

PRELIMINARY ECOLOGICAL APPRAISAL

JANUARY 2024

Forshaw, Cornbrook

Cornbrook Road

Manchester

M15 4WB

U R B A N
G R E E N



QUALITY MANAGEMENT

Project No.:	UG2342				
Project:	Forshaw, Cornbrook				
Location:	Cornbrook Road, Manchester, M15 4WB				
Title:	Preliminary Ecological Appraisal				
Document Type:	PEA	Issue No.:	01		
Date:	17/01/2024				
Prepared By:	Toby Mills	Signature:		Qualifications:	Assistant Ecologist, BSc, QCIEEM
Checked By:	Jake Healy	Signature:		Qualifications:	Ecologist, MSc, QCIEEM
Checked By:	Barnaby Indio Gardner	Signature:		Qualifications:	Assistant Ecologist, MEnvSci, BSc, QCIEEM
Revision Status					
Rev	Date	Comment	Prepared	Checked	

NON-TECHNICAL EXECUTIVE SUMMARY

Forshaw are proposing to develop land off Cornbrook Road in Manchester (hereafter referred to as ‘the site’). The proposals include the erection of a 24-storey mixed use building incorporating 224 residential apartments (Use Class C3), 87 apart-hotel studios (Use Class C1), amenity space, flexible commercial space (Use Class E), and café (Use Class E(b)), together with infrastructure, landscaping, and other associated works.

Urban Green have been appointed to complete a Preliminary Ecological Appraisal of the site. The objectives of the assessment are to identify habitats on site and determine the suitability for any ‘protected and/or notable’ species that may occur on site. Further ecological surveys and mitigation are recommended, where necessary, which aim to minimise potential impacts on ecology, due to the proposed development.

Following the survey work, the key recommendations are summarised in the following table:

Current Site Use and Adjacent Site Use	The current site is an abandoned demolition site of a former building, now derelict and overgrown with vegetation.
Potential Impacts on Designated Sites	No potential impacts on designated sites nearby to the site are anticipated to occur due to the proposed development. The site is located at a sufficient distance from nearby designated sites, and the proposed development activities have been considered.
Habitats	The site comprised predominantly sparsely vegetated land and derelict land with shrubbery, with sections of developed land; sealed surface.
Ecological Constraints	<p>The following potential ecological constraints were identified during the assessment:</p> <ul style="list-style-type: none">• Suitable habitats for nesting notable bird species.• Low commuting and foraging value for bats.
Recommended Ecological Mitigation	<p>The following mitigation measures are recommended to minimise potential impacts due to the proposed development:</p> <ul style="list-style-type: none">• Precautionary Working Methods during the construction phase for badgers.• Reasonable Avoidance Measures for hedgehog and common amphibians.• If any vegetation requires removal, it should be completed outside of the breeding bird season (March to September, inclusive). If this is not feasible, a Nesting Bird Check is to be completed by a qualified ecologist within 48 hours before removal is completed.• Lighting mitigation for bats.
Recommended Further Surveys and Reports	No further surveys are required for development to proceed.
Recommended Ecological Enhancements	The National Planning Policy Framework (NPPF) (2023) highlights the requirement for planning policies and decisions to conserve and enhance the natural environment. The proposed development provides the opportunity to enhance the site and ecological enhancements have been recommended.

CONTENTS

1	Introduction	1
1.1	Background to the Scheme.....	1
1.2	Site Context.....	1
1.3	Purpose of this Report	2
2	Methods	3
2.1	Desk Study	3
2.1.1	Online Resources and Local Records Centre	3
2.2	Field Survey.....	4
2.2.1	Vegetation	4
2.2.2	Fauna.....	4
2.3	Bat Assessment.....	5
2.3.1	Preliminary Roost Assessment	5
2.3.2	Commuting and Foraging Bats.....	6
2.4	Habitat Suitability Index.....	6
2.5	Constraints to the Survey	7
2.6	Lifespan of Report	8
2.7	Definitions.....	8
3	Baseline Ecological Conditions	9
3.1	Desk Study	9
3.1.1	Site Location.....	9
3.1.2	Designated Sites.....	9
3.1.3	Flora and Fauna.....	9
3.2	Field Survey.....	12
3.2.1	Sparsely vegetated land (s 10 519).....	12
3.2.2	Derelict Land (U 16 81 82 519 524)	12
3.2.3	Developed Land; Sealed Surface (u1b 528)	13
3.3	Site Suitability for Protected and Notable Species	13
3.3.1	Species Discounted from Assessment	13
3.3.2	Vascular Plants.....	13
3.3.3	Invertebrates.....	13
3.3.4	Amphibians.....	13

3.3.5	Reptiles	14
3.3.6	Birds	14
3.3.7	Bats	14
3.3.8	Hedgehog	14
3.3.9	Badger	15
3.4	Invasive Species	15
3.4.1	Flora	15
4	Ecological Constraints and Recommended Mitigation	16
4.1	Proposed Development	16
4.2	Designated Sites	16
4.3	Habitats	16
4.3.1	Urban Trees	16
4.4	Fauna	16
4.4.1	Amphibians	16
4.4.2	Birds	16
4.4.3	Bats	17
4.4.4	Hedgehog	18
4.4.5	Badgers	18
4.5	Invasive Species	18
5	Further Surveys	19
6	Opportunities for Enhancement	20
7	Conclusion	21
8	References	22
	Appendix 1 - Relevant Legislation	24
	Appendix 2 - Habitat Map and Target Notes	29

1 Introduction

1.1 Background to the Scheme

Forshaw are proposing to develop land off Cornbrook Road in Manchester (hereafter referred to as ‘the site’). The proposals include the erection of a 24-storey mixed use building incorporating 224 residential apartments (Use Class C3), 87 apart-hotel studios (Use Class C1), amenity space, flexible commercial space (Use Class E), and café (Use Class E(b)), together with infrastructure, landscaping, and other associated works. Urban Green have been appointed to undertake a Preliminary Ecological Appraisal (PEA) of the site.

The author of the report is Toby Mills, BSc, QCIEEM, Assistant Ecologist at Urban Green. Toby has experience providing ecological consulting services for a range of development schemes across the UK, including residential and commercial schemes.

1.2 Site Context

The site is located at National Grid Reference SJ 82404 97043 and comprises a total area of approximately 0.1ha (see Figure 1).

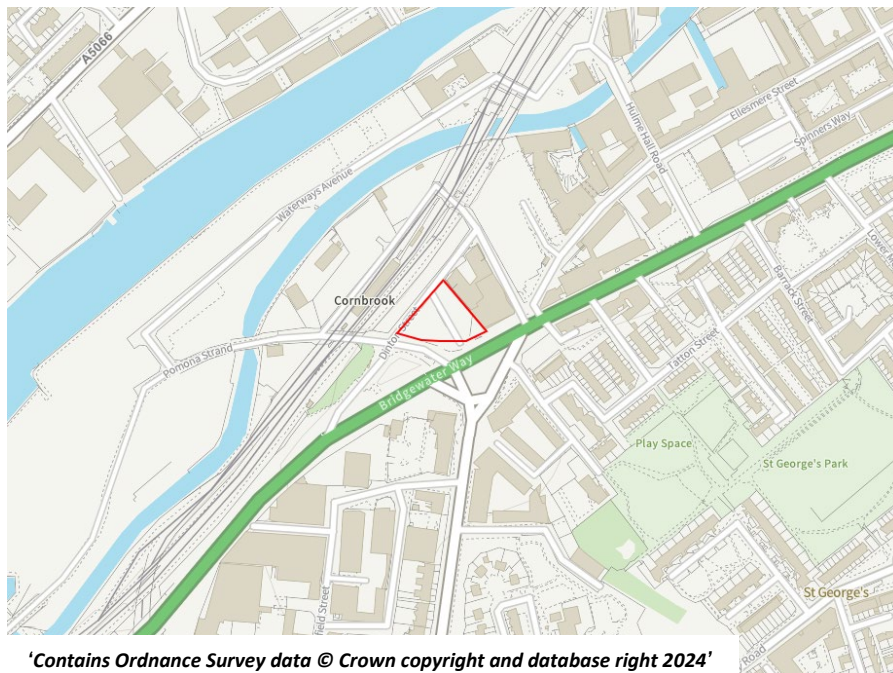


Figure 1 – Site Extent

The site is located in a densely urban area of Manchester, approximately 1.5km from the centre of Manchester and approximately 2.2km from the centre of Salford. Cornbrook tram lines run past the site approximately 25m north. Bridgewater canal runs north of the tram lines to the north approximately 115m from site, with the River Irwell adjacent approximately 57m from the canal and approximately 191m from site. The site is surrounded predominantly by urban buildings comprising of residential and commercial structures.

1.3 Purpose of this Report

This report has been produced to set out the methods, results, and conclusions of a PEA. The purpose of the PEA report is to identify habitats on site and determine the sites potential value for protected and/or notable fauna and flora, with the addition of potential impacts on designated sites. This will inform the need for any further ecological surveys and/or mitigation to minimise the potential impacts on ecology on site and within the local area.

Further information and details of UK legislation for those species which are formally protected is defined in Appendix 1, which are considered throughout the assessment.

The National Planning Policy Framework (NPPF) (2023) and other Local Planning Policies are considered with the PEA. Ecological enhancements are advised to be in line with relevant Planning Policies.

2 Methods

The PEA assessment and Report follows the good practice methodology as detailed within the *Guidelines for Preliminary Ecological Appraisal* (CIEEM, 2019).

2.1 Desk Study

2.1.1 Online Resources and Local Records Centre

Due to the size of the proposed development and being located within a predominantly urban area of Manchester, a 1km Local Data Search was conducted as it is deemed an appropriate distance for the Zone of Influence.

Sources of information used in the desk study are presented in Table 1.

Table 1 – Desk Study Sources of Information

Source	Date Consulted	Information Sought
MAGIC website (www.magic.gov.uk)	20/12/2023	Locations of statutory designated sites within 1km of the site boundary. Locations of National Site Network (Ramsar, Special Area of Conservation (SAC) and Special Protection Area (SPA)) within 5km of the site boundary. Locations of European Protected Species Licences (EPSL) and Class Licences within 1km.
Natural England (https://designatedsites.nature.naturalengland.org.uk/)	20/12/2023	Relevant statutory designated site citations.
JNCC (https://jncc.defra.gov.uk/)	20/12/2023	Information on European wildlife sites. Details of relevant Section 41 species and habitats.
Greater Manchester Ecology Unit	20/12/2023	Locally designated wildlife sites within 1km of site boundary. Records of protected and notable species within 1km of the site boundary.
Greater Manchester Local Biodiversity Action Plans	20/12/2023	Species and habitats which are given special conservation status at the local level.
Catchment Data Explorer	20/12/2023	Summary of data relating to river condition and catchment data, provided The Environment Agency.

2.2 Field Survey

2.2.1 Vegetation

The site was subject to a field survey on 19/12/2023, by Assistant Ecologists Toby Mills and Olivia Jones of Urban Green. The weather conditions were 9°C, passing clouds (2/8 oktas), wind speed 5 Beaufort scale.

The methods were based on the standard methodology as detailed by The UK Habitat Classification User Manual (Butcher et al, 2020). A UKHab Habitat Plan has been produced to demonstrate habitats within the proposed development and the surrounding area. The mapping techniques are based on The UK Habitat Classification User Manual (Butcher et al, 2020) guidance.

Flora species listed as protected in the *Wildlife and Countryside Act 1981* (as amended) and species which are indicators of important and/or uncommon habitats, were searched for during the survey.

Species abundance is described using the DAFOR scale as shown in Table 2. Percentages are an approximate indication rather than a quantitative measure.

Table 2 – Key to Species Abundance

		Description	Indicative Percentage Ranges
D	Dominant	Covers most of the area	90% or greater
A	Abundant	Very common throughout the area.	50 – 90%
F	Frequent	Common or with many individuals.	20 – 50%
O	Occasional	Occurs in several places but not throughout. Populations are not large.	5 – 20%
R	Rare	Occurs in low numbers in relation to size of area.	Less than 5%
“L” will be used to indicate abundance in a localised area, e.g. LA = Locally abundant			

Any invasive species, including those listed on the revised (April 2010) Schedule 9 of the *Wildlife and Countryside Act 1981* (as amended) were noted during the field survey when sighted.

2.2.2 Fauna

A site search for field signs of protected and notable fauna was undertaken, and incidental sightings are detailed. The searches completed were as follows:

- Suitability of any ponds to support notable and protected amphibians, and the suitability of the site's terrestrial habitats to support amphibians.
- Suitability of the site to support reptiles by way of habitat structure and refuge piles, as well as links to the wider landscape.
- Search of any watercourses for signs or suitability for white-clawed crayfish (*Austropotamobius pallipes*), water vole (*Arvicola amphibius*) and otter (*Lutra lutra*) by way of burrows, resting places, holts, and foraging signs.
- Suitability of the site to support notable bird species. Bird nests and droppings of notable and protected bird species.
- Suitability of the site to support notable invertebrates.

- Search of the site for any invasive species.
- Badger (*Meles meles*) field signs such as setts, mammal, paths, snuffle holes and latrines.
- Suitability of the site to support notable terrestrial mammals including harvest mouse (*Micromys minutus*) and brown hare (*Lepus europaeus*).

2.3 Bat Assessment

2.3.1 Preliminary Roost Assessment

A Preliminary Roost Assessment (PRA) was carried out on the site buildings and trees using a high-powered torch and close-focussing binoculars.

The PRA methodology is based on information contained within the Bat Conservation Trust (BCT) guidelines, 4th edition (Collins, 2023). The categorisation within this report is based on that set out in Table 3, which is used as a basis for determining the requirement for further surveys.

Table 3 – Suitability of Buildings and Trees for Roosting Bats (adapted from Collins, 2023)

Category of Suitability	Typical Characteristics	Further Survey Requirements
High Roost Suitability	A structure/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 and surrounding habitat.	Three separate survey visits. At least one dusk emergence and a separate dawn re-entry survey. Surveys can be undertaken between May and September, with at least two surveys between May and August.
Moderate Roost Suitability	A structure/tree with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions and surrounding habitat but are unlikely to support a roost of high conservation status.	Two separate survey visits. One dusk emergence and a separate dawn re-entry survey. Surveys can be undertaken between May and September with at least one survey between May and August.
Low Roost Suitability	A structure/tree 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 condition and/or suitable surrounding habitat to be used on a regular basis by larger numbers of bats.	Structures: one emergence/re-entry survey between May and August. Trees: No further survey required but precautionary methods of felling recommended.
Negligible Suitability	Negligible habitat features on site likely to be used by roosting bats.	No further work required.

2.3.2 Commuting and Foraging Bats

The site was assessed for its suitability for use by commuting and foraging bats.

The commuting and foraging assessment methodology is based on information contained within the Bat Conservation Trust guidelines 4th edition (Collins, 2023). The categorisation within this report is based on that set out in Table 4, which is used as a basis for determining the requirement for further surveys.

Table 4 – Suitability of Site for Foraging and Commuting Bats (adapted from Collins, 2023)

Category of Suitability	Typical Characteristics
High Suitability	Continuous high-quality habitat that is well connected to the wider landscape that is likely to be used regularly by commuting or foraging bats such as; river valleys, streams, hedgerows, lines of trees or woodland edge. Site is close to or connected to known roosts.
Moderate Suitability	Continuous habitat connected to the wider landscape that could be used by commuting bats such as lines of trees, scrub or linked back gardens. Habitat connected to wider landscape that could be used for bats for foraging such as; trees, scrub, grassland or water.
Low Suitability	Habitat that could be used by small number of commuting bats such as; defunct hedgerow, isolated features not well connected to surrounding habitat or Isolated habitat that could be used by a small number of foraging bats such as a lone tree or patch of scrub.
Negligible Suitability	No features on site suitable for use by commuting and foraging bats.

2.4 Habitat Suitability Index

No ponds were present on site; however, one pond (P1) was identified within 250m of the site boundary (see Section 3.3.4 for further details). As great crested newts' upper dispersal limit is generally considered to be up to 250m from a waterbody (though occurrence of greater distances does exist), ponds beyond this distance were not assessed due to limited connectivity (English Nature, 2001).

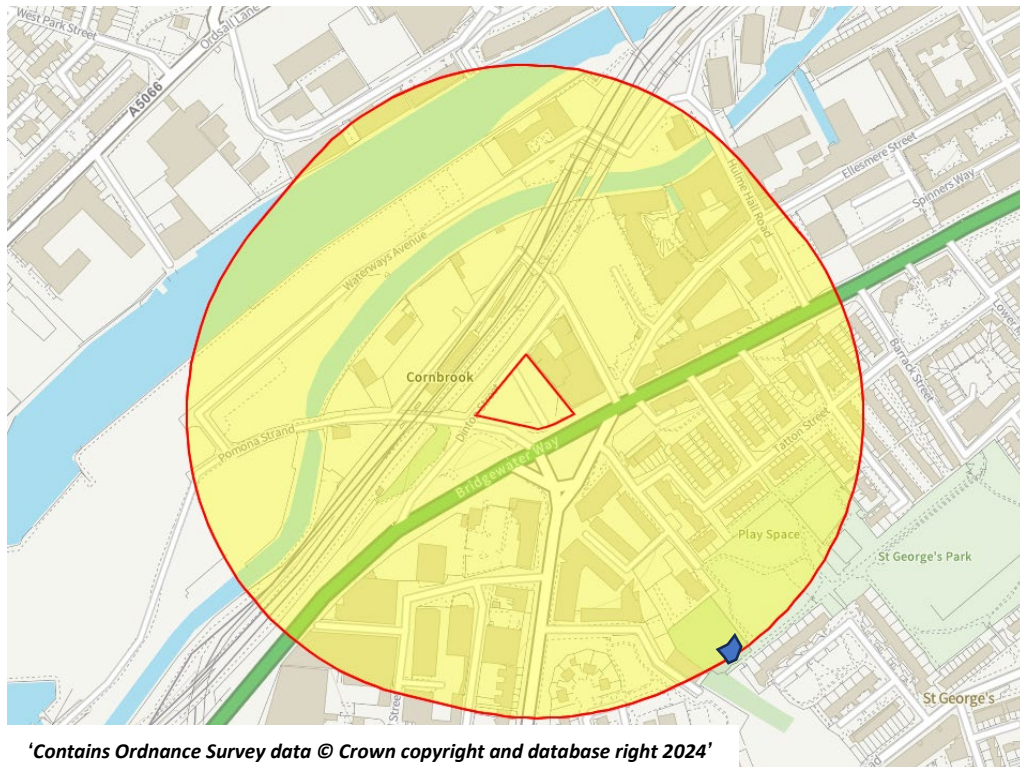


Figure 2 – Pond located within 250m

Although located within 250m, this pond has not been assessed for its habitat suitability for GCN, due to the presence of multiple anthropogenic barriers including roads and buildings, as well as a lack of habitat corridors that connect the pond to the site, meaning that neither the pond nor its potential ecology are thought to be notably impacted. Therefore, assessment of the pond's habitat suitability was deemed unnecessary.

2.5 Constraints to the Survey

Whilst every effort has been made to provide a comprehensive description of the site, no investigation could ensure the complete characterisation and prediction of the natural environment.

This PEA does not constitute a full botanical survey. The protected species assessment provides a view of the likelihood of protected species occurring on the site based on the known distribution of species in the local area and the suitability of the habitat. It should not, however, be taken as providing a full and definitive survey of any protected species group.

December is a suboptimal time for carrying out UKHab Habitat Surveys due to being outside of the optimal plant growing season. Therefore, it is likely that some plants are present on the site but were not evident at the time of the survey and were not recorded. This is not considered to be a significant constraint with regards to the general UKHab Habitat Survey results as the habitats remained consistent with previous surveys, and due to the size and location of the site and limited extent of the habitats, it is considered very unlikely that any rare or priority plant species were missed.

Where a lack of records is found during the desk search for a defined geographical area, it does not necessarily mean that there is a lack of ecological interest; the area may be simply under-recorded.

The conclusions and recommendations detailed in this report are based upon the site redline boundary and the development proposals as outlined by the client at the time of writing. Should there be any

changes to the site redline boundary or development proposals at a later stage, this assessment should be reviewed to determine whether any amendments or additional survey work is required.

The findings of this report represent the professional opinion of qualified ecologists and do not constitute professional legal advice. The client may wish to seek professional legal interpretation of the relevant wildlife legislation cited within this document.

2.6 Lifespan of Report

In accordance with CIEEM's Advice Note on the Lifespan of Ecological Reports and Surveys (CIEEM, 2019), the details of this report will remain valid for a period of **18 months** from the date of the survey (i.e. until **19/05/2025**). After this date, this assessment should be reviewed to determine whether any updated surveys are required.

2.7 Definitions

For the purposes of this report, the term 'protected and notable species' relates to:

- Species included on Schedules 2 and 4 of *The Conservation of Habitats and Species Regulations 2017*;
- Species included on Schedules 1, 5 and 8 of the *Wildlife and Countryside Act 1981* (as amended), excluding species that are only protected in relation to their sale (see section 9[5] and 13[2]);
- Invasive non-native species included on Schedule 9 of the *Wildlife and Countryside Act 1981* (as amended);
- Species of principal importance for the conservation of/maintaining and enhancing biodiversity as required under: Section 41 of the *Natural Environment and Rural Communities Act 2006* (England), Section 7 of the *Environment (Wales) Act 2016*, Section 2[4] of the *Nature Conservation (Scotland) Act 2004*;
- Local species of importance as identified within various local biodiversity action plans; and,
- Badgers, which are protected under the *Protection of Badgers Act 1992*.

3 Baseline Ecological Conditions

3.1 Desk Study

3.1.1 Site Location

The site lies within a predominantly urban area of Manchester, with residential and commercial buildings present in the immediate vicinity and in the wider area. Bridgewater canal runs north of the tram lines to the north approximately 115m from site, with the River Irwell adjacent approximately 57m from the canal and approximately 191m from site.

It is anticipated these habitats will provide suitable foraging, resting, and commuting resources within the local area for a variety of wildlife, such as birds, bats, and other terrestrial mammals.

Habitats within the surrounding area are limited to urban street planning, with the Manchester Ship Canal and River Irwell located within 200m north of site and recreational parks such as St. Georges Park and Playground approximately 200m southeast and Ordsall Park approximately 650m northwest.

3.1.2 Designated Sites

No sites that forms part of the National Site Network were located within 5km of the site boundary, nor statutory or non-statutory designated sites were located within 1km of the site.

The site falls within the Impact Risk Zone of Rochdale Canal Site of Special Scientific Interest (SSSI). The site is protected for its mesotrophic water quality, which supports a diverse flora, including water plant species such as floating water-plantain (*Luronium natans*) and pondweeds *Potamogeton* species. These in turn support a rich invertebrate assemblage, with several species of local importance.

3.1.3 Flora and Fauna

The following section summarises protected and/or notable species records that have been recorded within 1km of the site.

Invertebrates

Eight records of cinnabar moth (*Tyria jacobaeae*) were returned in the data search, with the closest being approximately 120m north west from the site in 2016. Cinnabar moth is listed on Section 41 of the Natural Environment and Rural Communities Act (NERC) 2006.

Birds

A total of 304 records of protected or notable birds were returned within 1km of the site as detailed in Table 5.

Table 5 – Protected or notable birds recorded within 1km

Scientific Name	Common Name	Protection	No. of records	Closest approximate distance from site	Date
<i>Stercorarius parasiticus</i>	Arctic skua	BoCC5*, S41*****	1	657m	2015
<i>Phoenicurus ochruros</i>	Black redstart	Sch.1****, BoCC5**, LBAP*****	1	770m	2010
<i>Pyrhula pyrrhula</i>	Bullfinch	BoCC5**, S41*****	15	144m	2018
<i>Prunella modularis</i>	Dunnock	BoCC5**, S41*****	71	30m	2015
<i>Larus argentatus</i>	Herring gull	BoCC5*, S41*****	6	480m	2016
<i>Passer domesticus</i>	House sparrow	BoCC5*, S41*****	52	102m	2019
<i>Alcedo atthis</i>	Kingfisher	Sch.1****, BoCC5**	39	170m	2016
<i>Vanellus vanellus</i>	Lapwing	BoCC5*, S41*****	31	280m	2014
<i>Acanthis cabaret</i>	Lesser redpoll	BoCC5*, S41*****	1	641m	2012
<i>Carduelis cannabina</i>	Linnet	BoCC5*, S41*****	5	236m	2016
<i>Charadrius dubius</i>	Little ringed plover	Sch.1****	4	632m	2014
<i>Falco peregrinus</i>	Peregrine	Sch.1****	8	247m	2016
<i>Emberiza schoeniclus</i>	Reed bunting	BoCC5**, S41*****	5	337m	2019
<i>Alauda arvensis</i>	Skylark	BoCC5*, S41*****	9	358m	2014
<i>Turdus philomelos</i>	Song thrush	BoCC5**, S41*****	37	144m	2017
<i>Muscicapa striata</i>	Spotted flycatcher	BoCC5*, S41*****	1	650m	2015
<i>Sturnus vulgaris</i>	Starling	BoCC5*, S41*****	18	256m	2018

* Listed Red on the Bird of Conservation Concern 5 (2021)

** Listed Amber on the Bird of Conservation Concern 5 (2021)

*** Listed black on the Bird of Conservation Concern 5 (2021)

**** Wildlife & Countryside Act (Sch 1, 5 & 8)

*****Listed on Section 41 (NERC Act, 2009).

*****Greater Manchester Biodiversity Action Plan (LBAP 2009)

Bats

Sixty records of bat were returned in the data search including common pipistrelle (*Pipistrellus pipistrellus*), soprano pipistrelle (*Pipistrellus pygmaeus*), Daubenton's (*Myotis daubentonii*), Noctule (*Nyctalus noctula*) an unidentified pipistrelle species (*Pipistrellus* sp.) and an unidentified bat species (*Chiroptera* sp.).

Roosting

Ten of the bat records returned were roosting bats. Roosting species included common pipistrelle, daubenton's bat, soprano pipistrelle and an identified pipistrelle species between 2004 and 2017. The closest record attributing to an unidentified pipistrelle species approximately 839m south west of the site in 2009.

MAGIC also detailed the presence of no granted EPSL within 1km of the site.

Field signs

Various field signs of bats included species of pipistrelle, common pipistrelle, noctule bat and soprano pipistrelle. Field sightings included bat detectors, casualties, foraging and commuting between 2004 and 2022. The closest field sign attributed to an unidentified pipistrelle species foraging in 2017, approximately 136m west of the site along Pomona Strand.

The species listed are protected under the LBAP, WCA 1981 and are a European Protected Species through the Conservation of Habitats and Species Regulations (2017). Soprano pipistrelle and noctule bats are also listed on Section 41 of the NERC Act (2006).

Hedgehog

Twelve records of hedgehog were returned with 1km of the site, with the closest record located approximately 446m southeast of the site from 2013. Hedgehog are listed on Section 41 of the NERC Act (2006).

Otter

Two records of Otter (*Lutra lutra*) were returned in the data search, with the closest record being approximately 805m southwest from the site in 2021.

Otter are a European Protected Species through the Conservation of Habitats and Species Regulations (2017) and protected under Schedule 5 of the WCA (1981).

No Records Returned

The data search returned no records for:

- Vascular Plants
- Great crested newt
- Amphibians
- Hazel dormice (*Muscardinus avellanarius*)
- Red squirrel (*Sciurus vulgaris*)
- Badger

- Water vole
- White-clawed crayfish
- Invasive non-native species

3.2 Field Survey

The site habitats and accompanying Target Notes are presented in the UKHab Habitat Map in Appendix 2.

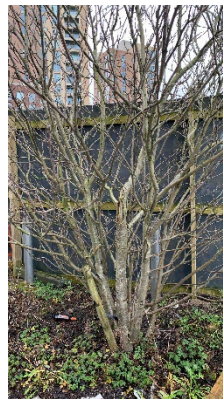
Secondary codes are added to confirm the identity of a habitat (when necessary), and also to provide information on management and the environment relating to that habitat parcel. The number and type of secondary codes added to a primary habitat will vary depending on the habitats present. There is no limit to the number of secondary codes that can be used for a single parcel. More details regarding the secondary codes used can be found in Appendix 2.

3.2.1 Sparsely vegetated land (s 10 519)

Half of the site comprised of derelict land, inhabited by generalist flora species, growing through rubble and cracks in paving. Buddleia (*Buddleia davidii*) was dominant, with abundant mare's-tail (*Hippuris vulgaris*), frequent bramble (*Rubus fruticosus* agg.) scrub, dandelion (*Taraxacum* spp.) and colt's-foot (*Tussilago farfara*). Occasional species present included tall fleabane (*Erigeron annuus*), ribwort plantain (*Plantago lanceolata*), white melilot (*Melilotus albus*), common nettles (*Urtica dioica*), red fescue (*Festuca rubra*), broadleaved dock (*Rumex obtusifolius*), ground ivy (*Glechoma hederacea*), weld (*Reseda luteola*), common sowthistle (*Sonchus oleraceus*), Oxford ragwort (*Senecio squalidus*) and woody fleabane (*Dittrichia viscosa*). There were rare occurrences of herb-robert (*Geranium robertianum*), mugwort (*Artemisia vulgaris*), scentless mayweed (*Tripleurospermum inodorum*), soft rush (*Juncus effusus*) and spear thistle (*Cirsium vulgare*). A single, juvenile wild cherry (*Prunus avium*) tree, identified within the habitat map, was located to the south of site.



Photograph 1 – Sparsely vegetated land, buddleia dominant



Photograph 2 – Wild cherry tree to the south of site

3.2.2 Derelict Land (U 16 81 82 519 524)

The western half of the site comprised the remnants of a derelict building which had become overgrown by buddleia scrub. As well as buddleia, bramble, white clover (*Trifolium repens*) and broadleaved dock was abundant, and frequent observations of willow (*Salix* sp.) sapling regeneration, pendulous sedge (*Carex pendula*), broom (*Cytisus scoparius*), common vetch (*Vicia sativa*), St John's wort (*Hypericum androsaemum*) and dandelions. Occasional species included creeping buttercup (*Ranunculus repens*), and rare occurrences of selfheal (*Prunella vulgaris*) and purple toadflax (*Linaria purpurea*).

3.2.3 Developed Land; Sealed Surface (u1b 528)

The north-western and southern boundaries of site are encompassed by pavements, which run along Dinton Street, Cornbrook Road and Chester Road.

3.3 Site Suitability for Protected and Notable Species

3.3.1 Species Discounted from Assessment

Water vole, otter and white-clawed crayfish have been discounted from assessment as no aquatic habitats are located on site. The closest aquatic habitat is the Bridgewater Canal, which is located approximately 100m north of site, although is separated by anthropogenic barriers including the Manchester Metrolink, and the site holds no value to such species.

Hazel dormouse mainly occur in southern counties, especially in Devon, Somerset, Sussex and Kent. There are few recorded localities north of the Midlands, though they are present in parts of the Lake District and in scattered Welsh localities (Matthews *et al.*, 2018). The species are not generally known to be present within the area (Wembridge *et al.*, 2016). The habitats on site are of limited value due to limited areas of extensive woodland and scrub. As such, the species are reasonably discounted from site.

Red squirrel have been discounted from the assessment. Red squirrel populations are limited to small areas of northern England and are not known to be present in the area; with no previous records returned in the data search. It is anticipated that high abundances of grey squirrel (*Sciurus carolinensis*) are present within this region (Shuttleworth/RSST n.d.). This species will displace red squirrel through competition as well as cause increased red squirrel mortality through the spread of squirrel pox (The Mammal Society, 2020).

3.3.2 Vascular Plants

The site held limited potential to support notable vascular plant species due to the nature of the site comprising sparsely vegetated hardstanding and a demolished building. Vegetation is present on site, though species present are predominantly associated with disturbed land and no notable species were recorded.

Notable vascular plant species are reasonably discounted from site.

3.3.3 Invertebrates

No deadwood, aquatic habitats or high floristic diversity was located on site which would provide an important resource for invertebrates during their life cycle. The presence of dominant buddleia is likely to provide a foraging resource for pollinators. It is anticipated common species will be present due to the minimal management on site.

Overall, the presence of notable invertebrates within the site is reasonably discounted, although common species may be present.

3.3.4 Amphibians

One pond is located within 250m of the site boundary, located approximately 250m south east of the site. As great crested newts' upper dispersal limit is generally considered to be up to 250m from a waterbody (though occurrence of greater distances does exist), great crested newts are not anticipated to be present on site (English Nature, 2001). This pond is separated from site by multiple anthropogenic barriers and has no habitat corridors connecting the pond to site, and so is not considered further.

The site comprised a mosaic of unmanaged habitats which may provide suitable foraging resources and cover for common amphibians such as common toads. Ornamental water bodies may be located within nearby residential gardens which may provide suitable conditions for breeding common amphibians.

The presence of great crested newts within the site is reasonably discounted, though common amphibians may occur on site.

3.3.5 Reptiles

The site was found to provide limited value for reptiles, given the majority of the site comprised hardstanding which lacks the structure and habitat quality to support the species group. The scrub habitats may provide some terrestrial cover for the species, though these are generally confined to the boundaries. Additionally, no records of reptiles were returned within the data search.

Reptiles are not considered to be present on site.

3.3.6 Birds

Ground Nesting

The site provides limited suitability to ground nesting birds, with much of the site comprising abandoned hardstanding, as well as providing no sustainable food source in the form of cereal crop. There are more suitable habitats within the surrounding areas for ground nesting birds to utilise and are anticipated to be used preferentially over the site.

Ground nesting birds are reasonably discounted from site.

Passerine

The site offers scrub habitats for common nesting birds. Blackbird (*Turdus merula*) and house sparrow were identified on site during the site visit, and multiple records of passerines were returned within the data search. As a result, it is likely that birds use these habitats to nest during the nesting season.

The site was confirmed to provide potential for nesting birds.

3.3.7 Bats

Preliminary Roost Assessment

A Preliminary Roost Assessment (PRA) was completed on all trees and structures on and adjacent to the site. In summary, none of the buildings or trees present were assessed as providing bat roosting potential.

Commuting and Foraging Bats

The habitats on site are anticipated to provide low value for foraging bats due to comprising mosaic of unmanaged habitats which will attract invertebrate prey. No linear features are located within the site which may provide suitable commuting conditions. The habitats on site appear to be generally common within the local area.

The site has the potential to support commuting and foraging bats.

3.3.8 Hedgehog

The scrub habitats are expected to provide suitable cover and foraging habitats for the species.

Hedgehog are potentially present within the site.

3.3.9 Badger

No evidence of badger was found on site or within 30m of site, and there is negligible sett building potential within the site extent or within the surrounding area, as well as high levels of disturbance on site at night time. Despite this, badgers are highly mobile and opportunistic with habitats in urban areas. Tramlines, especially those vegetated, can provide suitable commuting routes for badger, providing a suitable habitat corridor on to site.

Badger presence is deemed low but cannot be reasonably discounted.

3.4 Invasive Species

3.4.1 Flora

No invasive, non-native species were present on the site at the time of the field survey. However, it should be noted that some invasive non-native plants are very fast spreading and therefore the potential for these species to be introduced to the site at a later date cannot be ruled out.

4 Ecological Constraints and Recommended Mitigation

4.1 Proposed Development

Forshaw are proposing to develop land off Cornbrook Road in Manchester. The proposals include the erection of a 24-storey mixed use building incorporating 224 residential apartments (Use Class C3), 87 apart-hotel studios (Use Class C1), amenity space, flexible commercial space (Use Class E), and café (Use Class E(b)), together with infrastructure, landscaping, and other associated works.

4.2 Designated Sites

The site is located within the impact risk zone for Rochdale Canal SAC and SSSI. It is anticipated that the canal is a sufficient distance away and is separated by sufficient anthropogenic barriers that no impacts as a result of development are anticipated.

4.3 Habitats

The site comprised habitats that were found to be widespread within the local area; however, they did contain value for wildlife such as bats, birds, and terrestrial mammals, with the scrub providing the highest value for wildlife.

4.3.1 Urban Trees

Generally, the protection measures of retained trees will be through the use of temporary protective demarcation fencing to protect the trees and shrubs. The fencing must extend outside the canopy of the retained trees and must remain in position until all plots have been developed to ensure protection is provided throughout the construction phase.

The fencing will be in accordance with BS 5837:2012 Trees in Relation to Design, Demolition and Construction: Recommendations.

It is recommended that replacement tree planting at a 1:3 ratio is required to compensate for loss of any trees. It is recommended that the planting comprises native species and species known to be of value for the attraction of wildlife. This will include fruiting and flowering species.

4.4 Fauna

4.4.1 Amphibians

Great crested newts were deemed unlikely to be present on site and no further consideration for the species is required. However, there is a possibility that common amphibians such as common toad may be present on site.

It is recommended that Reasonable Avoidance Measures are to be followed during site clearance. All site contractors are to be inducted to the potential presence of the species. Any debris is to be cleared by hand, and any common amphibians located moved carefully, by hand, to outside of the development area.

4.4.2 Birds

Scrub removal should be undertaken outside of the breeding bird season (March to September, inclusive). If this is not possible, a suitably experienced ecologist should check the habitat for breeding bird activity no more than 48 hours before clearance. If nesting activity is found, nests must be left in situ until the young have fledged.

The site has been assessed to provide some suitable habitat for nesting birds, therefore it is recommended that the landscape scheme for this site contains a range of habitats such as scrub and trees, which will provide suitable shelter and nesting habitat for a range of bird species which are likely to be present in the surrounding area.

4.4.3 Bats

Foraging and Commuting Bats

The site was assessed as being of low value to commuting and foraging bats. It is recommended that the landscape designs for this site contain a mix of native plant species and those known to be of value to native invertebrate species, providing additional value to local bat populations as a foraging resource.

Slow-flying species such as brown long-eared and *Myotis* species, which are known to be in the local area, are sensitive to lighting and may be impacted by the proposed development, should no mitigation for lighting be considered.

Lighting mitigation should follow the guidance outlined in the Institute for Lighting Engineers document “Guidance for the Reduction of Obtrusive Lighting” (2005) and BCT’s “Bats and Artificial Lighting in the UK” (2018).

Construction lighting should not be directed towards retained and surrounding habitats. The construction lighting may impact bats which are sensitive to light. Directional lighting will be achieved by angle and orientation of beam, use of a cowl, louvre or other light shield, or a combination of these.

An External Lighting Scheme had not been produced on the writing of this report. As such, the following recommendations are to be considered within the scheme during its condition, to minimise impacts of lighting. The recommendations are as follows:

- Keep site lighting to minimum levels.
- Luminaries should lack UV elements and preferably LED lighting with a warm white light should be used over cool white light (ideally <2700Kelvin).
- Lighting should feature peak wavelengths greater than 550nm.
- Internal lighting should be positioned away from windows to minimise light spill, where appropriate.
- Light placement should be downward facing to prevent excess horizontal or vertical light spill.
- The use of integrated fittings such as cowls, shields, louvres, and hoods, that effectively contain light spill from unintended areas, where appropriate.
- The use of hard landscaping features to block light and create dark corridors.
- Use of timed security lights should be set on motion-sensors and using short, 1-minute timers, to minimise light use, where appropriate.
- Column heights of lighting can be considered to minimise light spill.

4.4.4 Hedgehog

Hedgehog may be present on site, as such checks for hedgehogs should be carried out prior to scrub removal to avoid harming this species during works.

4.4.5 Badgers

Although badger presence is deemed unlikely, it cannot be reasonably discounted, and Precautionary Working Methods (PWMs) should be followed.

The following PWMs will be adhered to during construction phase to ensure that no badgers are impacted by the proposed development:

- All site operatives will be inducted to the potential presence of the species and the species legal protection.
- All site operatives will be inducted as to identifying potential badger setts and should be vigilant if they suspect they locate a new sett during works and inform the site manager immediately. A minimum 20m buffer will be maintained from the potential sett until an ecologist has been to site.
- All excavations will be battened at a 45-degree angle or ramps to be positioned to allow escape should animals become trapped.
- All site machinery and materials will be appropriately stored to avoid harm to the species, notably between July and November each year when extra care is needed to avoid potential impacts on pregnant females.

4.5 Invasive Species

No non-native invasive flora species were identified during the site walkover. However, many invasive floras are fast-spreading and can colonise at any time. Should any be identified prior to development, it is recommended that an invasive species specialist should be contracted to map the extent of invasive species present within the site and produce a detailed management plan for the removal and eradication of such species onsite.

5 Further Surveys

No further surveys are required for development to proceed. Should development proposals or the red line boundary change significantly, a suitably qualified ecologist should review the plans to reassess the potential effect on ecology.

6 Opportunities for Enhancement

The National Planning Policy Framework (NPPF) (2023) highlights the requirement for planning policies and decisions to conserve and enhance the natural environment.

Paragraph 180 states that this should be achieved by (in terms of this assessment only):

- a) *protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory status or identified quality in the development plan);*
- d) *minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures;*

Specific enhancement recommendations for the site include the following:

- Bat and bird boxes could be placed on the new buildings. A plan to show the locations of these boxes and the specifications should be produced by a suitably qualified ecologist once the layout is finalised.
- An ecologically sensitive planting scheme could be incorporated on the site to promote invertebrate use of the site, which could benefit local bat and bird species.
- Peregrine falcon are known to be present within Manchester city centre and were included within the Data Search. Enhanced nesting provision for peregrines could be included within the development through the inclusion of suitable ledges within the design that increase the availability of nesting habitat.

7 Conclusion

The PEA has met the objectives of the report, by demonstrating the following:

- The major habitats identified on site included derelict land, sparsely vegetated land and developed land; sealed surface and are detailed in Section 3.
- Potential ecological constraints identified included breeding birds and commuting and foraging bats and are detailed in Section 3.
- Mitigation recommendations to be completed prior and during the construction phase for nesting birds, hedgehog, badger and commuting and foraging bats and have been detailed in Section 4.
- No further surveys are required to facilitate development.
- General ecological enhancements are listed within Section 6.

8 References

- Bat Conservation Trust and Institute of Lighting Professionals (2018). Bats and artificial lighting in the UK – Bats and the Built Environment Series.
- British Hedgehog Preservation Society / People's Trust for Endangered Species (2019). Hedgehogs and Development. BHPS / PTES.
- Chanin P (2003). Ecology of the European Otter. Conserving Natura 2000
- CIEEM (2019). Advice Note on the Lifespan of Ecological Reports and Surveys. CIEEM.
- CIEEM (2019). Guidelines for Preliminary Ecological Appraisal. CIEEM. Rivers Ecology Series No. 10. English Nature, Peterborough.
- Collins (2023). Bat Surveys for Professional Ecologists: Good Practice Guidelines (Fourth Edition). The Bat Conservation Trust, London.
- Eaton, M., Aebischer, N., Balmer, D., Brown, A., Douse, A., Lindley, P., McCulloch, N., Noble, D., and Win I. 2021. The status of our bird populations: the fifth Birds of Conservation Concern in the United Kingdom, Channel Islands and Isle of Man and second IUCN Red List assessment of extinction risk for Great Britain. British Birds 114: 723-747. Available online at <https://britishbirds.co.uk/content/status-our-bird-populations> [Last accessed 16/01/2024]
- English Nature (2004). Bat Mitigation Guidelines. English Nature, Peterborough.
- Environment Agency. (2020). Catchment Data Explorer. Available: <https://environment.data.gov.uk/catchment-planning/WaterBody/GB112069061452> [Last accessed 16/01/2024]
- Gent, A.H & Gibson, S.D. (2003) Herpetofauna Workers' Manual. Joint Nature Conservation Committee, Peterborough.
- Google Earth (2002). Historical aerial imagery of the site [Last accessed 16/01/2024]
- Gov.uk (2020). Guidance Otters: surveys and mitigation for development projects. Available: <https://www.gov.uk/guidance/otters-protection-surveys-and-licences>. Last accessed 30/11/2020.
- Harris S., Cresswell P., Jefferies D. (1989). *Surveying Badgers*. The Mammal Society.
- IEA (1995). Guidelines for Baseline Ecological Assessment. E & F Spon.
- JNCC (2004). Bat Workers Manual. JNCC, Peterborough.
- Liles, G. (2003). Otter Breeding Sites. *Conservation and Management*. Conserving Natura 2000 Rivers Conservation Techniques Series No. 5. English Nature, Peterborough.
- Maddock, A. (2008). UK biodiversity action plan; priority habitat descriptions. UK Biodiversity Action Plan.
- Mathews, F., Kubasiewicz, L.M., Gurnell, J., Harrower, C.A., McDonald, R.A., and Shore, R.F. (2018). A review of the population and conservation status of British mammals.

Langton, T.E.S., Beckett, C.L., and Foster, J.P. (2001), Great crested newt conservation handbook, Froglife, Halesworth.

Oldham, R.S., Keeble, J., Swan, M.J.S., and Jeffcote, M. (2000). Evaluating the suitability of habitat for the Great Crested Newt (*Triturus cristatus*). Herpetology Journal 10 (4), 143-155.

Shuttleworth, C., RSST (n.d.). Red and grey squirrels distribution in the British Isles in 1945 and 2010.

The Mammal Society (2020). Species Factsheet: Red Squirrel. Available:

<https://www.mammal.org.uk/species-hub/full-species-hub/discover-mammals/species-red-squirrel/> [Last accessed 16/01/2024]

UKHab Ltd (2023). UK Habitat Classification Version 2.0. Available: <https://www.ukhab.org> [Last accessed 16/01/2024]

Wembridge, D., Al-Fulaij, N. and Langton, S. (2016). The State of Britain's Dormice 2016. Population index, p.100.

Appendix 1 – Relevant Legislation

Legislation relating to European Protected Species (e.g. bats, otter, great crested newt)

European Protected Species and their resting places (e.g. bat roosts) are protected under the Wildlife and Countryside Act 1981 (as amended), the Countryside and Rights of Way (CROW) Act 2000, and the Conservation of Habitats and Species Regulations 2017.

The Conservation of Habitats and Species Regulations 2017 transpose the European Union's 'Habitats Directive' (Council Directive 92/43/EEC) on the Conservation of Natural Habitats and of Wild Fauna and Flora (EC Habitats Directive) into UK law. The Regulations provide for the designation and protection of 'European Sites', the protection of 'European Protected Species' (EPS), and the adaptation of planning and other controls for the protection of European Sites. EPS are listed on Schedule 2 of the Conservation of Habitats and Species Regulations 2017.

Under the Wildlife and Countryside Act 1981 (as amended) it is an offence to:

- Intentionally kill, injure or take certain animals listed in Schedule 5;
- Intentionally or recklessly damage or destroy any structure or place which any wild animal specified in Schedule 5 uses for shelter or protection;
- Intentionally or recklessly disturb any such animal while it is occupying a structure or place which it uses for shelter or protection; or
- Intentionally or recklessly obstruct access to any structure or place which any such animal uses for shelter or protection.

In addition, under this legislation there are offences relating to sale, possession and control of wild animals listed in Schedule 5.

Under the Conservation of Habitats and Species Regulations 2017 it is an offence to:

- Deliberately capture, injure or kill any wild animal listed as a European Protected Species;
- Deliberately disturb wild animals of any such species in such a way as to be likely:
- to impair their ability:
 - to survive, to breed or reproduce, or to rear or nurture their young, or;
 - in the case of animals of a hibernating or migratory species, to hibernate or migrate, or;
- to affect significantly the local distribution or abundance of the species to which they belong.
- Deliberately take or destroy the eggs of such an animal, or;
- Damage or destroy a breeding site or resting place of such an animal.

In addition, under this legislation there are offences relating to possession, control sale and exchange of an EPS.

Great crested newt, otter and several species of bat are listed as a SoPI under Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006.

Legislation for amphibians (other than great crested newt)

Under the Wildlife and Countryside Act 1981 (as amended) the four widespread amphibian species, smooth newt (*Triturus vulgaris*), palmate newt (*Triturus helveticus*), common toad (*Bufo bufo*) and common frog (*Rana temporaria*) receive limited protection through section 9(5) only which makes selling, offering for sale, possessing or transporting for the purpose of sale (live or dead animal, part or derivative) an offence.

Common toad is listed as a SoPI under Section 41 of the NERC Act 2006.

Legislation relating to reptiles

All native reptile species have some degree of protection in the UK, through section 9(1) and (5) (specified in Schedule 5) of the Wildlife and Countryside Act 1981 (as amended). There are two different levels of protection afforded to reptiles through this legislation according to species and this is described in more detail below.

Full Protection

Sand lizard (*Lacerta agilis*) and smooth snake (*Coronella austriaca*) are afforded protection under The Conservation of Habitats and Species Regulations 2010 (are species of European importance) and are fully protected under the Wildlife and Countryside Act 1981 (as amended) and the CROW Act (2000). The Conservation of Habitats and Species Regulations 2010 implements the European Union's 'Habitats Directive' (Council Directive 92/43/EEC (a) on the Conservation of Natural Habitats and of Wild Fauna and Flora) in Great Britain. The relevant sections of this legislation make it an offence to:

- Intentionally kill, injure or capture or take a reptile;
- Possess or control (live or dead animal, part or derivative);
- Deliberately (intentionally) or recklessly damage, destroy or obstruct access to a breeding site or any structure or place used for shelter or protection by a reptile;
- Disturb whilst the reptile is occupying such a structure or place; and
- Sell, offer for sale, possess or transport for the purpose of sale (live or dead animal, part or derivative).

Sand lizard and smooth snake are listed as a SoPI under Section 41 of the NERC Act 2006.

Protection against killing, injuring and trade

This level of protection under section 9 (parts 1 and 5) applies to the four widespread species of reptile, namely the common lizard (*Zootoca vivipara*), slow-worm (*Anguis fragilis*), grass snake (*Natrix natrix*) and adder (*Viper berus*). Only part of sub-section 9(1) applies, which make it an offence to:

- Intentionally kill or injure, and
- Sell, offer for sale, possess or transport for the purpose of sale (live or dead animal, part or derivative).

Grass snake, slow-worm and adder are all listed as SoPI under Section 41 of the NERC Act 2006.

Legislation relating to breeding birds

All birds, their nests and eggs are protected by the Wildlife and Countryside Act 1981 (as amended) and it is an offence, with certain exceptions, to:

- Intentionally kill, injure or take any wild bird;
- Intentionally take, damage or destroy the nest of any wild bird while it is in use or being built;
- Intentionally take or destroy the egg of any wild bird; and
- Intentionally or recklessly disturb any wild bird listed on Schedule 1 while it is nest building or is in, on or near a nest with eggs or young; or disturb the dependent young of such a bird.

Schedule 1 of the Wildlife and Countryside Act 1981 provides further protection for selected species (including peregrine falcon, barn owl (*Tyto alba*), little ringed plover and black redstart during the breeding season. If any person intentionally or recklessly disturbs any wild bird included in Schedule 1 while it is building a nest or is in, on or near a nest containing eggs or young; or disturb dependent young of such a bird. That person shall be guilty of an offence.

A number of bird species are listed as SoPI under Section 41 of the NERC Act 2006.

Conservation status - Birds of Conservation Concern (Eaton et al. 2015)

The UK's leading bird conservation organisations have worked together on the third quantitative review of the status of the birds that occur regularly in the UK, updating the last review in 2011. The status of birds within the UK have been regularly monitored through a series of surveys, including the national Breeding Bird Survey, Common Bird Census, sea bird monitoring programs and wetland monitoring programs. The result of this review and continued monitoring is The Population Status of Birds in the UK, Birds of Conservation Concern 4: 2015.

Birds are assessed against criteria to place each species on one of three alert lists, red, amber or green. Red list species are considered to be of high conservation concern, being either globally threatened, having historical UK population declines, having a rapid population decline or breeding range contraction of 50% or more in the last 25 years.

Amber list species are considered to be of medium conservation concern as they meet one or more of the following criteria (but none of the red list criteria): Red listed for historical decline in a previous review but with substantial recent recovery (more than doubled in the last 25 years), a UK breeding range contraction of between 25% and 49%, a reduction of breeding or non-breeding population of 25-49% in the last 25 years, a 5-year mean of 1-300 breeding pairs in the UK, an unfavourable European conservation status, at least 50% of the UK breeding population found in 10 or fewer sites, or where the breeding population in the UK represents 20% or more of the European breeding populations.

Green list species are considered to be of low conservation concern. They include all regularly occurring species that do not qualify under any of the red or amber criteria are green listed. The green list also includes those species listed as recovering from Historical Decline in the last review that have continued to recover and do not qualify under any of the other criteria.

Legislation relating to badger

Badgers are protected under the Protection of Badgers Act 1992 (as amended) which makes it an offence to:

- wilfully kill, injure, take, possess or cruelly ill-treat a badger, or to attempt to do so;
- intentionally or recklessly damage, destroy or obstruct access to a badger sett; and
- disturb a badger when it is occupying a sett.

These provisions have implications for construction or preparation works undertaken in the vicinity of an active sett and may be confounded by distance from the sett entrance. Any works resulting in ground penetration, vibration or noise near an identified badger sett entrance/s have the potential to disturb badgers and advice should be sought from a suitably experienced ecologist under such circumstances. If disturbance to an active sett is probable, then a licence may need to be obtained from Natural England before any works commence.

Legislation relating to water vole

The water vole is fully protected under Section 9 of the Wildlife & Countryside Act 1981 (as amended) through its inclusion in Schedule 5. The legal protection makes it an offence to:

- Intentionally kill, injure or capture or take a water vole;
- Possess or control (live or dead animal, part or derivative);
- Deliberately (intentionally) or recklessly damage, destroy or obstruct access to a breeding site or any structure or place used for shelter or protection by a water vole;
- Deliberately (intentionally) or recklessly disturb a water vole whilst occupying such as structure or place, and
- Sell, offer for sale, possess or transport for the purpose of sale (live or dead animal, part or derivative).

Water vole is listed as a SoPI under Section 41 of the NERC Act 2006.

Legislation relating to invasive plant species

Several non-native invasive plant species such as Himalayan balsam (*Impatiens glandulifera*), giant hogweed (*Heracleum mantegazzianum*), Japanese rose (*Rosa rugosa*), variegated yellow archangel (*Lamium galeobdolon*), rhododendron (*Rhododendron ponticum*) and Japanese knotweed (*Reynoutria japonica*) are listed under Schedule 9 of the Wildlife and Countryside Act, 1981 (as amended), which makes it an offence to ‘...plant or otherwise cause the species to grow in the wild’. This includes spreading or transferring contaminated soil from one area to another.

Estate Managers and landowners have a duty to pro-actively treat knotweed outbreaks. Under the Natural Environment and Rural Communities Act 2006 (NERC), subsection 14ZA (1), makes it is an offence to sell, offer or expose for sale, or to have in one’s possession or transport for the purpose of sale, any Schedule 9 animal or plant or anything from which such an animal or plant can be propagated, including rhizomes of Japanese knotweed. Under subsection 14ZA (2) it is also an offence to publish or cause to be published any advertisement for the purchase or sale of these animals and plants.

The Environmental Protection Act 1990 (EPA 1990) contains a number of legal provisions concerning controlled waste. Any Japanese knotweed contaminated soil or plant material that is intended for discard is likely to be classified as controlled waste.

The Environmental Protection (Duty of Care) regulations 1991 also imposes a 'duty of care' on persons concerned with controlled waste, which includes any materials incorporating Japanese knotweed including soil, grass cuttings, general wastes and ash arising from the burning of knotweed. The duty applies to any person, who produces, imports, carries, keeps, treats or disposes of controlled waste. Failure to appropriately dispose of any material containing Japanese knotweed may lead to prosecution under Section 33 and 34 of the EPA 1990 and Section 14 (2) of the Wildlife & Countryside Act 1981 (as amended).

If knotweed stands are to be treated with herbicides, The Control of Pesticides Regulations (1986) applies. These regulations require any person who uses a pesticide to take all reasonable precautions to protect the health of human beings, creatures and plants, safeguard the environment and in particular avoid the pollution of water. If pesticides are to be used in or near to a watercourse, the Environment Agency should be contacted, and approval must be sought (application to use herbicides in or near water).

Waste leaving the site must be handled responsibly and in accordance with the law at all stages between its production and final recovery or disposal. Waste must be transferred to an authorised person, who is either a registered waste carrier or exempted from registration by the Controlled Waste (Registration of Carriers and Seizure of Vehicles) Regulations 1991.

Additional legislation regarding the transport of Japanese knotweed contaminated materials is covered by the Hazardous Waste Regulations 2005 (HWR 2005). This contains provisions about the handling and movement of hazardous waste. Consignment notes must be completed when any hazardous waste is transferred, which includes details about the hazardous waste properties and any handling requirements. Untreated Japanese knotweed is not classed as hazardous waste, but material containing knotweed which has been treated with certain herbicides, may be classified as hazardous waste.

If any waste soil or knotweed is sent for landfill either before or after treatment, it must go to a landfill that is authorised to receive it.

Appendix 2 – Habitat Map and Target Notes

Hierarchical code	Code	Meaning
Primary Code	u	Urban
	s	Sparsely vegetated land
	u1b	Developed land; sealed surface
Secondary Code	10	Scattered scrub
	16	Tall forbs
	81	Ruderal or ephemeral
	82	Vacant or derelict land
	519	Abandoned
	524	Invasive non-native species
	528	Walking or cycling route

Do not scale this drawing (printed or electronic version).
This drawing is copyright and is for use on this site only. This drawing should be read in conjunction with all relevant consultants drawings and specialist subcontractors / supply chain drawings and specifications.
Responsibility for the reproduction of this drawing in paper form, or issued in electronic format, lies with the recipient to check that all information has been replicated in full and is correct when compared to the original paper or electronic image.

Legend

- Red Line Boundary
- Sparsely vegetated land
- Urban
- Developed land sealed surface
- Urban Tree



A: Ground Floor, The Tower,
Deva City Office Park, Trinity Way,
Manchester M3 7BF

T: +44 (0) 161 312 3131

weareurbangreen.co.uk

Client: **Artal**

Project: **Forshaw Cornbrook**

Title: **UKHAB Habitat Map**

Issue: **01**

Drawn: CL	Checked: TM	Approved: OJ
---------------------	-----------------------	------------------------

Project: UG2342	Scale @ A3: 1:250	Date: 19/12/2023
---------------------------	-----------------------------	----------------------------

Dwg No: UG_2342_ECO_HM_01	Revision: 01
-------------------------------------	------------------------

