



Preliminary Ecological Appraisal Report

Lickers Lane, Halsnead

Reference: 80-571-R2-4

Date: April 2022



PRELIMINARY ECOLOGICAL APPRAISAL REPORT

Lickers Lane
Halsnead

Prepared for:
Vistry Partnerships

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EXECUTIVE SUMMARY

Site Address	Lickers Lane, Halsnead, Whiston, Knowsley, Merseyside, L35 3SR
Coordinates	E 347506, N 390503
Site Area	Approximately 2.6 ha
Current Site Use and Adjacent Site Use	The site is located within a residential and agricultural area of Whiston Cross, south of Whiston. Lickers Lane defines the northern site boundary, with arable fields featuring to the east, west and south where the adjacent housing development is proposed. Sandfield Natural Play Centre runs along the eastern boundary with Fox's Bank Cemetery located further east. An active treelined railway is located approximately 550 m north of the site.
Designated Sites	The site is located within the Impact Risk Zone of Mersey Estuary Site of Special Scientific Interest, Special Protection Area and Ramsar. No impacts on the designated site is anticipated as a result of development, based on its distance from the site and the small scale of the development. However, during consultation with Knowsley Council, recreational pressure from residential development has been identified as a Likely Significant Effect alone and in-combination within the Liverpool City Region. Therefore, it is recommended that information is provided within sales packs, informing residents of the importance of the designated sites, the responsible user code and the location of Suitable Alternative Natural Green Spaces (SANGS). Woodland, Sandfield Park Local Wildlife Site (LWS) lies adjacent to the site boundary. Precautionary Working Methods have been recommended to ensure there will be no impact on LWSs within the wider area as a result of the development.
Survey Results	The site was found to comprise broadleaved woodland, dense scrub, semi-improved grassland, tall ruderal, arable and scattered trees. The site was found to have the following potential ecological constraints: ✿ T38 and T62 had High bat roosting potential. ✿ T25 and T61 had Low bat roosting potential. ✿ Potential foraging opportunities for bats within the dense scrub and broadleaved woodland. ✿ Opportunities for nesting birds within the broadleaved woodland and dense scrub. ✿ Opportunities for ground nesting birds within the semi-improved grassland and arable field. ✿ Evidence of badger using the site for foraging. ✿ Potential presence of hedgehog within the dense scrub and broadleaved woodland.



Conclusions

The following further surveys are recommended:

- ✿ Three Nocturnal Bat Surveys on T38 and T62 if they are to be removed (May to September).

The following mitigation is recommended:

- ✿ Soft felling of T25 and T61 under supervision of an ecologist if they are to be removed.
- ✿ Updated badger walkover prior to start of works.
- ✿ Precautionary Working Methods for badger
- ✿ Common amphibians are to be removed by hand from the working area during the clearance phase.
- ✿ Lighting strategy produced and areas identified as being suitable for foraging bats maintained as dark areas.
- ✿ If any vegetation requires removal, it should be removed outside of the breeding bird season (March to September inclusive). If this is not possible, a nesting bird check should be undertaken by a suitably qualified ecologist up to 24 hours before works commence. If a nest, or nest in construction, is located, then a stand-off distance should be maintained until the young have fledged. A check prior to clearance works within the semi-improved grassland or arable field should also be undertaken for ground nesting birds should the works take place in the nesting bird season.
- ✿ During site clearance, any woodland, scrub or associated debris piles that require removal, should be demolished under ecological supervision to ensure no sheltering hedgehogs are impacted by the works. It is recommended that vegetation clearance takes place outside of December-March to avoid impacting hibernating hedgehogs.
- ✿ Pre-commencement check for young brown hare prior to start of works.
- ✿ Eradication of rhododendron and Japanese knotweed prior to start of works.

A gain in biodiversity will likely be required on-site. If this cannot be achieved on-site, a conservation offset payment, or off-site compensation may be required.



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1. INTRODUCTION

1.1. BACKGROUND

E3P were commissioned by Vistry Partnerships to undertake a Preliminary Ecological Appraisal at Lickers Lane, Halsnead, hereafter referred to as “the site”.

This report has been prepared by Huw Morgan BSc (Hons) ACIEEM, Senior Ecologist at E3P, who has seven years of professional experience as an ecological consultant. Huw has undertaken multiple Preliminary Ecological Appraisals and condition assessments for various projects across the UK. Huw also holds a class 2 great crested newt Natural England licence, a Natural England barn owl survey class licence, class 1 bat licence and has key experience with birds and plants.

1.2. PREVIOUS SURVEYS

Surveys were undertaken by Cheshire Ecological Services Ltd in 2017 and 2020 as part of the wider Halsnead Garden Village scheme in which the badger (*Meles meles*) surveys and great crested newt (*Triturus cristatus*) surveys included the same survey area as the site. The results of the surveys are detailed within the Halsnead Garden Village Biodiversity Statement (report reference: 31631/A5/ES2020) and detailed great crested newt surveys results are within Appendix 10.13, Great Crested Newt Survey (report reference: 1349/06/20/LO).

Two waterbodies within 250 m of the site returned negative results for great crested newts and no evidence of badger was recorded within the survey area or within 30 m of the site during the 2020 surveys.

1.3. PROPOSED DEVELOPMENT

Detailed development proposals include the construction of an access road to a proposed housing development to the south of the site.

1.4. SITE LOCATION

The site is located within a residential and agricultural area of Whiston Cross, south of Whiston. Lickers Lane defines the northern site boundary, with arable fields featuring to the east, west and south where the new housing development is proposed. Sandfield Natural Play Centre runs along the eastern boundary with Fox's Bank Cemetery located further east. An active treelined railway is located approximately 550 m north of the site. Please refer to Figure 1.1 for the approximate site location.



FIGURE 1.1 APPROXIMATE SITE LOCATION



1.5. OBJECTIVES

The objectives of the Preliminary Ecological Appraisal are as follows:

- 🏠 Identify the major habitats present.
- 🏠 Ascertain the presence or potential presence of any legally protected species and habitats.
- 🏠 Recommend any further surveys or mitigation that may be required.

The Preliminary Ecological Appraisal comprises a desk study and site walkover. This survey has been completed as a baseline assessment of the site, and as such please see the end of the report for further surveys and mitigation proposed.



2. METHODOLOGY

2.1. DESKTOP STUDY

The following sources of information and ecological records were consulted:

- ✳ MAGIC – A web-based interactive mapping system, on which geographic information regarding key environmental schemes and designations are collated, including details of statutory conservation sites, consulted in August 2021.
- ✳ Aerial mapping and ordnance survey maps.
- ✳ Local data records, including The Merseyside BioBank (MBB), the biodiversity information service for North Merseyside, which covers Liverpool, Knowsley, Sefton and St Helens.

The desk study data was taken from the Biodiversity Statement produced by Cheshire Ecological Services in 2020, as the data covers the same search area as the site was still valid at the time of writing.

A 2.5 km search area was utilised for the data search, with this being deemed an appropriate distance for the zone of influence of the site, due to the size of the site and the surrounding habitat.

The data search included a request for details of protected and notable species of flora and fauna within 2.5 km of the central grid reference of the site. In addition, a request was made for any non-statutory designated sites within 1 km of the site boundary.

Please note that a lack of up-to-date records does not confirm absence of a species from the area. Lack of records may simply be a result of a lack of protected species surveys being undertaken within the local area.

2.2. VEGETATION AND HABITATS

A Preliminary Ecological Appraisal of the proposed development site was undertaken by Huw Morgan BSc (Hons) and Rhian Keating on 26th August 2021. The weather was warm and sunny with light winds.

An updated Preliminary Ecological Appraisal was undertaken on 14th April by Huw Morgan to survey the updated boundary of the proposed development site. The weather was overcast with light winds.

The walkover survey was undertaken to the standard methodology as detailed by the JNCC Handbook for Phase 1 Habitat Survey, 2010. The assessment follows the methodology as per "Guidelines for Preliminary Ecological Appraisal" (CIEEM, 2017).

A vegetation and habitat plan has been produced for the proposed development site and the immediate surrounding area (please refer to Appendix I). The mapping is based on the Joint Nature Conservation Committee Phase I Habitat Survey Methodology (JNCC, 2010).

Searches were made for uncommon, rare, and statutorily protected plant species, those species listed as protected in the Wildlife and Countryside Act 1981 (as amended) and species which are indicators of important and uncommon plant communities. All plant nomenclature follows Stace (2019).



Searches were carried out for the presence of invasive species, including those listed on the revised (April 2010) Schedule 9 of the Wildlife and Countryside Act 1981 (as amended) including but not limited to, Japanese knotweed (*Fallopia japonica*), Himalayan balsam (*Impatiens glandulifera*) and giant hogweed (*Heracleum mantegazzianum*).

2.3. FAUNA

A thorough search of the site for signs of protected species of fauna was undertaken during the site walkover. These searches considered the following:

- ✿ Suitability of any ponds to support notable amphibians, and the suitability of the site's terrestrial habitats to support amphibians.
- ✿ Suitability of the site to support reptiles by way of habitat structure and refuge piles, as well as links to the wider landscape.
- ✿ Signs of badgers, by way of setts, mammal paths, foraging signs, or latrines to indicate usage of the site by the species.
- ✿ Search of any watercourses for signs or suitability for water vole and otter by way of burrows, resting places, holts, and foraging signs.
- ✿ Suitability of the site to support roosting, foraging and commuting bats.
- ✿ Suitability of the site to support notable bird species.
- ✿ Suitability of the site to support notable invertebrates.
- ✿ Search of the site for any invasive species.

2.4. PRELIMINARY ROOST ASSESSMENT

The Preliminary Roost Assessment (PRA) was undertaken by Huw Morgan on 26th August 2021. Huw holds a valid Natural England Class 1 Survey Licence (2021-53691-CLS-CLS).

The survey involved undertaking a systematic search of the trees, searching for signs of bats, or spaces where bats would be able to access. The methodology followed that described in Bat Surveys for Professional Ecologists, 3rd Edition (Collins, 2016).

The trees were categorised for their bat roosting potential as described in Table 2.1 in accordance with Collins (2016).



TABLE 2.1 BAT ROOSTING POTENTIAL CLASSIFICATION OF TREES AND STRUCTURES

CATEGORY	DESCRIPTION
NEGLECTIBLE	A tree with no roosting features present or of an age/species that would not support roosting bats.
LOW	A tree with one or more potential roost site. However, the potential roost sites do not provide suitability for large numbers of bats (i.e., for maternity or hibernation) and would only be used on an occasional basis.
MODERATE	A tree with one or more potential roosting feature which could support bats but is of a suitability meaning that it would be unlikely to support a roost of high conservation status.
HIGH	A tree with several potential roosting features which could support large number of bats on a regular basis and for longer periods of time. The tree or structure would have suitability to support maternity or hibernation roosts.

The survey was undertaken utilising suitable binoculars and ladders to access all areas where safe to do so.

2.5. SURVEY LIMITATIONS

A Preliminary Ecological Appraisal does not constitute a full botanical survey. Instead, key species are identified to give a representative description of each habitat type.

This survey was undertaken in August, which is an appropriate time of year to undertake ecological surveys. However, some species of flora may have been missed or misidentified. It is possible that some invasive/non-native species could have been missed during the survey. Due to the habitats present on-site, this is not considered to be a major constraint.

Areas of woodland and scrub were overgrown at the time of the survey and could not be thoroughly searched; therefore, signs of badgers may have been missed. These constraints have been taken into consideration.



3. SURVEY RESULTS

3.1. SITE CONTEXT

The site is located within a residential and agricultural area of Whiston Cross, south of Whiston. Lickers Lane defines the northern site boundary, with arable fields featuring to the east, west and south. Sandfield Natural Play Centre runs along the eastern boundary with Fox's Bank Cemetery located further to the east. An active treelined railway is located approximately 550 m north of the site. The site is expected to provide some value to local wildlife, with the broadleaved woodland and dense scrub expected to offer nesting or roosting opportunities for passerine birds and bats. Residential housing extend to the north of the site which are anticipated to be of limited value for local wildlife.

Adjacent to the north-east of the site is Sandfield Natural Play Centre, providing some ecological value. Beyond this to the south is an area of grassland, scrub, and woodland, used for agriculture, which connects to the M62 approximately 700 m south of the site boundary. This habitat is expected to act as a resource for a range of local fauna and has the potential to provide roosting and nesting opportunities for bats and birds.

An active treelined railway is located approximately 550 m north of the site, running east to west. A treelined footpath crosses the railway line and continues northwest, with residential housing and roads running adjacent to the railway line. These may act as an important commuting feature for local wildlife including birds and terrestrial mammals.

Two waterbodies were identified within 250 m of the site boundary located approximately 20 m north and 25 m east of the site respectively.

3.2. DESIGNATED SITES

The site is located within the Impact Risk Zone of Mersey Estuary Site Special Scientific Interest (SSSI), Special Protection Area (SPA) and Ramsar, located approximately 6.8 km south of the site boundary. The Mersey Estuary is designated as it is an internationally important site for wildfowl and consists of large areas of intertidal sand and mudflats. The site also includes an area of reclaimed marshland, salt-marshes, brackish marshes and boulder clay cliffs with freshwater seepages.

The following Local Wildlife Sites (LWS) and two Local Geological Sites (LGS) were located within the search area:

- ✿ Woodland, Sandfield Park LWS, located adjacent to the site boundary.
- ✿ Lickers Lane Wood LWS, located approximately 100 m west of the site.
- ✿ Parrens Covert LWS, located approximately 270 m north-east of the site.
- ✿ Blundell Hills Golf Course LWS, located approximately 560 m south-east of the site.
- ✿ Big Water and Big Water Wood, Halsnead LWS, located approximately 580 m south-west of the site.
- ✿ The Old Wood, North LWS, located approximately 730 m south-west of the site. This LWS contains an Ancient Woodland.
- ✿ Stadt Moers Q4 LWS, located approximately 820 m west of the site.



- ✚ Stadt Moers Park LGS, located approximately 850 m north-west of the site.
- ✚ The Old Wood, South LWS, located approximately 945 m south-west of the site. This woodland contains an Ancient Woodland.
- ✚ Cronton Mineral Line, Windy Arbor, Whiston LGS, located approximately 1 km south-west of the site.
- ✚ Tushingham's Pond, Stadt Moers Country Park LWS, located approximately 1.1 km west of the site.
- ✚ Strettles Bog, Tarbock LWS, located approximately 1.1 km south-west.
- ✚ Stadt Moers Q2 and visitor centre LWS, located approximately 1.3 km north-west of the site.
- ✚ Stadt Moers Q3 LWS, located approximately 1.5 km west of the site.
- ✚ Coppice Lane Council Depot, Huyton LWS, located approximately 1.5 km south-west of the site.

3.3. HABITATS

The main habitats encountered during the survey are described in the following subsections. Please refer to Appendix I for the Phase 1 Habitat Plan.

3.3.1. BROADLEAVED WOODLAND

The majority of the northern area of the site comprised a mature broadleaved woodland dominated by beech (*Fagus sylvatica*) and pedunculate oak (*Quercus robur*). Rowan (*Sorbus aucuparia*), silver birch (*Betula pendula*), sweet chestnut (*Castanea sativa*), holly (*Ilex aquifolium*), hazel (*Corylus avellana*) and ash (*Fraxinus excelsior*) were also present in small numbers. The understorey was dominated by rhododendron (*Rhododendron ponticum*) and bramble (*Rubus fruticosus* agg).



PLATE 1 SHOWING BROADLEAVED WOODLAND



3.3.2. DENSE SCRUB

The dense scrub was situated on the edge of the broadleaved woodland and extended southwards away from the site boundary. The scrub was dominated by bramble which showed signs of encroachment into the woodland and forming parts of the understorey. Common nettle (*Urtica dioica*) and rosebay willowherb (*Chamaenerion angustifolium*) was present in large numbers with ragwort (*Jacobaea vulgaris*), spear thistle (*Cirsium vulgare*) and redshank (*Persicaria maculosa*) also present.

PLATE 2 SHOWING DENSE SCRUB



3.3.3. SEMI-IMPROVED GRASSLAND

The majority of the southern area of the site was made up of semi-improved grassland. The grassland was largely unmanaged with shorter mown areas used as footpaths by members of the public. Species present comprised redshank, ragwort, broad-leaved dock (*Rumex obtusifolius*), curled dock (*Rumex crispus*), rosebay willowherb, spear thistle (*Cirsium vulgare*), meadow foxtail (*Alopecurus pratensis*), perennial rye-grass (*Lolium perenne*), Yorkshire fog (*Holcus lanatus*), knapweed (*Centaurea nigra*), false oat-grass (*Arrhenatherum elatius*), michaelmas-daisy (*Aster schreberi*), greater plantain (*Plantago major*), corn spurrey (*Spergularia arvensis*), creeping buttercup (*Ranunculus repens*), meadow buttercup (*Ranunculus acris*), groundsel (*Senecio vulgaris*), common mouse-ear (*Cerastium fontanum*) and pineappleweed (*Matricaria discoidea*).

PLATE 3 SHOWING SEMI-IMPROVED GRASSLAND



3.3.4. TALL RUDERAL

Patches of tall ruderal were present across the site, largely associated with the boundary between the semi-improved grassland and arable and was also located close to areas of dense scrub. The tall ruderal were dominated by rosebay willowherb, with common nettle, ragwort, red campion (*Silene dioica*) and bush vetch (*Vicia sepium*) also present.



PLATE 4 SHOWING TALL RUDERAL



3.3.5. SCATTERED TREES

Scattered trees were present across the site ranging from young to semi-mature in age. The trees were largely present within the semi-improved grassland and around the site boundary. Species present comprised elder (*Sambucus nigra*), grey willow (*Salix cinerea*), pedunculate oak, hawthorn (*Crataegus monogyna*) and plum species (*Prunus sp.*).

PLATE 5 SHOWING SCATTERED TREES



3.3.6. ARABLE

A section of arable field was present along the southern and eastern site boundary. The field was planted with a rye cover crop.

PLATE 6 SHOWING ARABLE FIELD



3.3.7. HARDSTANDING

Lickers Lane, a hardstanding road with associated pavements formed the northern boundary of the site.

PLATE 7 SHOWING HARDSTANDING



3.4. PROTECTED AND NOTABLE SPECIES

3.4.1. SPECIES DISCOUNTED FROM ASSESSMENT

White-clawed crayfish (*Austropotamobius pallipes*) has been discounted from assessment as no suitable aquatic habitats were located on-site or within proximity to the site.

Hazel Dormouse (*Muscardinus avellanarius*) mainly occur in southern counties, especially in Devon, Somerset, Sussex, and Kent. There are few recorded localities north of the Midlands, though they are present in parts of the Lake District and in scattered Welsh localities (Matthews et al, 2018). The species are not generally known to be present within the Merseyside area and as such, the species are reasonably discounted from assessment.

3.4.2. AMPHIBIANS

Consultation with MBB identified a single record of great crested newt within the search area, located to the south of the site, south of the M62.

Consultation with MAGIC did not identify any great crested newt European Protected Species Licences within the 1 km search area. The closest licence was located approximately 3 km northwest of the site, effective from 2017 to 2019 for the damage and destruction of a great crested newt resting place.

eDNA surveys were undertaken by Cheshire Ecological Services Ltd 2017 and 2020 on all ponds within 250 m of the site and across the wider Halsnead Garden Village North scheme. The eDNA test results all returned negative indicating that great crested newts are absent within the site. Therefore, great crested newts have been scoped out of further assessment.

Records of smooth newt (*Lissotriton vulgaris*), common frog (*Rana temporaria*) and common toad (*Bufo bufo*) were identified within the search area. The habitats on-site were assessed as being suitable for these species with the dense scrub, broadleaved woodland and tall ruderal providing suitable foraging and hibernation habitat and the waterbodies close to the site providing suitable breeding habitat.

3.4.3. BATS

Numerous records of bats were located within the search area. Records included common pipistrelle (*Pipistrellus pipistrellus*), soprano pipistrelle (*Pipistrellus pygmaeus*), Daubenton's bat (*Myotis daubentonii*), whiskered/Brandt's (*Myotis mystacinus/brandti*), Nathusius's pipistrelle (*Pipistrellus nathusii*), noctule (*Nyctalus noctule*), brown long-eared bat (*Plecotus auratus*), and myotis species (*Myotis* sp.).

Consultation with MAGIC identified one Natural England Bat Mitigation Licence within the search area, located approximately 1.7 km south-west of the site, active between 2013 and 2014 for the destruction of a common pipistrelle, soprano pipistrelle, brown long-eared bat and natterer's bat (*Myotis nattereri*) non-breeding roost.

During the site survey, an inspection of trees was undertaken as per guidance set out in Collins (2016), to assess the features for suitability for roosting bats. An arboricultural assessment has been undertaken (report reference: 80-571-R1-3) on the trees within and adjacent to the site and the tree numbering from this report is in line with the current report.



Four trees were identified as having bat roosting potential, with Tree 38 and Tree 62 (T38 & T62) found to have High potential and Tree 25 and Tree 61 (T25 & T61) with Low potential. A detailed description of the trees and associated Preliminary Roost Assessment can be found in Appendix II.

The broadleaved woodland and dense scrub are likely to act as a foraging resource due to the attraction of invertebrate prey. It is anticipated that only a small number of trees located on the edge of the woodland will be removed to facilitate the development, with the majority of the woodland being retained. Therefore, it is not considered that the proposed works will have a significant impact on foraging habitat for bats within the site.

It is anticipated that there will be some light disturbance from the proposed residential to the south of the site and any lighting proposed within the site which may influence the local bat population (Downs et al, 2003) as foraging and commuting behaviour may be affected (BCT, 2018). Specifically, on slow-flying species (i.e., brown long-eared bats and myotis species) which are less tolerant to light. It should be acknowledged however that artificial lighting has benefits for more light tolerant species (i.e., pipistrelles) as many species of night flying insects are attracted to light, which bats will predate on.

3.4.4. BADGERS

Numerous records of badger were identified within the search area. A search for signs of badger was undertaken throughout the site and within 30 m of the site. No badger setts were recorded but evidence of badger in the form of snuffle holes was recorded on-site.

The wider landscape to the east and south of the site was assessed as having suitability for the species, due to the presence of broadleaved woodland and scrub. As such, badger may be present in the surrounding area.

3.4.5. OTTER AND WATER VOLE

Records of water vole (*Arvicola amphibious*) were identified within the search area, however, no records of otter (*Lutra lutra*) were returned. No aquatic habitats were identified on-site or within proximity to the site, therefore, otters and water voles can be reasonably discounted from further assessment.

3.4.6. OTHER TERRESTRIAL MAMMALS

Records of European hedgehog (*Erinaceus europaeus*) were located within the search area. The species is anticipated to be present within the site, with the dense scrub, broadleaved woodland and tall ruderal providing optimal habitat for foraging, commuting and shelter.

Records of brown hare (*Lepus europaeus*) were identified within the search area associated with farmland off Windy Arbor Road. The section of arable field located along the southern and eastern site boundaries was assessed as providing suitable habitat for brown hare due to providing the open habitat that the species favours.



3.4.7. NESTING BIRDS

Consultation with MBB identified numerous records of notable birds within the search area, including kingfisher (*Alcedo atthis*), little ringed plover (*Charadrius dubius*), corn bunting (*Emberiza calandra*), grey partridge (*Perdix perdix*), house martin (*Delichon urbicum*), house sparrow (*Passer domesticus*), lapwing (*Vanellus vanellus*), skylark (*Alauda arvensis*), song thrush (*Turdus philomelos*), starling (*Sturnus vulgaris*), swift (*Apus apus*), bullfinch (*Pyrrhula pyrrhula*), cuckoo (*Cuculus canorus*), dunnoek (*Prunella modularis*), grasshopper warbler (*Locustella naevia*), lesser redpoll (*Carduelis cabaret*), lesser spotted woodpecker (*Dendrocopos minor*), linnet (*Carduelis cannabina*), reed bunting (*Emberiza schoeniclus*), spotted flycatcher (*Muscicapa striata*), tree sparrow (*Passer montanus*), turtle dove (*Streptopelia turtur*), willow tit (*Poecila montanus*), yellow wagtail (*Montacilla flava*) and yellowhammer (*Emberiza citronella*).

During the site walkover, robin (*Erithacus rubecula*), blackbird (*Turdus merula*), great tit (*Parus major*), woodpigeon (*Columba palumbus*), buzzard (*Buteo buteo*), sparrowhawk (*Accipiter nisus*), grey wagtail (*Montacilla cinerea*), jay (*Garrulus glandarius*) and dunnoek were recorded.

The habitats within the site are common within the local area and are anticipated to support passerine bird species within the broadleaved woodland, dense scrub and scattered trees.

The site is assessed as having value for ground-nesting birds within the semi-improved grassland, due to the suitable sward length of the grassland providing optimal protection from predators. The arable field was also assessed as providing suitable habitat for ground nesting species including lapwing.

3.4.8. REPTILES

No recent records of reptiles were identified within the search area. A single historic record of grass snake (*Natrix natrix*) was returned from Stadt Moors Country Park located approximately 1 km west of the site. The site was found to provide limited value for reptiles, given the site lacked a mosaic of habitats with limited structure and habitat quality to support the species group. As such, the presence of reptiles within the site is reasonably discounted.

3.4.9. INVERTEBRATES

The data search identified numerous records of notable invertebrates within the search area including azure damselfly (*Coenagrion puella*), blue-tailed damselfly (*Ischnura elegans*), broad-bodied chaser (*Libellula depressa*), brown hawker (*Aeshna grandis*), migrant hawker (*Aeshna mixta*), southern hawker (*Aeshna cyanea*), wall (*Lasiommata megera*), alder leaf beetle (*Agelastica alni*) and buff ermine (*Spilarctia luteum*).

Due to the site comprising lacking floristic diversity, notable invertebrates are not anticipated to be present on-site.

3.5. INVASIVE PLANT SPECIES

Multiple records of invasive species were recorded within the search area including Canadian waterweed (*Elodea canadensis*), duck-potato (*Sagittatis latifolia*), floating pennywort (*Hydrocotyle ranunculoides*), Japanese knotweed, Japanese rose (*Rosa rugosa*), monbretia (*Crocosmia x crocosmiiflora*), rhododendron and yellow archangel (*Lamium galeobdolon*).



During the survey, large areas of rhododendron were present within the broadleaved woodland. Japanese knotweed was also located outside the site boundary, adjacent to the western boundary and approximately 35 m east of the site.



4. ECOLOGICAL CONSTRAINTS AND MITIGATION

4.1. DEVELOPMENT PROPOSALS

Detailed development proposals include the construction of an access road to a proposed housing development to the south of the site.

4.2. DESIGNATED SITES

The site is located within the Impact Risk Zone of Mersey Estuary SSSI, SPA and Ramsar, located approximately 6.8 km south of the site boundary. The Mersey Estuary is designated as it is an internationally important site for wildfowl and consists of large areas of intertidal sand and mudflats. The site also includes an area of reclaimed marshland, salt-marshes, brackish marshes and boulder clay cliffs with freshwater seepages.

Considering the reasons for its designation, it is deemed highly unlikely that the development will have an impact on the Mersey Estuary due to the small scale of the site, distance present between the site and the SSSI and the anthropogenic barriers, such as the built up areas of Liverpool and Widnes, that lay between them. Furthermore, consultation with MAGIC identified that the proposed development does not meet the requirements that would justify further consultation with Natural England for the development to proceed.

During consultation with Knowsley Council, recreational pressure from residential development has been identified as a Likely Significant Effect alone and in-combination within the Liverpool City Region. Recreational pressure is recognised in the formal statutory Conservation Advice Packages and Site Improvement Plans 5&6 as Medium-High risk to qualifying features of the European sites. Therefore, it is recommended that information is provided within sales packs, informing residents of the importance of the designated sites, the responsible user code and the location of Suitable Alternative Natural Green Spaces (SANGS). This measure is anticipated to mitigate for potential increased visitor pressure on the sites.

Woodland, Sandfield Park LWS was located adjacent to the site and a further 12 LWS and two LGS lie within the wider search area, including Lickers Lane Woodland located 100m west of the site. Two Ancient Woodlands lie in proximity to the site, with the nearest being located approximately 730 m south-west of the site.

Due to the presence of the LWSs and ancient woodland, there is the potential for the LWSs to be adversely affected by the proposed works. Therefore, it is recommended that the LWSs are retained and protected with a minimum 5 m buffer maintained throughout the works. In addition, all site operatives will be given a Toolbox Talk on the designated sites and its legal protection. Site operatives will be required to sign the Toolbox Talk in order to confirm they have understood the details provided and contact details of the ecologist will be provided.

The following Precautionary Working Methods should be adhered to for all works on site:

- ✳ A Toolbox Talk will be given to all contractors on-site by the ECoW and will be signed. During the talk, contractors will be made aware of the designated site and its ecological importance.
- ✳ No works will be undertaken within 5 m of the designated and no machinery will be tracked in this buffer area.



- ✳ All excavations will be backfilled at the end of each day to ensure wildlife that may use the designated site do not become trapped in the excavations.
- ✳ All site machinery and materials will be appropriately stored to avoid harm to wildlife.
- ✳ Plant is to be turned off when not in use.
- ✳ Measures to prevent pollutants from entering ground and surface water is standard practice. These measures should be underwritten by spill management plan to contain any accidental spillage within any part of the operational area.
- ✳ During night hours, no lighting is to be located towards the designated site to ensure no wildlife are deterred from using it.
- ✳ A 'Site Tidy' protocol is to be put in place on-site. All litter is to be appropriately controlled, whilst on-site materials are to be adequately stored over-night to ensure no harm to protected species.

4.3. HABITATS

The site comprised habitats that were found to be widespread within the local area; however, they did contain value for wildlife such as bats, birds, badgers and hedgehogs. The tall ruderal is of lowest value for wildlife, with the broadleaved woodland and scattered trees comprising the areas of highest value.

4.3.1. BROADLEAVED WOODLAND

Broadleaved woodland is listed as a Biodiversity Action Plan (BAP) habitat, therefore, it is recommended that, where possible, trees are retained and protected through development. It is anticipated that some trees may require removal to facilitate development, and where this is needed, new landscape planting will be introduced to mitigate the loss.

It is recommended that the landscape planting comprises native species and species known to be of value for the attraction of wildlife. This will include fruiting and flowering species. Species deemed suitable for this development could include berry-bearing native species such as:

- ✳ Hawthorn.
- ✳ Rowan.
- ✳ Holly.
- ✳ Whitebeam (*Sorbus aria*).
- ✳ Spindle (*Euonymus europaea*).
- ✳ Dog rose (*Rosa canina*).
- ✳ Guelder rose (*Viburnum opulus*).
- ✳ Elder.

All planting should be from a trusted pest-free source and, where possible, be of local provenance.



Any trees within the site or boundary, to be retained, are to be appropriately protected during the construction phase. Temporary protective demarcation fencing will be used to protect the trees. The fencing must extend outside the canopy of the retained trees and must remain in position until the end of development to ensure protection is provided throughout the construction phase.

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

4.4. PROTECTED AND NOTABLE SPECIES

4.4.1. AMPHIBIANS

The site may support small numbers of common amphibians within the broadleaved woodland, tall ruderal and dense scrub habitats on-site. It is recommended that during the clearance phase of works, any common amphibians encountered be moved by hand, away from construction activities.

4.4.2. BREEDING BIRDS

The site was assessed as having value for passerine species within the dense scrub and broadleaved woodland. The site was also assessed as being suitable for ground nesting birds within the semi-improved grassland and arable field.

If any vegetation requires removal, it should be removed outside of the breeding bird season (March to September inclusive). If this is not possible, a nesting bird check will be undertaken by a suitably qualified ecologist up to 24 hours before works commence. If a nest, or nest in construction, is located then a stand-off distance will be maintained until the young have fledged. The ecologist will advise on suitable stand off and provide a toolbox talk to all site contractors regarding their working limits and legal implications. A check prior to clearance works within the semi-improved grassland or arable field should also be undertaken for ground nesting birds should the works take place in the nesting bird season.

Post-development, landscape planting, as detailed in Section 4.3.1, should be introduced to mitigate the loss of any trees removed to facilitate the development.

4.4.3. BATS

The site was found to have value for foraging and roosting bats, with the broadleaved woodland and dense scrub providing suitable habitat for the species. It is understood that the majority of the broadleaved woodland will be retained.

Therefore, it is recommended that the proposed lighting plan considers the habitats of highest importance and maintains the habitats adjacent to the site as dark areas. It is recommended that any security lighting during construction is appropriately placed to avoid being directed at retained habitats.

Two trees identified as having Low bat roosting potential (T25 & T61) will require soft felling under the supervision of an ecologist if they are to be removed.

It is recommended that any planting within the site be of native fruiting/flowering species in order to enhance the site for foraging bats post-completion. Bat boxes could be installed throughout the site post-construction to enhance the site for the species.



4.4.4. BADGERS

No badger setts were located during the survey, though the habitats were identified as being suitable for the species. Badgers are highly mobile and can create new setts in a short period of time. It is recommended that an updated site walkover prior to the development is carried out to identify any new badger setts.

If a badger sett is located, a stand-off distance may be required as well as precautionary working methods. If the sett requires closure, a Natural England Badger Licence would be required. Please note that badger licences can only be obtained between July and November each year to avoid potential impact on pregnant females.

The following precautionary working methods will be adhered to during construction phase to ensure that no badgers within the local area are impacted by the proposed development:

-  All site operatives will be inducted to the presence of the species and their working limits and legal responsibilities.
-  All site operatives will be inducted as to identifying potential badger setts and should be vigilant if they suspect they locate a new set during works and inform the project ecologist immediately.
-  All site machinery and materials will be appropriately stored to avoid harm to the species, notably between July and November each year when extra care is needed to avoid potential impacts on pregnant females.

It is not anticipated that the development will have a negative impact on badgers within the local area.

4.4.5. HEDGEHOGS

During site clearance, the scrub and debris associated with the broadleaved woodland and dense scrub, should be demolished by hand (if required) to ensure no sheltering hedgehogs are impacted by the works. If hedgehogs are located, they should be carefully moved by hand to an area outside of construction workings.

4.4.6. BROWN HARE

Brown hare are a UK Biodiversity Action Plan (UKBAP) species. The habitats on site are common within the wider landscape, therefore, impacts on the local population are anticipated to be low. It is recommended that a pre-commencement check for young hare, which may have been left in the arable field by mothers after the breeding season (February to September), is undertaken

4.4.7. INVASIVE PLANT SPECIES

Rhododendron was identified within the site during the site walkover. Japanese knotweed was also identified adjacent to the western site boundary and approximately 35 m east of the site. As such, it is recommended, prior to the development, that these species should be eradicated following the most current guidance set out by the Environment Agency by a qualified contractor.



5. FURTHER SURVEYS

5.1. BATS

A total of four trees were found to have bat roosting potential. Two of the trees were assessed as having High potential for roosting bats (T38 & T62), therefore, three nocturnal surveys are required on the trees between May and September, with two surveys between May and August if they are to be removed. The surveys would be valid for two years to inform a planning application. If bats are identified roosting within the trees, three surveys would be required to characterise the roost and a European Protected Species Licence will be required with up-to-date surveys from the survey season prior to the application submission.

5.2. TABLE OF FURTHER SURVEYS

Please refer to Table 5.1 for a summary of further surveys required to inform a planning application.

TABLE 5.1 FURTHER SURVEYS RECOMMENDED

SURVEY TYPE	TIMESCALES
Bat Tree Surveys on T38 and T62 (if they require removal)	Three surveys between May and September (inclusive), with two between May and August.



6. BIODIVERSITY NET GAIN

The scheme should strive to achieve biodiversity net gain, as per “Biodiversity Net Gain; Good Practice Principles for Development” CIEEM, CIRIA, IEMA (2016). Full details of this and a calculation of net gain could be completed after detailed landscape plans have been prepared. An initial draft calculation could be completed to ensure loss of high distinctiveness habitats is minimised. The following habitat measures will increase the on-site biodiversity:

-  Retaining the Broadleaved Woodland.
-  Native Hedgerow Planting.
-  Native Scrub Planting.
-  Wildlife Ponds.
-  Broadleaved Trees.
-  Wildflower Meadows.

Habitat measures should be provided within areas of open space or designated wildlife zones. A 30-year management plan should be produced to ensure biodiversity is secured on-site.



7. REFERENCES

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END OF REPORT



APPENDIX I

PHASE 1 HABITAT PLAN

Key:

- Site Boundary
- A Arable
- Dense Scrub
- Broadleaved Woodland
- Semi-Improved Grassland
- Tall Ruderal
- Waterbodies
- ▲ Japanese Knotweed
- Rhododendron
- Trees With Bat Potential

Notes

Issue 1	Revision	Date 22/04/2022	Drawn RK	Authorised CB
Client: Vistry Partnerships			Job No. 80-571	Date 22/04/2022
			Drawing No. 004	Scale 1:2500
Job title: Lickers Lane, Halsnead			Drawing title: Phase 1 Habitat Plan	



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APPENDIX II

BAT TREE DESCRIPTIONS

TREE REF.	DESCRIPTION	ASSESSMENT	PHOTOGRAPH
T38	Semi mature sycamore with multiple rot holes in the main trunk and limbs from 2.5 m upwards. Peeling bark was also present throughout the tree. Sections of the main trunk appeared to be hollow. The hollow trunk has the potential to support maternity roosts for bat species favouring roosts in trees.	High	
T25	Mature oak tree with a rotten north east facing limb, approximately 6 m high. The features has the potential to support crevice dwelling bat species on an occasional basis.	Low	



T62	Mature ash with two south facing woodpecker holes approximately 8 m high. The features have the potential to support maternity roosts if the holes extend inwards into a cavity.	High	
T61	Ivy covered sycamore with potential to conceal a potential summer roost feature for bats.	Low	

