonium caeruleum*
Japanese Knotweed	*Reynoutria japonica*
Japanese Knotweed	*Reynoutria japonica*
Kidney Vetch	*Anthyllis vulneraria*
Large-leaved Lime	*Tilia platyphyllos*
Least Duckweed	*Lemna minuta*
Lesser Marshwort	*Helosciadium inundatum*
Lesser Water-parsnip	*Berula erecta*
Lodgepole Pine	*Pinus contorta*
Long-headed Poppy	*Papaver dubium*
Many-fruited Leskea	*Leskea polycarpa*
Many-seeded Goosefoot	*Lipandra polysperma*
Marsh Yellow-cress	*Rorippa palustris*
Meadow Barley	*Hordeum secalinum*
Montbretia	*Crocosmia aurea x pottsii = C. x crocosmiiflora*
Musk Thistle	*Carduus nutans*
Northern Marsh-orchid	*Dactylorhiza purpurella*
Pendulous Sedge	*Carex pendula*

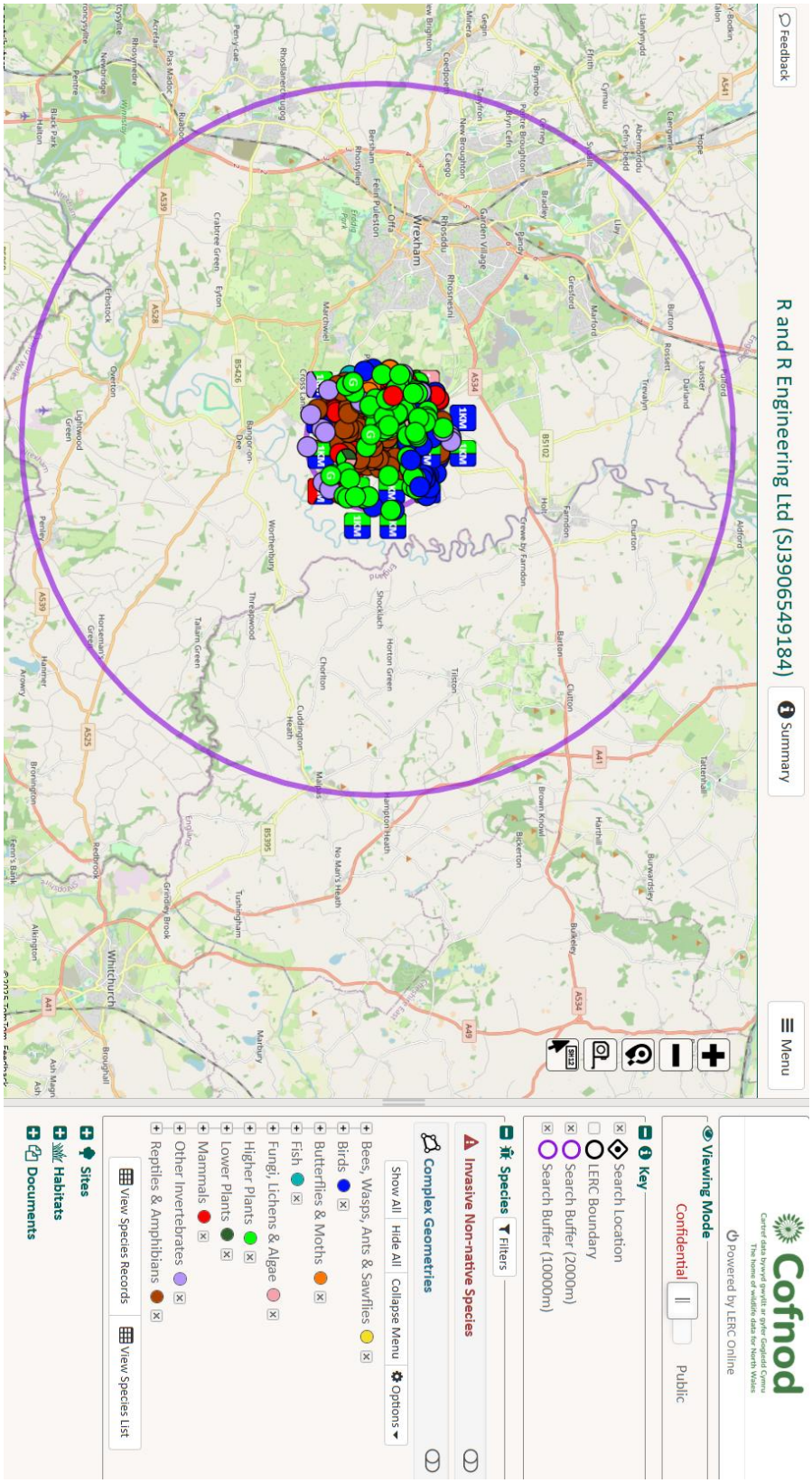
Pennyroyal	*Mentha pulegium*
Pepper-saxifrage	*Silaum silaus*
Pink Water-speedwell	*Veronica catenata*
Plicate Sweet-grass	*Glyceria notata*
Rat's-tail Fescue	*Vulpia myuros*
Red Goosefoot	*Oxybasis rubra*
Reed Sweet-grass	*Glyceria maxima*
Reflexed Saltmarsh-Grass	*Puccinellia distans*
River Water-crowfoot	*Ranunculus fluitans*
Rough Hawkbit	*Leontodon hispidus*
Rough Hawk's-beard	*Crepis biennis*
Rusty Willow	*Salix cinerea subsp. oleifolia*
Scented Mayweed	*Matricaria chamomilla*
Scentless Mayweed	*Tripleurospermum inodorum*
Scots Pine	*Pinus sylvestris*
Silky-leaved Osier	*Salix viminalis x cinerea = S. x holosericea*
Sitka Spruce	*Picea sitchensis*
Slender Sandwort	*Arenaria leptoclados*
Slender Thistle	*Carduus tenuiflorus*
Slender Trefoil	*Trifolium micranthum*
Small Nettle	*Urtica urens*
Small Pondweed	*Potamogeton berchtoldii*
Small-flowered Crane's-bill	*Geranium pusillum*
Small-leaved Lime	*Tilia cordata*
Smooth Tare	*Ervum tetraspermum*
Soft Shield-fern	*Polystichum setiferum*
Southern Marsh-orchid	*Dactylorhiza praetermissa*
Spiked Sedge	*Carex spicata*
Spiny Restharrow	*Ononis spinosa*
Spotted Medick	*Medicago arabica*
Square-stalked Willowherb	*Epilobium tetragonum*
Stone Parsley	*Sison amomum*
Sweet Violet	*Viola odorata*
Tall Melilot	*Melilotus altissimus*
Tansy	*Tanacetum vulgare*
Thread-leaved Water-crowfoot	*Ranunculus trichophyllus*
Thyme-leaved Sandwort	*Arenaria serpyllifolia*
Trailing St John's-wort	*Hypericum humifusum*
Unbranched Bur-reed	*Sparganium emersum*
Upright Hedge Bedstraw	*Galium album subsp. erectum*
Water Chickweed	*Stellaria aquatica*
Water Cress	*Nasturtium officinale*
Water Fern	*Azolla filiculoides*
Water Fern	*Azolla filiculoides*

Water Figwort	*Scrophularia auriculata*
Water-pepper	*Persicaria hydropiper*
Weld	*Reseda luteola*
Welted Thistle	*Carduus crispus*
White Campion	*Silene latifolia*
White Stonecrop	*Sedum album*
White Willow	*Salix alba*
Wild Parsnip	*Pastinaca sativa*
Wild Teasel	*Dipsacus fullonum*
Wild-oat	*Avena fatua*
Winter-cress	*Barbarea vulgaris*
Wood Small-reed	*Calamagrostis epigejos*
Wormwood	*Artemisia absinthium*
Yellow-wort	*Blackstonia perfoliata*
Zigzag Clover	*Trifolium medium*
Fungi	
Common Name	**Latin Name**
	Clavaria tenuipes
	Ganoderma resinaceum
	Tyromyces chioneus
Bay Polypore	Polyporus badius
Blackening Waxcap	Hygrocybe conica
Cinnamon Bracket	Hapalopilus nidulans
Flame Shield	Pluteus aurantiorugosus
Slender Coral	Ramariopsis subtilis
Snowy Waxcap	Cuphophyllus virgineus var. virgineus
Striate Earthstar	Geastrum striatum
Sulphur Knight	Tricholoma sulphureum var. sulphureum
Tufted Wood Mushroom	Agaricus impudicus
Wood Pinkgill	Entoloma rhodopolium
Wrinkled Peach	Rhodotus palmatus
Yellow Club	Clavulinopsis helvola
Yellow Shield	Pluteus chrysophaeus
Invertebrates	
Common name	***Latin name***
Acanthiophilus helianthi	*Acanthiophilus helianthi*
Anaglyptus mysticus	*Anaglyptus mysticus*
Bembidion obliquum	*Bembidion obliquum*
Black-legged Water Snipe-fly	*Ibisia marginata*
Blood Vein	*Timandra comae*
Ceraclea albimacula	*Ceraclea albimacula*
Cinnaabar	*Tyria acobaeae*

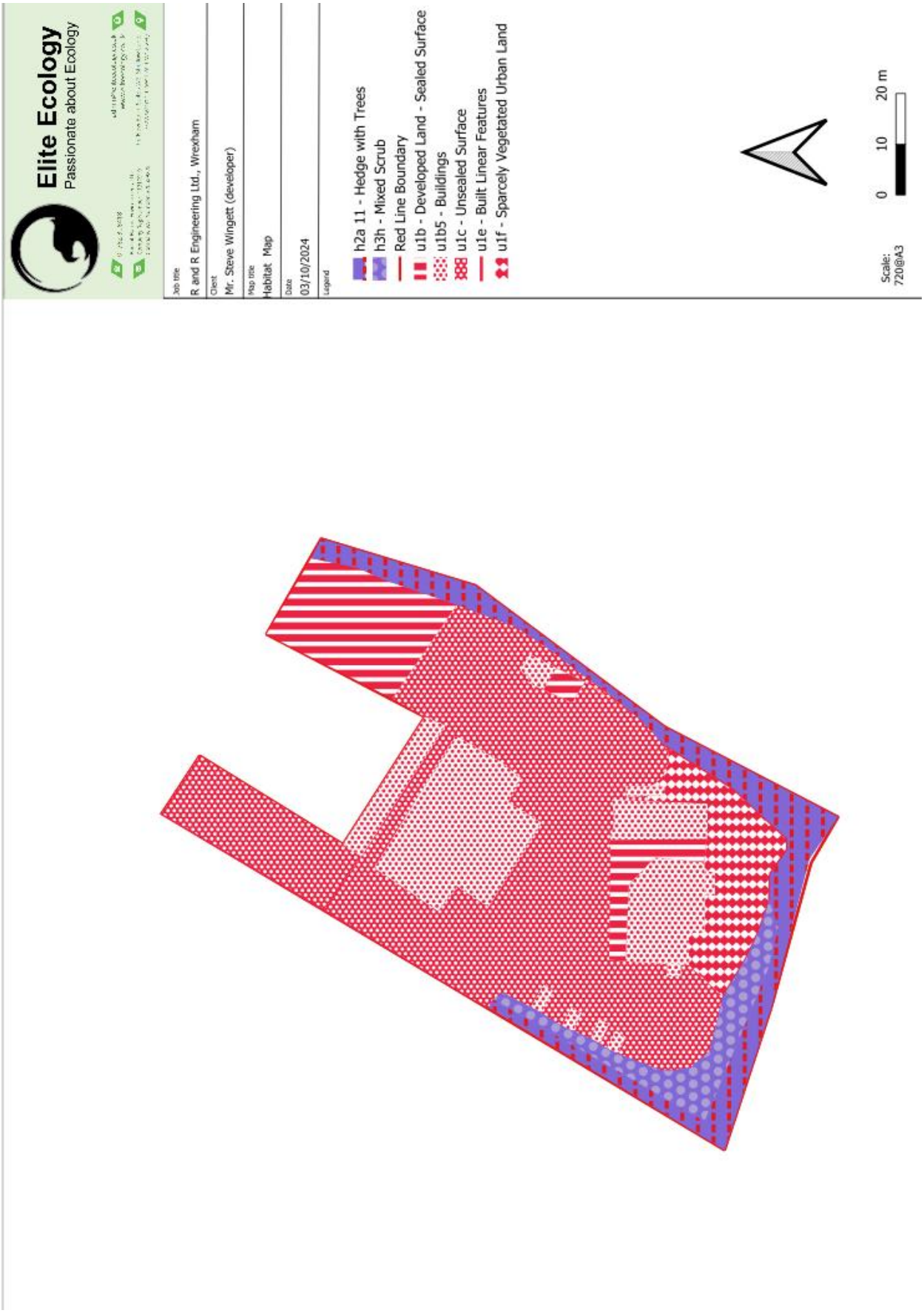
Common Club-tail	*Gomphus vulgatissimus*
Common Darter	*Sympetrum striolatum*
Contacyphon pubescens	*Contacyphon pubescens*
Cragonyx pseudogracillis	*Cragonyx pseudogracillis*
Delphacodes capnodes	*Delphacodes capnodes*
Diplapion stolidum	*Diplapion stolidum*
Donacia thalassina	*Donacia thalassina*
Dingy Skipper	*Erynnis tages*
Diplapion stolidum	*Diplapion stolidum*
Figure of Eight	*Dolba caeruleocephala*
Grizzled Skipper	*Pyrgus malvae*
Girardia tigrina	*Girardia tigrine*
Hairy Legged Horse Fly	*Hybomitra bimaculata*
Horsetail Weevil	*Grypus equiseti*
Hydaticus seminiger	*Hydaticus seminiger*
Ischnomera caerulea	*Ischnomera caerulea*
Jenkins' Spire Snail	*Potamopyrgus antipodarum*
Latticed Heath	*Chiasmia clathrata*
Lime Beetle	*Stenostola dubia*
Marsh Pond Snail	*Stagnicola palustris*
Neophytobius quadrinodosus	*Neophytobius quadrinodosus*
Oak Hook-tip	*Watsonalla binaria*
Ocypus fortunatarum	*Ocypus fortunatarum*
Phaonia atriceps	*Phaonia atriceps*
Potamophylax rotundipennies	*Potamophylax rotundipennies*
Proteinus crenulatus	*Proteinus crenulatus*
Pseudorchestes pratensis	*Pseudorchestes pratensis*
Red-girdled Mining Bee	*Andrena labiate*
Rembidion quadripustulatum	*Rembidion quadripustulatum*
Shaded Broad-bar	*Scotopteryx chenopodiata*
Small Emerald	*Hemistola chrysoprasaria*
Small Heath	*Coenonympha pamphilus*
Small Pheonix	*Ecliptopera sialceata*
Sprawler	*Asteroscopus sphinx*
Stenus fornicates	*Stenus fornicates*
Styloctetor compar	*Styloctetor compar*
Wall	*Lasiommata megera*
White-barred Soldier	*Oxycera morrisii*
White-letter Hairstreak	*Satyrium w-album*
Yelllow-legged Water-snipefly	*Atherix ibis*
Ylodes simulans	*Ylodes simulans*

Appendix C: Desktop Study Maps

This map has been produced by Cofnod. All rights concerning it belong to them.



Appendix D: Phase 1 Habitat Map



Appendix E: Site Photographs

Plate 1: Image showing the north-eastern entrance to the site.



Plate 2: Image showing the sealed surface at the carpark to the north-east of the site.



Plate 3: Image showing the eastern and southern elevations of **B8**.



Plate 4: Image showing the northern and eastern elevations of **B8**.



Plate 5: Image showing the unsealed surface to the south of the car park with reference to locations of **B2** and **B5**.



Pate 6: Image showing the north-western elevation of **B5**.



Plate 7: Image showing the north-eastern elevation of **B5** and south-western elevation of **B6**.



Plate 8: Image showing the northern elevation of **B2**.



Plate 9: Image showing the eastern elevation of **B2**.



Plate 10: Image showing the southern elevation of **B2**.



Plate 11: Image showing **B2** internally.

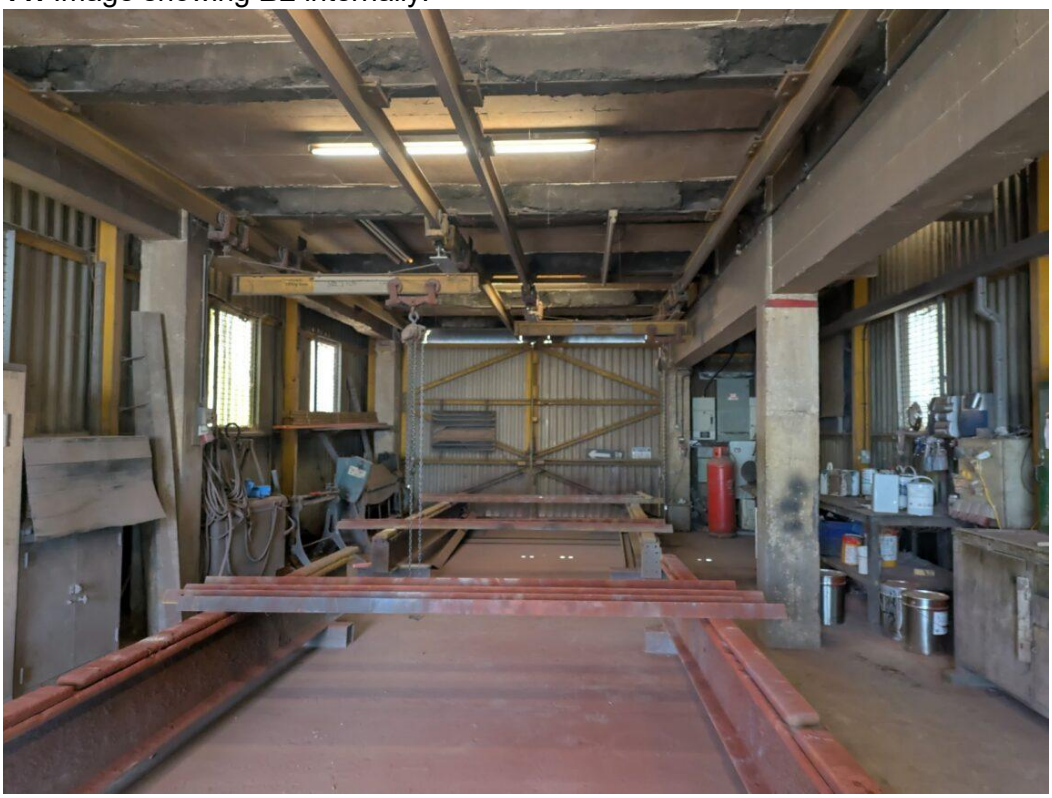


Plate 12: Image showing the southern and eastern elevations of **B3**.



Plate 13: Image showing the northern elevation of **B3**.



Plate 14: Image showing the eastern elevation of **B1**.



Plate 15: Image showing the southern elevation of **B1**.



Plate 16: Image showing the southern elevation of **B1**.



Plate 17: Image showing western elevation of **B1**.



Plate 18: Image showing **B1** internally.



Plate 19: Image showing **B1** internally.



Plate 20: Image showing the southern and western elevation of **B4**.



Plate 21: Image showing the northern and western elevation of **B4**.



Plate 22: Image showing **B1** internally.



Plate 23: Image showing the hedge, scrub, sparsely vegetated and unsealed surface at the south-west of the site



Plate 24: Image showing the containers (**B7**) at the south-east of the site from their south-western and north-western elevation.



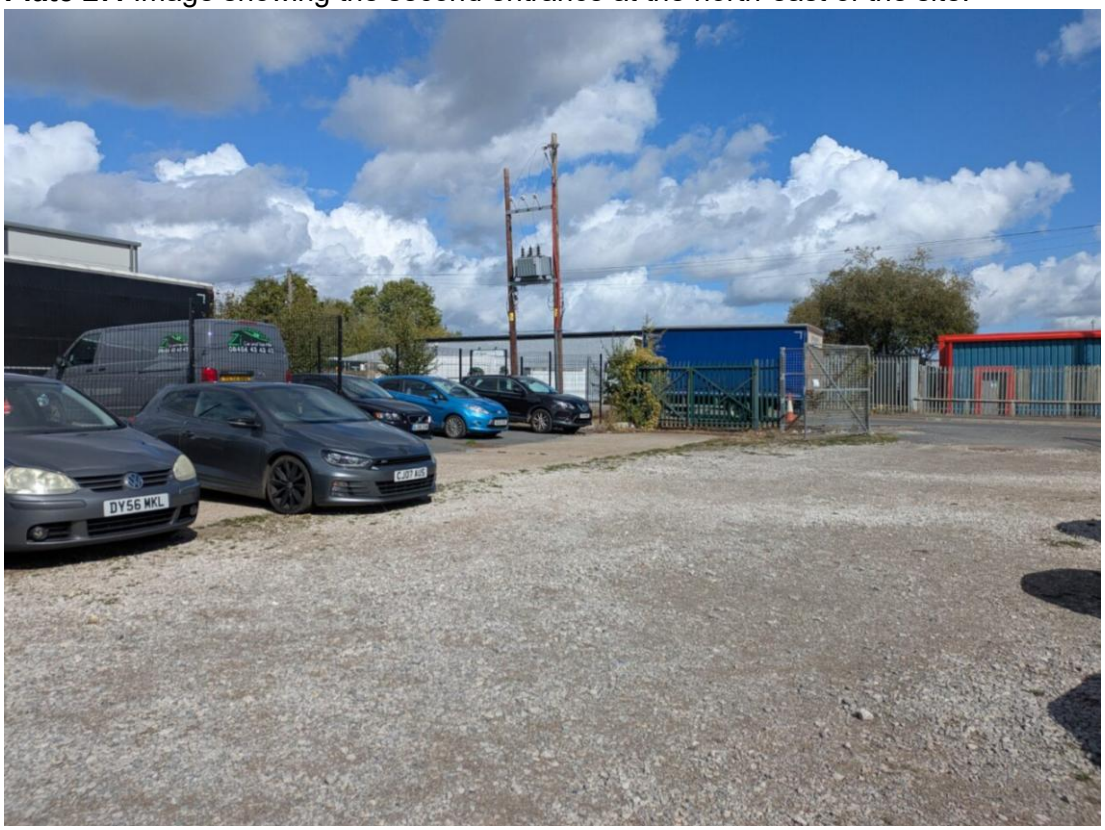
Plate 25: Image showing the north-western and north-eastern elevations of **B7**.



Plate 26: Image showing the car park to the south-east of the site.



Plate 27: Image showing the second entrance at the north-east of the site.



Appendix F: Biodiversity Legislation and Policy

General Legislation and Policy:

The framework of legislation and policy which underpins nature conservation in England and Wales. This is a material consideration in the planning process in England and Wales.

Conservation of Habitats and Species Regulations 2017 (Habitats Regulations 2010 as amended)

The Conservation of Habitats and Species Regulations 2017 consolidate and update the Conservation Regulations 1994 and the conservation of habitats and species regulations 2010 (and all their amendments). The Conservation of Habitats and Species Regulations 2017 are the principal means by which the EEC Council Directive 92/43 (The Habitats Directive) as amended is transposed into English and Welsh law.

The Conservation of Habitats and Species Regulations 2017 place duty upon the relevant authority of government to identify sites which are of importance to the habitats and species listed in Annexes I and II of the Habitats Directive. Those sites which meet the criteria are, in conjunction with the European Commission, designated as Sites of Community Importance, which are subsequently identified as Special Areas of Conservation (SAC) by the European Union member states. The regulations also place a duty upon the government to maintain a register of European protected sites designated as a result of EC Directive 79/409/EEC on the Conservation of Wild Birds (The Birds Directive). These sites are termed Special Protection Areas (SPA) and, in conjunction with SACs, form a network of sites known as Natura 2000. The Habitats Directive introduces for the first time for protected areas, the precautionary principle; that is that projects can only be permitted having ascertained no adverse effect on the integrity of the site. Projects may still be permitted if there are no alternatives, and there are imperative reasons of overriding public interest.

The Conservation of Habitats and Species Regulations 2017 also provide for the protection of individual species of fauna and flora of European conservation concern listed in Schedules 2 and 5 respectively. Schedule 2 includes species such as otter and great crested newt for which the UK population represents a significant proportion of the total European population. It is an offence to deliberately kill, injure, disturb or trade these species. Schedule 5 plant species are protected from unlawful destruction, uprooting or trade under the regulations.

Environment (Wales) Act 2016

Places a duty on public authorities to maintain and enhance biodiversity and promote ecosystem resilience. The Act requires application of the DECCA framework (Diversity, Extent, Condition, Connectivity, Adaptability) when assessing and improving ecosystem resilience.

Local Nature Recovery Action Plans (NRAPs)

Developed by Welsh local authorities as part of the Nature Recovery Action Plan for Wales. These guide local actions for habitat and species conservation, ecological connectivity, and biodiversity enhancement in alignment with national targets.

The Wildlife and Countryside Act (WCA) 1981 (As amended)

The WCA, as amended, consolidates and amends pre-existing national wildlife legislation in order to implement the Bern Convention and the Birds Directive. It complements the Conservation (Natural Habitats. & c.) Regulations 1994 (as amended), offering protection to a wider range of species. The Act also provides for the designation and protection of national conservation sites of value for their floral, faunal or geological features, termed Sites of Special Scientific Interest (SSSIs).

Schedules of the act provide lists of protected species, both flora and fauna, and detail the possible offences that apply to these species.

The Countryside and Rights of Way (CRoW) Act 2000

The CROW Act, introduced in England and Wales in 2000, amends and strengthens existing wildlife legislation detailed in the WCA. It places a duty on government departments and the National Assembly for Wales to have regard for biodiversity and provides increased powers for the protection and maintenance of SSSIs.

The Act also contains lists of habitats and species (Section 74) for which conservation measures should be promoted, in accordance with the recommendations of the Convention on Biological Diversity (Rio Earth Summit) 1992.

The Natural Environment and Rural Communities (NERC) Act 2006

Section 40 of the NERC Act places a duty upon all local authorities and public bodies in England and Wales to promote and enhance biodiversity in all of their functions. Sections 41 (England) and 42 (Wales) list habitats and species of principal importance to the conservation of biodiversity. These lists supersede Section 74 of the CRoW Act 2000. These species and habitats are a material consideration in the planning process.

The Hedgerow Regulations 1997

The Hedgerow Regulations make provision for the identification of important hedgerows which may not be removed without permission from the Local Planning Authority.

UK Biodiversity Action Plan

The United Kingdom Biodiversity Action Plan (UKBAP), first published in 1994 and updated in 2007, is a government initiative designed to implement the requirements of the Convention of Biological Diversity to conserve and enhance species and habitats. The UKBAP contains a list of priority habitats and species of conservation concern in the UK, and outlines biodiversity initiatives designed to enhance their conservation status. Lists of Broad and Local habitats are also included. The priority habitats and species correlate with those listed on Section 41 and 42 of the NERC Act.

The UKBAP requires that conservation of biodiversity is addressed at a County level through the production of Local BAPs. These are complementary to the UKBAP, however are targeted towards species of conservation concern characteristic of each area. In addition, a number of local authorities and large organisations have produced their own BAPs. UKBAP and Local BAP targets with regard to species and habitats are a material consideration in the planning process.

Well-being of Future Generations (Wales) Act 2015

Requires public bodies to work towards seven well-being goals, including a resilient Wales. This embeds the sustainable management of natural resources into decision-making to support ecosystem resilience and biodiversity enhancement.

Wrexham Biodiversity Action Plan

The Wrexham Biodiversity Action Plan (LBAP) was developed as a partnership initiative to safeguard the county borough's diverse wildlife and habitats. It highlights priority species and habitats for conservation, many of which are recognised as Species and Habitats of Principal Importance under the Environment (Wales) Act 2016. The LBAP provides a framework for local action, guiding conservation work, land management, and planning policy within Caerphilly. It also contributes to national strategies such as the Wales Nature Recovery Action Plan, helping to strengthen ecological networks and promote the sustainable use of natural resources across the county borough.

Planning Policy (Wales)

Planning Policy Wales places biodiversity and ecosystem resilience at the heart of the planning system. Under the Environment (Wales) Act 2016, local planning authorities are legally required to seek to maintain and enhance biodiversity and promote the resilience of ecosystems through the planning process. This is known as the Section 6 Duty, and it applies to all public authorities when carrying out their functions—including decisions on planning applications.

To meet these obligations, PPW introduces the concept of Net Benefit for Biodiversity (NBB). This means that development proposals must not only avoid harming biodiversity but should actively improve it. Enhancements should be measurable, demonstrable, and ideally located on or adjacent to the development site. If a proposal cannot deliver a net benefit, planning permission may be refused. The policy also encourages the use of green infrastructure, protection of designated sites like SSSIs, and application of the DECCA framework—which assesses ecosystem resilience through Diversity, Extent, Condition, Connectivity, and Adaptability.

Species Specific Legislation

This section contains a summary of legislation with relation to the species present or potentially present in the survey area. The reader should refer to the original legislation for definitive interpretation.

Nesting and Nest Building Birds

Nesting and nest building birds are protected under the Wildlife and Countryside Act WCA 1981 (as amended). Some species (listed in Schedule 1 of the WCA) are protected by special penalties.

Subject to the provisions of the act, if any person intentionally:

- kills, injures or takes any wild bird;
- takes, damages or destroys the nest of any wild bird while that nest is in use or being built; or
- takes or destroys an egg of any wild bird, he shall be guilty of an offence.

'Reckless' offences with regard to the disturbance of nesting wild birds included in Schedule 1 of the Wildlife and Countryside Act were added by the Countryside and Rights of Way Act 2000.

The Natural Environment and Rural Communities (NERC) Act 2006 places a duty on Government Departments to have regard for the conservation of biodiversity and maintains lists of species and habitats which are of principal importance for the purposes of conserving biodiversity in England and Wales. These lists include a number of bird species.

The reader is referred to the original legislation for the definitive interpretation.

Badger

The main legislation protecting badgers in England and Wales is the Protection of Badgers Act 1992 (the 1992 Act). Under the 1992 Act it is an offence to:

- wilfully kill, injure, take or attempt to kill, injure or take a badger;
- possess a dead badger or any part of a badger;
- cruelly ill-treat a badger;
- use badger tongs in the course of killing, taking or attempting to kill a badger;
- dig for a badger;
- sell or offer for sale or control any live badger;
- mark, tag or ring a badger; and
- interfere with a badger sett by:
- damaging a sett or any part thereof;
- destroying a sett;
- obstructing access to a sett;
- causing a dog to enter a sett; and
- disturbing a badger while occupying a sett.

The 1992 Act defines a badger sett as: "any structure or place which displays signs indicating current use by a badger".

Bats

All species of bat are fully protected under a variety of domestic, European and international legislation and conventions. These include:

- Bern Convention (Appendix II)
- Bonn Convention (Appendix II)
- Conservation Regulations (Northern Ireland) 1995
- Conservation of Habitats and Species Regulations 2017
- Countryside Rights of Way Act 2000
- Eurobats Agreement
- Habitats Directive (Annexes IV and II)
- Habitats Regulations 1994 (as amended) Scotland
- NERC Act 2006
- Wildlife and Countryside Act 1981 (as amended)
- Wild Mammals Protection Act

In addition to this, some species have additional protection by being listed on the UK Biodiversity Action Plan (UKBAP).

The legislation afforded to bats makes it illegal to possess or control any live or dead specimens, to damage, destroy or obstruct access to any structure or place used for shelter, protection or breeding, and to intentionally disturb a bat while it is occupying a structure or place which it uses for that purpose.

All nesting birds are protected under the Wildlife and Countryside Act 1981 (as amended), which protects birds, nests, eggs and nestlings from harm. In addition to this, some rarer species, such as barn owls are afforded extra protection.

National Planning Policy Framework, Section 15:

The published framework in 2018 replaces the previous Planning Policy Statement 9 and National Planning Policy (dated 2012).

Section 15: Conserving and enhancing the natural environment reaffirms the government's commitment to maintaining green belt protections and preventing urban sprawl, retains the protection of designated sites and preserves wildlife. It also aims to improve the quality of the natural environment and halt declines in species and habitats, protects and enhances biodiversity and promotes wildlife corridors.

Biodiversity 2020:

This sets out to halt overall biodiversity loss and support healthy well-functioning ecosystems by establishing coherent ecological networks, with more and better places for nature, to the benefit of wildlife and people. The government's policy is aimed at individuals, communities, local authorities, charities, business and government, which all have a role to play in delivering Biodiversity 2020.

Freshwater White-clawed Crayfish

The white-clawed crayfish is partially protected under Wildlife and Countryside Act 1981 (as amended). It is listed on schedule 5 and therefore afforded protection under Section 9 (1 and 5). Therefore, it is an offence to take white-clawed crayfish and to sell, or attempt to sell, any part of the species, alive or dead, or intend to buy or sell.

Great Crested Newt

The great crested newt (*Triturus cristatus*) is fully protected under a variety of legislation and conventions. These include:

- Bern Convention (Appendix II)
- Conservation (Natural Habitats, &c.) Regulations 1994 (as amended)
- Conservation of Habitats and Species Regulations 2017
- EU Habitats Directive (Annex II and IV)
- Nature Conservation (Scotland) Act 2004
- NERC Act 2006 (Section 41 England; Section 42 Wales)
- Wildlife and Countryside Act 1981 (as amended)

In addition to this, the great crested newt has been listed as a priority species on the UK Biodiversity Action Plan (UKBAP).

This legislation covers all aspects of newt life stages (eggs, efts and adult newts) and makes it illegal to damage, destroy or obstruct access to any structure or place used for shelter, protection or breeding, and to intentionally disturb a great crested newt while it is occupying a structure or place which it uses for that purpose.

Licenses can be obtained from Natural England (DEFRA) under the Conservation (Natural Habitats etc.) Regulations 1994, to permit activities for the purposes of:

- Regulation 44(2)(e): Preserving public health or public safety or other imperative reasons of overriding public interest including those of a social or economic nature and beneficial consequences of primary importance for the environment, or
- Regulation 44(2)(f): Preventing the spread of disease
- Regulation 44(2)(g): Preventing serious damage to any form of property or fisheries

  Or
- If there is no satisfactory alternative.

The above regulations allow people to carry out activities which would otherwise be illegal.

Hazel Dormouse

Hazel Dormouse and their habitats are protected by:

- Wildlife and Countryside Act 1981 (as amended)
- Countryside Rights of Way (CROW) 2000
- The Natural Environment and Rural Communities Act 2006
- Conservation of Habitat and Species Regulations 2017

These make it an offence to:

- Capture, injure or kill a Hazel Dormouse
- Disturb a Hazel Dormouse
- Damage or destroy breeding or nesting sites in use by Hazel Dormice
- Disturb a Dormouse whilst it is occupying a structure or place that they use for shelter or protection
- Obstruct access to any structure or place that the Dormouse uses for shelter and protection.
- To possess or control any live or dead specimens.

Otter

Otters are fully protected by the European Habitats Directive (92/43/EEC) by being incorporated in annex II of the legislation. In addition to this, otters are listed on schedule 5 of the Wildlife and Countryside Act 1981 (as amended). This makes it an offence to:

- To intentionally kill, injure or take an otter.
- To possess or control any live or dead specimens.
- To intentionally or recklessly damage, destroy or obstruct access to any structure, feature or place of shelter in use by otters.
- To intentionally or recklessly disturb an otter whilst it is in occupation of a feature or structure.
- To sell, possess or transport for the purpose of sale or publicly declare the desire to buy or sell otters.

Reptiles

All six native reptiles within Great Britain are legally protected, with the extent of protection varying dependent upon their rarity and conservation importance.

Those that receive full protection under the Wildlife and Countryside Act 1981 (as amended) are the rare sand lizard and smooth snake. These species also receive protection under the Conservation (Natural Habitats &c.) Regulations 1994 (also referred to as the Habitats Directive). This means that they are protected from deliberate disturbance, killing, injury or capture and the habitat in which they live is also fully protected against damage or destruction. Any activity involving disturbance or damage to habitats utilised by sand lizards or smooth snakes would require a licence issued by the Department of the Environment, Food and Rural Affairs (DEFRA) following consultation with the statutory nature conservation organisation (Natural England).

The remaining four reptile species are ‘partially protected’ under the Wildlife and Countryside Act 1981 (as amended), with these species being slow-worm, common lizard, grass snake and adder. This means that these species are protected against intentional killing, injuring and against sale, but their habitat is not protected. In planning terms this means that the presence of these species is a material consideration and there is a requirement to ensure that any reptile interest is safeguarded. If a proposed development is likely to have an impact on these reptiles, then the statutory nature conservation organisation must be notified, particularly if capture and translocation is being proposed. In some parts of the UK, sites that support common reptile species such as common lizards and slow-

worms can qualify as County Wildlife Sites. Sites of this designation may receive protection in planning policy.

Water Voles

Water Voles are fully protected under the Wildlife and Countryside Act 1981 (as amended). This makes it an offence to:

- To intentionally kill, injure or take a water vole.
- To possess or control any live or dead specimens.
- To intentionally or recklessly damage, destroy or obstruct access to any structure, feature or place of shelter in use by water voles.
- To intentionally or recklessly disturb a water vole whilst it is in occupation of a feature or structure.
- To sell, possess or transport for the purpose of sale or publicly declare the desire to buy or sell water voles.

Non-native Floral Species

It is an offence under schedule 9 of the Wildlife and Countryside Act 1981 (as amended) to plant or otherwise cause non-native flora to grow in the wild. This includes the transportation of earth that has previously had non-native species growing and includes the spread of the species.

All stands of non-native floral species need to be disposed of safely at a licenced landfill site according to the Environmental Protection Act (Duty of Care) Regulations 1991.

Appendix G: Bats and Artificial Light

Artificial lighting is known to affect bat's roosting and foraging behaviour, with lighting resulting in a range of impacts that includes roost desertion (BCT, 2009), delayed emergence of roosting bats (Downs et al., 2003), increased activity of some bat species and decreased activity by others (Stone et al., 2012).

An experimental approach using LED units, demonstrated that relatively fast-flying bat species, including the common pipistrelle, showed no significant impacts as a result of new artificial lighting, even when lighting was set at relatively high levels close to 50 lux.

In contrast, slow flying bats such as the myotid bats (Myotis spp.) showed sharp reductions in presence, even at low light levels of 3.6 lux (Stone et al., 2012).

Current recommendations for all bat species specify that no bat roost should be directly illuminated.

Due to the impacts of lighting, mitigation and sensitive lighting design schemes are required for projects where bats are present. These should include bat friendly lighting plans that should aim to avoid lighting wherever possible. If this is not possible, then the minimisation of any lighting impacts is required by adopting the following measures:

- To introduce lighting curfews or use of PIR sensors.

  Lighting curfews can be an effective way of avoiding impacts on bats. These curfews may involve either turning off lighting or dimming light units at specific times of the night, dimming units at key times of the year, providing the luminaire allows for this option via a control unit. Lighting to be triggered by PIR sensors can be expected to be illuminated only when required and for a low proportion of time.

- To consider no lighting solutions where possible.

  Options such as white lining, good signage and LED cats eyes should be considered as preferable. Reflective fittings may help make use of headlights to provide any necessary illumination in some areas.

- To use only high pressure sodium or warm white LED lamps where possible.

  High pressure sodium and warm white LED lamps emit lower proportions of insect attracting UV light than mercury, metal halide lamps and white LED lighting. Generally, lamps should have a lower proportion of white or blue wavelengths, with a colour temperature <4200 kelvin recommended (BCT, 2014).

- To minimise the spread of light.

  The light spread should be kept at or near horizontal to ensure that only the task area is lit. Flat cut-off lanterns or accessories should be used to shield or direct light to where it is required. Baffles, hoods, louvres and shields should be used where necessary to reduce light spill.

- To consider the height of the lighting column.

  While downward facing bollard lighting is often preferable, it should be noted that a lower mounting height does not automatically reduce impacts to bats as bollard lighting can often be designed to provide up-lighting. Where bollard lighting is considered to be the most appropriate system, bollard spacing or unit density should be kept to a minimum and units should be fitted with the appropriate hoods/deflectors to reduce any up-lighting.

- To avoid reflective surfaces below lights.

  The polarisation of light by shiny surfaces attracts insects increasing bat activity (BCT, 2012). Consequently, surface materials around lighting require consideration.

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