



Emily Armstrong
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Chorley
Lancashire
PR6 9AF
United Kingdom

DATE: 18th February 2026
SITE: Land at Marl Road, Knowsley
REFERENCE: UES05235/01

Dear Ms Armstrong,

Updated Ecological Walkover Survey

I am writing to provide a summary of the recent ecological survey work undertaken by United Environmental Services (UES) at a parcel of land at Marl Road, Knowsley Industrial Park, Knowsley, Merseyside, L33 7UH, hereby referred to as 'the site'.

The proposed development is for the use of the site for containerised self-storage and associated works.

A Preliminary Ecological Appraisal report has previously been produced by Biora Ltd (August 2021, report reference: SE0950-01_E0a_PEA_AS Marl Road, Knowsley) to support a previous application for an electricity generation plant on the same site (ref. 21/00718/FUL).

An updated ecological walkover survey of the site was undertaken by Tom Kenwright BSc MSc, UES Senior Ecologist, and Osian Shirley MSci, UES Graduate Ecologist on 22nd January 2026. Tom holds a level 6 Botanical Society for Britain and Ireland (BSBI) field identification skills certificate (FISC). Level 6 is only awarded in exceptional circumstances where the surveyor is a very competent professional field botanist and is of national status. Tom is licenced by Natural England to disturb, take, and handle, all species of bats under licence number 2025-85323-CL18-BAT (level 2). He is also licenced by Natural England to disturb, take, and handle great crested newts *Triturus cristatus* under licence number 2025-82825-SCI-CL09 (level 2).

The purpose of the survey was to inform the new planning application and to provide an update of ecological conditions on site and any potential impacts associated with the development of the land parcel.

A desk study was conducted, in which statutorily protected sites were scoped to a distance of 10km from the site using the UK government's MAGIC website. Maps showing the results of the desk study can be found at Appendix 1 – Desk study.

The habitats onsite were assessed by using the UKHab survey technique, which is a system for environmental audit widely used within the environmental consultancy field. The survey was undertaken in accordance with the methodology in the UK Habitat Classification Version 2.0 (UKHab Ltd, 2023) as recommended by Natural Resources Wales, and in the “Guidelines for Preliminary Ecological Appraisal” (CIEEM, 2017).

Protected sites

There is one statutorily protected site within 2km of the proposed development site:

- Acornfield Plantation LNR¹

Located approximately 1.43km to the south of the proposed development site. It is mainly comprised mainly of broadleaf woodland with a lowland basin mire, various waterbodies, and acidic and neutral grasslands.

There are eight statutorily protected sites (designated for ecological reasons) within 2 – 10km of site:

- Clinkham Wood LNR
- Croxteth LNR
- Mill Brow LNR
- Parr Hall Millenium Green LNR
- Ravenhead Brickworks SSSI²
- Sliding Lane Woodland LNR
- Stanley Bank LNR
- Thatto Heath Meadows LNR

The site does not lie within a SSSI impact Risk Zone.

Walkover survey - Habitats

Based on aerial imagery from recent years, the sections of the site which had been mapped as artificial unvegetated, unsealed surface in the 2021 PEA report had been colonised by vegetation by 2024; however, prior to the survey, this had been cleared and replaced with artificial unvegetated, unsealed surface. The area that had previously been mapped as other neutral grassland, as well as a proportion of the strip of woodland that had ran along the northern and western boundaries of the site had likewise been cleared, leaving a thin strip of other broadleaved woodland off-site but within the ownership boundary. Some ephemeral vegetation remains at the boundaries of the site, as does a single scattered tree.

The results of the walkover survey are shown on the accompanying map at Appendix 2 – UKHab plan. Habitats are colour-coded in accordance with the UKHab standard. A full botanical species list is provided at Appendix 5. The following principal habitat types were characterised on or adjacent to the site:

¹ LNR – Local Nature Reserve

² SSSI – Site of Special Scientific Interest

- u1c Artificial unvegetated unsealed surface
- w1g Other broadleaved woodland
- 32 Scattered trees

u1c Artificial unvegetated, unsealed surface

The majority of the site is now comprised of artificial unvegetated unsealed surface, consisting of gravel which has been laid on top of an impermeable sheet material. No plants are present on this habitat except in at the site boundary where the artificial surface ends. Species present at the boundaries include common nettle *Urtica dioica*, black medick *Medicago lupulina*, buddleia *Buddleja davidii*, and herb Robert *Geranium robertianum*, as well as some ash *Fraxinus excelsior* & sycamore *Acer pseudoplatanus* seedlings & saplings.

w1g Other broadleaved woodland

The remaining woodland now comprises a thin strip running along the western edge of the ownership boundary, but outside of the development boundary. It is in poor condition, with high amounts of litter and larger waste materials throughout. Little ground flora is present, and the understory is dense in small patches but sporadic throughout the remainder. There is also a high amount of deadwood on the ground, predominantly from the felling that occurred prior to survey. It has a canopy of sycamore, silver birch *Betula pendula*, and goat willow *Salix caprea*. The understorey is comprised mainly of hawthorn *Crataegus monogyna* with hazel *Corylus avellana*, dog rose *Rosa canina*, and dogwood *Cornus sanguinea* also present. The ground flora is dominated by bramble *Rubus fruticosus* agg. and ivy *Hedera helix*, with other species present including cleavers *Galium aparine*, garlic mustard *Alliaria petiolata*, and ground elder *Aegopodium podagraria*.

32 Scattered trees

There is one semi-mature silver birch at the southwest corner of the site near the entrance. This was originally part of the wider woodland habitat before the clearance took place but now functions as a single scattered tree.

Evaluation and recommendations

No evidence of notable or protected species was observed on site or within the immediate vicinity of the site during the walkover survey. The area within the development boundary is almost entirely composed of gravel with a single scattered tree and scattered ephemeral vegetation at the boundaries, and thus provides very limited opportunities for wildlife.

Protected sites

The closest statutorily protected site is Acornfield LNR, located approx. 1.43km south of the site.

Given the small size & low ecological value of the site, the distance between the LNR and the site, and the lack of habitat connectivity between them due to the land between being industrial

in nature, it is considered that the proposed works will not have any impacts on the LNR or any other designated sites in the area.

Woodland & scattered trees

A strip of remaining woodland lies immediately west of the development boundary, within the ownership boundary. A single scattered tree remains within the development boundary.

Construction impacts

Site clearance and setting out may involve the direct loss of the tree on site. The woodland lies outside the development boundary. However, the woodland could be permanently damaged, altered and / or disturbed by the construction activities, as could the scattered tree if it is to be retained.

Mitigation

The remaining scattered tree should be retained if possible and a root protection area (RPA) should be established and implemented around it.

The woodland should be adequately protected during the construction activities on site. It should be fenced off to protect the root systems of the trees within, and no contractors should access the woodland unless authorised to do so or for reasons related to working within the woodland (e.g. protecting it from construction activities or litter removal). No materials should be stored in the woodland and no temporary or permanent external lighting should be directed onto the woodland.

The litter and other waste materials currently present in the woodland should be removed to increase its value and condition.

Compensation

If the tree or any further sections of the woodland are to be removed, they should be replaced accordingly as part of a detailed landscaping scheme, with only native species to be planted.

Operational impacts

No further impacts envisaged.

Bats

No buildings are present within the development boundary. However, the scattered tree onsite and trees within the adjacent retained woodland may contain features that are suitable for roosting bats

Construction impacts

If bats are roosting within trees to be removed during site clearance, they are at risk of direct harm and disturbance and the roosts will be lost permanently. Inappropriate landscaping could

also result in the severing of commuting corridors used by bats as well as the loss of foraging habitats.

Mitigation

If any further tree felling or arboricultural works are to take place, any trees due to be impacted should be subjected to ground level assessment (GLTA) to assess their potential to support roosting bats. If any trees due to be adversely impacted are found to have the potential to support roosting bats, further aerial tree inspections should be conducted (any time of year). If any potential roosting features are found to still be suitable following the inspections, further bat presence / absence surveys or further aerial inspections may be required during the peak bat survey season (May to August inclusive).

Any external lighting installed as part of the development should be designed to be wildlife-friendly and avoid overspill onto the retained woodland.

Compensation & enhancements

Bat boxes should be installed onsite to compensate for the potential loss of roosting habitat incurred by the previous habitat clearance onsite. At the time of writing this report no detailed plans are available, but bat boxes that could be used on site include:

- Schwegler 1FF box (affixed to trees)
- Schwegler 2F box (affixed to trees)

Bat boxes affixed to trees should be fitted at a height of between 5m and 6m on a southerly aspect.

No detailed lighting proposals are as yet available to UES; however, care must be taken when installing any new lighting to ensure that light spillage onto the bat boxes is minimised. This may require the use of cowlings or relocation of the bat box or lighting. See Appendix 6 – External lighting guidance for further information.

It should be noted that once a bat inhabits a bat box, they may only be disturbed by a licensed bat worker.

Operational impacts

None envisaged.

Birds

The scattered tree onsite and the retained offsite woodland on site could support breeding birds.

Construction impacts

Tree felling, arboricultural works and vegetation removal could result in the disturbance and direct loss of nests, any individuals within the nests and of available nesting territories if conducted during the breeding season.

Mitigation

If any further tree felling, arboricultural works or vegetation removal (including enabling works) is required, then these works are to take place outside of the breeding bird season and should not be undertaken from March to August inclusive. If this is not possible and works need to take place between this period, a targeted breeding bird nest scoping survey should be conducted by a suitably qualified ecologist immediately prior to the works, or an ecological clerk of works appointed to oversee the works.

Compensation and enhancements

Compensation for the loss of nesting habitat incurred by the previous habitat clearance, and enhancement of the nesting habitat on site should be provided through the provision of bird nest boxes. At the time of writing this report no detailed plans are available, but bird boxes that could be used on site include:

- Schwegler 1B nest box; 26mm, 32mm and oval entrances (affixed to trees).

The bird boxes should be sited at a minimum height of 3m. Unless there are trees which shade the box during the day, the boxes should be oriented between north and east, thus avoiding strong sunlight and the wettest winds.

Operational impacts

Inappropriate management of any retained and newly planted habitats on or adjacent to the site could degrade them and render them unsuitable for wildlife.

Mitigation

It is important to implement good horticultural practice in any landscaping scheme, including the use of peat-free composts, mulches and soil conditioners. The use of pesticides (herbicides, insecticides, fungicides and slug pellets) should be discouraged to prevent fatal effects on the food chain. Any pesticides used should be non-residual.

Excessive removal or pruning of trees should be avoided to maximise the growth and plant matter available to wildlife. Pruning should be left until late winter to leave seeds and berries for wintering wildlife and to ensure no impact on breeding and nesting birds.

Biodiversity Net Gain

As the proposed working area has already been cleared and the application is partly retrospective, the baseline value of the site will be calculated based on the highest value habitats that were present prior to clearance after the 30th January 2020. This assessment will need to be based on a combination of findings from the walkover survey, the previous PEA report and historical aerial imagery. Where the condition of removed habitats cannot reasonably and confidently be determined from these sources of information, and there is no evidence to the contrary, it will be assumed the habitats lost were in good condition.

Where possible, onsite habitat creation and enhancement will be prioritised to maximise net gain within the proposed development site. However, it is considered unlikely that sufficient

onsite habitat retention, creation and / or enhancement will be feasible whilst facilitating the proposed development. Should this prove to be the case, then any deficit in units will be provided through offsite compensation. This will either be secured on land within the developer's ownership, or through a payment to a third-party landowner acting as a habitat bank.

Conclusion

The updated ecological walkover survey has highlighted potential impacts associated with the following ecological receptors on or adjacent to the site: breeding birds, bats, woodland, and trees. Provided these issues are addressed in accordance with the recommendations detailed in this letter, the development may proceed without adversely impacting the aforementioned ecological receptors.

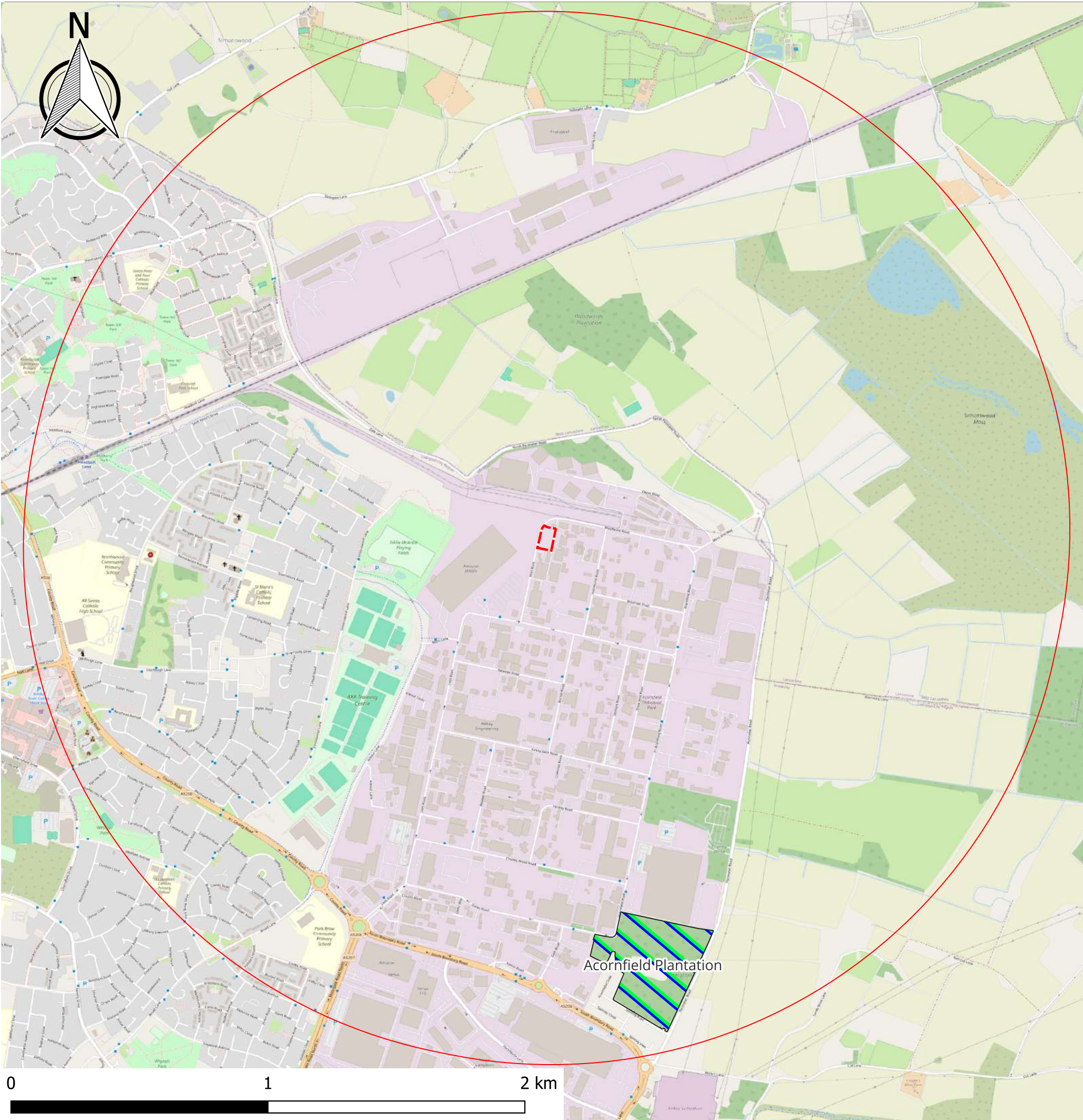
The development also presents an opportunity to enhance the habitats available to wildlife on site. The provision of bat & bird boxes onsite would provide additional features for wildlife locally.

If you require any further information or wish to discuss, please do not hesitate to get in touch with myself or another member of staff at UES.

Yours faithfully,

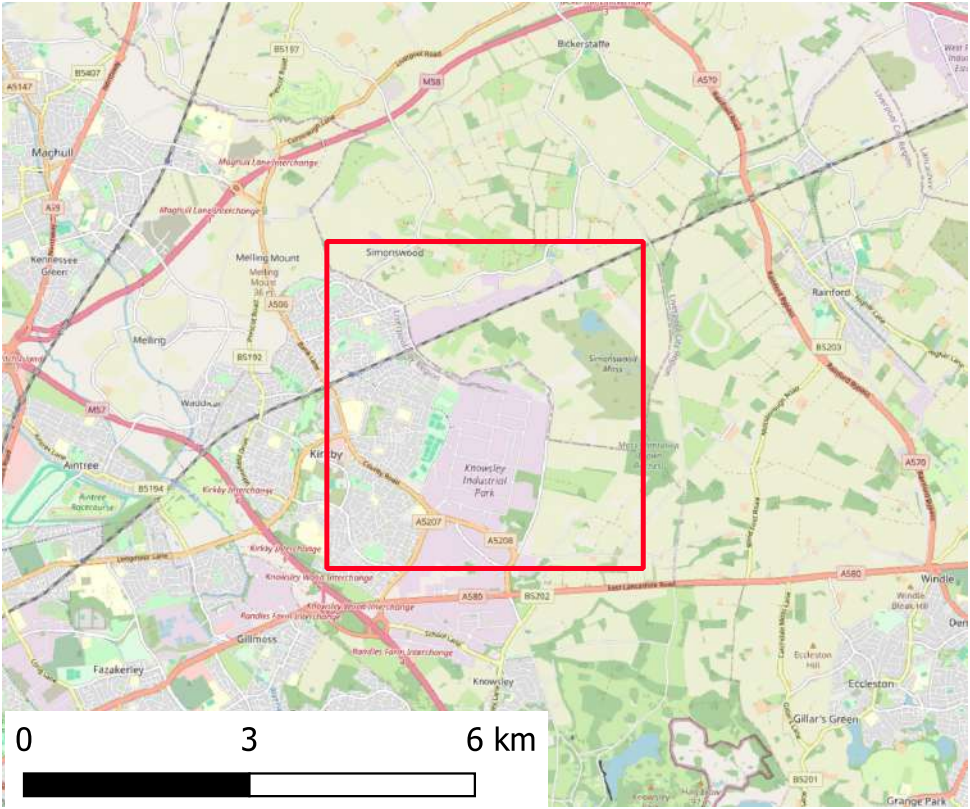
Osian Shirley MSci
Graduate Ecologist
United Environmental Services Ltd

Appendix 1 – Desk study



Statutory Designated Sites (2km)

**Site: Land off Marl Road,
Knowsley**
NGR: SJ 43258 99485
Author: Osian Shirley
Date: 21/01/2026

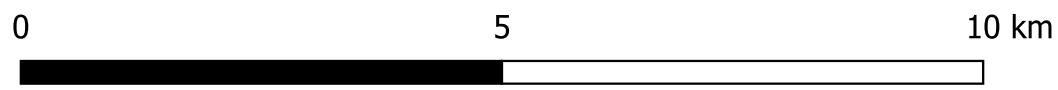
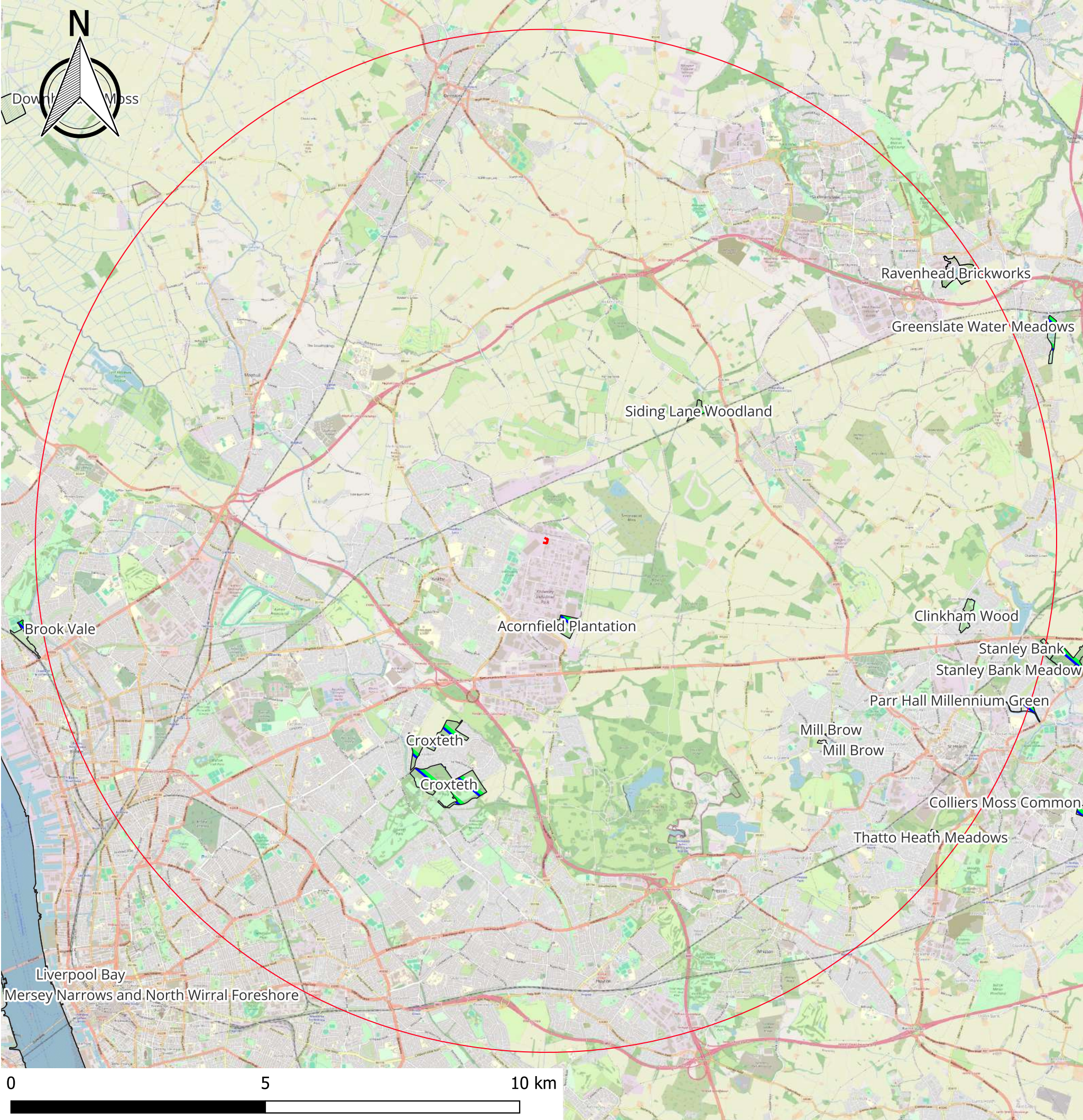


Key

-  Local Nature Reserve
-  Site of Special Scientific Interest
-  Special Area for Conservation
-  Special Protection Area
-  Ramsar site
-  National Nature Reserve
-  Survey boundary
-  2km Buffer

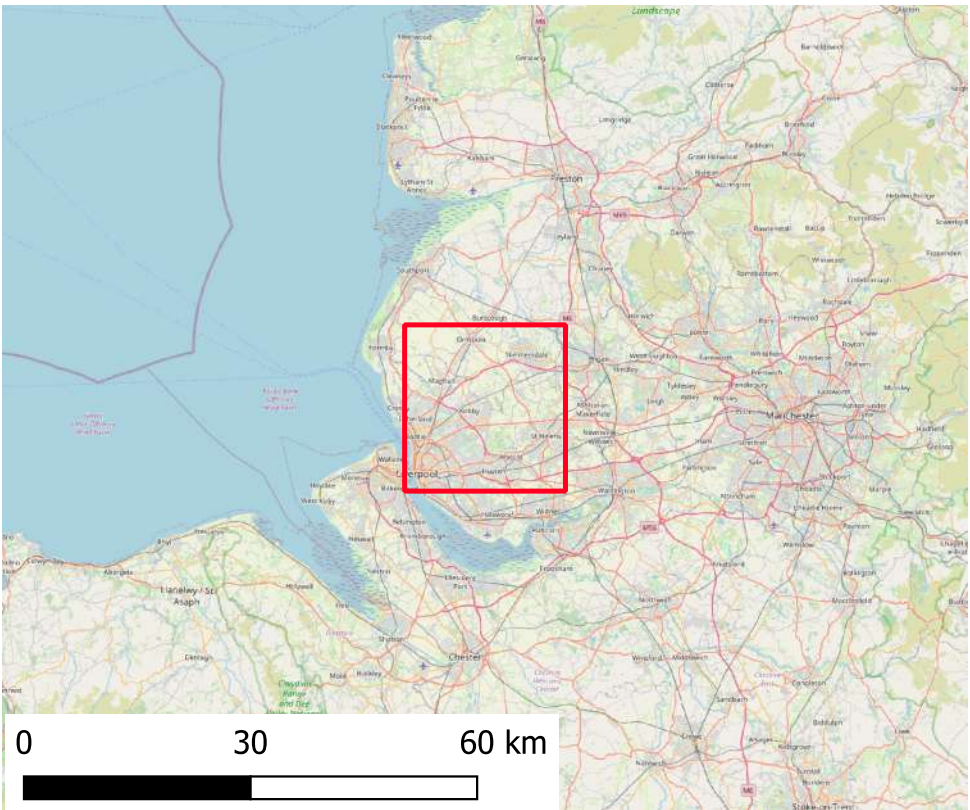
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Statutory Designated Sites (10km)

**Site: Land off Marl Road,
Knowsley**
NGR: SJ 43258 99485
Author: Osian Shirley
Date: 21/01/2026



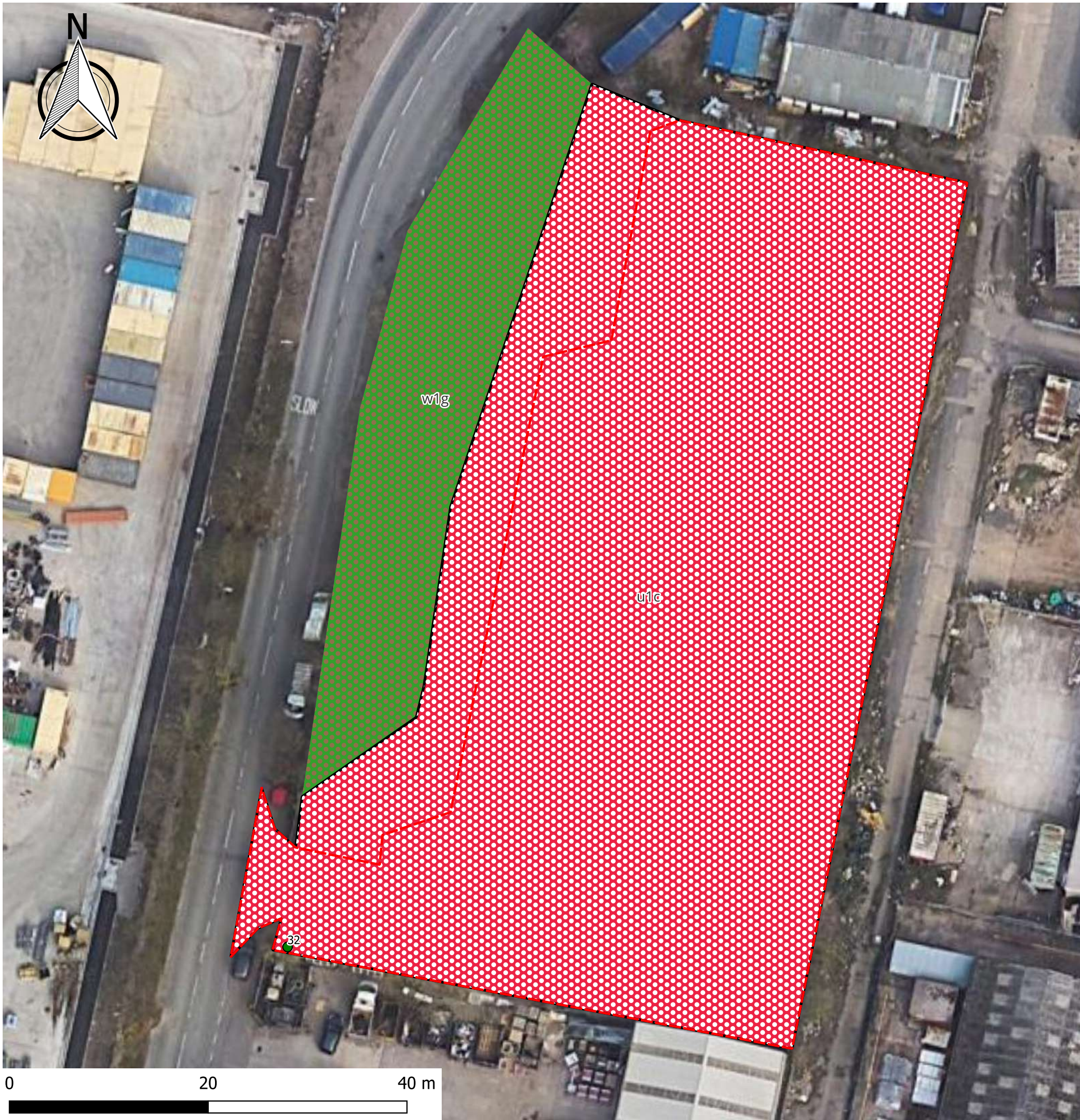
Key

- Local Nature Reserve
- Site of Special Scientific Interest
- Special Area for Conservation
- Special Protection Area
- Ramsar site
- National Nature Reserve
- Survey boundary
- 10km Buffer

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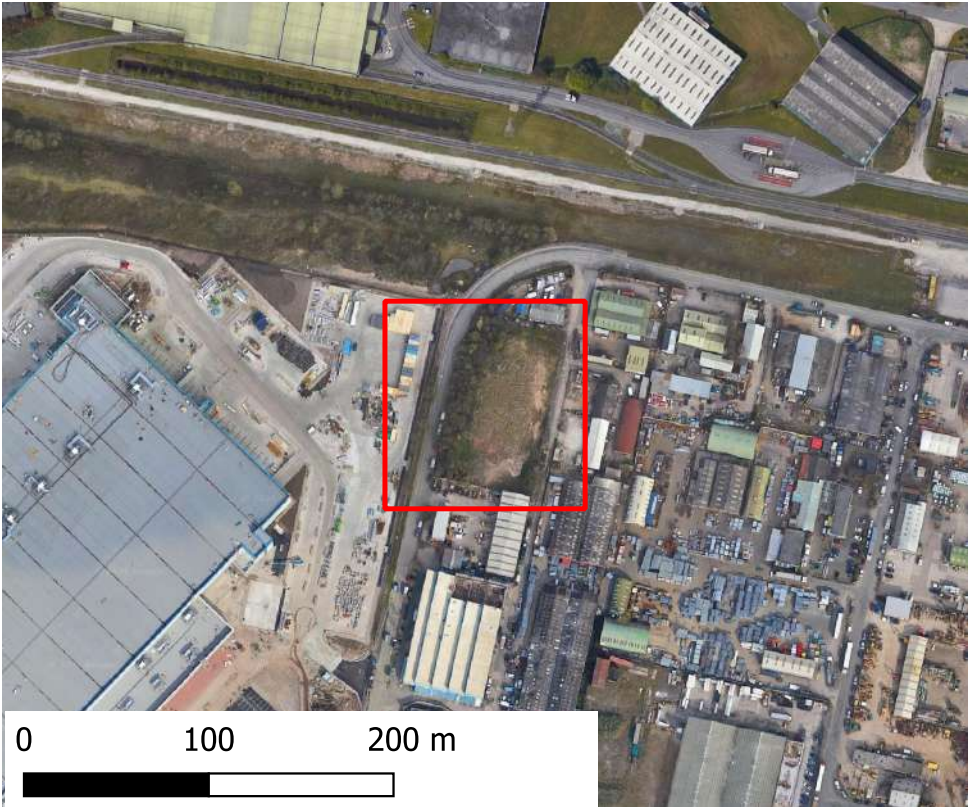
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Appendix 2 – UKHab plan



UK Habitat Classification Plan

Site: Land off Marl Road,
Knowsley
NGR: SJ 43258 99484
Author: Osian Shirley
Date: 23/01/2026



Key

-  w1g - other broadleaved woodland
-  u1c - artificial unvegetated unsealed surface
-  32 - scattered trees
-  Development boundary

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Appendix 3 – Aerials



Land off Marl Road, Knowsley

Close Aerial Photograph

 Development boundary





Land off Marl Road, Knowsley
Wide Aerial Photograph
→ Site location



Appendix 4 – Photographs



Photograph 1 – Retained woodland within the ownership boundary but outside the proposed development boundary.



Photograph 2 – The artificial unvegetated, unsealed surface that forms the majority of the site.



Photograph 3 – Some of the larger waste items in the strip of retained woodland.



Photograph 4 – The woodland contains high levels of litter and contains deadwood left over from felling that occurred prior to survey.



Photograph 5 – A single scattered tree, a semi-mature silver birch, that was originally part of the woodland before sections of it were cleared.



Photograph 6 – Scattered ephemeral vegetation remaining at the boundary of the proposed development site.



Photograph 7 – One of ten felled trees by the eastern site boundary. The stump of the small silver birch pictured is one of two trees at the northeastern corner, the rest were at the southeastern corner.

Appendix 5 – Botanical species list

Remaining onsite vegetation

Scientific name	Common name
<i>Fraxinus excelsior</i>	Ash
<i>Medicago lupulina</i>	Black medick
<i>Rubus fruticosus</i> agg.	Bramble
<i>Buddleja davidii</i>	Butterfly bush
<i>Conyza canadensis</i>	Canadian fleabane
<i>Galium aparine</i>	Cleavers
<i>Urtica dioica</i>	Common nettle
<i>Agrostis stolonifera</i>	Creeping bent
<i>Cirsium arvense</i>	Creeping thistle
<i>Alliaria petiolata</i>	Garlic mustard
<i>Pentaglottis sempervirens</i>	Green alkanet
<i>Salix cinerea</i>	Grey willow
<i>Calystegia sepium</i>	Hedge bindweed
<i>Geranium robertianum</i>	Herb Robert
<i>Veronica hederifolia</i>	Ivy-leaved speedwell
<i>Artemisia vulgaris</i>	Mugwort
<i>Lapsana communis</i>	Nipplewort
<i>Senecio squalidus</i>	Oxford ragwort
<i>Lamium purpureum</i>	Red deadnettle
<i>Festuca rubra</i>	Red fescue
<i>Plantago lanceolata</i>	Ribwort plantain
<i>Galanthus nivalis</i>	Snowdrop
<i>Acer pseudoplatanus</i>	Sycamore
<i>Epilobium</i> sp.	Willowherb
<i>Holcus lanatus</i>	Yorkshire fog

Offsite retained woodland	
Scientific name	Common name
<i>Fraxinus excelsior</i>	Ash
<i>Hyacinthoides</i> sp.	Bluebell sp.
<i>Rubus fruticosus</i> agg.	Bramble
<i>Galium aparine</i>	Cleavers
<i>Cornus sanguinea</i>	Common dogwood
<i>Urtica dioica</i>	Common nettle
<i>Ranunculus repens</i>	Creeping buttercup
<i>Rosa canina</i>	Dog rose
<i>Alliaria petiolata</i>	Garlic mustard
<i>Salix caprea</i>	Goat willow
<i>Aegopodium podagraria</i>	Ground elder
<i>Crataegus monogyna</i>	Hawthorn
<i>Corylus avellana</i>	Hazel
<i>Geranium robertianum</i>	Herb Robert
<i>Lonicera periclymenum</i>	Honeysuckle
<i>Hedera helix</i>	Ivy
<i>Betula pendula</i>	Silver birch
<i>Galanthus nivalis</i>	Snowdrop
<i>Acer pseudoplatanus</i>	Sycamore

Appendix 6 – External lighting guidance

Lighting scheme in relation to bats

The two most important features of street and security lighting with respect to bats are:

1. The UV component. Low or zero UV installations are preferred to reduce attraction of insects to lighting and therefore to reduce the attraction of foraging bats to these areas.
2. Restriction of the area illuminated. Lighting must be shielded to maintain dark areas, particularly above lighting installations, and in many cases, land adjacent to the areas illuminated. The aim is to maintain dark commuting corridors for foraging and commuting bats. Bats avoid well lit areas, and these create barriers for flying bats between roosting and feeding areas.

UV characteristics:

Low

- Low pressure Sodium Lamps (SOX) emit a minimal UV component.
- High pressure Sodium Lamps (SON) emit a small UV component.
- White SON, though low in UV, emit more than regular SON.

High

- Metal Halide lamps emit more UV than SON lamps, but less than Mercury lamps
- Mercury lamps (MBF) emit a high UV component.
- Tungsten Halogen, if unfiltered, emit a high UV component
- Compact Fluorescent (CFL), if unfiltered, emit a high UV component.
- Variable
- Light Emitting Diodes (LEDs) have a range of UV outputs. Variants are available with low or minimal UV output.
- Glass glazing and UV filtering lenses are recommended to reduce UV output.

Street lighting

- Low-pressure sodium or high-pressure sodium must be used instead of mercury or metal halide lamps. LEDs must be specified as low UV. Tungsten halogen and CFL sources must have appropriate UV filtering to reduce UV to low levels.
- Lighting must be directed to where it is needed and light spillage avoided. Hoods must be used on each lamp to direct light and contain spillage. Light leakage into hedgerows and trees must be avoided.
- If possible, the times during which the lighting is on overnight must be limited to provide some dark periods. If the light is fitted with a timer this must be adjusted to reduce the amount of 'lit time' and provide dark periods.

Security and domestic external lighting

The above recommendations concerning UV output and direction apply. In addition:

- Lighting should illuminate only ground floor areas. Light should not leak upwards to illuminate first floor and higher levels.
- Lamps of greater than 2000 lumens (150 W) must not be used.
- Movement or similar sensors must be used. They must be carefully installed and aimed, to reduce the amount of time a light is on each night.
- Light must illuminate only the immediate area required, by using as sharp a downward angle as possible. Light must not be directed at or close to bat roost access points or flight paths from the roost. A shield or hood can be used to control or restrict the area to be lit.
- Wide angle illumination must be avoided as this will be more disturbing to foraging and commuting bats as well as people and other wildlife.
- Lighting must not illuminate any bat bricks and boxes placed on buildings, trees or other nearby locations.

Appendix 7 – Statutory and planning context

Ecological assessments

Ecological assessments play an important part within the planning context; they include an initial assessment which highlights any specific interests of a site. From the initial site assessment, the surveyor assesses the suitability of habitats within the site to support protected species and makes recommendations for further survey works if required. The following paragraphs provide a brief interpretation of legislative protection in relation to the following species and habitats:

Amphibians

Great crested newts

Other amphibians

Reptiles

Badgers

Hazel dormouse

Bats

Birds

Trees

Hedgerows

Invasive plant species

Otters

Water voles

White-clawed crayfish

Planning policy

Amphibians

Great crested newts

Great crested newts (GCN) *Triturus cristatus* and their habitat (aquatic and terrestrial) are afforded full protection by the Wildlife and Countryside Act 1981 (as amended) and the Conservation of Habitats and Species Amendment (EU exit) Regulations 2019. If both national and international legislation are taken together, it is an offence to:

- Deliberately, intentionally or recklessly kill, injure or capture GCN
- Deliberately, intentionally or recklessly disturb GCN in such a way to be likely to significantly affect:
 - their ability to survive, breed, reproduce, rear or nurture their young
 - their ability to hibernate or migrate
 - their local distribution or abundance
- Deliberately, intentionally or recklessly take or destroy the eggs of GCN
- Damage or destroy breeding sites or resting places of GCN
- Intentionally or recklessly disturb sheltering GCN, or obstruct access to their resting place
- Keep, transport, sell or exchange, or offer for sale or exchange any live or dead GCN, any part of GCN or anything derived from GCN

Penalties for offences include fines of up to £5000, plus up to six months imprisonment, for each offence committed.

GCN are also protected by the Protection of Animals Act 1911, which prohibits cruelty and mistreatment. Releasing a GCN in such a way as to cause undue suffering may be an offence under the Abandonment of Animals Act 1960.

In addition to the above, there are various statutory provisions relating to the transport of animals, designed to ensure their welfare. GCN are also listed under Section 41 of the NERC Act (see bats section for further details).

It is important to identify the presence of GCN individuals and also to identify suitable habitat on sites so that legal obligations regarding this species can be observed. If a survey identifies the presence of GCN on the site, an assessment of the population size class is required. This can then inform a mitigation scheme, which would need to be developed in liaison with the local Natural England team, and which minimises direct threats to newts and compensates for any loss of habitat. A licence issued by Natural England is required for the legal implementation of a mitigation scheme.

A Natural England mitigation licence application requires a Mitigation Method Statement and a Reasoned Statement of Application. The Mitigation Method Statement contains details of the proposed mitigation

works. The Reasoned Statement needs to provide a rational and reasoned justification as to why the proposed development meets the requirements of the Conservation (National Habitats & c.) regulations 1994, namely Regulations 44(2)(e), (f) or (g), and 44(3)(a).

Other amphibians

More common British amphibians, such as common frog *Rana temporaria*, common toad *Bufo bufo*, smooth newt *Triturus vulgaris* and palmate newt *Triturus helveticus* are protected only by Section 9(5) of the Wildlife and Countryside Act 1981 (as amended). This section prohibits sale, barter, exchange, transporting for sale and advertising to sell or to buy.

The above named species are also listed as UK Species of Conservation Concern. Due to general declines in most British amphibian species in recent years, many local authorities require amphibian surveys as a planning condition, or as part of environmental information submitted as part of a planning application, even where the presence of GCN is ruled out.

Natterjack toad *Bufo calamita* and pool frog *Pelophylax lessonae* are also offered the same level of protection as GCN, through the Wildlife and Countryside Act 1981 (as amended) and the Conservation of Habitats and Species Regulations 2017.

Natterjack toad, common toad and pool frog are also listed under Section 41 of the NERC Act (see bats section for further details).

Water bodies that support all five (more common) species of British amphibians in high numbers, may be afforded protection in local plans, as Sites of Importance for Nature Conservation (SINC), or a similar equivalent, for sites of local importance. A site may require statutory protection as a Site of Special Scientific Interest (SSSI).

Reptiles

Common lizard *Zootoca vivipara*, slow-worm *Anguis fragilis*, grass snake *Natrix natrix* and adder *Vipera berus* are protected under the Wildlife and Countryside Act 1981 (as amended). They are listed as a Schedule 5 species therefore part of Section 9(1) and section 9(5) apply. The Countryside and Rights of Way Act 2000 also strengthens their protection. It is offence to:

- Intentionally or recklessly kill or injure any of the species listed above
- Sell, offer, advertise or transport for sale a live or dead animal of the species listed above

If a proposed development is likely to have an impact on these reptiles the local statutory nature conservation organisation must be consulted.

Sand lizard *Lacerta agilis* and smooth snake *Coronella austriaca* receive full protection under the Wildlife and Countryside Act 1981 (as amended) and Conservation of Habitats and Species Regulations 2017. Read together, it is an offence to:

- Deliberately, intentionally or recklessly kill, injure or capture any sand lizards or smooth snakes
- Deliberately, intentionally or recklessly disturb sand lizards or smooth snakes in such a way to be likely to significantly affect:
 - their ability to survive, breed, reproduce, rear or nurture their young
 - their ability to hibernate or migrate
 - their local distribution or abundance
- Deliberately, intentionally or recklessly take or destroy the eggs of such an animal
- Damage or destroy breeding sites or resting places of such animals
- Intentionally or recklessly disturb sheltering sand lizards or smooth snakes, or obstruct access to their resting place
- Keep, transport, sell or exchange, or offer for sale or exchange any live or dead sand lizards or smooth snakes, any part of such an animal or anything derived from such an animal

Penalties for offences include fines of up to £5000, plus up to six months imprisonment, for each offence committed.

All reptile species are also listed under Section 41 of the NERC Act (see bats section for further details).

Badgers

European badgers *Meles meles* and their habitat are protected under The Protection of Badgers Act 1992 and are also included on Schedule 6 of the Wildlife and Countryside Act 1981, and Appendix III of the Bern Convention. The legislation affords badgers protection against deliberate harm or injury making it an offence to:

- Wilfully kill, injure, take, possess or cruelly ill-treat a badger (or attempt to do so)
- To interfere with a sett by damaging or destroying it
- To obstruct access to, or entrance of, a badger sett
- To disturb a badger whilst it is occupying a sett

Penalties for offences include fines of up to £5000, plus up to six months imprisonment, for each offence committed.

Works that disturb badgers whilst they are occupying a sett are illegal without a licence. Disturbance can occur even without direct interference or damage to the sett in question. In general, the following activities are likely to require a licence:

- Use of heavy machinery or significant earth moving within 30m of a sett
- Use of lighter machinery (usually any wheeled vehicles) within 20m of a sett
- Any digging, chain saw use or scrub clearance within 10m of a sett

Hazel dormouse

Hazel dormice *Muscardinus avellanarius* are offered full protection through the Wildlife and Countryside Act 1981 (as amended) and the Conservation of Habitats and Species Regulations 2017. If both national and international legislation are taken together, it is an offence to:

- Deliberately, intentionally or recklessly kill, injure or capture dormice
- Deliberately, intentionally or recklessly disturb dormice in such a way to be likely to significantly affect:
 - their ability to survive, breed, reproduce, rear or nurture their young
 - their ability to hibernate or migrate
 - their local distribution or abundance
- Damage or destroy breeding sites or resting places of dormice
- Intentionally or recklessly disturb sheltering dormice, or obstruct access to their resting place
- Keep, transport, sell or exchange, or offer for sale or exchange any live or dead dormouse, any part of a dormouse or anything derived from a dormouse

Penalties for offences include fines of up to £5000, plus up to six months imprisonment, for each offence committed.

Dormice are also listed under Section 41 of the NERC Act (see bats section for further details).

Bats

In the United Kingdom, all species of bat and their roosts are afforded full protection under the Wildlife and Countryside Act 1981 (as amended) and the Conservation of Habitats and Species Regulations 2017 (known as the "Habitats Regulations"). The Wildlife and Countryside Act is the domestic implementation of

the Convention on the Conservation of European Wildlife and Natural Habitats (the Bern Convention) and was amended by the Countryside and Rights of Way Act 2000. This makes it an offence to:

- Deliberately, intentionally or recklessly kill, injure or capture a bat
- Deliberately, intentionally or recklessly disturb a bat while it is occupying a structure or place that it uses for shelter or protection
- Deliberately, intentionally or recklessly damage, destroy or obstruct access to any place that a bat uses for shelter or protection (even if the bat is not present at the time)
- Keep, transport, sell or exchange, or offer for sale or exchange any live or dead bat, any part of a bat or anything derived from a bat

Under UK law, a bat roost is *any structure or place which any wild [bat] ... uses for shelter or protection*. As bats often reuse the same roosts, legal opinion is that a roost is protected whether or not the bats are present at the time of the activity taking place.

Penalties for offences include fines of up to £5000, plus up to six months imprisonment, for each offence committed.

If an activity is likely to result in any of the above offences, a licence can be applied for to derogate from the protection afforded. These licences must provide appropriate mitigation and are issued by Natural England.

A Natural England mitigation licence application requires a Mitigation Method Statement and, in many cases, a Reasoned Statement of Application. The Mitigation Method Statement contains details of the proposed mitigation works. The Reasoned Statement needs to provide a rational and reasoned justification as to why the proposed development meets the requirements of the Conservation (National Habitats & c.) regulations 1994, namely Regulations 44(2)(e), (f) or (g), and 44(3)(a).

The Natural Environment and Rural Communities (NERC) Act 2006 lists the following bat species as species of principle importance under Section 41:

- Barbastelle *Barbastella barbastellus*
- Bechstein's bat *Myotis bechsteinii*
- Noctule *Nyctalus noctula*
- Soprano Pipistrelle *Pipistrellus pygmaeus*
- Brown Long-eared bat *Plecotus auritus*
- Greater Horseshoe *Rhinolophus ferrumequinum*
- Lesser Horseshoe *Rhinolophus hipposideros*

Section 40 requires every public body in the exercising of its functions 'have regard, so far as is consistent with the proper exercise of those functions, to the purpose of conserving biodiversity' (all biodiversity and not just section 41 species and habitats); therefore making these bats a material consideration in the planning process and requiring a detailed ecological bat survey before planning permission can be granted.

Birds

All wild birds, their nests and young are protected throughout England and Wales by the Wildlife & Countryside Act 1981 (as amended). It is illegal to kill, injure or take any wild bird, or damage or destroy the nest or eggs of breeding birds. The legislation applies to all bird species, common and rare.

In addition to the protection afforded to all wild birds, more vulnerable species listed on Schedule 1 of the Act receive enhanced protection when breeding. Schedule 1 species, including their dependent young, are protected from intentional or reckless disturbance whilst at or near the nest, in addition to the protection afforded the more common species.

The NERC Act offers further protection to the nests of some species that regularly re-use their nests, even when the nests are not in use.

The leading governmental and non-governmental conservation organisations in the UK have reviewed the population status' of 244 UK bird species. "Birds of Conservation Concern 4: the Red List for Birds" is the

most recent publication summarising their findings. Three lists, Red, Amber and Green, have been produced based on the most up-to-date evidence available and criteria include conservation status at global and European levels and, within the UK: historical decline, trends in population and range, rarity, localised distribution and international importance. These lists are a valuable resource when considering conservation priorities.

Trees

Trees may be protected on an individual or group level through a Tree Preservation Order (TPO). In order to carry out works to trees with a TPO, prior written consent must be obtained from the Local Planning Authority. Trees may also be protected through a condition of planning consent or designated conservation areas.

Hedgerows

The Hedgerow Regulations are made under Section 97 of the Environment Act 1995 and came into operation on 1st of June 1997. They aim to protect important hedgerows in the countryside by controlling their removal through a system of notification to the Local Planning Authority.

A hedgerow can only be considered for classification as “important” if it, or the hedgerow of which the section belongs to is over 20m in length (or which meets a hedgerow at either end) and has existed for 30 years or more.

Invasive plant species

A number of invasive, non-native plant species are listed under Schedule 9 (Part II) of the Wildlife and Countryside Act 1981 (as amended). The most commonly encountered listed species in ecological surveys are Japanese knotweed *Fallopia japonica*, Montbretia *Crocasmia x crocosmiiflora* and variegated yellow archangel *Lamiastrum galeobdolon subsp. argentatum*. Section 14(2) of this Act makes it an offence to *plant or otherwise cause to grow in the wild* any plant listed on Schedule 9 (Part II). These provisions are necessary to prevent the establishment of non-native species which may be detrimental to our native wildlife.

A number of invasive, non-native plants species are listed under Schedule 2 (Part II) of the Invasive Alien Species (Enforcement and Permitting) Order 2019. The most commonly encountered listed species in ecological surveys are Himalayan balsam *Impatiens glandulifera* and giant hogweed *Heracleum mantegazzianum*. Section 3 of this Act make it an offence to *plant or otherwise causes to grow in the wild* any plant which is listed on Schedule 2 (Part II). These provisions are necessary to prevent the establishment of non-native species which may be detrimental to our native wildlife.

Soil or plant material contaminated with non-native and invasive plants can cause ecological damage and may be classified as controlled waste. It is an offence to keep, treat or dispose of waste that could harm the environment or human health. If there is any doubt, contact the local authority or Environment Agency.

Otters

European otter *Lutra lutra* are offered full protection through the Wildlife and Countryside Act 1981 (as amended) and the Conservation of Habitats and Species Regulations 2017. If both national and international legislation are taken together, it is an offence to:

- Deliberately, intentionally or recklessly kill, injure or capture otters
- Deliberately, intentionally or recklessly disturb otters in such a way to be likely to significantly affect:
 - their ability to survive, breed, reproduce, rear or nurture their young
 - their ability to migrate
 - their local distribution or abundance
- Damage or destroy breeding sites or resting places of otters

- Intentionally or recklessly disturb sheltering otters, or obstruct access to their resting place
- Keep, transport, sell or exchange, or offer for sale or exchange any live or dead otter, any part of an otter or anything derived from otter

Penalties for offences include fines of up to £5000, plus up to six months imprisonment, for each offence committed.

Otters are also listed under Section 41 of the NERC Act (see bats section for further details).

Water voles

Water voles *Arvicola amphibius* are protected by the provisions of Schedule 5 of the Wildlife and Countryside Act 1981 (as amended). This makes it an offence to:

- Intentionally kill, injure or take water vole
- Possess or control live or dead water vole or any part of a water vole
- Intentionally or recklessly damage destroy or obstruct access to any structure or place which a water vole uses for shelter or protection, or disturb water vole using such a place
- Sell, offer, advertise or transport live or dead water voles for sale

Licences are available from Natural England to allow activities that would otherwise be an offence, including:

- Scientific or educational purposes
- For the purposes of ringing or marking
- Conserving wild animals or introducing them into particular areas
- Preserving public health or public safety
- Preventing the spread of disease
- Preventing serious damage to any form of property or to fisheries

Penalties for offences include fines of up to £5000, plus up to six months imprisonment, for each offence committed.

Water voles are also listed under Section 41 of the NERC Act (see bats section for further details).

White-clawed crayfish

White-clawed crayfish *Austropotomobius pallipes* are protected under the Wildlife and Countryside Act 1981 (as amended). They are listed as a Schedule 5 species therefore part of Section 9(1) and section 9(5) apply. The Countryside and Rights of Way Act 2000 also strengthens their protection. It is offence to:

- Intentionally or recklessly kill or injure white-clawed crayfish
- Sell, offer, advertise or transport for sale a live or dead white-clawed crayfish

If a proposed development is likely to have an impact on white-clawed crayfish then the local statutory nature conservation organisation must be consulted.

Penalties for offences include fines of up to £5000, plus up to six months imprisonment, for each offence committed.

Their inclusion on the EC Habitats Directive allows areas to be designated as Special Areas of Conservation (SAC) for the presence of white-clawed crayfish. Such a designation brings legal protection under the Conservation of Habitats Regulations 2017, this includes how the site is managed and what development can occur on and in proximity to these sites.

White-clawed crayfish are also listed under Section 41 of the NERC Act (see bats section for further details).

Planning policy

The National Planning Policy Framework 2024 (NPPF) provides guidance on the interpretation of the law in relation to the natural environment and development.

National Planning Guidance is issued in the form of the National Planning Policy Framework 2024 (NPPF). The most relevant section is 15: Conserving and enhancing the natural environment.

Key relevant principles stated in 15: Conserving and enhancing the natural environment are;

- 187.** Planning policies and decisions should contribute to and enhance the natural and local environment by:
- 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);
 - b) recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services – including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland;
 - c) maintaining the character of the undeveloped coast, while improving public access to it where appropriate;
 - 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 and incorporating features which support priority or threatened species such as swifts, bats, and hedgehogs;
 - e) preventing new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of soil, air, water or noise pollution or land instability. Development should, wherever possible, help to improve local environmental conditions such as air and water quality, taking into account relevant information such as river basin management plans; and
 - f) remediating and mitigating despoiled, degraded, derelict, contaminated and unstable land, where appropriate.
- 192.** To protect and enhance biodiversity and geodiversity, plans should:
- a) Identify, map and safeguard components of local wildlife-rich habitats and wider ecological networks, including the hierarchy of international, national and locally designated sites of importance for biodiversity⁶⁸; wildlife corridors and stepping stones that connect them; and areas identified by national and local partnerships for habitat management, enhancement, restoration or creation⁶⁹; and
 - b) promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species; and identify and pursue opportunities for securing measurable net gains for biodiversity
- 193.** When determining planning applications, local planning authorities should apply the following principles:
- a) if significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused;
 - b) development on land within or outside a Site of Special Scientific Interest, and which is likely to have an adverse effect on it (either individually or in combination with other developments), should not normally be permitted. The only exception is where the benefits of the development in the location proposed clearly outweigh both its likely impact on the features of the site that make it of special scientific interest, and any broader impacts on the national network of Sites of Special Scientific Interest;

- c) development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons⁷⁰ and a suitable compensation strategy exists; and
- d) development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to improve biodiversity in and around developments should be integrated as part of their design, especially where this can secure measurable net gains for biodiversity or enhance public access to nature where this is appropriate.