



**Ecological Consultants
Environmental and Rural Chartered Surveyors**

Preliminary Ecological Appraisal

Dakota, Manchester Airport



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ACCURACY OF REPORT

This report has been compiled based on the methodology as detailed and the professional experience of the surveyor. Whilst the report reflects the situation found as accurately as possible, all of the protected species this survey covers are wild and can move freely from site to site. Their presence or absence detailed in this report does not entirely preclude the possibility of a different past, current or future use of the site surveyed.

We would ask all clients acting upon the contents of this report to show due diligence when undertaking work on their site and/or in their interaction with protected species. If protected species are found during a work programme, and continuing the work programme could result in their disturbance, injury or death, either directly or indirectly an offence may be committed.

If in doubt, stop work and seek further professional advice.

Quality and Environmental Assurance

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1. EXECUTIVE SUMMARY

- 1.1.1 Envirotech NW Ltd were commissioned in January 2024 to carry out a Preliminary Ecological Appraisal of land at Manchester Airport. It is proposed that a new hotel is constructed on the site.
- 1.1.2 A data search and desk study of the site and an area within 1km of the site were undertaken to establish the presence of protected species and notable habitats.
- 1.1.3 The site was then visited by a licenced ecologist from Envirotech NW Ltd on the 9th February 2023. A full botanical survey of the site was initially undertaken and this was followed by surveys to establish the presence or absence of notable species at the site or in proximity such that they may be affected by the proposed development.
- 1.1.4 The plant species assemblages recorded at the site are all common in the local area and are considered to be of low ecological value. Sympathetically landscaped open space is considered to offer habitat of equal or greater ecological value.
- 1.1.5 Low numbers of common bat species may forage along the site boundary. No suitable bat roosts were recorded on or near site.
- 1.1.6 Birds are likely to utilise scrub on site boundary for nesting between March and September. Any vegetation clearance should therefore be undertaken outside of this period.
- 1.1.7 No other notable or protected species were recorded on the site.

2. INTRODUCTION

2.1 Background

2.1.1 Envirotech NW Ltd were commissioned to carry out a Preliminary Ecological Appraisal of land at Manchester Airport, central grid reference SJ819860 (Figure 1). A site investigation was undertaken and a report compiled which includes recommendations for any future actions and or mitigation required.

2.1.2 The survey was requested in connection with the proposed construction of a new hotel.



2.2 Objectives

2.2.1 The main objectives of the study were:

- The completion of a UKHabs Version 2 (UKHab Ltd (2023)) survey including the preparation of a vegetation and habitat map of the site and the immediate surrounding area.
- The survey and assessment of all habitats for statutorily protected species.
- An evaluation of the ecological significance of the site.
- The identification of any potential development constraints and the specification of the scope of mitigation and enhancement required in accordance with wildlife legislation, planning policy and other relevant guidance, and;
- The identification of any further surveys or precautionary assessments that may be required prior to the commencement of any development activities.

3. METHODOLOGY AND SOURCES OF INFORMATION

3.1 Data Search

- 3.1.1 The Biological Records centre for Manchester “GMEU”, the Envirotech dataset, and the Multi-Agency Geographic Information for the Countryside (MAGIC) were searched to establish the presence of any records of statutorily protected, notable or rare species, and any designated sites of international, national, regional or local importance within a 1km radius of the site boundary.
- 3.1.2 The Envirotech dataset is compiled from extensive field surveys from the period 2004-present, as well as records obtained from third parties during this time.
- 3.1.3 Google Earth and Google Street View were consulted to establish the presence of any features of ecological importance within the local area.

3.2 Vegetation and Habitats

- 3.2.1 A vegetation and habitat map was produced for the site and the immediate surrounding area. The mapping is based on the UKHabs V2 survey and reporting methodology.
- 3.2.2 Searches were made for uncommon, rare and statutorily protected plant species, those species listed as protected in the Wildlife and Countryside Act (1981) and indicators of important and uncommon plant communities. All plant nomenclature follows Stace (2019).
- 3.2.3 Searches were carried out for the presence of invasive species, including those listed on Schedule 9 of the Wildlife and Countryside Act (1981), namely Japanese knotweed (*Fallopia japonica*), Himalayan balsam (*Impatiens glandulifera*) and giant hogweed (*Heracleum mantegazzianum*) on terrestrial habitat and aquatic species such as floating pennywort (*Hydrocotyle ranunculoides*), water hyacinth (*Eichhornia crassipes*) and New Zealand pygmyweed (*Crassula helmsii*).
- 3.2.4 The survey was also informed by questioning the landowner/site agent to ascertain the recent history of the site.
- 3.2.5 Habitats of Principal Importance (HPI) were cross referenced with Natural England’s inventory against the site boundary and where found ground truthed.

3.3 Timing and Personnel

- 3.3.1 During the visit, weather conditions were suitable for the survey types undertaken being warm and dry in mid winter.
- 3.3.2 The site and surrounding land was visited on the 9th February 2023 by

- (AG) Mr Andrew Gardner BSc (Hons), MSc, MRICS

Natural England Bat Class Licence (Level 2)
Natural England Bat Low Impact Class Licence
Natural England Barn Owl Licence
Natural England Great Crested Newt Licence (Level 1)
Natural England Badger Class Licence
Natural England White Clawed Crayfish Licence

4. SPECIES SURVEY METHODOLOGY

4.1 Amphibian

- 4.1.1 Great crested newts (*Triturus cristatus*) are protected under Schedule 2 of the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 and Schedule 5 of the Wildlife & Countryside Act (1981).
- 4.1.2 Water-bodies located within or adjacent to the study area were identified and where access was possible were assessed for their potential to support great crested newts.
- 4.1.3 The criteria used in the assessment are based on those contained in the Herpetofauna Workers Manual and Oldham et al, 2000, and in applying these criteria a precautionary approach was adopted. Following the criteria developed by Oldham et al (2000), the HSI tool developed for use with great crested newts and forming part of Natural England's Licensing process was used to determine the suitability of ponds for great crested newts.
- 4.1.4 The pond assessment was undertaken in order to determine which water-bodies, based on their potential to support great crested newts, should be subject to presence/absence surveys.
- 4.1.5 The site was considered sufficiently low risk for GCN that no further assessments were warranted.

4.2 Badger

- 4.2.1 Badgers (*Meles meles*) and their setts are protected under the Protection of Badgers Act (1992). This legislation arises from animal welfare issues (rather than on the basis of nature conservation grounds) and protects badgers from being killed, injured or disturbed whilst occupying a sett.
- 4.2.2 A disturbance to badgers in their setts may occur as a result of construction operations. Natural England recommends that the use of heavy machinery in proximity of a sett entrance should be avoided, with a 'disturbance free-zone' being established.
- 4.2.3 The degree of disturbance attributed to construction activity is a function of the background level of activity badgers are accustomed to and that which will be attributed to a proposed activity. The "disturbance free zone" is therefore site specific.
- 4.2.4 The survey for badgers comprised an assessment of all suitable habitat within and outside the study area boundary (where this was possible) to a distance of 30m for indications of use by badgers.
- 4.2.5 Signs of badgers which were searched for included:
 - Setts - 'D' shaped entrances at least 25cms wide and wider than they are high with large spoil mounds
 - Discarded bedding at sett entrances (this includes grass and leaves)
 - Scratching posts on shrubs and trees close to a sett entrance

- The presence of badger hairs which are coarse, up to 100mm long with a long black section and a white tip
- Dung pit latrines and footprints
- Habitual runs through vegetation and beneath fences
- Hedgehog carcasses

4.3 Bats

- 4.3.1 All British bat species are fully protected under Schedule 5 of the Wildlife and Countryside Act (1981), and are included on Schedule 2 of the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019, as a Protected Species. Taken together, these pieces of legislation make it an offence to:
- Intentionally or recklessly kill, injure or capture bats;
 - Deliberately or recklessly disturb bats (whether in a roost or not);
 - Damage, destroy or obstruct access to bat roosts.
- 4.3.2 The Bat Conservation Trust Collins, J. (ed) (2023) issued guidelines on bat survey methodology, a key feature of their recommendation is for the undertaking of a pre-survey assessment – an initial desk-study and a walkover assessment of the survey area and its surrounding area to identify the relative value of the habitats present for bats and likely commuting routes. This is to be followed by a survey program that is appropriate to the likely level of bat activity within the survey area to be determined by and based on the experience of the surveyor.
- 4.3.3 The potential value of the survey area for foraging bats was assessed through consideration of two main factors: professional knowledge of bat ecology and foraging behaviour in combination with the geographical location, topography and habitats present within the survey area and surrounds.
- 4.3.4 Trees and structures on and within the survey area boundary were assessed for their potential to support roosting or hibernating bats. This comprised a close inspection of all trees and buildings on the site to allow an assessment of their potential to be used by bats to be made by a licensed surveyor.
- 4.3.5 Trees were all assessed in accordance with Collins, J. (ed) (2023) but categorised as 1* - 3 in accordance with Hundt (2012). Collins, J. (ed) (2023) does not provide roost classification criteria. The schedule of risk provided by Hundt (2012) is considered most appropriate in this case.

4.4 Birds

- 4.4.1 All breeding birds, other than pest species, are protected under the Wildlife and Countryside Act of 1981 when building a nest, rearing young or sitting on eggs. Some bird species, such as barn owl (*Tyto alba*), are protected when near an active nest site. Several birds are listed as Species of Principal Importance (SPI).

- 4.4.2 Bird species and behaviour was noted during the other field surveys. All areas are covered equally, in order to avoid the subjective survey of better quality 'bird habitat'.

4.5 Otter

- 4.5.1 Otters (*Lutra lutra*) are given protection by the Wildlife and Countryside Act (1981) as amended and Schedule 2 of the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019.

This protection means that it is an offence to deliberately or recklessly:

- Kill or injure otters;
- Destroy, damage or obstruct their dens, and
- Disturb them whilst in the den.

- 4.5.2 Watercourses were assessed for their suitability and for the presence of otters within 10m of the banks. The banks and scrub vegetation were carefully searched for spraints, feeding remains, runs, prints and couches/holts.

4.6 Water Vole

- 4.6.1 Water voles (*Arvicola amphibious*) and their habitat are fully protected under Schedule 5 of the Wildlife and Countryside Act (1981). This provides protection from killing or taking by certain prohibited methods and their breeding and resting places are fully protected from destruction or obstruction, it is also an offence to disturb them in these places.

- 4.6.2 There is a ditch on the North boundary of the site. This watercourse was surveyed and assessed for evidence of the presence of water vole.

- 4.6.3 This involved intensive searches by wading upstream where possible, and observing from the banks where not; looking for burrows and other signs including footprints, droppings and chewed vegetation. This was undertaken up to 5m from the water course.

4.7 Survey limitations

- 4.7.1 The survey was undertaken in winter. At this time of year plant species are less easily identified and the activity of some species is reduced.

- 4.7.2 Due to the habitats present on site there were no significant constraints in respect of identifying the botanical interest of the site.

- 4.7.3 The duration, extent and scope of the surveys were considered sufficient to plan appropriate mitigation and recommend additional precautionary survey work required prior to the commencement of work.

5. RESULTS

5.1 *Data Search*

- 5.1.1 Envirotech and GMEU hold no records of protected or notable species for the site. There are however records of protected or notable species within 1km (Figure 2). These are discussed in the relevant sections below. There were no records over Manchester Airport to the South.
- 5.1.2 The nearest non-statutory protected site is Painswick Park Meadow to the West (Figure 3). There is mapped priority habitat deciduous woodland on the East boundary (Figure 3a)
- 5.1.3 The nearest statutory protected site Cotteril Clough SSSI 1.9km to the South (Figure 4).

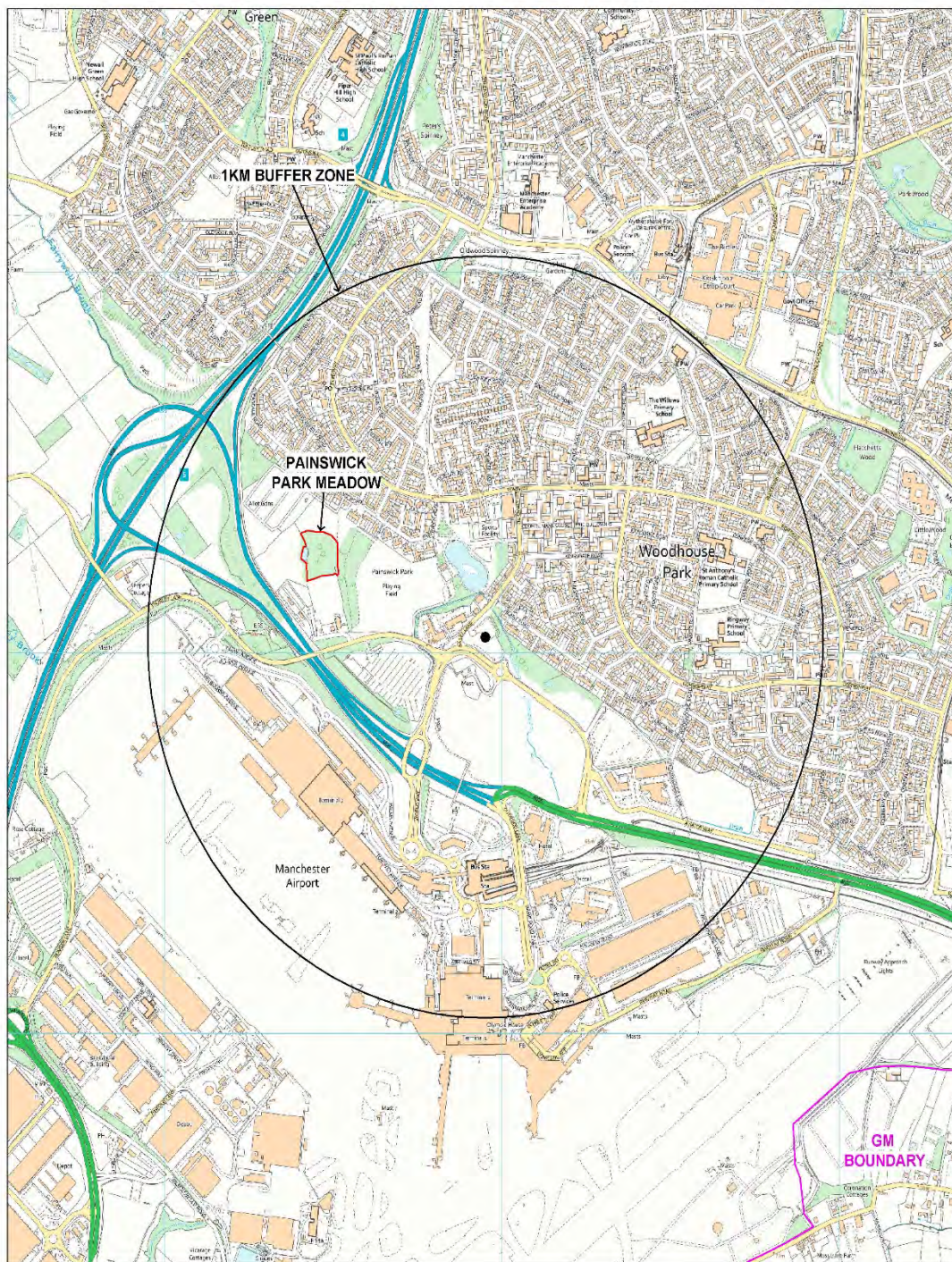


- Red Line Boundary
- Bullfinch
- Cinnabar
- Common Pipistrelle
- Daubenton's Bat
- Dunnock
- Hedgehog
- House Sparrow
- Noctule Bat
- Pipistrelle sp
- Soprano Pipistrelle
- Spotted Flycatcher
- Starling

Figure 2

Protected and
Notable Species





KEY
 SITE OF BIOLOGICAL IMPORTANCE
 SBI BOUNDARY

GREATER MANCHESTER ECOLOGY UNIT
 ECOLOGICAL SEARCH - SJ 81950 86041
 MANCHESTER AIRPORT - MAP 1

SCALE 1:10,000

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Table 3 Non-statutory protected sites.



- Red Line Boundary
- Deciduous woodland
- No main habitat but additional habitats present

Figure 3a
Mapped Habitats of
Principal Importance
and Non-statutory
Protected Sites



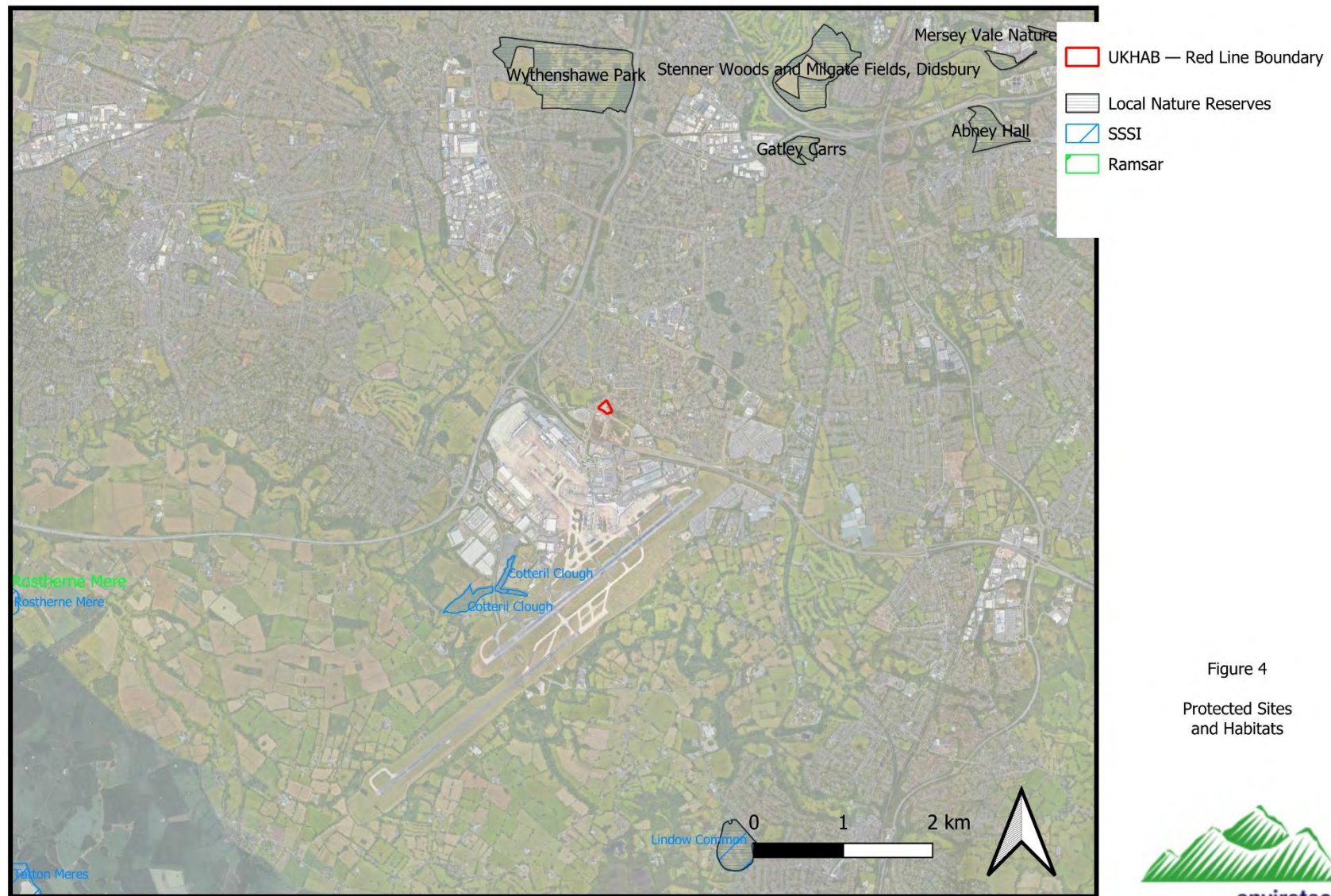


Figure 4
Protected Sites
and Habitats

6. UKHabs V2 SURVEY RESULTS

6.1 *Habitat Results*

6.1.1 The site comprises unvegetated part sealed and part unsealed surface with scrub and grassland to its South and West boundary and Woodland to the East.

6.1.2 See Figure 5 for the UK Habs V2 Plan and Table 1 for the descriptive Target Notes.

Target Note	Description	Comment
TN1	Artificial sealed surface	A former carparking area comprising tarmac, concrete and compacted aggregates. Occasional pools of standing water on hardstanding with pioneer species such as Annual Meadow Grass (<i>Poa annua</i>) in cracks but vegetation cover is negligible.
TN2	Sparsely vegetated urban land	To the West edge of the carpark is a soil bund leading to a post and rail fence and roadside. The bund appears to have been cleared or disturbed in the recent past as plant species on it are representative of disturbed ground. Teasel (<i>Dipsacus fullonum</i>), Yorkshire Fog (<i>Holcus lanatus</i>), Rosebay Willow herb (<i>Epilobium angustifolium</i>), Creeping Buttercup (<i>Ranunculus repens</i>), Annual Meadow Grass (<i>Poa annua</i>) and White clover (<i>Trifolium repens</i>). Bare ground is extensive. To the Northern extent of this land are occasional Broom (<i>Cytisus scoparius</i>) plants.
TN3	Neutral Grassland	To the North edge of the carpark is a soil bund with a steel fence to the side tide. The bund appears to have been mown in the recent past as plant species are of uniform length. Yorkshire Fog, Rosebay Willow herb, Creeping Buttercup, Annual Meadow Grass and White clover as per TN2 along with Common Bent (<i>Agrostis capillaris</i>), oxeye daisy (<i>Leucanthemum vulgare</i>), Hawkweed (<i>Hieracium sp</i>), Mouse ear (<i>Cerastium fontanum</i>) and mosses (<i>Bryophyta sensu stricto Sp.</i>)
TN4	Broadleaf Mixed woodland	<p>To the East is an earth bank which has been planted with trees. Trees are now well established but tree guards are still present to the lower stems. Species include Holly (<i>Ilex aquifolium</i>), Sycamore (<i>Acer pseudoplatanus</i>), Alder (<i>Alnus glutinosa</i>), Cherry (<i>Prunus Sp.</i>), Hazel (<i>Corylus avellana</i>), Scots Pine (<i>Pinus sylvestris</i>) and Willow (<i>Salix Sp.</i>).</p> <p>Dog Wood (<i>Cornus alba</i>) and small Alder (<i>Alnus glutinosa</i>) to edge of woodland and site boundary.</p> <p>Ground flora includes species associated with woodland such as Lords and ladies (<i>Arum maculatum</i>) suggesting this may be re-planted woodland and a residual seed bank remained following past clearance. Bramble (<i>Rubus fruticosus agg</i>) is however dominant along with bare ground suggesting dense shading as the plantation has not been thinned.</p>

TN5	Ditch	A small shallow ditch in a natural bed of small stones and silt. Ditch confined by earth banking to the West and garden fences to the East. Ditch shallow with clear flow towards the North.
Table 1 <i>Details of Target Notes.</i>		



- Red Line Boundary
- Target Notes
- r2b
- g3
- u1b
- w1h

Figure 5
UK Habitats Survey
Map





TN1- An open area of compacted bare ground



TN2- Bare ground and pioneer species to an earth bank



TN2- Occasional broom to the North-west



TN3- Earth bank with well established but short grassland



TN4- deciduous woodland, trees in tree guards suggesting replanting



TN4- Ground flora includes Lords and ladies a woodland indicator species suggesting the site may have been woodland which was cleared and replanted



TN4- Dogwood and small alder to site boundary



TN5- Small ditch confined by woodland earth bank and garden fences

Table 2 *Photographs*

6.2 Vegetation

- 6.2.1 Details of the plant species found on site are included in the target notes.
- 6.2.2 The core development area and disturbed ground to the West has a very low species diversity.
- 6.2.3 A grassed bank to the North and woodland to the West, although evidently arising from planting/ landscaping are of higher ecological value.
- 6.2.4 There are no hedges on the site.
- 6.2.5 There is no vegetation associated with the ditch.
- 6.2.6 There is no evidence of Japanese knotweed, giant hogweed or Himalayan balsam on the site. No other invasive or notable weed species listed on Schedule 9 (Section 14) of the Wildlife and Countryside Act (1981) (as amended) was identified within the site or adjacent land.

6.3 Amphibian

- 6.3.1 There are no records for amphibians within 1km of the site.
- 6.3.2 The core development area has a low value to amphibians being open and exposed. The boundary woodland and banks could be utilised as refuges and/or hibernacula but there are no breeding ponds in proximity to the site.
- 6.3.3 Structural diversity at ground level across the site is very poor. There are no areas with log, rubble piles or compost heaps which would be particularly favourable to amphibians.
- 6.3.4 Amphibians would be unlikely to attempt to cross the site as it comprises an area that is mostly open with uniform length grass. Whilst not a physical barrier to the dispersal of amphibians, the site is regarded as being a potentially hostile environment to them.
- 6.3.5 The proposed development will not result in the permanent loss of or a substantial negative effect on any waterbodies or foraging areas linked to them. Boundary areas which may provide foraging or refuge sites, are to be retained.

6.4 Badger

- 6.4.1 No records of badgers occur within 1km of the site.
- 6.4.2 Badger setts do not occur on site and a lack of feeding signs or runs across the site would suggest that they do not occur within 30m of site boundaries.
- 6.4.3 The proposed development will not impact on any existing badger runs or setts. The porosity of the surrounding fields to the passage of badgers will not be affected.

6.5 Bats

- 6.5.1 There are 77 records of five species of bat within 1km of the site.
- 6.5.2 The foraging habitat across the core development site is very poor for bat species being open and exposed. The grass and sparsely vegetated banks offer negligible foraging opportunities for bats.
- 6.5.3 To the site boundary is a strip of woodland with a ditch. This would provide high quality foraging areas for bats but is limited in width and connectivity. Past use of the site included high level floodlighting.
- 6.5.4 It is not considered there would be significant degradation of foraging habitat as a result of the proposal so long as the woodland is retained and or its loss is compensated for in any landscaping scheme. Lighting should be sensitive to the woodland habitat and is likely in any event to be lower than past use.
- 6.5.5 All trees around the site perimeter were also assessed in accordance with Collins ed. (2016) and assigned a risk category.
- 6.5.6 A cluster of higher risk trees occurs to the South-east of the site where early mature poplar (*Populus* Sp.) appear to have fallen and or are ivy covered. These do not appear to have cracks or splits, Figure 6.

All of the other trees on site were category 3 (negligible) risk. No indications of roosting or highly suitable roost sites were located within any of the tree trees. All of the trees could be adequately inspected. Risk categories from Hundt (2012) and the requirement for mitigation for each tree category are shown on Figure 7.
- 6.5.7 We consider bat species are highly unlikely to rely on the site for feeding but may occur in the local area. Roosting by bats will not occur on the site.



- Red Line Boundary
- Bat Tree Risk

Figure 6
Bat tree risk



Tree category and description	Stage 1 Initial survey requirements	Stage 2 Further measures to inform proposed mitigation	Stage 3 Likely mitigation
Known or confirmed roost	Follow SNCO guidance and these guidelines wherever possible, to establish the extent to which bats use the site. This is particularly important for roosts of high risk species and/or roosts of district or higher importance and above		The tree can be felled only under EPS licence following the installation of equivalent habitats as a replacement.
Category 1* Trees with multiple, highly suitable features capable of supporting larger roosts	Tree identified on a map and on the ground. Further assessment to provide a best expert judgement on the likely use of the roost, numbers and species of bat, by analysis of droppings or other field evidence. <i>A consultant ecologist is required</i>	Avoid disturbance to trees, where possible. Further dusk and pre-dawn survey to establish more accurately the presence, species, numbers of bats present and the type of roost, and to inform the requirements for mitigation if felling is required.	Felling would be undertaken taking reasonable avoidance measures ³ such as 'soft felling' to minimise the risk of harm to individual bats.
Category 1 Trees with definite bat potential, supporting fewer suitable features than category 1* trees or with potential for use by single bats	Tree identified on a map and on the ground. Further assessed to provide a best expert judgement on the potential use of suitable cavities, based on the habitat preferences of bats. <i>A consultant ecologist required</i>	Avoid disturbance to trees, where possible. More detailed, off the ground visual assessment. Further dusk and pre-dawn survey to establish the presence of bats, and if present, the species and numbers of bats and type of roost, to inform the requirements for mitigation if felling is required.	Trees with confirmed roosts following further survey are upgraded to Category 1* and felled under licence as above. Trees with no confirmed roosts may be downgraded to Category 2 dependent on survey findings
Category 2 Trees with no obvious potential, although the tree is of a size and age that elevated surveys may result in cracks or crevices being found; or the tree supports some features which may have limited potential to support bats.	None. <i>A consultant ecologist is unlikely to be required</i>	Avoid disturbance to trees, where possible. No further surveys.	Trees may be felled taking reasonable avoidance measures. Stop works and seek advice in the event bats are found, in order to comply with relevant legislation.
Category 3 Trees with no potential to support bats	None. <i>A consultant ecologist is not required unless new evidence is found</i>	None.	No mitigation for bats required.

Figure 7 Tree risk categories from Hundt (2012).

6.6 Birds

- 6.6.1 There are records of birds within 1km of the site including Section 41 species, Starling (*Sturnus vulgaris*), Bullfinch (*Pyrrhula pyrrhula*), Dunnock (*Prunella modularis*), House Sparrow (*Passer domesticus*) Woodpigeon (*Columba palumbus*) and Spotted fly catcher (*Muscicapa striata*), all of which could make use of the woodland for foraging.
- 6.6.2 There were no rot holes or cracks in the trees within the site boundary which would support tree hole nesting species such as woodpeckers.
- 6.6.3 The woodland has a poor shrub layer, there is little cover in the grassland and more urban areas of the site.
- 6.6.4 A risk assessment of the site in respect of its future potential for and value to nesting birds could be adequately made.
- 6.6.5 The habitat on site is not considered to be of anything more than of local significance, habitats present are well represented in the local area. The impact on nesting birds is therefore considered likely to be minor.

6.7 Otter

- 6.7.1 There are no records of otters within 1km of the site.
- 6.7.2 No indication of the presence or past use of the site by otter was found. The ditch is considered unlikely to support fish. There are no waterbodies in proximity to the site which would be attractive to Amphibians. This species is considered as being absent from the site.
- 6.7.3 The ditch should be retained in the scheme, dense scrub/ woodland should be retained on the site boundaries so as to continue to provide suitable holt sites in the future. Precautionary mitigation would be appropriate in respect of construction activities which will need to be restricted at night.

6.8 Water vole

- 6.8.1 There are no records of water voles within 1km of the site.
- 6.8.2 The vegetation growing along the ditch could be accessed by this species but is poor and no aquatic vegetation was associated with the ditch. Whilst water vole will utilise species such as willow, the lack of more palatable species on site would negate the likely presence of this species.
- 6.8.3 No signs of water voles, such as droppings, feeding piles or footprints were. Precautionary mitigation would be appropriate in respect of retaining or recreating soft edges to the mill pond.

6.9 Other

6.9.1 The boundary hedgerows are species poor and provide little potential for use by hedgehog (*Erinaceus europaeus*). Fragmentation of habitat locally and existing land use do not provide optimal conditions for the free passage of this species across the site and slugs and snails are likely to occur only at very low numbers.

6.10 Statutory and Non-Statutory Sites

Direct Impacts:

6.10.1 There are no statutory or non-statutory sites which are connected to the site such that site development would directly affect the dispersal of species between them or directly impact upon their integrity.

6.10.2 The habitats on site do not represent or are linked to those found in any of the statutory or non-statutory sites locally.

Indirect Impacts:

6.10.3 There are no statutory or non-statutory sites which are connected to the site such that site development would indirectly affect the dispersal of species between them or indirectly impact upon their integrity.

7. MITIGATION/RECOMMENDATIONS

7.1 *Compensatory planting and habitat enhancement*

- 7.1.1 The roots of trees on the site and its boundaries should be adequately protected during work in accordance with industry standards. All trees should as far as possible be retained in the scheme.
- 7.1.2 The landscaping scheme should utilise plants which are native and wildlife friendly. In particular night flowering species would be beneficial to bats. Wildflower seed could be used to plant verges to enhance the ecological value of the site and continuity between the site and the wider area.

7.2 *Amphibians*

- 7.2.1 There is no requirement for specific mitigation for these species. There are currently no suitable breeding sites on or near the site. However, as a precautionary measure, in the unlikely event that any signs of any amphibian activity is subsequently found, all site works should cease and further ecological advice should be sought with a view to a detailed method statement and programme of mitigation measures being prepared and implemented.

7.3 *Badger*

- 7.3.1 Badger setts are not known to occur within 1km of the site however the species is common and widespread, even in urban areas. In order to minimise impacts on badgers passing over the site the following points should also be followed.
- All work must take place during daylight hours as badgers are more likely to be commuting over the site at night and this will ensure the risk to any badgers passing through the site will be minimised.
 - Should any trenches and excavations be required, an escape route for animals that enter the trench must be provided, especially if left open overnight. Ramps should be no greater than of 45 degrees in angle. Ideally, any holes should be securely covered. This will ensure badgers are not trapped during work.
 - All excavations left open overnight or longer should be checked for animals prior to the continuation of works or infilling. Back filling should be completed immediately after any excavations, ideally back filling as an on-going process to the work in hand.

7.4 *Bats*

- 7.4.1 Work at night should be restricted, new planting within the site should enhance structural diversity and light spill onto the boundary woodland should be minimised.
- 7.4.2 New roosting provision for crevice dwelling bats could be incorporated into the buildings on site or bat boxes could be erected in retained trees.

- 7.4.3 Any category 2 trees to be felled should be re-inspected for bats to confirm they remain absent.
- 7.4.4 Overall it is considered there is more than sufficient scope for mitigation and compensation at the site such that there will be no adverse impact on the favourable conservation status of bats affected by the proposal.

7.5 Birds

- 7.5.1 Nesting by birds within the development area is considered unlikely to occur. Birds may nest within woodland on the periphery of the site but this is low quality.
- 7.5.2 Any vegetation to be trimmed or cleared should be checked for nesting birds before it is removed. Ideally this should occur outside the bird nesting period March- September. If vegetation clearance is to occur in the March-September period a check for nesting birds should be conducted first by a suitably qualified individual.
- 7.5.3 New planting within the site and the retention of trees and shrubs on the site boundary will maintain the ecological functionality of the site for breeding birds.
- 7.5.4 Artificial bird nesting sites for swallow could be incorporated into the new buildings under the eaves in suitable locations.
- 7.5.5 If nesting birds are found at the site all site works shall cease and further ecological advice shall be sought with a view to a detailed method statement and programme of mitigation measures being prepared and implemented.

7.6 Otter

- 7.6.1 There is no requirement for specific mitigation for this species. However, as a precautionary measure, in the unlikely event that any signs of any otter activity is subsequently found, all site works should cease and further ecological advice should be sought with a view to a detailed method statement and programme of mitigation measures being prepared and implemented.
- 7.6.2 The points in respect of not working at night and leaving open trenches with means of escape detailed for badgers are also applicable to this species which is only likely to pass through the site at night.
- 7.6.3 The points in respect of new shrub and tree planting around the site are also likely to enhance the sites potential for future use of the site.

7.7 Water vole

- 7.7.1 There is no requirement for specific mitigation for this species. However, as a precautionary measure, in the unlikely event that any signs of any Water vole activity is subsequently found, all site works should cease and further ecological advice should be sought with a view to a detailed method statement and programme of mitigation measures being prepared and implemented.

8. REFERENCES

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