Preliminary Ecological Appraisal

Land off Coach Road Whitehaven

MEP-22-03

02/12/2022

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Naturally Wild

Preliminary Ecological Appraisal

Whitehaven
Cumbria
CA28 9BX

Grid Reference:
NX 97390 17471

Report for:
Manning Elliott Partnership

Version	Prepared by	Date	Checked by	Date	Approved by	Date
R1	Connor Pimm	06/12/2022	Katie Pearson	06/12/2022	Marshall Reilly	06/12/2022

This assessment is intended to provide an accurate description of findings from the desktop study and from survey work undertaken on the date shown; however, all ecological data has a shelf life, which is dependent on the discretion of the governing body overseeing licencing or condition application. This is usually one survey season. This assessment cannot fully account for the reliability of third-party data provided or for any changes to site conditions following the completion of the survey work due to activities carried out on site or the dynamic nature of the natural environment. All work carried out by Naturally Wild Consultants Ltd is subject to our Terms and Conditions. The report has been produced in accordance with current best practice guidelines.

Contents

Executive Summary

Background

Naturally Wild were instructed to undertake a Preliminary Ecological Appraisal (PEA) at land off Coach Road, Whitehaven. The site comprised areas of hardstanding, bare ground, and bramble scrub. The proposals are to redevelop the site.

Methods

The PEA comprised two parts: a desktop study and a survey visit. The desktop study collated available public information regarding the biodiversity of the area, including the habitat structure of the site and surrounding area and the presence of any statutory or non-statutory designated sites. In addition, biological records within 1 km of the site were requested from the Cumbria Biodiversity Data Centre (CBDC). The survey visit consisted of an assessment of all habitats on site and in the surrounding area to determine their ecological value and was conducted on 25th November 2022 by ecologists Marshall Reilly MSc, BSc (Hons) and Katie Pearson MSc, BSc (Hons).

Results

The site was found to be of low ecological value. There was limited suitable habitat for nesting birds and hedgehog present on site, as well as limited opportunities for basking for reptiles.

Conclusions

Following the site assessment and in review of the findings, a series of ecological mitigation and enhancement measures to be incorporated into the works have been outlined. These include a sensitive lighting scheme, clearance works to be carried out outside of bird nesting season (March to August, inclusive) and precautionary working relating to hedgehogs, as well as addressing the INNS present on site. Full details are provided in Section 5. Providing the recommendations of this report are implemented in full, Naturally Wild would conclude that there will not be a significant impact to protected species or habitats as a result of the proposed works.

Summary of Potential Ecological Constraints

Colour Key for Summary of Assessment:

Works can start only once authorised by an ecologist.	Additional ecological works required.	No action required.

Potential Ecological Constraints		
Designated sites		None Identified
Ecologically valuable watercourses		None Identified
Plants and habitats		None Identified
Badgers		None Identified
Bats		None Identified
Dormice		None Identified
Great crested newts		None Identified
Nesting birds		None Identified
Otters		None Identified
Reptiles		None Identified
Water voles		None Identified
White-clawed crayfish		None Identified
Invasive species		See Section 4.4.
Other		None Identified

Recommended Actions:		
Requirement for formal Environmental Impact Assessment		N/A
Requirement for consultation with statutory environmental bodies		N/A
Requirement for 'assent' from Natural England (e.g., within or adjacent to a European site or SSSI)		N/A
Requirement for further ecological surveys		N/A
Requirement for protected species licensing		N/A
Requirement for an ecologist to oversee the works (see below)		N/A

The contractor should inform the ecologist of the works programme with sufficient notice to coordinate the following:		
Ecologist to be on site before works begin (includes vegetation clearance)		N/A
Ecologist to be on site during the first day of works		N/A
Ecologist to be on site throughout the works		N/A
Ecologist to be on site as the works are completed		N/A
Ecologist to be on site once all the works are completed		N/A

1 Introduction

Naturally Wild were instructed to undertake a Preliminary Ecological Appraisal (PEA) at land off Coach Road, Whitehaven (Figure 1). The site comprised majority hardstanding with limited areas of bramble scrub and bare ground. The main objective of the assessment was to determine the suitability of the site to support protected species and to check for any evidence of the presence of protected species, as well as the presence of any protected or notable habitats.

The proposals are for the redevelopment of the former contractor's yard. As part of the planning process, an ecological assessment is required to determine if any protected or notable species/habitats are likely to be affected by the proposed works, and to show how any negative ecological impacts would be mitigated and compensated.

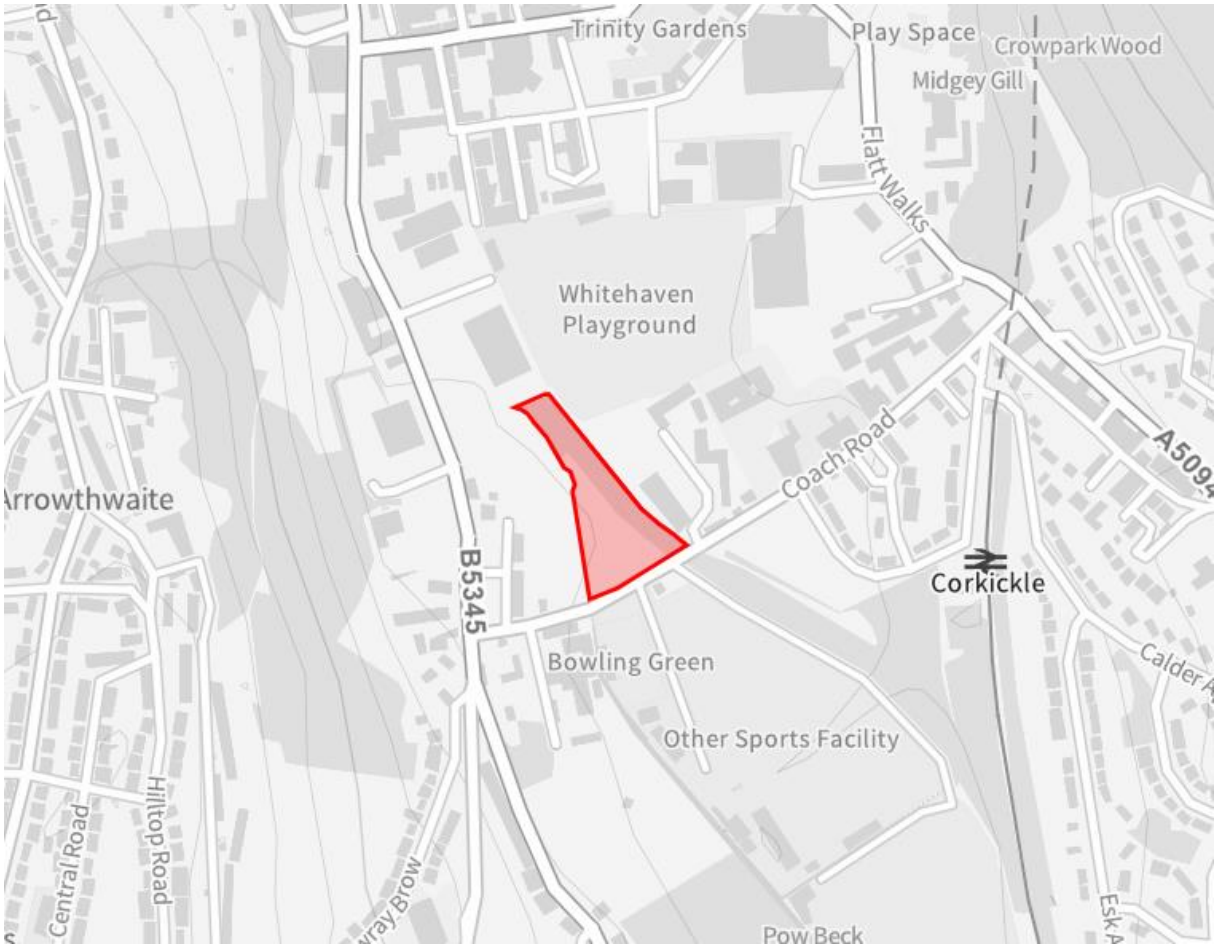

Figure 1.: Site location plan. Red line shows the area proposed for re-development.

2 Relevant Legislation

British wildlife is protected by a range of legislation, the most important being the Wildlife and Countryside Act 1981 (as amended), The Conservation of Habitats and Species Regulations 2017 (as amended), and the Natural Environment and Rural Communities (NERC) Act 2006.

The Wildlife and Countryside Act, as amended mainly by the Countryside Rights of Way (CRoW) Act 2000, protects species listed in Schedules 5 and 8 of the Act (animals and plants respectively) from being killed, injured, and used for trade. For some species, such as great crested newts and all bat species, the provisions of this Act go further to protect animals from being disturbed or taken from the wild and protects aspects of their habitats. The Act also stipulates that offences occur regardless of whether they were committed intentionally or recklessly. The parts of this legislation that apply to most reptile species are in regard to killing, injury and trade only and do not protect their habitat, nor are they protected from disturbance or from being taken from their habitat.

The Conservation of Habitats and Species Regulations is the English enactment of European legislation and provides similar but subtly different protection for species listed on Schedules 2 and 4 of those regulations. Species to which these provisions apply are known as European Protected Species. Activities that might cause offences to be committed can be legitimised by obtaining a licence from the relevant statutory body.

The NERC Act 2006 extends the biodiversity duty set out in the CRoW Act to public bodies and statutory undertakers to ensure due regard to the conservation of biodiversity. Section 40 of the Act states: *"every public authority must, in exercising its functions, have regard, so far as is consistent with the proper exercise of those functions, to the purpose of conserving biodiversity."* Section 41 of the Act sets out a list of habitats and species that are considered to be of principal importance for the conservation of biodiversity in England. These species may be referred to as 'priority species/habitats' or 'UK Biodiversity Action Plan (BAP) priority species/habitats.'

Further details on the legislation protecting species of British wildlife relevant to this assessment can be found in Section 8.1 of this report.

3 Methodology

3.1 Overview

The PEA comprised a desktop study and a survey visit. All work undertaken has been completed in line with official guidelines produced by Natural England and the Chartered Institute for Ecology and Environmental Management (CIEEM), and British Standard document BS 42020: 2013 *'Biodiversity – Code of practice for planning and development.'*

The desktop study collated available public information regarding the biodiversity of the area, including the habitat structure of the site and surrounding area and the presence of any statutory or non-statutory designated sites, and any records of previously granted European Protected Species (EPS) mitigation licences in relation to certain species, using the Multi-Agency Geographic Information for the Countryside (MAGIC) resource, along with a search of the Local Planning Authority's website for any trees in the area covered by Tree Preservation Orders (TPOs). In addition, biological records within 1 km of the site were requested from the Cumbria Biodiversity Data Centre (CBDC), which included records of protected and notable species and any nearby non-statutory designated sites (Local Wildlife Sites) not available through MAGIC.

The objective of the survey was to ascertain if any protected species may be using the site, document the habitats present and determine any potential ecological impacts during and following the completion of the works. The survey would be completed under suitable weather conditions and by experienced ecologists. Further to this, the results of the desktop study and site survey would be assessed to determine the ecological impacts posed by the work, any additional survey work required, and how such impacts should be mitigated and compensated for.

The survey work and the preparation of this report has been conducted by ecologists Marshall Reilly MSc, BSc (Hons) and Katie Pearson MSc, BSc (Hons) who are experienced in undertaking ecological assessments.

3.2 Survey Area

The application site is located at Grid Reference NX 97390 17471 and can be accessed via Coach Road. The assessment focused on the application site, as well as all habitats in the immediate surrounding area (where access was available). Weather conditions were suitable for undertaking ecological assessments, with temperatures of 11°C, cloud cover of 3 (oktas), wind 3-4 (Beaufort scale), and 0 precipitation (mm).

Figure 2. Location of the surveyed area. Site boundary is shown by the red line.

(Image taken from Google Earth Pro: ©2022 Map Data Google).

3.3 Survey Constraints

There were no constraints with regards to site access or completion of the survey objectives across the site.

3.4 Field Survey

3.4.1 Habitat Assessment

The survey was carried out on Friday 25th November 2022 and consisted of an assessment and classification of the habitats on and adjacent to the site, based on their structure and the dominant vegetation coverage, where present, following the UKHabs habitat survey methodology (Butcher et al 2020). Following this, the habitats present were assessed for their suitability to support protected species and for the presence of any evidence of protected species. Each habitat present was then assigned a level of value (negligible, low, moderate, or high) on a geographical scale from site level to European/international level, with reference to guidance provided by CIEEM (2018).

3.4.2 Protected Species Impact Assessment

Based on the habitats present, the site was assessed with particular regard to determine the presence or otherwise of European badgers (*Meles meles*), bats, European hedgehogs (*Erinaceus europaeus*) great crested newts (GCN) (*Triturus cristatus*), nesting birds, and reptiles. An overview of the survey methods used is outlined below.

European Badgers:

An assessment of the site and surrounding habitats (where access was available), with particular focus on any areas of dense vegetation, was carried out in order to identify any evidence of badgers, including:

- the presence of any setts
- well-used runs/tracks
- supplementary evidence, such as hairs or prints
- badgers themselves

Bats:

Evidence of roosting bats includes: bat droppings in, around or below an entrance hole; staining around an entrance hole; audible squeaking at dusk or in warm weather; smoothening of surfaces around cavity or an entrance hole; distinctive smell of bats.

The assessment was completed using binoculars and powerful torches. An endoscope was also available to check any small gaps/cracks for evidence of bats.

European Hedgehogs:

An assessment of the site and surrounding habitats (where access was available), with particular focus on any areas of dense vegetation, was carried out in order to identify any evidence of hedgehogs, including:

- well-used runs/tracks
- supplementary evidence, such as hairs or droppings
- observed hedgehogs

Great Crested Newts:

An assessment of the habitats present on the site was carried out in order to determine their suitability to support foraging and sheltering GCN, and any natural or artificial refugia (such as logs, stones, discarded building materials, etc.) present were also lifted to check for the presence of GCN.

Nesting Birds:

Although the survey was conducted outside of the bird nesting season, an assessment of the habitats on site was carried out in order to determine their suitability for nesting birds, including a check for the presence of any existing disused nests.

Reptiles: The assessment for reptiles followed survey guidance provided by Froglife (1999), with an assessment of the habitats present carried out to determine their suitability to support reptiles for shelter, foraging and basking, and with any refugia lifted to check for the presence of reptiles or evidence of reptiles, such as sloughs (shed skins).

Other Wildlife: In accordance with good practice, the site was checked for the presence of any other protected/notable species, with particular regard to any other species highlighted in the desktop study.

Invasive Species: The site was also surveyed for the presence of any invasive, non-native flora or fauna.

4 Results

4.1 Desktop Study

4.1.1 Designated Sites

Statutory Designated Sites

There is one statutory designated site within 5 km of the application site. This is St Bees Head Site of Special Scientific Interest (SSSI) which is located approximately 877 m to the west of site at its closest point. The site forms part of the wider Cumbria Coast Marine Conservation Zone (MCZ) and was designated due to its importance for nesting birds and it is the only breeding location in England for black guillemot (*Cepphus grylle*). The site also contains several species of flowering plant, including bloody cranesbill (*Geranium sanguineum*) and soft shield fern (*Polystichum setiferum*). Due to the small-scale nature of the development, it is expected that any impacts from the development upon the nearby statutory site are expected to be negligible.

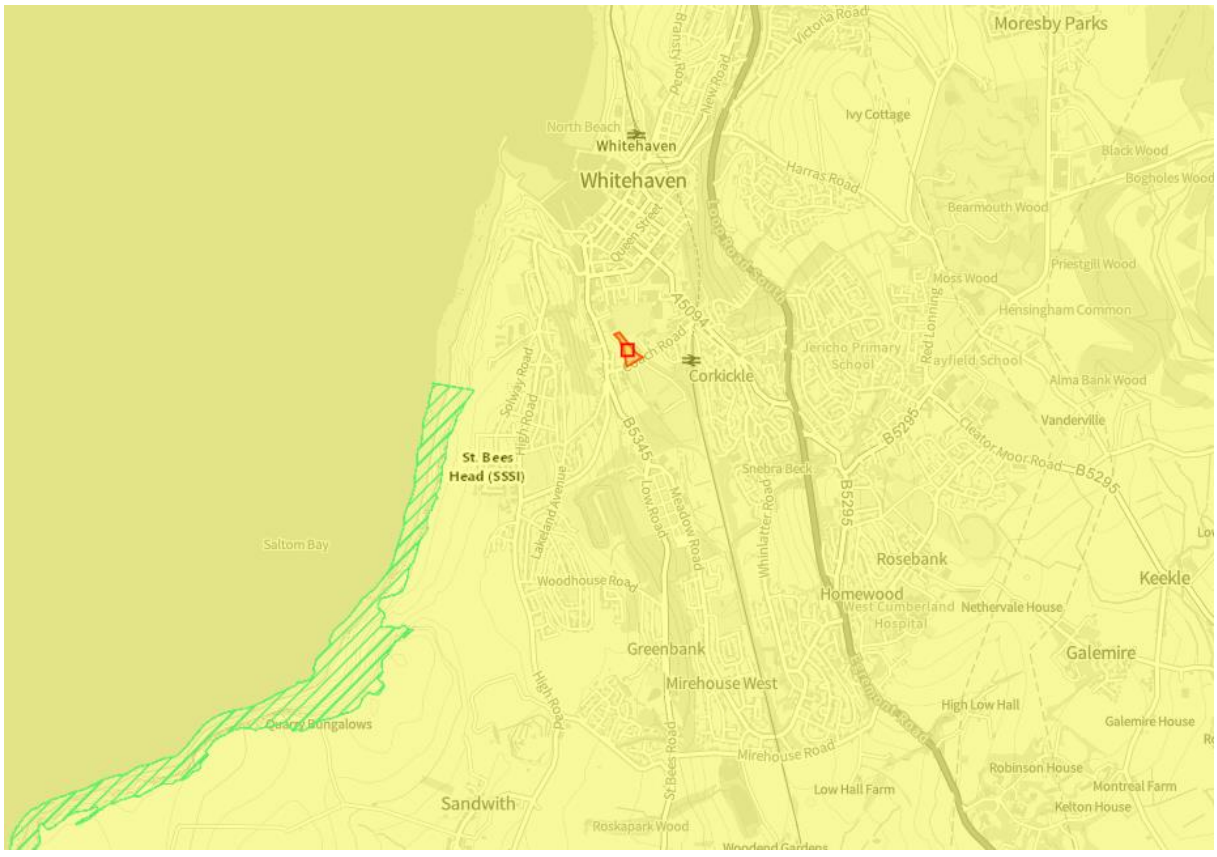

Figure 3. Location of the surveyed site in relation to the surrounding designated sites.

Non-statutory Designated Sites:

There are three non-statutory designated sites within 1 km of the application site. These are county wildlife sites and the closest of which is Midgey Gill which is located approximately 450 m to the north east of site at its closest point. Midgey Gill primarily consists of ancient woodland and as such, provides vital habitat for a wide range of protected flora and fauna, including rare butterflies, nesting birds and bats.

Given the small-scale nature of the development, it is expected that any impacts from the development upon the nearby non-statutory sites will be negligible.

Notable Habitats:

There are several priority habitats within 2 km of the application site. These include maritime cliffs and slopes and deciduous woodland. The closest of which is approximately 381 m to the north east of site at its closest point.

Maritime cliffs are often significant for their populations of breeding seabirds, many of which are of international importance. Some 70% of the international population of gannet *Morus bassanus* and important proportions of the European populations of shag *Phalacrocorax aristotelis*, razorbill *Alca torda* and guillemot *Uria aalge* nest colonially on cliff ledges whilst significant populations of Manx shearwater *Puffinus puffinus* and puffins *Fratercula arctica* nest in burrows in turf on cliff-tops or slopes. Coastal cliffs are also important for crag nesting species, such as raven *Corvus corax* and peregrine *Falco peregrinus*, and cliff-top vegetation may provide important feeding grounds for chough *Pyrrhocorax pyrrhocorax.*

Lowland deciduous woodlands are classified as Habitats of Principal Importance (HoPI), under Section 41 of the NERC Act (2006) and provide suitable sheltering, foraging, and commuting habitat for a variety of UK species. Many are ancient woods with high variation in the canopy and ground flora and can offer nesting opportunities for birds and roosting opportunities for bats within suitably mature trees, as well as sheltering and foraging habitat for other small mammals, reptiles, and amphibians within the understorey and ground layer. Additionally, there are numerous invertebrate taxa associated with woodland, and the deadwood often present offers opportunities for saproxylic species (those dependent on dead or decaying wood).

Due to the small-scale nature of the development and distance to the application site, it is expected that any impacts from the development upon the nearby habitats will be negligible.

Granted EPS Licenses:

Following a search on DEFRA's MAGIC database, one granted EPSL was found within 1 km of the application site. This was for the destruction of a resting place for common pipistrelles (*Pipistrellus pipistrellus*).

4.1.2 Biological Records

A total of 1637 records were returned from CBDC, which are separated into taxonomic groups in Table 4 below. The importance of individual species records in the context of the proposals are discussed in Section 4.3 – Protected Species, where and if appropriate. A full list of received records is available on request with the permission of the records centre, excluding records of sensitive species.

Table 4. Biological records returned from CBDC within 1km of the site.

Taxonomic Group	Number of Records	Number of Species	Notable Species
Terrestrial Mammals	140	8	Eurasian Red Squirrel West European Hedgehog
Plants	1	2	Scots Pine
Birds	1294	109	Long-Tailed Duck Curlew
Insect	144	39	Dingy Skipper Wall Grayling
Reptiles	39	2	Common Lizard Slow Worm
Fish	1	1	Mackerel
Marine Mammals	6	3	Common porpoise Grey seal Harbour seal
Chromista	1	1	Sea Loch Egg Wrack

Table 5. Bat records returned from RECORDS CENTRE within 1km of the site.

Common Name	Scientific Name	Number of Records
Common Pipistrelle	**(***Pipistrellus pipistrellus)*	**1**
Unconfirmed species	**/**	**2**

4.2 Site Assessment

4.2.1 On-Site Ecological Features

The site comprised largely areas of hardstanding, bare ground and small areas of bramble scrub. The general ecological value of each habitat is described in the paragraphs below, with any notable species-specific findings detailed in Section 4.3. A full site species list can be found in Appendix 8.5. A UKHabs habitat map showing the distribution of the habitats on site is provided at the end of this section, and a series of site photographs giving an overview of the habitats present are provided in Section 6.

Bare ground

Comprising a large proportion of the site were areas of bare ground. Species recorded as growing on the bare ground included buddleia (*Buddleja davidii*), bramble (*Rubus fruticosus*), ivy sp. (*Hedera sp.*), perennial rye-grass (*Lolium perenne*), white clover (*Trifolium repens*), wild strawberry (*Fragaria vesca*), ribwort plantain (*Plantago lanceolata*), broad-leaved dock (*Rumex obtusifolius*), creeping buttercup (*Ranunculus repens*), dandelion (*Taraxacum oficinale*), holly (*Ilex aquifolium*), hawthorn (*Crataegus monogyna*), carrot family (*Apiaceae*), lettuce sp. (*Lactuca sp.*), cleavers (*Galium aparine*), bracken (*Pteridium aquilinum*), yarrow (*Achillea millefolium*), mouse-ear sp. (*Cerastium sp.*) and sallow willow (*Salix caprea*).

Due to the comparative lack of species diversity and habitat availability for protected species, the bare ground was assessed as being of low ecological value overall. Although piles of rubble and the limited vegetation could provide some habitat for terrestrial mammals, reptiles, and amphibians, it was deemed largely suboptimal for these species.

Hardstanding

Making up a further large proportion of the site were areas of hardstanding. This was assessed as being of negligible ecological value to the lack of species present and available habitat for protected species.

Bramble scrub

The rest of site contained small areas of bramble scrub. Species recorded in this area included bramble, Himalayan honeysuckle (*Leycesteria formosa*), rosebay willowherb (*Chamerion angustifolium*), bracken and perennial rye grass. Bramble scrub was assessed as being of moderate ecological value due to its suitability for nesting birds and butterflies. Provided works are carried out outside of bird nesting season (March to August, inclusive), impacts upon nesting birds are expected to be negligible.

Figure 3. UKHabs habitat map of the site of proposed works.

(Base map taken from Google Earth Pro: ©2022 Google, figure produced in QGIS 3.22.)

4.2.2 Off-Site Ecological Features

The site is largely surrounded by the urban development of Whitehaven with associated hardstanding, buildings and vegetated gardens. These provide largely sub-optimal habitat for UK wildlife, although vegetated gardens can provide some suitable habitat for nesting birds, amphibians and terrestrial mammals such as European hedgehog (*Erinaceus europaeus*).

To the east of site is an area of deciduous woodland. This is classed as a UK Priority Habitat and as such, offers excellent suitability for a wide range of UK wildlife, including nesting birds, bats and terrestrial mammals such as badger (*Meles meles*).

Given the small-scale nature of the development and works being restricted to the redline boundary, it is expected that any impacts from the development upon the nearby off site habitats will be low to negligible provided basic mitigation measures are adhered to.

4.3 Protected Species

4.3.1 Badgers

Records

There are no badger records nor any granted EPSL within 1 km of the application site.

Field Evidence

No signs of badgers were detected on site during the survey, including snuffle holes, latrines or holes.

Summary Evaluation

The habitat on site was largely unsuitable for badgers, consisting primarily of bare ground and hardstanding. There were no areas on site suitable for foraging or sett creation. Therefore, it is extremely unlikely that badgers would be present on site and provided basic mitigation measures are adhered to, it is expected that any impacts from the development upon badgers will be negligible.

Further Surveys

No further surveys required at this time.

4.3.2 Bats

Records

Three bat records were returned within 1 km of the application site, as well as one granted EPSL for the destruction of a resting place for common pipistrelles (*Pipistrellus pipistrellus*).

Field Evidence

There were no suitable structures or trees present on site that provided roosting opportunities for bats. No field signs such as insect wings, droppings or other feeding remains were detected during the survey.

Summary Evaluation

Due to the lack of suitable structures and/or trees with suitable PRFs, as well as unsuitable habitat, the site was assessed as being of largely negligible value for bats. Provided basic mitigation measures are adhered to, it is expected that any impacts from the development on nearby bat populations will be negligible.

Further Surveys

No further surveys required at this time.

4.3.3 Great Crested Newts

Records

There were no records of GCN or granted EPSL within 1 km of the application site.

Field Evidence

There were no ponds present within 500m of the application site. The habitat on and around site was also considered sub-optimal for GCN, considering of urban sprawl.

Summary Evaluation

Given the lack of suitable habitat on and around site (urban sprawl) it is extremely unlikely that GCN will be present on site. Therefore, provided basic mitigation measures are adhered to, it is expected that any impacts from the development upon GCN will be negligible.

Further Surveys

No further surveys required at this time.

4.3.4 Nesting Birds

Records

Some records for sensitive breeding species (redacted) were returned from the local records centre. A number of birds were identified visually and by their calls during the survey, including jackdaw (*Corvus monedula*), robin (*Erithacus rubecula*), herring gull (*Larus argentatus*), blackbird (*Turdus merula*), wren and bullfinch (*Pyrrhula pyrrhula*).

Field Evidence

Given the survey took place outside of bird nesting season, no active nests were recorded.

Summary Evaluation

The habitat on site, specifically the bramble scrub, could provide some suitable nesting habitat for scrub nesting birds such as wren (*Troglodytes troglodytes*) and common whitethroat (*Sylvia communis*). For this reason, it is recommended that any clearance works take place outside of bird nesting season.

Further Surveys

No further surveys required at this time unless works are conducted during bird nesting season (March to August, inclusive) in which case a nesting bird survey would be required.

4.3.5 Reptiles

Records

Several records of common lizard and slow-worm were recorded within 1 km of the application site. No EPSL were returned within 1 km of the site.

Field Evidence

No refugia were noted on site suitable for reptiles. The hardstanding/bare ground could provide some suitable basking opportunities but the lack of other suitable habitat limits the potential for reptiles to be on site.

Summary Evaluation

Overall, the site was assessed as being of low value for reptiles due to lack of suitable refugia and other habitat. Therefore, it is expected that any impacts from the development upon local reptiles will be negligible.

Further Surveys

No further surveys required at this time.

4.3.6 Hedgehogs

Records

The biological records returned 11 records for European hedgehog within 1 km of the application site.

Field Evidence

No signs of hedgehog were detected during the survey. The scrub on site could provide some suitable foraging habitat.

Summary Evaluation

Overall, the site was assessed as being of low ecological value for hedgehogs. The scrub could provide some suitable foraging habitat for hedgehogs. However, it is unlikely overall that hedgehogs would be encountered on site.

Further Actions

A toolbox talk should be given to workers on site on what to do if a hedgehog is encountered.

4.3.7 Hazel Dormice

Records

No records or EPSL within 1 km.

Field Evidence

No signs of dormice recorded on site.

Summary Evaluation

Geographic location not in known dormouse range, therefore extremely unlikely to be present on site.

Further Actions

No further action required.

4.3.8 Other Wildlife

The biological records returned 94 red squirrel records within 1 km of the application site. Although not a European Protected Species, red squirrels are seen as endangered within the United Kingdom. Given the lack of suitable habitat present on site, it is highly unlikely that red squirrels would be present on site. Therefore, it is expected that any impacts from the development upon red squirrels will be negligible.

Furthermore, a number of rare butterfly species have also been recorded, including small blue (*Cupido minimus*). The scrub on site could provide limited suitable foraging habitat for butterflies. However, provided basic mitigation measures are adhered to, it is expected that any impacts from the development upon butterflies will be negligible.

4.4 Invasive Non-Native Species (INNS)

Several invasive non-native species (INNS) listed on Schedule 9 of the Wildlife and Countryside Act 1981 (as amended), for which it is an offence to cause or allow it to grow in the wild – were recorded within the site extent at the time of the site survey, or within habitats adjacent to the site. These included Himalayan balsam (*Impatiens glandulifera*) and buddleia on-site, as well as Japanese knotweed (*Reynoutria japonica*), Japanese rose (*Rosa rugosa*) and Rhododendron (*Rhododendron ponticum*) located within 1 km of the application site outside of the site boundary. Several grey squirrel (*Sciurus carolinensis*) were also noted within 1 km of the application site.

Although no additional INNS have been identified in this preliminary survey, it is not always possible to conclude absence from preliminary survey alone due to factors such as season, accessibility, third party attempts to hide evidence or undisclosed treatment programmes. Whilst our ecologists are trained in the identification of invasive species, this report is not a dedicated invasive species survey. For this reason, this report should not be relied upon as definitive evidence of absence of INNS. Detectability of invasive plant species can be affected by several factors, and conclusive determination status, or extent, is not possible through preliminary survey alone.

Should further assurances be needed in relations to INNS, a dedicated Invasive Weed Survey should be commissioned. As the presence of invasive species can generate significant costs to development, the client may wish to instruct a dedicated invasive species survey prior to start of proposed works.

Figure 4. Map of the site of proposed works, with Schedule 9 non-native invasive species Himalayan balsam highlighted in blue. Site boundary is shown by the red line.
(Image taken from Google Earth Pro: ©2022 Map Data Google).

5 Conclusions & Recommendations

5.1 Conclusions

Overall ecological value of the site was assessed to be low. Suitability for foraging hedgehogs was identified, and works will need to be undertaken with regards to the INNS present on site. Following the site assessment and in review of the findings, the following mitigation and compensation measures are considered to be required to be incorporated into the works:

5.2 Mitigation Measures

Species	Mitigation Measures Required	Timing
Hedgehogs	Due to the suitability of bramble scrub to support hedgehogs, works should be carried out in a precautionary manner in relation to hedgehogs, with any hedgehogs encountered during the works allowed to move off of their own accord. If this is not feasible, they should be carefully moved to a safe location by gloved hand. If clearance works are being carried out during hedgehog hibernation season (defined as November to March), any structures suitable for hedgehog hibernation such as vegetation piles should be checked for hibernating hedgehogs. If a hibernating hedgehog is present, a suitable exclusion zone should be put around the hedgehog, with no works occurring in this area until the hedgehog has moved off of its own accord. If this is not feasible, the hedgehog will be carefully translocated to suitable off-site habitat by a suitably qualified ecologist under appropriate weather conditions. New nesting material and supplementary food safe for hedgehog consumption will be provided at the translocation site.	Prior to works if November-March, otherwise during the works.
Nesting Birds	Due to the suitability of bramble scrub to support nesting birds, clearance works should be carried out outside of the nesting season, which is defined as running from March to August, inclusive. If this is not feasible for any reason, a nesting bird survey must be carried out by a suitably qualified ecologist shortly prior to the start of works to ensure no active nests are present. In the event that any active nests are found during this survey or at any point during the works, a suitable exclusion zone should be put around the nest, with no work taking place in this area until such time as the nest can be confirmed as no longer active.	Shortly prior to the start of works

Invasive Non-Native Species	Works should be carried in a precautionary manner in relation to the Himalayan balsam and buddleia present on site, with care taken not disturb the Himalayan balsam or buddleia, which could potentially result in its distribution to the wider surrounding habitats. If the Himalayan balsam or buddleia is to be disturbed during development works it should be removed following best practice bio-security protocol, by which the Himalayan balsam is cut to ground level, and the stump treated with glyphosate. Any cuttings should be sent to a landfill licensed to receive invasive plant material.	Prior to and during works.
All Species	Any excavations should be covered at night to prevent wildlife becoming trapped, if feasible. If this is not feasible, a suitable means of egress such as a ramp with adequate grip, at least 30 cm wide and set at an angle of no greater than 45°. To prevent a further reduction in ecological connectivity resulting from the development, any fenced boundaries are to be gapped, with a 13 x 13 cm hole cut at ground level to allow small mammals to access and egress gardens. A sensitive lighting scheme should be implemented during and after construction to avoid indirect disturbance to foraging and commuting bats, birds and small mammals that may be using the site and surrounding habitats, and should include the following elements: ○ Sensitive positioning of lighting to avoid unnecessary spill onto the nearby buildings and scrub ○ Angle of lighting: avoidance of direct lighting and light spill onto areas of habitat that are of importance as commuting pathways and/or foraging areas; ○ Type of lighting: studies have shown that light sources emitting higher amounts of UV light have a greater impact to wildlife. Use of narrow-spectrum bulbs that avoid white and blue wavelengths are likely to reduce the number of species impacted by the lighting; ○ Reduce the height of lighting columns to avoid unnecessary light spill. ○	Three months prior to works. During Works. During Works.

5.4 Enhancement Measures (optional)

- Any landscape planting should use native plant species and/or species of known wildlife value that will enhance the ecological value of the site for local populations of invertebrates, birds, bats and small mammals.
- A series of invertebrate hibernacula should be installed at suitable locations on site post-development.
- A series of bird and bat boxes should be incorporated into the development to provide enhanced roosting and nesting habitat.

This report should be reviewed and amended, as necessary, upon finalised development plans being produced, to ensure that further survey effort and mitigation measures are appropriate to the scale and nature of the works. Providing the recommendations of this report are implemented in full, Naturally Wild would conclude that there will not be a significant impact to protected species or habitats as a result of the proposed works.

6 Site Images

Image 1. Areas of hardstanding and unsealed bare ground present on site.

Image 2. Piles of rubble and waste material present on site.

Image 3. Bramble scrub present to the south western aspect of site

Image 4. Area of hardstanding to the southern aspect of site

Image 5. Unsealed bare ground present on site.

7 Bibliography

Amphibian and Reptile Groups of the UK (2010) *ARG UK Advice Note 5: Great Crested Newt Habitat Suitability Index.* ARGUK.

British Standards Institution (2013) *BS 42020:2013. Biodiversity – Code of practice for planning and development*. British Standards Institution, London.

Butcher, B., Carey, P., Edmonds, R., Norton, L., and Treweek, J. (2020). *UK Habitat Classification – Habitat Definitions V1.1.*

CIEEM (2017a) *Guidelines for Preliminary Ecological Appraisal, 2nd edition*. Chartered Institute of Ecology and Environmental Management, Winchester.

CIEEM (2017b) *Guidelines on Ecological Report Writing*. Chartered Institute of Ecology and Environmental Management, Winchester.

CIEEM (2018) *Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine version 1.1.* Chartered Institute of Ecology and Environmental Management, Winchester

CIEEM (2020) *Guidelines for Accessing, Using and Sharing Biodiversity Data in the UK. 2nd Edition*. Chartered Institute of Ecology and Environmental Management. Winchester, UK.

Collins, J. (2016) *Bat Surveys for Professional Ecologists: Good Practice Guidelines, 3rd edition*. Bat Conservation Trust, London.

Cresswell, W. and Whitworth, R. (2004) *An assessment of the efficiency of capture techniques and the value of different habitats for great crested newts.* English Nature Research Reports 576. English Nature, Peterborough.

Dodd, C.K. Jr (2010) *Amphibian Ecology and Conservation. A Handbook of Techniques.* Oxford University Press

English Nature (2001) *Great Crested Newt Mitigation Guidelines*. English Nature, Peterborough

Gleed-Owen, C., Buckley, J., Coneybeer, J., Gent, T., McCracken, M., Moulton. N. Wright, D. (2005*) Costed plans and options for herpetofauna surveillance and monitoring.* English Nature Research Report no. 663, English Nature, Peterborough.

Harris, S., Cresswell, P, and Jeffries, D. (1989) *Surveying Badgers*. Occasional Publication No. 9. The Mammal Society, London.

JNCC (2004) *Common standards monitoring guidance for reptiles and amphibians.* Joint Nature Conservation Committee, Peterborough

JNCC and Defra (on behalf of the Four Countries' Biodiversity Group). (2012) *UK Post-2010 Biodiversity Framework.* July 2012. Available from: http://jncc.defra.gov.uk/page-6189.

Lintott, P & Mathews, F (2018) *Reviewing the evidence on mitigation strategies for bats in buildings: informing best-practice for policy makers and practitioners.* Chartered Institute of Ecology and Environmental Management, Winchester.

Ministry of Housing, Communities and Local Government (2021) *National Policy Planning Framework*. Crown Copyright 2021. https://www.gov.uk/government/publications/national-planning-policy-framework--2

Mitchell-Jones, A.J. (2004) *Bat Mitigation Guidelines.* English Nature, Peterborough.

Multi-Agency Geographical Information for the Countryside (MAGIC). Crown Copyright and database rights [2022]. Ordnance Survey 100022861. Available at: http://www.magic.gov.uk/

Natural England (2011) *Reptile mitigation guidelines (1st draft) Natural England Technical Information Note TIN102,* Natural England, Peterborough.

ODPM Circular 06/2005. *Government Circular: Biodiversity and Geological Conservation – Statutory Obligations and Their Impact Within the Planning System.*

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

Rose, F. and O'Reilly, C. (2006) *The Wild Flower Key, Revised Edition*. Penguin Books, London.

Sewell, D, Griffiths, R.A., Beebee, T.J.C., Foster, J, and Wilkinson, J.W. (2013) *Survey protocols for the British herpetofauna Version 1.0.* Amphibian and Reptile Conservation, pp 1-22.

Scottish Badgers (2018). *Surveying for Badgers: Good Practice Guidelines. Version 1.*

Stanbury, A.J., Eaton, M.A., Aebischer, N.J., Balmer, D., Brown, A.F., Douse, A., Lindley, P., McCulloch, N., Noble, D.G. and Win, I. (2021). *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, pp. 723 – 747.

Panks, S., White, N., Newsome A., Nash M., Potter J., Heydon M., Mayhew E., Alvarez M., Russell T., Cashon C., Goddard F., Scott S.J., Heaver M., Scott S.H., Treweek J., Butcher B., Stone D., (2022) *Biodiversity metric 3.1: Auditing and accounting for biodiversity – User Guide.* Natural England.

QGIS.org (2022) *QGIS Geographic Information System*. QGIS Association. http://www.qgis.org

8 Appendices

8.1 Legislation

8.1.1 Relevant Legislation

Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019. Accessed: https://www.legislation.gov.uk/uksi/2019/579/contents/made

European Commission. (1992*) Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora.* (Amended 2013)

European Commission. (2009) *Directive 2009/147/EC of the European Parliament and of the Council of 30 November 2009 on the conservation of wild birds* (Amended 2019)

DEFRA (2005) Biodiversity and Geological conservation – Statutory obligations and their impact within the planning system. Accessed: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/7692/147570.pdf

The Birds Directive (2009) Accessed: https://ec.europa.eu/environment/nature/legislation/birdsdirective/index_en.htm

The Habitats Directive (1992) Accessed: https://ec.europa.eu/environment/nature/legislation/habitatsdirective/index_en.htm

Natural Environment and Rural Communities (NERC) Act (2006) Accessed: https://www.legislation.gov.uk/ukpga/2006/16/contents

The Hedgerows Regulations 1997. https://www.legislation.gov.uk/uksi/1997/1160/contents/made

The Protection of Badgers Act (1992). https://www.legislation.gov.uk/ukpga/1992/51/contents

Wildlife and Countryside Act 1981 (as amended). https://www.legislation.gov.uk/ukpga/1981/69

8.1.2 Protected Species Legislation: Additional Information

European Badgers: The badger is geographically widespread across the UK; however, they are still vulnerable to baiting, hunting and detrimental impacts of development to their habitat. Both the badger and its habitat are protected under The Protection of Badgers Act 1992, Schedule 6 of the Wildlife and Countryside Act 1981 (as amended) an Appendix Three of the Bern Convention; therefore, badgers have legal protection against deliberate harm or injury and it is an offence to:

- Interfere with a badger sett by damaging or destroying it
- Kill, injure, take or possess a badger
- Cruelly ill-treat a badger
- Obstruct access to a badger sett
- Disturb a badger whilst it is in a badger sett

Bats: All British bat species are listed on Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) and are therefore afforded protection under Section 9 of this Act. In addition, all bat species are listed in Schedule 2 of The Conservation of Habitats and Species Regulations and are protected under Regulation 39 of the Regulations. These Regulations make provision for the purpose of implementing European Union Directive on the Conservation of Natural Habitats and of Wild Fauna and Flora 1992, under which bats are included on Annex IV. The Act and Regulations makes it an offence, *inter alia,* to:

- Intentionally kill, injure, take (handle) or capture a bat;
- Intentionally or recklessly damage, destroy or obstruct access to any place that a bat uses for shelter or protection (this is taken to mean all bat roosts whether bats are present or not) - under the Habitats Regulations it is an offence to damage or destroy a breeding site or resting place of any bat; or
- Intentionally or recklessly disturb a bat while it is occupying a structure or place that it uses for shelter or protection - under the Habitats Regulations it is an offence to deliberately disturb a bat (this applies anywhere, not just at its roost) in such a way as to be likely to affect its ability to survive, breed, reproduce, rear or nurture their young or hibernate.

Further details of the above legislation, and of the roles and responsibilities of developers and planners in relation to bats, can be found in Natural England's Bat Mitigation Guidelines (Mitchell-Jones, 2004).

West-European Hedgehogs: Hedgehogs are protected, in England, Scotland and Wales, under the Wildlife and Countryside Act 1981, Schedule 6 and in Northern Ireland under the Wildlife (NI) Order 1985, Schedules 6 & 7. They are "protected from being killed or taken by certain methods under Section 11(1) of the Wildlife and Countryside Act 1981. The methods listed are: self-locking snares, bows, crossbows, explosives (other than ammunition for a firearm), or live decoys. The species listed are also protected from the following activities: trap, snare or net, electrical device for killing or stunning, poisonous, poisoned or stupefying substances or any other gas or smoke, automatic or semi-automatic weapon, device for illuminating a target or sighting device for night shooting, artificial light, mirror or other dazzling device, sound recording, and mechanically propelled vehicle in immediate pursuit."

A survey licence is required for work on hedgehogs if the animals are to be trapped, taken with the use of artificial light (such a torch or spotlight), marked, or fitted with a radio or GPS tag. A licence is not required for surveys of hedgehog field signs, for direct observation or for presence/absence surveys where they are observed or detected without 'taking' (such as trapping or handling) e.g. for the use of footprint tunnels, remote camera traps and thermal imaging cameras or for habitat appraisal or general ecological survey purposes.

Great Crested Newts: Great crested newts are protected under Schedule 2 of The Conservation of Habitats and Species Regulations. This species is also afforded full protection under the Schedule 5 of the Wildlife and Countryside Act 1981. Under such legislation it is an offence to:

- Intentionally or recklessly* kill, injure or capture a great crested newt;
- Possess or control any live or dead specimen or anything derived from a great crested newt;
- Intentionally or recklessly* damage, destroy or obstruct access to any structure or place used for shelter or protection by a great crested newt; and
- Intentionally or recklessly* disturb a great crested newt while it is occupying a structure or place which it uses for that purpose.
- Damage or destroy a breeding site or resting place.
- Sell, barter, exchange or transport or offer for sale great crested newts or parts of them.

**Reckless offences were added by the Countryside and Rights of Way Act 2000, which applies only to England and Wales.*

To undertake surveys for great crested newts it is necessary to hold an appropriate licence issued by Natural England.

Nesting Birds: Birds receive protection under the Wildlife and Countryside Act 1981 (as amended). It is an offence to intentionally or recklessly kill, injure or take any wild bird; take, damage or destroy a nest of a wild bird whilst it is in use or being built; or to take, damage or destroy an egg of a wild bird. The bird-nesting season is defined as being from 1st March until 31st August with exceptions and alterations for some species.

Reptiles: All native British species of reptile (of which there are six) are listed on Schedule 5 of the Wildlife and Countryside Act 1981 and, as such, are protected from deliberate killing, injury or trade; therefore, where development is permitted and there will be a significant change in land use, a reasonable effort must be undertaken to remove reptiles off site to avoid committing an offence. The same Act makes the trading of native reptile species a criminal offence without an appropriate licence.