

Preliminary Ecological Appraisal

Former Ambulance and Fire Station, Huyton Lane, Huyton, Liverpool, Merseyside

A Report to: McCarthy & Stone
Report Number: RT-MME-158942-01 Rev B
Date: October 2022
Revised: May 2023



Quality Assurance

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Declaration of Compliance

This study has been undertaken in accordance with British Standard 42020:2013 “Biodiversity, Code of Practice for Planning and Development”. The information which we have prepared is true, and has been prepared and provided in accordance with the Chartered Institute of Ecology and Environmental Management’s Code of Professional Conduct. We confirm that the opinions expressed are our true and professional bona fide opinions.

Disclaimer

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Validity of Data

The findings of this study are valid for a period of 24 months from the date of survey. If works have not commenced by this date, an updated site visit should be carried out by a suitably qualified ecologist to assess any changes in the habitats present on site, and to inform a review of the conclusions and recommendations made.

Non-Technical Summary

Project Background

In September 2022, McCarthy & Stone commissioned Middlemarch to undertake a Preliminary Ecological Appraisal of the site of a proposed development at the Former Ambulance and Fire Station, Huyton Lane, Huyton, Liverpool, Merseyside. This assessment is required to inform a planning application associated with the development of a four-storey apartment block on site with associated hard and soft landscaping.

Scope of Appraisal

To fulfil the above brief, an ecological desk study and a walkover survey (in accordance with Phase 1 Habitat Survey methodology) were undertaken. The walkover survey was carried out on 15th September 2022 by Charlotte Richardson MSc, ACIEEM (Senior Ecological Consultant). An initial review of the ecological data was subsequently carried out to determine the features of ecological importance on site as well as a preliminary assessment of the potential impacts the proposed development could have on these features.

Material Considerations

Protected/notable species: Common amphibians, bats, birds and terrestrial mammals.

Invasive species: Japanese knotweed.

Recommendations

In order to ensure compliance with wildlife legislation and relevant planning policy and to secure a net gain for biodiversity overall, the following recommendations are made:

Further Ecological Surveys	The recommendations made within the Preliminary Bat Roost Assessment report (RT-MME-158942-02) should be followed.
Scheme Design	The proposed development should be designed in accordance with ecological mitigation hierarchy as set out in the National Planning Policy Framework (NPPF), and the National Planning Practice Guidance (NPPG). In accordance with the principles of the Environment Act 2021 the development should also secure an overall net gain for biodiversity.
Precautionary Working Measures	Precautionary working measures have been recommended with regards to terrestrial mammal entrapment, the timing of works for nesting birds and precautionary clearance measures for common amphibians.
Management Plans and Strategies	A Landscape and Ecology Management Plan should be produced setting out the detailed establishment and management of all on site compensation and enhancement measures. In addition, it is recommended that a contractor registered with the Property Care Association be appointed to undertake a treatment programme for the eradication of the Japanese knotweed on site. Details of three organisations which provide this service are provided in Chapter 7.

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1. Introduction

1.1. Project Background

In September 2022, McCarthy & Stone commissioned Middlemarch to undertake a Preliminary Ecological Appraisal of the site of a proposed development at Former Ambulance and Fire Station, Huyton Lane, Huyton, Liverpool, Merseyside. This assessment is required to inform a planning application associated with the development of a four-storey apartment block on site with associated hard and soft landscaping.

The purpose of the Preliminary Ecological Appraisal is to identify the features of ecological importance on site and provide a preliminary assessment of the potential impacts the proposed development could have on these features. In addition, Middlemarch has been commissioned to undertake a Preliminary Bat Roost Assessment at this site, details of which can be found in Report: RT-MME-158942-02.

1.2 Site Description and Context

Table 1.1 provides a brief summary of the site and its surroundings.

Attribute	Description
Location	The site was located within the town of Huyton, situated within the Metropolitan Borough of Knowsley, Merseyside.
National Grid Reference	SJ 44401 91122
Site Area (ha)	Approx. 0.4 ha
Topography	The site topography was largely flat, with a slight slope to south-east where poor, semi-improved grassland was present.
Land Cover (on site)	The land cover on site comprised predominantly of hardstanding with buildings associated with an ambulance station to the north-east and scrub/trees to the south-west. Scattered buddleia was noted throughout the site.
Land Cover (site surrounds)	The wider landscape is dominated by commercial units to the south, and residential properties with associated gardens to the remaining sides. Pockets of greenspace are dispersed throughout the wider landscape, including areas of grassland, wetland (Huyton Lane Wetland) and woodland/scattered trees. The River Alt is located approximately 230 m north-east.

Table 1.1: Summary of Site and Surroundings

1.3 Documentation Provided

The conclusions and recommendations made in this report are based on information provided by the client regarding the scope of the project. Documentation made available by the client is listed in Table 1.2.

Document / Drawing Number	Author
Huyton Lane, Huyton – Proposed Site Plan (Drawing No: 220253_1002_Rev C).	Brightspace Architects
Proposed Residential Development Huyton Lane, Huyton – Landscape Masterplan (Drawing No: R/2671/1).	FDA Landscape

Table 1.2: Documentation Provided by Client

2. Methods

2.1 Desk study

An ecological desk study was undertaken to determine the presence of any designated nature conservation sites and protected species in proximity to the site. This involved contacting appropriate statutory and non-statutory organisations which hold ecological data relating to the survey area. Middlemarch then assimilated and reviewed the desk study data provided by these organisations.

The consultees for the desk study were:

- Natural England - MAGIC website for statutory conservation sites; and,
- BioBank Merseyside

The desk study included a search for:

- Landscape Scale Conservation Initiatives;
- European statutory nature conservation sites in the UK (now referred to as the 'National Site Network') within a 5 km radius of the site (extended to 10 km for any statutory site designated for bats);
- UK statutory sites within a 2 km radius; and,
- Non-statutory sites and protected/notable habitats and species records within a 1 km radius.

The data collected from the consultees are discussed in Chapter 3. In compliance with the terms and conditions relating to its commercial use, the full desk study data are not provided within this report.

The desk study also included a review of relevant local planning policy with regard to biodiversity and nature conservation (see Appendix 1).

2.2 Phase 1 Habitat Survey

A field survey was conducted following the Phase 1 Habitat Survey methodology of the Joint Nature Conservation Committee¹ and the Institute of Environmental Assessment². Phase 1 Habitat Survey is a standard technique for classifying and mapping British habitats. The aim is to provide a record of habitats that are present on site. During the survey, a Habitat Condition Assessment was carried out to determine the ecological status of each habitat recorded. The condition assessment was assessed using published criteria in Panks *et al.* (2022)³, the details of which are presented in Section 8.

During the survey, the presence or potential presence of protected species was noted where observed. This included a review of suitable habitat opportunities or field signs of notable species

¹ Joint Nature Conservation Committee (2010). *Handbook for Phase 1 Habitat Survey: A technique for environmental audit (reprint)*. Joint Nature Conservation Committee, Peterborough.

² Institute of Environmental Assessment. (1995). *Guidelines for Baseline Ecological Assessment*, Institute of Environmental Assessment. E&FN Spon, An Imprint of Chapman and Hall. London.

³ Panks, S., White, N., Newsome, A., Nash, M., Potter, J., Heyton, M., Mayhew, E., Alvarez, M., Russell, T., Cashon, C., Goddard, F., Scott, S.J., Heaver, M., Scott, S.H., Treweek, J., Butcher, B. and Stone, D. (2022) *The Biodiversity Metric 3.1 – Auditing and accounting for biodiversity: Technical Supplement*. Natural England.

groups (amphibians, bats, birds, terrestrial and aquatic invertebrates, terrestrial and aquatic mammals, plants and reptiles).

The survey was carried out on 15th September 2022 by Charlotte Richardson MSc, ACIEEM (Senior Ecological Consultant). Table 2.1 details the weather conditions at the time of the survey

Parameter	Condition
Temperature (°C)	10°C
Cloud (%)	100%
Wind (Beaufort)	F2
Precipitation	Nil

Table 2.1: Weather Conditions During Field Survey

Field Survey Constraints and Limitations

It was not possible to gain full access to the former Fire Station side of the survey area, as no key to the gate was available. However, as an assessment of the habitats present was able to be undertaken from the fence line, this was not considered to be a significant constraint to a robust site assessment.

2.3 Preliminary Evaluation

The Preliminary Evaluation is an initial review of the ecological data to determine which features are likely to be a material consideration for the proposed development at the site. A material consideration is an ecological feature that by virtue of its legal status, its inclusion in any national policy or plan, rarity or contribution to local ecological networks, is worthy of further consideration in the planning system. Typical material considerations include statutory or non-statutory nature conservation sites, species protected by law, Habitat and Species of Principal Importance in England as defined by the Natural Environment and Rural Communities (NERC) Act 2006 or other ecological corridors and biodiversity opportunities areas outlined in local policy.

3. Desk Study

3.1 Landscape Initiatives

The River Alt and M57 Corridor was identified 350 m north-west of the site and is designated as a Nature Improvement Area.

3.2 Nature Conservation Sites

Statutory and non-statutory nature conservation sites located in proximity to the survey area are summarised in Table 3.1.

Site Name	Designation	Proximity to the Survey Area	Description
Non-statutory Sites			
Huyton Lane Wetland	SBI/LWS	210 m north-east	Comprising predominantly neutral marsh with a smaller area of acidic marsh. With unimproved neutral grassland, marshy grassland and unimproved acid grassland found on site. These habitats allow for seven locally rare plant species to survive including velvet bent <i>Agrostis canina</i> .
Key: LWS: Local Wildlife Site SBI: Site of Biological Interest			

Table 3.1: Summary of Nature Conservation Sites

The survey area is located within a SSSI Impact Risk Zone likely associated with Mersey Estuary SSSI, located 8.4 km south-west.

3.3 Habitats

Table 3.2 summarises known priority or notable habitats within a 1 km radius of the site.

Habitat Type	No. of Records	Location of Nearest Record
Good quality semi-improved grassland (non-priority)	1	210 m north-east
Standing open water	2	220 m north-east
Open mosaic	2	590 m south-west
Deciduous woodland	3	870 m north-east

Table 3.2: Summary of Priority/Notable Habitats

3.4 Protected / Notable Species

Table 3.3 and the following text provide a summary of protected and notable species records within a 1 km radius of the study area. It should be noted that the absence of records should not be taken as confirmation that a species is absent from the search area.

Species	No. of Records	Most Recent Record	Proximity of Nearest Record to Survey Area	Species of Principal Importance?	Legislation / Conservation Status
Amphibians					
Common frog <i>Rana temporaria</i>	13	2018	260 m east	-	WCA 5 S9(5)
Great crested newt <i>Triturus cristatus</i>	1	2011	*	✓	ECH 2, ECH 4, WCA 5
Birds					
Barn owl <i>Tyto alba</i>	2	1998	**	-	WCA1i
Mammals - Bats					
Common pipistrelle <i>Pipistrellus pipistrellus</i>	18	2021	290 m south	-	ECH 4, WCA 5, WCA 6
Unidentified bat <i>Chiroptera</i> sp.	3	2014	290 m south	#	#
Noctule <i>Nyctalus noctula</i>	3	2019	310 m south-west	✓	ECH 4, WCA 5, WCA 6
Soprano pipistrelle <i>Pipistrellus pygmaeus</i>	18	2016	730 m north-west	✓	ECH 4, WCA 5, WCA 6
Brown long-eared bat <i>Plecotus auritus</i>	2	2016	*	✓	ECH 4, WCA 5, WCA 6
Daubenton's bat <i>Myotis daubentonii</i>	2	2014	**	-	ECH 4, WCA 5, WCA 6
Whiskered bat <i>Myotis mystacinus</i>	2	2014	**	-	ECH 4, WCA 5, WCA 6
Pipistrelle <i>Pipistrellus</i> sp.	4	2014	**	#	ECH 4, WCA 5, WCA 6
Nathusius's Pipistrelle <i>Pipistrellus nathusii</i>	2	2014	**	-	ECH 4, WCA 5, WCA 6
Unidentified myotis <i>Myotis</i> sp.	2	2014	**	-	ECH 4, WCA 5, WCA 6
Unidentified nyctalus <i>Nyctalus</i> sp.	1	2014	**	#	#

Table 3.3: Summary of Protected/Notable Species Records (continues)

Species	No. of Records	Most Recent Record	Proximity of Nearest Record to Survey Area	Species of Principal Importance?	Legislation / Conservation Status
Mammals - Other					
Hedgehog <i>Erinaceus europaeus</i>	32	2021	320 m north-east	✓	WCA 6
Water vole <i>Arvicola amphibius</i>	3	2007	660 m north-west	✓	WCA 5
Key: #: Dependent on species. *: Potentially within a 1 km radius (grid reference provided was four figures only) **: Potentially within a 1 km radius (grid reference provided was two figures only) ECH 2: Annex II of the European Communities Council Directive on the Conservation of Natural Habitats and Wild Fauna and Flora. Animal and plant species of community interest whose conservation requires the designation of Special Areas of Conservation. ECH 4: Annex IV of the European Communities Council Directive on the Conservation of Natural Habitats and Wild Fauna and Flora. Animal and plant species of community interest in need of strict protection. WCA 1i: Schedule 1 Part 1 of Wildlife and Countryside Act 1981 (as amended). Birds protected by special penalties at all times. WCA 5: Schedule 5 of Wildlife and Countryside Act 1981 (as amended). Protected animals (other than birds). WCA 5 S9(5): Schedule 5 Section 9(5) of Wildlife and Countryside Act 1981 (as amended). Protected animals (other than birds). Protection limited to selling, offering for sale, processing or transporting for purpose of sale, or advertising for sale, any live or dead animal, or any part of, or anything derived from, such animal. WCA 6: Schedule 6 of Wildlife and Countryside Act 1981 (as amended). Animals which may not be killed or taken by certain methods. Species of Principal Importance: Species of Principal Importance for Nature Conservation in England.					

Table 3.3: Summary of Protected/Notable Species Records (continued)

Birds

The desk study provided nineteen records of bird listed as Species of Principal Importance comprising bullfinch *Pyrrhula pyrrhula*, cornbunting *Emberiza calandra*, cuckoo *Cuculus canorus*, dunnock *Prunella modularis*, grasshopper warbler *Locustella naevia*, grey partridge *Perdix perdix*, house sparrow *Passer domesticus*, lapwing *Vanellus vanellus*, lesser redpoll *Acanthis cabaret*, lesser spotted woodpecker *Dryobates minor*, linnet *Linaria cannabina*, reed bunting *Emberiza schoeniclus*, skylark *Alauda arvensis*, song thrush *Turdus philomelos*, spotted flycatcher *Muscicapa striata*, starling *Sturnus vulgaris*, turtle dove *Streptopelia turtur*, willow tit *Poecile montanus*, and yellow wagtail *Motacilla flava*.

The desk study provided two records of bird listed under RSPB Red comprising house martin *Delichon urbicum*, and swift *Apus apus*.

The desk study provided one records of bird listed under RSPB Amber comprising barnacle goose *Branta leucopsis*.

Invertebrates

The desk study provided seven records of dragonfly species listed under the Local Biodiversity Action Plan comprising azure damselfly *Coenagrion puella*, blue-tailed damselfly *Ischnura elegans*, common blue damselfly *Enallagma cyathigerum*, common darter dragonfly *Sympetrum striolatum*, emperor dragonfly *Anax imperator*, large red damselfly *Pyrrosoma nymphula*, and southern hawker dragonfly *Aeshna cyanea*.

Plants

The desk study provided two records of plant species listed as Species of Principal Importance comprising coral-necklace *Illecebrum verticillatum* and cornflower *Centaurea cyanus*.

3.5 Invasive Species

Table 3.4 provides a summary of invasive species records within a 1 km radius of the study area. It should be noted that the absence of records should not be taken as confirmation that a species is absent from the search area.

Species	No. of Records	Most Recent Record	Proximity of Nearest Record to Survey Area	Legislation / Conservation Status
Japanese knotweed <i>Fallopia japonica</i>	14	2014	50 m west	WCA 9
Rhododendron <i>Rhododendron ponticum</i>	4	2019	410 m south-west	WCA 9
Himalayan balsam <i>Impatiens glandulifera</i>	2	2007	820 m south-east	WCA 9
Key: WCA 9: Schedule 9 of Wildlife and Countryside Act 1981 (as amended). Invasive, non-native, plants and animals.				

Table 3.4: Summary of Invasive Species Records

4. Survey Results

4.1 Introduction

A Phase 1 Habitat Survey Drawing (Drawing C158942-01-01), illustrating the location and extent of all habitat types recorded on site, is provided in Chapter 8. Detailed habitat descriptions and a summary of the condition assessment for each habitat type using Panks *et al.* (2022)³ is also included in Chapter 8.

4.2 Habitats

Table 4.1 details the types, extent and ecological condition of the habitats which were recorded on site during the field survey visit. Photographs taken during the field survey are presented in Chapter 9.

Habitat	Area (ha) / Length (km) / Number (no.)	Condition	Photo Reference
Amenity Grassland	0.02 ha	Poor	Plate 9.1
Hardstanding	0.29 ha	N/A	Plate 9.2
Fence	0.30 km	N/A	-
Scattered Trees	20 no.	Poor to Moderate	Plate 9.3
Scattered Scrub	42 no.	N/A	Plate 9.4
Poor, Semi-improved Grassland	0.03 ha	Poor	Plate 9.3
Buildings	0.03 ha	N/A	Plates 9.5 & 9.6
Introduced Shrub	31 no.	N/A	Plate 9.2
Bare Ground	0.01 ha	Included within poor semi-improved grassland condition assessment	Plate 9.3
Wall	0.03 km	N/A	-

Table 4.1: Summary of Habitats Recorded on Site

4.3 Protected / Notable Species

Table 4.2 summarises the suitability of the site for protected/notable species and any species/evidence of species that were recorded during the survey. The time of year at which the survey is undertaken will affect species or field signs directly recorded during the survey.

Species/Group	Description
Herpetofauna	There was no suitable aquatic habitat on site for amphibians and the terrestrial habitat was generally considered to be of relatively low value for herpetofauna, being dominated by hardstanding and buildings. The poor semi-improved grassland and amenity grassland areas, do offer some foraging opportunities for reptiles and amphibians.

Table 4.2: Summary of Species/Species Evidence Recorded on Site (Continues)

Species/Group	Description
Bats	Two buildings (B1 & B2) were recorded on site, which were considered to have value for roosting bats. Full details of the sites suitability for roosting bats can be found in the Preliminary Bat Roost Assessment report (RT-MME-158942-02). In addition, the scrub and scattered trees at the site boundaries serve as suitable potential foraging/commuting features for bats.
Terrestrial Mammals	Badger - The habitats on site provide limited suitable sett building opportunities for badger, but the grassland areas may provide some suitable foraging habitat. No field signs of badger were recorded on site during the field survey. Hedgehog – The habitats on site provided limited shelter opportunities for terrestrial mammals such as hedgehog. However, the grassland areas may provide some suitable foraging habitat for hedgehog and other small terrestrial mammals.
Birds	The scattered trees/scrub provide potential nesting opportunities for birds, as well as foraging opportunities. Robin <i>Erithacus rubecula</i> and woodpigeon <i>Columba palumbus</i> were recorded on site during the field survey.
Terrestrial Invertebrates	The majority of the site was dominated by buildings and hardstanding which are considered to be of limited value to terrestrial invertebrates. Scattered trees, scrub and introduced shrub were present on site alongside small areas of amenity and poor semi-improved grassland, which may be of some value to terrestrial invertebrates.

Table 4.2: Summary of Species/Species Evidence Recorded on Site (Continued)

4.4 Invasive Species

A small number (3 - 4) of newly established Japanese knotweed plants were identified along the south-eastern boundary of the Ambulance Station compound, within a narrow loose stone pavement, adjacent to the parking area. Although a 2 m high concrete panel fence separated the site from the adjacent supermarket, dead Japanese knotweed stems could be seen protruding above the fence. These dead stems were immediately adjacent to a young whitebeam *Sorbus aria* tree. Some fresh Japanese knotweed growth was observed within the supermarket site around the dead stems and scattered throughout an area of ornamental shrub. Although only a relatively small number of stems were identified (approximately 10), the Japanese knotweed on the supermarket side was anticipated to extend for a length of approximately 4 m. The location of the Japanese knotweed identified on and adjacent to the study site can be seen on Drawing C158942-01-02 in Chapter 8.

A small number of introduced/ornamental plant species were also recorded on site (such as buddleia and cotoneaster), however, no further species listed on Schedule 9 of the Wildlife and Countryside Act 1981 (as amended) were among these shrubs.

5. Preliminary Evaluation

5.1 Landscape Initiatives

The River Alt and M57 Corridor Nature Improvement Areas were identified 350 m north-west of the site. This area was located beyond the B5199 and as such, had limited direct connectivity to the study site. Therefore, this Nature Improvement Area is not a material consideration with regards to the proposed works.

5.2 Nature Conservation Sites

European Statutory Sites

No European Statutory sites were identified within a 5 km radius of the application site, so they are not a material consideration.

UK Statutory Sites

No UK Statutory sites were noted within a 2 km radius of the application site. However, the site does fall within a SSSI Impact Risk Zone for Mersey Estuary SSSI, which was located 8.4 km south-west.

SSSI's are statutory nature conservation sites of national importance and as such the Mersey Estuary is a material consideration for the proposed development.

Non-Statutory Sites

One non-statutory site was identified within a 1 km radius of the study site. This was Huyton Lane Wetland (Site of Biological Importance and Local Wildlife Site), which was located approximately 210 m north-east. This intervening distance between this site and the survey area is dominated by residential properties and roads, which provide limited connectivity. As such, Huyton Lane Wetland (SBI/LWS) is not a material consideration with respect to the proposed works.

5.3 Habitats

An evaluation of the importance of each habitat recorded on site is summarised in Table 5.1.

Habitat Type	Material Consideration?	Rationale
Amenity grassland	No	Amenity grassland is a common, widespread habitat with low ecological value, and it can easily be replaced.
Hardstanding / Fence / Buildings / Bare Ground / Wall	No	These habitats are considered to have negligible inherent ecological value.

Table 5.1: Preliminary Evaluation of Habitats (Continues)

Habitat Type	Material Consideration?	Rationale
Scattered Trees	Yes	Semi-mature trees are difficult to replace in the short- to medium-term and as such, are considered to be of intrinsic ecological value.
Scattered Scrub	No	The scattered scrub on site was species poor and largely immature and as such, provided little structural diversity.
Poor, Semi-improved Grassland	No	Poor, semi-improved grassland is a common, widespread habitat with low ecological value, and the example on site possessed limited species and/or structural diversity.
Introduced Shrub	No	Introduced shrub is a non-native habitat type and as such, is considered to be of limited inherent ecological value.

Table 5.1: Preliminary Evaluation of Habitats (Continued)

All habitats have the capacity to be important in the context of the site as they contribute to the overall biodiversity value of the site when quantified using a biodiversity metric tool. The Biodiversity Metric tool uses habitat attribute data to assign a comparable value of biodiversity using habitat area, quality (distinctiveness) and condition. Therefore, habitats of high quality and those of low quality with a high spatial coverage, can still be of intrinsic importance for achieving biodiversity net gain targets irrespective of whether they are a material consideration or not.

5.4 Protected / Notable Species

An evaluation of the potential presence of protected / notable species on site is summarised in Table 5.2.

Species/Species Group	Material Consideration?	Rationale
Great Crested Newt	No	A single great crested newt record was located roughly 1.6 km south-east, from Stadt Moers Park. Given the large intervening distance and the built-up nature of the habitats present in between this site and the survey area, it is considered unlikely that any great crested newts would actively commute to the study site. Reference to Ordnance Survey data indicates the potential presence of one pond within a 500 m radius of the study site. This was located approximately 270 m north-east, beyond the River Alt, which was deemed to be a significant barrier to great crested newt dispersal. In addition, the intervening land was dominated by buildings and hardstanding habitat, which both provide limited opportunities for terrestrial amphibians. The habitats on site are generally of limited value to great crested newts, being dominated by hardstanding and buildings. Although small amounts of suitable terrestrial habitat were present (comprising poor semi-improved grassland and amenity grassland) it is considered unlikely that great crested newts would utilize these habitats due to a lack of connectivity to suitable breeding habitat. As such, great crested newts are not a material consideration.

Table 5.2: Preliminary Evaluation of Species (Continues)

Species/Species Group	Material Consideration?	Rationale
Common Amphibians	Yes*	The site is largely dominated by hardstanding and buildings, however small pockets of suitable terrestrial habitat for amphibians is present, including poor semi-improved and amenity grassland. Desk study records of common frog were identified within a 1 km radius of the site, the closest of which were located approximately 260 m east. Given the relatively low value of the habitats across the majority of the study site, in combination with the lack of connectivity to other suitable habitat within the surrounding landscape, it is considered unlikely that the site would support significant numbers of amphibians. However, as residential gardens are present nearby, the potential exists for opportunistic individuals to be present on site. As such, common amphibians are a material consideration with respect to the proposed works. All amphibians afford limited protection under the Wildlife and Countryside Act 1981 (as amended). In addition, common toad is classified as a Species of Principal Importance.
Bats	Yes*	The buildings on site (i.e. B1 & B2) both support some bat roost features, whilst the tree/scrub line in the south-west functions as a potentially suitable foraging and/or commuting route for bats. There are records of at least seven bat species within a 1 km radius of the study site, the closest of which was of a common pipistrelle, recorded 290 m south. Several bat species are Species of Principal Importance, and all afford full protection under the Wildlife and Countryside Act 1981 (as amended) and the Conservation of Habitats and Species Regulations 2017 (as amended).
Aquatic mammals	No	Three records of water vole were identified within a 1 km radius of the survey area the closest of which was situated approximately 660 m north-west. However, as no aquatic habitat was recorded on or adjacent to the study site, it is considered highly unlikely that aquatic mammals, such as water vole, would be present on site. Therefore, they are not a material consideration with respect to the proposed works.
Badger	No	No desk study records of badger were identified within a 1 km radius of the study site and no field signs indicating badger presence were noted during the field survey. The site was surrounded by roads to the north-west and south-west, an ASDA superstore to the south-east and residential properties to the north-east, with limited connectivity to other suitable sett building habitat. Given the built-up nature of the immediately surrounding landscape, the lack of connectivity to other suitable badger habitat and the relatively low value of the habitats on site, it is considered unlikely that badger would utilize the site. As such, badgers are not a material consideration.

Table 5.2: Preliminary Evaluation of Species (Continues)

Species/Species Group	Material Consideration?	Rationale
Terrestrial Mammals	Yes*	The desk study identified 32 records of hedgehog within a 1 km radius of the study site, the closest of which was located approximately 320 m north-east. The majority of the habitats on site are of limited value to this species, but the grassland areas do provide some suitable foraging habitat. Given the presence of residential gardens to the north-east, it is considered possible that hedgehog may pass through the site on occasion. As such, terrestrial mammals are a material consideration with respect to the proposed works. Hedgehogs are a Species of Principal Importance and afford limited protection under the Wildlife and Countryside Act 1981 (as amended).
Terrestrial Invertebrates	No	Desk study records of seven dragonfly species listed under the Local Biodiversity Action Plan were identified within a 1 km radius of the site. The site holds no aquatic habitat, so it is unlikely to be of significance to notable dragonfly species. In addition, given the relatively limited extent of semi-natural habitat on site, it is considered unlikely that the site would support significant invertebrate assemblages.
Birds	Yes	The desk study returned records of several bird species within a 1 km radius of the site including barn owl (a Schedule 1 species on the Wildlife and Countryside Act) and nineteen Species of Principal Importance. The buildings, scrub and scattered trees on site all offer potential nesting opportunities for birds. All nesting birds afford protection under the Wildlife and Countryside Act 1981 (as amended) whilst in nest.
Key: * Features assessed as material consideration based on available evidence such as existing records or habitat suitability. Conclusions should be evaluated if and when further information about the status of the species becomes available.		

Table 5.2: Preliminary Evaluation of Species (Continued)

5.5 Invasive Species

The desk study revealed records of three invasive plant species within a 1 km radius of the survey area. The closest of these to the site was of a Japanese knotweed record which was identified approximately 50 m west.

During the field survey, a small number (3 - 4) of newly established Japanese knotweed plants were identified along the south-eastern boundary of the Ambulance Station compound, within a narrow loose stone pavement, adjacent to the parking area. Japanese knotweed was also found to be present offsite within the adjacent supermarket car park.

As the Japanese knotweed on site is located within an area proposed for landscaping, the proposed works will likely result in disturbance to this invasive species. Disturbance of Japanese knotweed rhizomes could inadvertently cause further spread of this species without appropriate management/removal. As such, a recommendation regarding the need for a specialist Japanese knotweed contractor to be appointed, has been made in Chapter 7.

6. Preliminary Impact Assessment

6.1 Summary of Proposals

This assessment is required to inform a planning application associated with the development of a four-storey apartment block on site with associated hard and soft landscaping. It is understood that the existing trees to the south-west will be retained and incorporated into the works. The soft landscaping will comprise new hedgerows, turf areas and tree planting.

Construction Phase

The following activities are likely to be associated with the proposed development during the construction phase.

- Site clearance and ground preparation;
- Use and movement of heavy goods vehicles and machinery;
- Storage of plant, materials and waste; and,
- Presence of and movement of site personnel.

Operational Phase

The following activities are likely to be associated with the operational phase of the proposed development.

- Permanent siting of buildings, structures and roads;
- Frequent movement of heavy goods vehicle, cars and other forms of transportation;
- Use of lighting associated with roads and buildings;
- Presence of and movement of site personnel; and,
- Maintenance of landscaping.

6.2 Nature Conservation Sites

UK Statutory Sites

No UK Statutory sites were noted within a 2 km radius of the application site. However, the site does fall within a SSSI Impact Risk Zone for Mersey Estuary SSSI, which was located 8.4 km south-west.

As the proposals comprise a residential development, the works do not fall within any of the Impact Risk Categories for this SSSI. Therefore, no adverse impacts are anticipated on this SSSI as a result of the proposed works, especially taking into account the large intervening distance.

Non-Statutory Sites

Huyton Lane Wetland (Site of Biological Importance and Local Wildlife Site) was located approximately 210 m north-east. However, due to a lack of connectivity between this area and the study site, no adverse impacts on this site are anticipated as a result of the proposed works.

6.3 Habitats

Table 6.1 below summarises the potential impacts on habitat features that are likely to occur as a result of the construction and operational activities of the proposed development described in

Section 6.1 above. Impacts are considered before mitigation. Only habitats considered to be a material consideration in the planning system are included in the impact assessment.

Habitat Type	Summary of Potential Impacts
Scattered Trees	● Habitat loss and fragmentation; ● Risk of increased lighting or inappropriate post-construction landscape management of retained trees; and, ● Risk of root damage/compaction to retained trees during the construction phase of the works.

Table 6.1: Summary of Potential Impacts on Notable Habitats

6.4 Protected / Notable Species

Table 6.2 below summarises the potential impacts on species/species groups that are likely to occur as a result of the construction and operational activities of the proposed development described in Section 6.1 above. Only species/species groups considered to be a material consideration in the planning system are included in the impact assessment.

Species / Species Group	Summary of Potential Impacts
Common Amphibians	● Low risk of killing/injury of individual common amphibians; and, ● Loss of some suitable terrestrial habitat (such as amenity and poor semi-improved grassland) for common amphibians
Bats	● Killing or injury of bat and/or loss of a bat roost during construction phase; ● Physical loss of fragmentation of bat foraging/dispersal habitat; and, ● Habitat fragmentation, degradation or displacement of foraging routes due to light spill
Terrestrial Mammals	● Killing or injury of terrestrial mammals; ● Habitat loss; and, ● Risk of entrapment in excavations/pipework.
Birds	● Killing or injury of nesting birds or damage/destruction of a bird nest during the construction phase or as a result of inappropriate postconstruction landscape management; and, ● Loss of suitable nesting and foraging habitat.

Table 6.2: Summary of Potential Impacts on Protected/Notable Species

6.5 Invasive Plant Species

The proposed development could result in the disturbance or spread of Japanese knotweed during the construction phases or as a result of inappropriate post-construction landscape management.

7. Recommendations

All recommendations provided in this section are based on Middlemarch's current understanding of the site proposals, correct at the time the report was compiled. Should the proposals alter, the conclusions and recommendations made in the report should be reviewed to ensure that they remain appropriate.

R1 Ecological Surveys: The Preliminary Ecological Appraisal has highlighted the presence or potential presence of a range of protected and notable species. It is recommended that the following species surveys are undertaken:

- **Bats** – The recommendations made within the Preliminary Bat Roost Assessment report (RT-MME-158942-02) should be followed.

All further ecological surveys should be undertaken in accordance with best practice methodologies, during the appropriate survey windows. Please refer to Appendix 3.

R2 Scheme Design: The proposed development should be designed in accordance with the ecological mitigation hierarchy as set out in the National Planning Policy Framework (NPPF), and the National Planning Practice Guidance (NPPG). The mitigation hierarchy requires all development schemes to apply the following principles:

- *Avoidance* – the proposed development should seek to avoid/minimise losses of scattered trees in the first instance and incorporate these features in the landscaping layout of the scheme accordingly. This will help to further avoid and minimise impacts to protected and notable species.
- *Mitigation* – where significant harm cannot be wholly or partially avoided, adverse effects should be minimised by design or through the use of effective mitigation measures such as minimizing light spill.
- *Compensation* – where unavoidable losses occur and mitigation cannot be provided, compensation for significant residual harm will be required as a last resort or planning permission could be refused. Compensation should include the remediation of lost habitats and/or connectivity, the creation of new habitats of ecological value and providing novel compensation solutions to minimise effects on protected or notable species to ensure compliance with UK wildlife legislation.

In accordance with the principles of the Environment Act 2021 the development should also secure an overall net gain for biodiversity. Biodiversity Net Gain is a planning process that aims to leave biodiversity on site in a better state than it was before, going beyond solely avoiding, mitigating and compensating adverse effect on biodiversity and actively seeking to enhance the site's biodiversity value overall. A Biodiversity Metric tool should be used to help guide and quantify the baseline and proposed value of the scheme.

R3 Terrestrial Mammals including Badger and Hedgehog: Any excavations that need to be left overnight should be covered or fitted with mammal ramps to ensure that any animals that enter can safely escape. Any open pipework with an outside diameter of greater than 120 mm must be covered at the end of each work day to prevent animals entering/becoming trapped.

R4 Common Amphibians: Suitable amphibian habitat (such as the overgrown poor, semi-improved grassland areas) should be strimmed to 150 mm in a directional manner, in order to allow any amphibians present to disperse. Any hibernacula present should be

dismantled during the active season for herpetofauna. This is weather dependent but generally extends between March and October inclusive.

R5 Nesting Birds: Vegetation clearance should be undertaken outside the nesting bird season. The nesting bird season is weather dependent but generally extends between March and September inclusive (peak period March-August). If this is not possible then any vegetation to be removed or disturbed should be checked by an experienced ecologist for nesting birds immediately prior to works commencing. If birds are found to be nesting any works which may affect them should be delayed until the young have fledged and the nest has been abandoned naturally, for example via the implementation of an appropriate buffer zone (species dependent) around the nest in which no disturbance is permitted until the nest is no longer in use.

R6 Landscape and Ecology Management Plan (LEMP): A Landscape and Ecology Management Plan should be produced setting out the detailed establishment and management of all on site compensation and enhancement measures. In accordance with Biodiversity Net Gain Best Practice Principles, and the principles of the Environment Act 2021, the LEMP should cover a period of 30 years from the date of commencement with provisions for long-term monitoring and contingency actions linked to the Biodiversity Net Gain objectives of the project.

The LEMP should be submitted to the Local Planning Authority for approval (typically to discharge planning conditions) and should be implemented in full thereafter.

R7 Japanese Knotweed: It is recommended that a suitably qualified contractor be appointed to undertake the treatment programme for the eradication of this plant from site. For the Japanese knotweed treatment in this instance Middlemarch would recommend a contractor registered with the Property Care Association as they have access to the appropriate warranties and insurances. This includes a minimum 10-year guarantee on their treatment programme. It would be advisable to obtain and compare quotes from the following organisations who would have the technical expertise to perform the eradication of the plant and aftercare programme:

- **Japanese Knotweed Ltd**, Ivy Business Centre, Crown Street, Failsworth, Manchester, M35 9BG
T: 0161 393 6029
E: manchester@knotweed.co.uk
- **Phlorum Ltd**, Ground Floor, Adamson House, Towers Business Park, Wilmslow Road, Didsbury, Manchester, M20 2YY
T: 0161 955 4250
E: info@phlorum.com
- **TP Knotweed Solutions Ltd**, Hill Quays, 14 Commercial Street, Greater Manchester, M15 4PZ
T: 0161 250 5005
E: enquiries@tpknotweed.com

8. Drawings

Drawing C158942-01-01 – Phase 1 Habitat Map



Legend

- ⊙ Target note
- x Scattered scrub
- x Scattered shrub
- Scattered tree
- Fence
- Wall
- Site boundary
- A Amenity grassland
- SI Poor semi-improved grassland
- Bare ground
- Building
- Hardstanding

Project
Former Ambulance & Fire Station, Huyton

Drawing
Phase 1 Habitat Map

Client
McCarthy Stone

Drawing Number
C158942-01-01

Revision
00

Scale @ A4
1:600

Date
September 2022

Approved By
CR

Drawn By
CD



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C158942-01-01

Drawing C158942-01-02 – Japanese Knotweed Location Plan



C158942-01-02

Legend

- Site boundary
- Whitebeam tree
- Scattering of 3-4 young Japanese knotweed plants which have colonised the loose stone hardstanding on site
- Approximate extent of Japanese knotweed off site (4 m long area)



Project
Former Ambulance and Fire Station, Huyton

Drawing
Japanese Knotweed Location Map

Client
McCarthy Stone

Drawing Number C158942-01-02	Revision 00
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Scale @ A4 1:500	Date May 2023
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Approved By CR	Drawn By RP
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The following tables include full habitat descriptions and summarise the condition assessment for habitats and hedgerows using Panks *et al.* (2022)³.

Area Habitat				Condition Sheet Criteria Score														Total Score	Condition Assessment
Polygon / Line Ref.	Phase 1 Habitat Type	UK Hab Habitat Equivalent	Habitat Description	Condition Sheet Used	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13		
TN1	Amenity Grassland	Modified Grassland	A parcel of amenity grassland was present in the north-west corner of the site. The grassland was managed uniformly to 2 – 3 cm in height and had a tarmac footpath running through it from south-west to east. Comprises perennial rye grass <i>Lolium perenne</i> , dandelion <i>Taraxacum officinale</i> agg., Shepherd's purse <i>Capsella bursa-pastoris</i> , white clover <i>Trifolium repens</i> , selfheal <i>Prunella vulgaris</i> , creeping buttercup <i>Ranunculus repens</i> , ribwort plantain <i>Plantago lanceolata</i> , ragwort <i>Jacobaea vulgaris</i> , daisy <i>Bellis perennis</i> , bugle <i>Ajuga reptans</i> and annual meadow grass <i>Poa annua</i> . This parcel of grassland contained less than 6-8 species per m ² .	Grassland Low (5)	F	F	P	P	P	P	P							5 / 7	Poor
TN2	Hardstanding	Urban – Developed Land; Sealed Surface (u1b)	The hardstanding around the Ambulance Station comprised a mix of concrete and tarmac, which formed an access road and car parking area. Hardstanding was also present to the north of the ambulance station, but this comprised largely of loose stone with some colonising plants, comprising willowherb <i>Epilobium sp.</i>, dandelion, bramble <i>Rubus fruticosus</i> agg., and immature sycamore <i>Acer pseudoplatanus</i> saplings. The hardstanding within the Fire Station boundary comprised concrete, with the footings of the previously demolished building also present. Buddleia <i>Buddleja davidii</i> was scattered throughout this area whilst scattered scrub was also noted.	N/A															N/A
TN3	Fence	N/A	Wooden garden fences were present to the north, which were up to 1.75 m high. A metal railing fence, up to 1.5 m high, was also present here, with some red jasmine <i>Jasminum beesianum</i> growth noted around it, which had colonised from an adjacent garden. A 2.25 m high palisade fence separated the derelict Fire Station site from the Ambulance Station to the north-east and the adjacent supermarket to the south-east, whilst the western and north-western boundaries were bounded by a 2.25 m high wooden board fence. A small section of concrete panel fence was also present to the south of Building B2 and this was up to 1.75 m high.	N/A															N/A
TN4	Scattered Trees	Line of Trees	A dense line of semi-mature leylandii conifers was recorded along the southern boundary of the site, which were approx. 10 m – 12 m high. The ground immediately below was largely bare, with scatterings of shed leaves.	Line of Trees	F	P	F	F	P									2 / 5	Poor
TN4a	Scattered Trees	Trees	A small number of young and semi-mature sycamore trees were present along the north-west/south-west boundary of the survey area.	Urban Trees	P	P	F	P	F	P								4 / 6	Moderate

Table 8.1: Habitat Descriptions and Condition Assessments (Continues)

Area Habitat				Condition Sheet Criteria Score																
Polygon / Line Ref.	Phase 1 Habitat Type	UK Hab Habitat Equivalent	Habitat Description	Condition Sheet Used	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	Total Score	Condition Assessment	
TN5	Scattered Scrub	N/A	Scattered scrub was present to the west and south of the survey area and comprised immature and semi mature holly <i>Ilex aquifolium</i> with ivy <i>Hedera helix</i> . Scattered scrub was also present to the east and within the poor semi-improved grass habitat. This comprised bramble, immature hazel <i>Corylus avellana</i> and immature oak <i>Quercus sp.</i> with some sycamore. Scattered scrub was also present throughout the hardstanding habitat, and this comprised sycamore saplings with some aspen <i>Populus tremula</i> .	N/A															N/A	
TN6	Poor, Semi-improved Grassland	Modified Grassland	Poor semi-improved grassland was present to south and west of the survey area. Full access to this area was not available, but an overview of the species present within this habitat was able to be made from the fence line. The poor semi-improved grassland comprised ribwort plantain, dandelion, cat's-ear <i>Hypochaeris radicata</i> , red fescue <i>Festuca rubra</i> , cock's-foot <i>Dactylis glomerata</i> , perennial rye grass, bent grass <i>Agrostis sp.</i> and meadow grass <i>Poa sp.</i> The sward was unmanaged at the time of survey and was between 10 cm – 40 cm in height. The poor-semi-improved grassland was slightly taller towards the south-east corner of the site, but was shorter around the line of leylandii conifers. In addition to the species listed above, additional species noted towards the south-east corner included bramble, creeping thistle <i>Cirsium arvense</i> , ragwort and small amounts of tufted hair grass <i>Deschampsia cespitosa</i> . Scattered scrub was present within the grassland, particularly to the south-east. The scrub within the grassland comprised immature oak, hazel and sycamore. A 1.25 m high brick retaining wall was present around the poor, semi-improved grassland in the west of the survey area.	Grassland Low (5)	F	P	F	P	F	P	P							4 / 7	Poor	
TN7	Buildings	Urban – Developed Land; Sealed Surface (u1b)	Two buildings were recorded on site (B1 and B2). Building B1 was an active Ambulance Station. This was a single storey structure with cavity brick walls and intact wooden doors/uPVC windows. A taller brick structure protruded from the main roof towards the north side of the building and this was in good condition. Weep holes and a small number of additional brickwork gaps were noted on the southern elevation of Building B1. Building B2 was a small single-storey structure, located to the south of the main Ambulance Station. This was flat roofed with rendered walls which were partially pebbledash and partially smooth. Gaps were noted around the fascia boarding and around the framework of a fire extinguisher installed within the north-west wall. Please see the Preliminary Bat Roost Assessment report (RT-MME-158942-02) for further details.	N/A															N/A	
TN8	Introduced Shrub	N/A	Scattered buddleia was recorded throughout the site, particularly within the hardstanding habitat. Small amounts of ornamental cotoneaster <i>Cotoneaster sp.</i> were also present within the grassland area to the south-west and colonising from offsite to the east.	N/A															N/A	
Key: P – Criteria passed F – Criteria failed																				

Table 8.1: Habitat Descriptions and Condition Assessments (Continued)

9. Photographs



Plate 9.1: Amenity Grassland.



Plate 9.2: Hardstanding and Introduced Shrub.



Plate 9.3: Scattered Trees, Bare Ground and Poor, Semi-improved Grassland.



Plate 9.4: Scattered Scrub.



Plate 9.5: Building B1.



Plate 9.6: Building B2.



Plate 9.7: Small Number of Japanese Knotweed Plants Along South-east Boundary of Ambulance Station.



Plate 9.8: Dead Japanese Knotweed Stems (to Left of Tree) and Fresh Plants Growing Through Ornamental Shrub.

Appendix 1

General Biodiversity Legislation and Policy

The Conservation of Habitats and Species Regulations 2017 (as amended) (the Habitats Regulations 2017) and the Conservation of Habitats and Species Regulations (Amendment) (EU Exit) Regulations 2019 (the Habitats Regulations 2019)

The Habitats Regulations 2017 (as amended) transposed the land and marine aspects of the Habitats Directive (Council Directive 92/43/EEC) and certain elements of the Wild Birds Directive (Directive 2009/147/EC) (known as the Nature Directives) into English and Welsh law. Changes have been made to parts of the Habitats Regulations 2017 so that they operate effectively from 1 January 2021. The changes are made by the Habitats Regulations 2019, which transfer functions from the European Commission to the appropriate authorities in England and Wales.

All other processes or terms in the 2017 Regulations remain unchanged and existing guidance is still relevant.

The obligations of a competent authority in the 2017 Regulations for the protection of sites or species do not change. A competent authority is a public body, statutory undertaker, minister or department of government, or anyone holding public office.

The Habitats Regulations 2019 have created a 'National Site Network' on land and at sea, including both the inshore and offshore marine areas in the UK. The National Site Network includes:

- Existing Special Areas of Conservation (SACs), which are designated due to their importance to the habitats and species listed in Annexes I and II of the Habitats Directive;
- Existing Special Protection Areas (SPAs), which are designated due to their importance for wild birds in accordance with the Wild Birds Directive; and,
- New SACs and SPAs designated under these Regulations.

SACs and SPAs in the UK no longer form part of the European Union's Natura 2000 ecological network. Any references to Natura 2000 in the 2017 Regulations and in guidance now refers to the new National Site Network. However, guidance provided by Freeths (2020)⁴ recommends that SACs and SPAs can continue to be referred to as "European sites" / "European marine sites".

Designated Wetlands of International Importance (known as Ramsar sites) do not form part of the National Site Network. Many Ramsar sites overlap with SACs and SPAs and may be designated for the same or different species and habitats. All Ramsar sites remain protected in the same way as SACs and SPAs.

The 2019 Regulations establish management objectives for the National Site Network. The network objectives are to:

- Maintain or, where appropriate, restore habitats and species listed in Annexes I and II of the Habitats Directive to a favourable conservation status; and,

⁴ Freeths (2020). *The Habitats Regulations Assessment regime after 31 December 2020 – how will it look?*
Available: <https://www.freeths.co.uk/2020/10/22/the-habitats-regulations-assessment-regime-after-31-december-2020-how-will-it-look/?cmpredirect>

- Contribute to ensuring, in their area of distribution, the survival and reproduction of wild birds and securing compliance with the overarching aims of the Wild Birds Directive.

The appropriate authorities must also have regard to the:

- Importance of protected sites;
- Coherence of the National Site Network; and,
- Threats of degradation or destruction (including deterioration and disturbance of protected features) on SPAs and SACs.

The network objectives contribute to the conservation of UK habitats and species that are also of pan-European importance, and to the achievement of their favourable conservation status within the UK.

The Wildlife and Countryside Act (WCA) 1981 (as amended)

The WCA, as amended, consolidates and amends pre-existing national wildlife legislation in order to implement the Bern Convention and the Birds Directive. It complements the Habitat Regulations 2017 and the Habitats Regulations 2019, offering protection to a wider range of species. The Act also provides for the designation and protection of national conservation sites of value for their floral, faunal or geological features, termed Sites of Special Scientific Interest (SSSIs).

Schedules of the act provide lists of protected species, both flora and fauna, and detail the possible offences that apply to these species.

The Countryside and Rights of Way (CROW) Act 2000

The CROW Act, introduced in England and Wales in 2000, amends and strengthens existing wildlife legislation detailed in the WCA. It places a duty on government departments and the National Assembly for Wales to have regard for biodiversity, and provides increased powers for the protection and maintenance of SSSIs. The Act also contains lists of habitats and species (Section 74) for which conservation measures should be promoted, in accordance with the recommendations of the Convention on Biological Diversity (Rio Earth Summit) 1992.

The Natural Environment and Rural Communities (NERC) Act 2006

Section 40 of the NERC Act places a duty upon all local authorities and public bodies in England and Wales to promote and enhance biodiversity in all of their functions. Sections 41 (England) and 42 (Wales) list habitats and species of principal importance to the conservation of biodiversity. These lists superseded Section 74 of the CROW Act 2000.

The Hedgerow Regulations 1997

The Hedgerow Regulations make provision for the identification of important hedgerows which may not be removed without permission from the Local Planning Authority.

Species and Habitats of Material Consideration for Planning in England

Previous planning policy (and some supporting guidance which is still current, e.g. ODPM Circular 06/2005, now under revision), refers to UK BAP habitats and species as being a material consideration in the planning process. Equally many local plans refer to BAP priority habitats and species. Both remain as material considerations in the planning process but such habitats and species are now described as Species and Habitats of Principal Importance for Conservation in England, or simply priority habitats and priority species under the UK Post-2010 Biodiversity Framework. The list of habitats and species remains unchanged and is still derived from Section 41 list of the Natural Environment and Rural Communities (NERC) Act 2006. As was previously

the case when it was a BAP priority species hen harrier continues to be regarded as a priority species although it does not appear on the Section 41 list.

National Planning Policy Framework and Practice Guidance

In July 2021, the National Planning Policy Framework (NPPF) was updated, replacing the previous framework published in 2012 and revised in 2018 and 2019. A presumption towards sustainable development is at the heart of the NPPF. This presumption does not apply however where developments require appropriate assessment under the Birds or Habitats Directives.

Chapter 15, on conserving and enhancing the natural environment, sets out how the planning system should contribute to and enhance the natural and local environment by:

- protecting and enhancing existing sites of biodiversity value;
- minimising impacts on and providing net gains for biodiversity; and,
- establishing coherent ecological networks.

If a proposed development would result in significant harm to the natural environment which cannot be avoided (through the use of an alternative site with less harmful impacts), mitigated or compensated for (as a last resort) then planning permission should be refused. With respect to development on land within or outside of a Site of Special Scientific Interest (SSSI) which is likely to have an adverse effect (either alone or in-combination with other developments) would only be permitted where the benefits of the proposed development clearly outweigh the impacts on the SSSI itself, and the wider network of SSSIs. Development resulting in the loss of deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused unless there are wholly exceptional reasons for the development, and a suitable compensation strategy is provided.

Chapter 15 identifies that development whose primary objective is to conserve or enhance biodiversity should be supported and 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.

Chapter 11, making effective use of the land, sets out how the planning system should promote use of land in meeting the need for homes and other uses, while safeguarding and improving the environment and ensuring safe and healthy living conditions. Substantial weight should be given to the value of using suitable brownfield land within settlements for homes and other identified needs. Opportunities for achieving net environmental gains, including new habitat creation, are encouraged.

In March 2014 the Department for Communities and Local Government released guidance to support the National Planning Policy Framework (NPPF), known as the National Planning Practice Guidance (NPPG). This has been produced to provide guidance for planners and communities which will help deliver high quality development and sustainable growth in England.

The guidance includes a section entitled 'Natural Environment: Biodiversity, geodiversity and ecosystems and green infrastructure', which was updated in July 2019. This document sets out information with respect to the following:

- the statutory basis for seeking to conserve and enhance biodiversity;
- the local planning authority's requirements for planning for biodiversity;
- what local ecological networks are and how to identify and map them;

- how plan-making bodies identify and safeguard Local Wildlife Sites, including Standard Criteria for Local Wildlife Sites;
- the sources of ecological evidence;
- the legal obligations on local planning authorities and developers regarding statutory designated sites and protected species;
- definition of green infrastructure;
- where biodiversity should be taken into account in preparing a planning application;
- how policy should be applied to avoid, mitigate or compensate for significant harm to biodiversity and how mitigation and compensation measures can be ensured;
- definitions of biodiversity net gain including information on how it can be achieved and assessed; and,
- the consideration of ancient woodlands and veteran trees in planning decisions and how potential impacts can be assessed.

The NPPG July 2019 issue also includes a section entitled 'Appropriate assessment: Guidance on the use of Habitats Regulations Assessment' which provides information in relation to Habitats Regulations Assessment processes, contents and approaches in light of case law. This guidance will be relevant to those projects and plans which have the potential to impact on European Sites and European Offshore Marine Sites identified under the Conservation of Habitats and Species Regulations 2017 (as amended).

Local Planning Policy

<https://www.knowsley.gov.uk/residents/building-and-planning/planning-policy/adopted-documents>

Core Strategy:

The Knowsley Local Plan Core Strategy was adopted in January 2016. It sets the strategic framework for the growth and development of Knowsley up to 2028 and beyond. The policies of relevance to ecology are:

Policy CS2 – Development Principles

(Note: only the environmental section of this policy is included here)

Principle 4: Recognise environmental limits, protect and enhance environmental assets, enhance local character and promote quality of place by:

- a) Understanding and respecting the character and distinctiveness of places and landscapes;
- b) Protecting and enhancing the historic environment;
- c) Promoting good quality design and ensuring that development respects its setting taking into account relevant design requirements, and best practice;
- d) Maximising opportunities for the regeneration of previously developed land, including derelict or unsightly areas to improve the image of Knowsley and use land resources efficiently;
- e) Mitigating potential negative impacts of traffic growth and road traffic on highway safety, air quality, noise and health;
- f) Supporting policies relating to Green Infrastructure and the greening of towns and cities;
- g) Maintaining or enhancing the tranquillity of open countryside and rural areas;

- h) Maintaining or enhancing the quantity and quality of biodiversity and habitats, including potential impacts on nationally and internationally important sites for biodiversity;
- i) Addressing any issues of unstable land, resulting from Knowsley's legacy of minerals extraction; and,
- j) Minimising negative impact upon flood risk, air quality, water quality, land quality, soil quality, and noise or vibration levels and ensuring any negative impacts are appropriately mitigated.

Development that will have an unacceptable impact upon any of the above will only be permitted where the benefits of the proposal clearly outweigh the harm.

Policy CS8 – Green Infrastructure

Maintenance and Enhancement of Knowsley's Existing Green Infrastructure

- 1) Knowsley's existing Green Infrastructure and its beneficial functions will be protected, managed and/or enhanced, primarily to:
 - a) Ensure more attractive and cleaner residential neighbourhoods;
 - b) Sustain and promote biodiversity (including designated sites, priority habitats and protected and endangered species) in accordance with importance and contribution to ecological networks;
 - c) Preserve the character and function of historic environments and valued landscapes;
 - d) Mitigate the effects of climate change and flood risk;
 - e) Mitigate air, water and noise pollution;
 - f) Provide local opportunities for sport, recreation and allotments; and
 - g) Provide sustainable transport linkages between residential neighbourhoods and easy access to employment and services.
- 2) To achieve the above, planning powers and other interventions will be used to:
 - a) Protect and enhance strategically important areas of greenspace;
 - b) Ensure an appropriate quantity and improved quality of locally important open spaces, including outdoor sports provision (and ancillary facilities of appropriate scale);
 - c) Promote effective movement of wildlife through a network of strategic green links, by protecting, maintaining and improving existing and new open spaces, water courses (including water quality) and biodiversity assets;
 - d) Protect, enhance and/or introduce biodiversity into existing areas of Green Infrastructure, through integration into the design of new development and public realm projects;
 - e) Improve accessibility for communities to greenspace offering leisure and recreation opportunities;
 - f) Protect and where possible improve green paths and cycleways linking residential areas, existing strategic areas of greenspace, employment locations, local community services and leisure facilities;
 - g) Work in partnership with other districts and relevant bodies at a landscape scale to minimise the impact of development upon Knowsley's existing biodiversity and geological assets, and sustain the protection afforded to internationally important sites, including supporting habitat, for biodiversity outside of the borough; and
 - h) Deliver new integrated and functional Green Infrastructure that helps to mitigate and adapt to climate change, such as sustainable drainage systems, carbon capture and storage, soft landscaping and green roofs.
- 3) Site allocations for greenspace will be identified in the Local Plan: Site Allocations and Development Policies document, with further guidance set out in the Developer

Contributions Supplementary Planning Document or future Supplementary Planning Document as appropriate.

Strategic Green Links

- 4) Knowsley's strategically important green links are:
 - a) Alt Corridor (Huyton) – stretching from Huyton Village through South Alt Park, Alt Park, Alt Meadows and into Stockbridge Village;
 - b) Valley Corridor (Kirkby) – stretching through Valley Meadow, St. Chad's Park, Millbrook Park, Millennium Green and Mill Dam;
 - c) Whiston to Cronton Corridor – stretching through Cronton, Stadt Moers Park and Whiston Greenway;
 - d) Halewood Triangle – Halewood Park linkage with the Trans-Pennine Trail and to the national cycle network;
 - e) M57 Green Belt Corridor; and
 - f) Knowsley Hall Estate – including Knowsley Safari Park and Local Wildlife Sites.

Green Infrastructure within the Liverpool City Region

- 5) Knowsley Council will work with partners to help deliver local and sub-regional programmes, initiatives and strategies to enhance Green Infrastructure.

Approach to Green Infrastructure and New Development

- 6) New development must be served by Green Infrastructure to meet the needs of residents and the local environment, in a manner which will:
 - a) Contribute to the creation of a high-quality residential environment;
 - b) Provide access to high quality open space for leisure and recreational purposes;
 - c) Seek to protect, maintain and where possible enhance biodiversity within and around new developments according to their designation and significance to provide space for nature; and,
 - d) Provide adequate mitigation and/or, as a last resort, compensation for Green Infrastructure or biodiversity loss, in circumstances where harm resulting from the development is otherwise unavoidable.

Policy CS21 – Greenspaces and Trees Greenspace Protection

- 1) In supporting the wider Green Infrastructure functions of urban greenspace in accordance with Policy CS8, the Council will provide and maintain quantitative, qualitative and accessibility standards for different types of public open space.
- 2) New development which would result in the loss of urban greenspace, will not be permitted unless at least one of the following criteria are met:
 - a) A surplus of provision for all types of greenspace would be maintained relative to local standards;
 - b) The land is considered unsuitable in terms of size, location or character to prevent or address individual deficiencies of different types of greenspace relative to local standards;
 - c) Appropriate mitigation is provided through replacement facilities of at least an equal quantity, quality and accessibility;
 - d) The development is required to improve greenspace provision or for ancillary facilities to support sport or recreation; or,
 - e) Where the proposal relates to the loss of indoor or outdoor sports provision, and there is no evidence of future or continuing need for sports use, or alternatively only land incapable of forming a playing pitch or sporting facility is affected and its release accords with either clause 2)a) or 2)b).

- 3) Irrespective of whether criteria in 2) are met, unless the benefits of a proposal clearly outweigh the loss of urban greenspace, development will be resisted where it would significantly harm any existing or potential special qualities of greenspace in the area in terms of:
 - a) Visual amenity;
 - b) Residential amenity;
 - c) Biodiversity and environmental benefits;
 - d) Historical, cultural or community value;
 - e) Recreational benefits; or,
 - f) Physical and/or visual linkages between adjoining urban greenspaces.

Local Greenspace Standards

- 4) The quantitative and accessibility standards for the provision of public open spaces within Substantial Residential Areas are set out in Table 9.1: Substantial Residential Area (SRA) Standards for Greenspace Quantity and Accessibility for the following greenspace typologies:
 - a) Park and Garden;
 - b) Amenity Greenspace;
 - c) Provision for Children and Young People; and
 - d) Allotments.
- 5) The Council's quantitative standards for Outdoor Sports Provision are set out in Table 9.2: Community Area Standards for Outdoor Sports Provision Quantity and Accessibility and seek to maintain an appropriate range of sites and address quantitative needs for individual sports at a Community Area level.
- 6) The Council will keep the standards of provision referred to above under review and if necessary publish revised standards in a future Local Plan document or Supplementary Planning Document.

Accessible and Quality Greenspaces

- 7) The Council will support improvements to existing and new areas of greenspace in accordance with best practice standards, to achieve the following requirements:
 - a) Accessible, safe and secure locations for all members of the community to use;
 - b) Clean and well maintained facilities, equipment and open spaces; and
 - c) Conservation of natural features, wildlife, fauna, landscapes, buildings and other structural features, as appropriate.
- 8) When considering proposals for new residential development, the Council will seek enhancements to greenspaces via on-site provision, new off-site provision or enhancement of existing off-site provision through developer contributions secured by legal agreement in accordance with Policy CS27: Planning and Paying for New Infrastructure, the Developer Contributions Supplementary Planning Document and/or a Community Infrastructure Levy Charging Schedule, as appropriate.

Local Green Spaces

- 9) Any Local Green Spaces Designations which are formally designated will be identified in the Local Plan: Site Allocations and Development Policies or future Neighbourhood Plans (if applicable). This designation will only be used where the greenspace concerned is:
 - a) Reasonably close to the community it serves;

- b) Demonstrably special to a local community and holds a particular local significance, for example because of its beauty, historic significance, recreational value (including as a playing field), tranquillity or richness of its wildlife; and,
- c) Local in character and not an extensive tract of land.

Enhancement of Natural and Semi-Natural Greenspace and Tree Protection

- 10) The Council will encourage proposals for new development to incorporate:
 - a) Retention of existing trees, woodland, vegetation and other habitat features which offer a positive contribution to the local environment in terms of visual amenity, recreation value or biodiversity/wildlife interest;
 - b) Appropriate planting of trees, other soft landscaping and installation of habitat features for the benefit of biodiversity; and,
 - c) Adequate replacement provision where tree loss is unavoidable, comprising two additional trees for every tree lost and taking account of species and size.

Unitary Development Plan

The Knowsley Replacement Unitary Development Plan was adopted in June 2006. Under the transitional arrangements for moving to the Local Plan system, 39 UDP policies were “saved” by the Secretary of State on 12 June 2009. The saved policies of relevance to ecology are:

Policy DQ4 – Trees and Development

All new development

- 1) Proposals for new development should include appropriate planting of trees or other soft landscaping, the location and details of which should be determined as an integral part of the development, and which shall have regard to the character of the surrounding area.

Developments affecting existing trees

- 2) Development proposals affecting existing trees, woodlands and other vegetation, which make a positive contribution to amenity, should make provision for their retention.
- 3) Applicants for planning permission will be required to provide a detailed survey of all existing trees on the site and the likely effects on them of the proposed development, as outlined in the Council’s technical advice note “Trees and Development”.
- 4) Where the Council accepts that tree loss will be unavoidable the applicant will be required to make adequate provision for their replacement, normally including two new trees for each tree lost. Replacement planting will take into account the number; size and species of trees lost and should contribute to the extension of tree and woodland cover across the Borough.

Links to the Mersey Forest Plan

- 5) All new development should be consistent with the aims and objectives of the Mersey Forest Plan.

Policy ENV3 – Light Pollution

- 1) Development requiring external lighting must satisfy the following criteria:
 - a) The lighting scheme proposed is the minimum required for security and working purposes to undertake the task;
 - b) There would be no unacceptable impact on visual amenity in the surrounding area;
 - c) The scheme will not have an unacceptable effect on road safety;

- d) The scheme will not harm wildlife; and,
- e) There will be no unacceptable loss of residential amenity.

Appendix 2

Relevant Species Legislation

Bats

Bats and the places they use for shelter or protection (i.e. roosts) receive legal protection under the Conservation of Habitats and Species Regulations 2017 (Habitats Regulations 2017) and the Conservation of Habitats and Species Regulations (Amendment) (EU Exit) Regulations 2019 (Habitats Regulations 2019). They receive further legal protection under the Wildlife and Countryside Act (WCA) 1981, as amended. This protection means that bats, and the places they use for shelter or protection, are capable of being a material consideration in the planning process.

Regulation 41 of the Habitats Regulations 2017, states that a person commits an offence if they:

- deliberately capture, injure or kill a bat;
- deliberately disturb bats; or
- damage or destroy a bat roost (breeding site or resting place).

Disturbance of animals includes in particular any disturbance which is likely to impair their ability to survive, to breed or reproduce, or to rear or nurture their young, or in the case of animals of a hibernating or migratory species, to hibernate or migrate; or to affect significantly the local distribution or abundance of the species to which they belong.

It is an offence under the Habitats Regulations 2017 for any person to have in his possession or control, to transport, to sell or exchange or to offer for sale, any live or dead bats, part of a bat or anything derived from bats, which has been unlawfully taken from the wild.

Changes have been made to parts of the Habitats Regulations 2017 so that they operate effectively from 1st January 2021. The changes are made by the Habitats Regulations 2019, which transfer functions from the European Commission to the appropriate authorities in England and Wales.

All other processes or terms in the 2017 Regulations remain unchanged and existing guidance is still relevant.

The obligations of a competent authority in the 2017 Regulations for the protection of species do not change. A competent authority is a public body, statutory undertaker, minister or department of government, or anyone holding public office.

Whilst broadly similar to the above legislation, the WCA 1981 (as amended) differs in the following ways:

- Section 9(1) of the WCA makes it an offence to *intentionally* kill, injure or take any protected species.
- Section 9(4)(a) of the WCA makes it an offence to *intentionally or recklessly** damage or destroy, or *obstruct access to*, any structure or place which a protected species uses for shelter or protection.
- Section 9(4)(b) of the WCA makes it an offence to *intentionally or recklessly** disturb any protected species *while it is occupying a structure or place which it uses for shelter or protection*.

*Reckless offences were added by the Countryside and Rights of Way (CROW) Act 2000.

As bats re-use the same roosts (breeding site or resting place) after periods of vacancy, legal opinion is that roosts are protected whether or not bats are present.

The reader should refer to the original legislation for the definitive interpretation.

The following bat species are Species of Principal Importance for Nature Conservation in England: barbastelle bat *Barbastella barbastellus*, Bechstein's bat *Myotis bechsteinii*, noctule *Nyctalus noctula*, soprano pipistrelle *Pipistrellus pygmaeus*, brown long-eared bat *Plecotus auritus*, greater horseshoe bat *Rhinolophus ferrumequinum* and lesser horseshoe bat *Rhinolophus hipposideros*. Species of Principal Importance for Nature Conservation in England are material considerations in the planning process. The list of species is derived from Section 41 list of the Natural Environmental and Rural Communities (NERC) Act 2006.

Common amphibians

Common frogs, common toad, smooth newt and palmate newt are protected in Britain under Schedule 5 of the Wildlife and Countryside Act (1981, as amended) with respect to sale only. They are also listed under Annex III of the Bern Convention 1979. Any exploitation of wild fauna specified in Appendix III shall be regulated in order to keep the populations out of danger. The convention seeks to prohibit the use of all indiscriminate means of capture and killing and the use of all means capable of causing local disappearance of, or serious disturbance to, populations of a species.

Common toad is listed as a Species of Principal Importance for Nature Conservation in England.

Hedgehog

Hedgehogs receive some protection under Schedule 6 of the Wildlife and Countryside Act 1981 (as amended); this section of the Act lists animals which may not be killed or taken by certain methods, namely traps and nets, poisons, automatic weapons, electrical devices, smokes/gases and various others. Humane trapping for research purposes requires a licence.

Hedgehogs are a Species of Principal Importance for Nature Conservation in England and are thus capable of being material considerations in the planning process.

Nesting Birds

The Conservation of Habitats and Species Regulations 2017, (Habitats Regulations 2017) and the Conservation of Habitats and Species Regulations (Amendment) (EU Exit) Regulations 2019 (Habitats Regulations 2019) places a duty on public bodies to take measures to preserve, maintain and re-establish habitat for wild birds.

Nesting and nest building birds are protected under the Wildlife and Countryside Act WCA 1981 (as amended).

Subject to the provisions of the act, if any person intentionally:

- kills, injures or takes any wild bird;
- takes, damages or destroys the nest of any wild bird while that nest is in use or being built; or
- takes or destroys an egg of any wild bird, he shall be guilty of an offence.

Some species (listed in Schedule 1 of the WCA) are protected by special penalties. Subject to the provisions of the act, if any person intentionally or recklessly:

- disturbs any wild bird included in Schedule 1 while it is building a nest or is in, on or near a nest containing eggs or young; or
- disturbs dependent young of such a bird, he shall be guilty of an offence.

Several bird species are Species of Principal Importance for Nature Conservation in England, making them capable of being material considerations in the planning process.

Appendix 3

Survey Calendar

SPECIES SURVEY CALENDAR

This calendar helps identify the seasonal constraints associated with many ecological and protected species surveys.

Recommended survey time

Possible survey time

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Extended Phase 1 Habitat Survey												
Botanical Survey												
Bats (initial bat survey)												
Bats (activity survey)												
Bats (hibernation survey)												
Great Crested Newt (habitat assessment)												
Great Crested Newt (presence/absence survey)												
Reptiles												
Badger												
Water Vole												
Otter												
Birds (winter birds)												
Birds (nesting bird)												
Dormouse												
White Clawed Crayfish												



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