

Garage off Smithy Bridge Road, Littleborough OL15 0BQ

**ECOLOGICAL SURVEY AND ASSESSMENT
(Including a Licensed Bat Survey)**

February 2023

[ERAP (Consultant Ecologists) Ltd ref: 2022-098]

ERAP (Consultant Ecologists) Ltd
Building N2
Chorley Business and Technology Centre
East Terrace
Euxton Lane
Euxton
Chorley
PR7 6TE

Tel: 01772 750502

mail@erap.co.uk
www.erap.co.uk



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Document Control

Survey Type:	Surveyors¹	Survey Date(s)
Phase 1 Habitat and daylight bat survey	Brian Robinson B.Sc. (Hons) MCIEEM and Rachel Platt B.Sc. (Hons) M.Sc.	1 st June 2022
Reporting	Personnel	Date
Author	Brian Robinson B.Sc. (Hons) MCIEEM Senior Ecologist	2 nd September 2022
Signature(s)		
Checked	Rachel Platt B.Sc. (Hons) M.Sc. Graduate Ecologist	15 th September 2022
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SUMMARY

- i. This ecological survey and assessment presents the ecological, biodiversity and nature conservation status of the disused garage off Smithy Bridge Road, Littleborough OL15 0BQ. The assessment was requested in connection with proposals to demolish the building and redevelop the site to a SPAR retail outlet.
- ii. This report presents the results of a desktop study, extended Phase 1 Habitat Survey and a licensed bat survey carried out in June 2022. The scope of survey undertaken is appropriate to identify potential ecological constraints, the remit of mitigation required and opportunities for biodiversity associated with the development proposals. The survey updates a previous study completed at the site by ERAP (Consultant Ecologists) Ltd in 2016.
- iii. The site comprises a single detached largely single-storey building (a former garage) with surrounding hard standing. The hard standing supports ruderal herbs and very locally frequent colonising shrubs.

Results of Survey and Assessment

- iv. The proposals will have no adverse effect on statutory or non-statutory designated sites for nature conservation.
- v. Only common and widespread plant species were detected. None of the habitats within the site are of significant interest in terms of their plant species composition. None of the habitats present are representative of semi-natural habitat. No habitats within the site were assessed to hold any importance in terms of their geographical context. No Priority Habitats were detected within the site.
- vi. Montbretia and Indian Balsam, both invasive plant species listed on Schedule 9 of the *Wildlife and Countryside Act 1981* (as amended) were detected at the northern end of the site. Field Horsetail was also detected within the site; this is not listed on Schedule 9 of the *Wildlife and Countryside Act 1981* (as amended), however the client has asked ERAP (Consultant Ecologists) Ltd to make them aware of its presence on site due to the difficulty of controlling this species.
- vii. No bats or signs of bats were detected at the building's exterior or interior during the internal inspection. Taking into account the suitability of the habitats within the surrounding area, the building was assessed to be of 'negligible' suitability for use by roosting bats. The presence of roosting bats is reasonably discounted at the building.
- viii. The building may be suitable for use by nesting birds (although no nesting birds were noted in June 2022). Measures for the protection of nesting birds are presented at **Section 5.2**. No other protected species have been detected.

Recommendations

- ix. The recommendations in **Section 5.0** outline all the mandatory measures and additional actions to be applied to ensure compliance with wildlife legislation, the National Planning Policy Framework (NPPF) and best practice.
- x. The proposals will secure an opportunity to implement beneficial measures such as habitat creation that will safeguard habitats for wildlife such as birds and bats, with the aim of providing a net gain in biodiversity in accordance with the principles of the NPPF.

Conclusion

- xi. It is concluded that, provided the measures outlined in **Section 5.0** of this report are adhered to, the demolition of the building is feasible and acceptable in accordance with ecological considerations and relevant planning policy. Redevelopment at the site will provide an opportunity to secure ecological enhancement for wildlife associated with suburban areas.

1.0 INTRODUCTION

1.1 Background and Rationale

- 1.1.1 ERAP (Consultant Ecologists) Ltd was commissioned by James Hall & Co (Properties) Ltd to carry out an updated ecological assessment of the disused garage off Smithy Bridge Road, Littleborough OL15 0BQ (hereafter referred to as the 'site'). The Ordnance Survey (OS) grid reference at the centre of the site is SD 93024 15021. An aerial image of the site and its surrounding habitats is appended at **Figure 1** (source image: ESRI World Imagery).
- 1.1.2 The assessment was requested in connection with a planning application to demolish the former garage (Building 1) and redevelop the site to a SPAR retail outlet. The survey updates *2016-246 Garage off Smithy Bridge Road, Littleborough OL15 0BQ: Ecological Survey and Assessment* (ERAP (Consultant Ecologists) Ltd, 2016), hereafter the '2016 ecology report'.

1.2 Scope of Works

- 1.2.1 The scope of ecological works undertaken in June 2022 comprised:
- A desktop study and data search for known ecological information at the site and the local area;
 - An Extended Phase 1 Habitat Survey and assessment;
 - Assessment of the ecological value of the habitats within the site with the use of the National Vegetation Classification (NVC) and the Ratcliffe criteria, as presented in *A Nature Conservation Review* (Ratcliffe, 1977);
 - Survey and assessment of all habitats for relevant statutorily protected species¹ and other wildlife including badger (*Meles meles*), barn owl (*Tyto alba*), bird species and reptiles;
 - A licensed daylight bat survey of the building (note that no trees are present within the site);
 - The identification of any potential ecological constraints on the proposals and the specification of the scope of mitigation required in accordance with wildlife legislation, planning policy guidance and other relevant guidance; and
 - The identification of any further surveys or precautionary actions that may be required prior to the commencement of any demolition activities.

¹ In accordance with *Government Circular: Biodiversity and Geological Conservation – Statutory Obligations and Their Impact on the Planning System* (Ministry of Housing, Communities & Local Government, 2005) developers should not be required to undertake surveys for protected species unless there is reasonable likelihood of the species being present and affected by the development. In this instance (for example) there are no ponds within an unobstructed 500 metres of the site, and no ditches or watercourses within or in proximity to the site; there has therefore been no requirement to consider great crested newt (*Triturus cristatus*), water vole (*Arvicola amphibius*) or otter (*Lutra lutra*) as part of this assessment.

2.0 METHOD OF SURVEY

2.1 Desktop Study and Data Search

2.1.1 The following sources of information and ecological records were consulted:

- a. MAGiC Maps: A web-based interactive map which brings together geographic information on key environmental schemes and designations, including details of statutory nature conservation sites;
- b. Greater Manchester Local Record Centre (GMLRC);
- c. Greater Manchester Biodiversity Action Plan (BAP); and
- d. The 2016 ecology report.

2.2 Vegetation and Habitats

2.2.1 An Extended Phase 1 Habitat Survey of the site was carried out by Brian Robinson on 1st June 2022. The weather was sunny and dry, with a light air (Beaufort scale 1) and an air temperature of 14°C.

2.2.2 A habitat and vegetation map was produced for the site and the immediate surrounding area at a scale of 1:500 (refer to **Figure 2**). The mapping is based on the Joint Nature Conservation Committee Phase 1 Habitat Survey methodology (JNCC, 2010) with minor adjustments to illustrate and examine the habitats with greater precision.

2.2.3 On site habitat mapping was assisted via use of GPS technology and QField on-site mapping software, using ESRI World Imagery as a base plan.

2.2.4 The plant species within the site boundary were determined with estimates of the distribution, ground cover, abundance and constancy of individual species. The estimation of abundance was based on the DAFOR system, where D = Dominant, A = Abundant, F = Frequent, O = Occasional and R = Rare, this being a widely used and accepted system employed by ecological surveyors. The terms L = Locally and V = Very were additionally used to describe the plant species distributions with greater precision.

2.2.5 Stands of vegetation and habitats were described and evaluated using the National Vegetation Classification (NVC). The NVC provides a systematic and comprehensive analysis of British vegetation and is a reliable framework for nature conservation and land-use planning.

2.2.6 Habitats within the site were assessed in accordance with the UK Habitats Classification / UKHab (Butcher, et al., 2020). The UKHab has been designed to function at two scales: fine scale (25m² or 5 metres length) and large scale (400m² or 20 metres length). It has been considered for the purposes of this survey that the fine scale of 25m² or 5 metres length is appropriate.

2.2.7 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. Plant nomenclature follows *New Flora of the British Isles 3rd Edition* (Stace, 2010).

2.2.8 Searches were carried out for the presence of invasive species, including those listed on Schedule 9 of the *Wildlife and Countryside Act 1981* (as amended), including Japanese Knotweed (*Fallopia japonica*), Indian Balsam (*Impatiens glandulifera*) and Giant Hogweed (*Heracleum mantegazzianum*).

2.3 Animal Life

Badger

- 2.3.1 The survey area for badger covered the site (as annotated on **Figure 2**) and extended to accessible land within a radius of 50 metres from the site boundary. Private gardens / land were excluded from the survey.
- 2.3.2 The survey was conducted in accordance with guidance presented within *Badgers and Development* (Natural England, 2007) and *Badgers: surveys and mitigation for development projects* (Natural England, 2015).
- 2.3.3 The following signs of badger activity were searched for:
- Sett entrances, e.g. entrances that are normally 25 to 35cm in diameter and shaped like a 'D' on its side;
 - Large spoil heaps outside sett entrances;
 - Bedding outside sett entrances;
 - Badger footprints;
 - Badger paths;
 - Latrines;
 - Badger hairs on fences or bushes;
 - Scratching posts; and
 - Signs of digging for food.
- 2.3.4 Habitats within and surrounding the site were assessed in terms of their suitability for use by foraging and sheltering badger in accordance with their known habitat preferences as detailed in current guidance and *Badger* (Roper, 2010).

Bat Species

Daylight Survey

Survey Personnel

- 2.3.5 The site was assessed for its suitability to support roosting bats by Brian Robinson, Natural England Class Survey Licence WML CL18 (Bat Survey Level 2), Registration Number 2015-13161-CLS-CLS. The surveyor's qualifications and experience meet the criteria as defined in the *Technical Guidance Series Competencies for Species Survey: Bats* (CIEEM, 2013).

Building

- 2.3.6 The survey was carried out in accordance with standard methodology including the *Bat Mitigation Guidelines* (Mitchell-Jones, 2004), the *Bat Workers' Manual 3rd Edition* (Mitchell-Jones & Mcleish, 2004) and *Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd edn)* (Collins, J. (ed), 2016).
- 2.3.7 An inspection of the external surfaces, walls and roof of the building was carried out to find potential bat roosting habitat or accesses into internal areas where roosts may be present. Searches for evidence of bat presence in the form of droppings, urine stains, feeding signs, grease marks and other evidence were also carried out.
- 2.3.8 The internal survey involved an examination of the accessible internal areas (including roof voids) to find roosting bats or evidence of past use of the building by bats such as droppings and prey remains.
- 2.3.9 A list of equipment used is detailed at **Table 2.1**, below:

Table 2.1: Survey Equipment used during Daylight Bat Survey

Ladders
LED Lenser P14 torch
Canon Ixus digital camera
8x20 binoculars
Ridgid Micro Inspection Camera Borescope CA-100

- 2.3.10 The suitability of the building has been assessed in accordance with Table 4.1 of *Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd edn)*, (Collins, J. (ed), 2016), taking into account any presence of gaps suitable for access by bats, features suitable for use by roosting bats within the building (including crevice dwelling species and species which can roost in the open in roof voids), and the suitability of the surrounding habitats for use by foraging and commuting bats.

Habitat Assessment for Commuting / Foraging Bats

- 2.3.11 Habitats within and adjacent to the site were assessed for their value and suitability for commuting and foraging bats in accordance with Table 4.1 of *Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd edn)*, (Collins, J. (ed), 2016). Reference has been made to the categories and descriptions / examples, presented at **Table 2.2**, below.

Table 2.2: Consideration of Suitability of Foraging and Commuting Habitat for Bats

Suitability	Commuting Habitat	Foraging Habitat
Negligible	Negligible habitat features on site likely to be used by commuting bats.	Negligible habitat features on site likely to be used by foraging bats.
Low	Habitat that could be used by small numbers of commuting bats such as a gappy hedgerow or unvegetated stream, but isolated i.e. not very well connected to the surrounding landscape by other habitat.	Suitable, but isolated habitat that could be used by small numbers of foraging bats such as a lone tree or patch of scrub.
Moderate	Continuous habitat connected to the wider landscape that could be used by bats for commuting such as lines of trees and scrub or linked back gardens.	Habitat that is linked to the wider landscape that could be used by bats for foraging such as trees, scrub, grassland or water.
High	Continuous, high-quality habitat that is well connected to the wider landscape and is likely to be used regularly by commuting bats such as river valleys, streams, hedgerows, lines of trees and woodland edge. Habitats close to and connected to known roosts.	High-quality habitat that is well-connected to the wider landscape and is likely to be used regularly by foraging bats such as broadleaved woodland, tree-lined watercourses and grazed parkland. Habitats close to and connected to known roosts.

Bird Species

- 2.3.12 Bird species observed and heard during the survey were recorded.
- 2.3.13 Habitats throughout the site and in the immediate surrounding area were assessed for their value to roosting, feeding and nesting birds, as indicated by the amount of shelter, feeding value, woody vegetation structure and species diversity of tree and shrub species in the site.

Reptile Species

- 2.3.14 The site and its surroundings were assessed in terms of their suitability for use by reptile species using the important characteristics for reptiles outlined in the draft document '*Reptile Mitigation Guidelines*' (Natural England, 2011), and the *Reptile Habitat Management Handbook* (Edgar, et al., 2010). These habitat characteristics are outlined in **Table 2.3**, below.

Table 2.3: Important Habitat Characteristics for Reptiles

1. Location (in relation to species range)	7. Connectivity to nearby good quality habitat
2. Vegetation Structure	8. Prey abundance
3. Insolation	9. Refuge opportunity
4. Aspect	10. Hibernation habitat potential
5. Topography	11. Disturbance regime
6. Surface geology	12. Egg-laying site potential

Other Wildlife

- 2.3.15 Evidence of other wildlife (including Priority Species) observed whilst on site (but for which specific surveys were not made) was recorded and has been included in this report where it is considered of relevance to the planning application.

2.4 Survey and Reporting Limitations

- 2.4.1 The surveys were completed at suitable times of year and under suitable conditions. No access constraints were encountered. No survey limitations were experienced.
- 2.4.2 All measurements within this report are approximate only, and have been either measured (using QField) or estimated whilst on site or calculated using mapping software (QGIS) or internet-based mapping services such as MAGiC Maps and Google Earth.

2.5 Evaluation Methods

- 2.5.1 The habitats, vegetation and animal life were evaluated with reference to standard nature conservation criteria as described in *A Nature Conservation Review* (Ratcliffe, 1977) and *Guidelines for the Selection of Biological SSSIs* (Bainbridge, et al., 2013). These are size (extent), diversity, naturalness, rarity, fragility, typicality, recorded history, position in an ecological or geographical unit, potential value and intrinsic appeal.
- 2.5.2 Habitats have been assessed to determine whether they meet those described in *UK Biodiversity Action Plan: Priority Habitat Descriptions* (Maddock, A (ed), 2008); these lists are used to help draw up the statutory lists of Priority Habitats, as required under Section 41 of the *Natural Environment and Rural Communities (NERC) Act 2006*. Where suitable, the ecological value of the habitats present has been assessed using the terms outlined in *Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine* (CIEEM, 2018).
- 2.5.3 Government advice on wildlife, as set out in the *National Planning Policy Framework* (Ministry of Housing, Communities and Local Government, 2021) and associated government circulars has been taken into consideration. Legislation relating to protected species, such as those listed under Schedules 1, 5, 6 and 8 of the *Wildlife and Countryside Act 1981* (as amended) and *The Conservation of Habitats and Species Regulations 2017* (as amended), is referenced where applicable, and any impacts to protected species are evaluated in accordance with current guidance.
- 2.5.4 The presence of any Priority Species, as listed under Section 41 of the *Natural Environment and Rural Communities (NERC) Act 2006* is noted, and habitats are assessed in terms of their suitability and value for these species. The presence of habitats and/or species listed by the Cumbria Biodiversity Action Plan has been taken into account in the evaluation of the site.

3.0 SURVEY RESULTS

3.1 Desktop Study and Data Search

Designated Sites for Nature Conservation

Statutory Designated Sites for Nature Conservation and SSSI Impact Risk Zones

- 3.1.1 The site is not and does not form part of any statutory designated site for nature conservation.
- 3.1.2 The site lies within a Site of Special Scientific Interest (SSSI) Impact Risk Zone for the Rochdale Canal SSSI and Special Area of Conservation (SAC), designated for its importance to aquatic plants, including Floating Water-plantain (*Luronium natans*). The SSSI and SAC are located 0.37 kilometres to the north of the site, across existing residential development. The SSSI Impact Risk Zone requires the Local Planning Authority to consult with Natural England on likely risks from the following development categories (Ordnance Survey, 2022):
- Pipelines, pylons and overhead cables. Any transport proposal including road, rail and by water (excluding routine maintenance). Airports, helipads and other aviation proposals.
 - Solar schemes with a footprint greater than 0.5 hectares, and all wind turbines.
 - Planning applications for quarries, including: new proposals, Review of Minerals Permissions, extensions, variations to conditions etc. Oil and gas exploration / extraction.
 - Large non-residential developments outside existing settlements / urban areas where the net additional gross internal floorspace is greater than 1,000m² or the footprint exceeds 0.2 hectares.
 - Residential development of 50 units or more.
 - Any residential development of 50 or more houses outside existing settlements / urban areas.
 - Any development that could cause air pollution (including industrial / commercial processes, livestock & poultry units, slurry lagoons and digestate stores and manure stores).
 - All general combustion processes, including energy from waste incineration, other incineration, landfill gas generation plant, pyrolysis / gasification, anaerobic digestion, sewage treatment works and other incineration / combustion.
 - Mechanical and biological waste treatment, inert landfill, non-hazardous landfill, hazardous landfill, household civic amenity recycling facilities construction, demolition and excavation waste and other waste management.
 - Any composting proposal, including open windrow composting, in-vessel composting, anaerobic digestion and other waste management.
 - Any discharge of water or liquid waste that is discharged to ground (i.e. to seep away) or to surface water, such as a beck or stream.
 - Large infrastructure such as warehousing / industry where the net additional gross internal floorspace is greater than 1,000m² or any development needing its own water supply.
- 3.1.3 It is considered at this stage that the proposals do not meet any of the criteria which would require further consultation with Natural England in respect of likely risks to the SSSI.

Non-statutory Designated Sites for Nature Conservation

- 3.1.4 The site is not and does not form part of any non-statutory designated site for nature conservation, named Sites of Biological Importance, or 'SBIs' in Greater Manchester.
- 3.1.5 SBIs within 2 kilometres of the site are summarised at **Table 3.1** below.

Table 3.1: SBIs within 2 Kilometres of the Site

SBI Name	Distance and Direction from the Site	Reasons for Designation
Hollingworth Lake	0.28 kilometres to the east	Birds (Br6)
Rochdale Canal (Scowcroft to Warland)	0.37 kilometres to the south-west	Canal (Fw3); Floating Water Plantain (GGSG1)
Slopes by River Beal, Fir Grove Farm	1.27 kilometres to the south-west	Grassland (Gr2)
South Pennine Moors (North)	1.71 kilometres to the north-east	Heathland & Bog (HB1); Birds (Br2, Br3, Br4; & Br5)

3.1.6 The presence of the SBIs within the wider area is considered further at **Section 4.2** below.

Priority Habitats Inventory

3.1.7 The Priority Habitats Inventory² was checked via MAGiC Maps. No Priority Habitats are reported for the site.

Protected and Notable Species

3.1.8 No records of protected and notable species are held by GMLRC for the site. Records of protected and notable species for a 2 kilometres radius of the site are summarised at **Table 3.2** below.

Table 3.2: Records of Protected Species Within a 2 Kilometre Radius of the Site

Taxon Group	Species Name and Designations ¹ and Notes
Amphibians	Great crested newt (<i>Triturus cristatus</i>): EPS, WCAs5, PS and GMBAP. 3 records, all from 2017. The closest record is 1285 metres to the south of the site. Common toad (<i>Bufo bufo</i>): PS. 8 records, dated between 2017 and 2019. The closest record is 705 metres to the north-east of the site, and from 2019.
Birds – WCAs1 Species	Bittern (<i>Botaurus stellaris</i>): WCAs1 and PS. 2 records, dated 2005 and 2016. The closest record is 650 metres to the east of the site, and from 2016. Barn owl (<i>Tyto alba</i>): WCAs1. 30 records, dated between 2005 and 2021. The closest record is 800 metres to the south of the site, and from 2020. Hobby (<i>Falco subbuteo</i>): WCAs1. 7 records, dated between 2006 and 2016. The closest record is 650 metres to the east of the site, and from 2012. Kingfisher (<i>Alcedo atthis</i>): WCAs1. 196 records, dated between 1988 and 2020. The closest record is 465 metres to the east of the site, and from 2012. Little ringed plover (<i>Charadrius dubius</i>): WCAs1. 176 records, dated between 2004 and 2020. The closest record is 465 metres to the east of the site, and from 2019. Peregrine (<i>Falco peregrinus</i>): WCAs1. 18 records, dated between 2004 and 2020. The closest record is 650 metres to the east of the site, and from 2014. Scaup (<i>Aythya marila</i>): WCAs1. 7 records, dated between 2005 and 2016. The closest record is 650 metres to the east of the site, and from 2007. Black-tailed godwit (<i>Limosa limosa</i>): PS. 4 records, dated between 2011 and 2018. The closest record is 465 metres to the east of the site, and from 2011. Black-throated diver (<i>Gavia arctica</i>): PS. 2 records, dated 1994 and 1997. The closest record is 660 metres to the east of the site, and from 1997.
Birds – Priority Species	Lapwing (<i>Vanellus vanellus</i>), lesser redpoll (<i>Carduelis cabaret</i>), reed bunting (<i>Emberiza schoeniclus</i>), linnet (<i>Linaria cannabina</i>), skylark (<i>Alauda arvensis</i>), ring ouzel (<i>Turdus torquatus</i>), dark-bellied brent goose (<i>Branta bernicla</i>), curlew (<i>Numenius arquata</i>), dunnoek (<i>Prunella modularis</i>), bullfinch (<i>Pyrrhula pyrrhula</i>), cuckoo (<i>Cuculus canorus</i>), herring gull (<i>Larus argentatus</i>), grasshopper warbler (<i>Locustella naevia</i>), grey partridge (<i>Perdix perdix</i>), house sparrow (<i>Passer domesticus</i>), black-throated diver (<i>Gavia arctica</i>), common scoter (<i>Melanitta nigra</i>), black-tailed godwit (<i>Limosa limosa</i>), song thrush (<i>Turdus philomelos</i>), spotted flycatcher (<i>Muscicapa striata</i>), starling (<i>Sturnus vulgaris</i>), tree pipit (<i>Anthus trivialis</i>), and yellow wagtail (<i>Motacilla flava</i>).

² A spatial dataset that describes the geographic extent and location of Natural Environment and Rural Communities Act (2006) Section 41 habitats of principal importance.

Taxon Group	Species Name and Designations ¹ and Notes
Vascular Plants	Floating Water-plantain (<i>Luronium natans</i>): EPS, WCAs8 and PS. 11 records, dated between 2002 and 2013. The closest record is 435 metres to the west of the site, and from 2010.
Terrestrial Invertebrates – Priority Species.	Moths Neglected rustic (<i>Xestia castanea</i>), powdered quaker (<i>Orthosia gracilis</i>), mottled rustic (<i>Caradrina morpheus</i>), mouse moth (<i>Amphipyra tragopoginis</i>), small phoenix (<i>Ecliptopera silaceata</i>), small heath (<i>Coenonympha pamphilus</i>), small emerald (<i>Hemistola chrysoprasaria</i>), small square-spot (<i>Diarsia rubi</i>), shoulder-striped wainscot (<i>Mythimna comma</i>), rustic (<i>Hoplodrina blanda</i>), rosy minor (<i>Mesoligia literosa</i>), rosy rustic (<i>Hydraecia micacea</i>), sawfly (<i>Xanthia icteritia</i>), dark-barred twin-spot carpet (<i>Xanthorhoe ferrugata</i>), dot moth (<i>Melanchra persicariae</i>), cinnabar (<i>Tyria jacobaeae</i>), dusky brocade (<i>Apamea remissa</i>), ear moth (<i>Amphipoea oculatea</i>), ghost moth (<i>Hepialus humuli</i>), grey dagger (<i>Acronicta psi</i>), knot grass (<i>Acronicta rumicis</i>), autumnal rustic (<i>Eugnorisma glareosa</i>), anomalous (<i>Stilbia anomala</i>), buff ermine (<i>Spilosoma luteum</i>), blood-vein (<i>Timandra comae</i>), broom moth (<i>Melanchra pisi</i>), spinach (<i>Eulithis mellinata</i>) and white ermine (<i>Spilosoma lubricipeda</i>). Butterflies Wall (<i>Lasiommata megera</i>) and white-letter hairstreak (<i>Satyrion w-album</i>).
Terrestrial Mammals	Badger (<i>Meles meles</i>): PBA. 35 records, dated between 1981 and 2021. The closest record over 500 metres from the site. Bat sp (<i>Chiroptera</i> sp.): EPS, WCAs5 and GMBAP. 2 records, dated 2011 and 2013. The closest record is 1050 metres to the west of the site, and from 2013. Brown hare (<i>Lepus europaeus</i>): PS and GMBAP. 2 records, both from 2015. The closest record is 1120 metres to the south-east of the site. Common pipistrelle (<i>Pipistrellus pipistrellus</i>): EPS, WCAs5 and GMBAP. 92 records, dated between 1996 and 2019. The closest record is 125 metres to the north-west of the site, and from 2018. Daubenton's bat (<i>Myotis daubentonii</i>): EPS, WCAs5 and GMBAP. 3 records, dated between 2001 and 2007. The closest record is 665 metres to the north-west of the site, and from 2001. Hedgehog (<i>Erinaceus europaeus</i>): PS. 14 records, dated between 2011 and 2020. The closest record is 150 metres to the north-east of the site, and from 2020. Myotis sp (<i>Myotis</i> sp.): EPS, WCAs5 and GMBAP. 5 records, all from 2009. The closest record is 975 metres to the north of the site. Nathusius' pipistrelle (<i>Pipistrellus nathusii</i>): EPS, WCAs5 and GMBAP. 1 record from 2019, located 465 metres to the east of the site. Noctule bat (<i>Nyctalus noctula</i>): EPS, WCAs5, PS and GMBAP. 10 records, dated between 2013 and 2019. The closest record is 340 metres to the south-east of the site, and from 2018. Otter (<i>Lutra lutra</i>): EPS, WCAs5 and PS. 14 records, dated between 2018 and 2020. The closest record is 625 metres to the north-west of the site, and from 2018. Pipistrelle species (<i>Pipistrellus</i> sp.): EPS, WCAs5 and GMBAP. 132 records, dated between 1997 and 2019. The closest record is 195 metres to the south of the site, and from 2009. Soprano pipistrelle (<i>Pipistrellus pygmaeus</i>): EPS, WCAs5, PS and GMBAP. 6 records, dated between 2002 and 2016. The closest record is 390 metres to the north of the site, and from 2011. Water vole (<i>Arvicola terrestris</i>): WCAs5 and PS. 3 records, dated between 1981 and 2007. The closest record is 590 metres to the east of the site, and from 1981. Whiskered / Brandt's bat (<i>Myotis mystacinus/brandtii</i>): EPS, WCAs5 and GMBAP. 1 record from 2004, located 1050 metres to the north of the site.
¹Key to Designation Codes: EPS = European Protected Species under the <i>Conservation of Habitats and Species Regulations 2017</i> (as amended). WCAs1 = Species receives full protection under Schedule 1 of the <i>Wildlife and Countryside Act 1981</i> (as amended). WCAs5 = Species receives full protection under Schedule 5 of the <i>Wildlife and Countryside Act 1981</i> (as amended). WCAs8 = Species receives full protection under Schedule 8 of the <i>Wildlife and Countryside Act 1981</i> (as amended). PBA= Protection of Badger Act 1992 PS = Priority Species listed under Section 41 of the NERC Act 2006 GMBAP = Species listed on the Greater Manchester Biodiversity Action Plan	

- 3.1.9 The presence of these protected and notable species within the wider area has been taken into account throughout this report.

3.2 Vegetation and Habitats

General Description

- 3.2.1 The approximately 0.16 hectare site remains largely as described by the 2016 ecology report, however the building is now disused and larger areas of the surrounding hard standing have been colonised by ruderal herbs.
- 3.2.2 The site is located within a suburban area and surrounded by housing, gardens and roads at each side.
- 3.2.3 The north-eastern site boundary is defined by a brick wall, beyond which lies Smithy Bridge Road. The north-western site boundary is defined by garden fencing, beyond which lies housing. The south-western site boundary is defined by a wall and timber panel fencing, beyond which lies gardens and housing. The south-eastern site boundary is defined by a concrete panel fence, beyond which lies gardens and housing.
- 3.2.4 A Phase 1 Habitat Survey map is appended at **Figure 2**, and can be referred to for all habitat descriptions. Photographs are appended at **Section 8.2**.

Habitat Descriptions

- 3.2.5 The building is described in detail in relation to its suitability for use by roosting bats at **Section 3.3**, below. No significant assemblage of plant species is associated with the building, which is described by the UKHab as u1b5 buildings.
- 3.2.6 Refer to **Photos 1** and **4**. The site supports asphalt and concrete slab hard standing which is colonised by sparse and very locally frequent ruderal herbs.
- 3.2.7 The ruderal herbs are characterised by occasional and very locally frequent Broad-leaved Willowherb (*Epilobium montanum*), Creeping Thistle (*Cirsium arvense*), Dandelion (*Taraxacum officinale* agg.), Goat Willow (*Salix caprea*) and Herb-Robert (*Geranium robertianum*), and occasional Broad-leaved Dock (*Rumex obtusifolius*), Prickly Sow-thistle (*Sonchus asper*), Rosebay Willowherb (*Chamerion angustifolium*), Silver Birch (*Betula pendula*), Sycamore (*Acer pseudoplatanus*) and Yorkshire-fog (*Holcus lanatus*). A plant species list is appended at **Table 8.1**.
- 3.2.8 The vegetation is not typical of any NVC community. The habitat is described by the UKHab as u1b6 other developed land with the secondary code 17 ruderal / ephemeral.

Invasive Plant Species

- 3.2.9 A single stand of Indian Balsam is present at the north-western site boundary, and Montbretia (*Crocsmia pottsii* x *aurea* = *C. x crocosmiiflora*) is present at the northern end of the site. Both species are listed under Schedule 9 of the *Wildlife and Countryside Act 1981* (as amended). This is considered further at **Section 4.2**, below.
- 3.2.10 Field Horsetail (*Equisetum arvense*) was also noted at the south-eastern end of the site. This species is not listed under Schedule 9 of the *Wildlife and Countryside Act 1981* (as amended) however its presence is noted at the request of the client, due to difficulties in its management.

3.3 Animal Life

Badger

- 3.3.1 No badger or signs of badger were detected within the site or within the accessible 50 metres around the site. The presence of badger is reasonably discounted.

Bat Species

Daylight Survey: Building 1

- 3.3.2 Refer to **Photos 2 to 10**. The detached unoccupied former car garage is constructed from a mixture of mortared bricks with corrugated metal sheeting (at its south-western elevation), mortared blockwork with an external render (at its south-eastern and north-eastern elevations) and mortared brickwork (at its north-western elevation).
- 3.3.3 The building supports a complex roof, due to lean-to extensions at its north-western, south-western and south-eastern elevations (all roof pitches are shown at **Figure 2**). All roofs are composed of corrugated metal sheeting. The central area of the roof is pitched, with a north-west / south-east ridge alignment.
- 3.3.4 The north-western extension supports a pitched roof with the same alignment; the pitches are at different heights (the south-western pitch is approximately 0.5 metres higher than the north-eastern pitch), and are divided by a mortared brick wall.
- 3.3.5 The south-western and south-eastern elevation extensions support single pitch roofs. A parapet wall is present at the south-eastern and south-western elevation.
- 3.3.6 Internally the extensions are open to the roof, unlined and supported on metal rafters. A single void (approximately 5 metres high) is located above the suspended ceiling of the showroom. The external corrugated metal sheeting is located on top of a layer of corrugated asbestos sheeting, which is unlined. The roof is supported on metal trusses. Fibreglass insulation is present above the suspended ceiling, and horizontal plastic sheeting is present approximately halfway between the suspended ceiling and the ridgeline.
- 3.3.7 No bats or signs of bats were detected at the external elevations of the building, or in any of the internal areas. The building supports gaps suitable for access by bats, but these do not lead to any suitable features for use by roosting bats. Whilst access to the building is possible for bats at the raised sections of corrugated metal sheeting, the roofing is largely unlined. Where the metal roofing is located above corrugated metal sheeting, it is considered that any narrow gap present would be thermally unstable, and therefore not provide suitable conditions for roosting bats; further, access to this section of roof is restricted via the presence of parapet walls at the south-eastern and north-eastern wall-tops.
- 3.3.8 As described below, the building is located within an area of poor-quality habitat for foraging and commuting bats. The building is considered to be of negligible suitability for use by roosting bats.

Habitat Assessment for Commuting and Foraging Bats

- 3.3.9 The habitats within the site are of poor suitability for use by foraging or commuting bats, as they are chiefly composed of hard standing and a single building (Building 1).
- 3.3.10 The site is located adjacent to a road at its north-eastern elevation, and to gardens and housing at its north-western, south-western and south-eastern elevations. The site is not linked or located adjacent or near to any favourable habitats for use by foraging and commuting bats, such as mature tree lines, broadleaved woodland, waterbodies or parkland. Whilst an area of parkland is present to the north-east of the site, this is located across a road and further housing; the site is not linked to this area by any wildlife links. Hollingworth Lake is located 320 metres to the south-east of the site. Again, the site is not linked to this habitat by any wildlife links.

Bird Species

- 3.3.11 No birds were detected within the site during the survey. The building and Bramble scrub may be suitable for use by nesting birds, although no signs of nesting birds were detected during the survey.
- 3.3.12 The habitats surrounding the building are unsuitable for foraging barn owl, and no signs of barn owl were detected within the building.
- 3.3.13 Birds detected in the gardens surrounding the site during the survey comprised house sparrow (*Passer domesticus*), wood pigeon (*Columba palumbus*) and robin (*Erithacus rubecula*).

Reptiles

- 3.3.14 The developed habitats within the site provide poor quality habitat for sheltering, basking and hibernating reptiles. There are no piles of garden waste or other suitable debris for use by sheltering or hibernating reptiles, and the site supports no favourable habitat for basking reptiles. The species-poor habitats within the site are reasonably unlikely to support a large populations or a variety of invertebrate prey.
- 3.3.15 The site is not adjacent or linked to any areas of favourable habitat for reptile species, and there are no records of reptile for the site or the wider area. The presence of reptiles within the site is reasonably discounted.

Other Wildlife

- 3.3.16 No other wildlife were detected during the survey, and the hard standing and buildings present within the site are unlikely to provide habitat for protected or Priority Species.

4.0 EVALUATION AND ASSESSMENT

4.1 Introduction and Description of Proposals

- 4.1.1 It is proposed to demolish the building and redevelop the site to SPAR retail outlet, as presented at *Smithy Bridge Road, Littleborough: Site Plan DWG No. 21 Rev P8* (HWL Ltd., December 2022), hereafter the 'proposals plan'.
- 4.1.2 **Section 4.2** provides an assessment of any impacts of the proposed development on the designated sites for nature conservation present in the wider area. The ecological value of habitats within the site is evaluated at **Section 4.3**, and protected and notable species are considered at **Section 4.4**.

4.2 Designated Sites for Nature Conservation

- 4.2.1 It is considered that the site is sufficiently small and distant from all designated sites for nature conservation that the proposed development will have no impact upon them.

4.3 Vegetation and Habitats

- 4.3.1 Only common and widespread plant species were found. None of the habitats present are representative of semi-natural habitat. The NVC communities present are typical of the geographical area and conditions present. No Priority Habitats are present.
- 4.3.2 None of the habitats are important in terms of their geographical context³.
- 4.3.3 Indian Balsam and Montbretia, both invasive plant species listed under Schedule 9 of the *Wildlife and Countryside Act 1981* (as amended), are present within the site. The proposals present an opportunity to eradicate these species (and Field Horsetail) from the site during the proposed site clearance. Recommendations for the eradication of these species as part of the proposed development are presented at **Section 5.2**, below.

4.4 Protected Species and Other Wildlife

- 4.4.1 The presence of roosting bats is reasonably discounted at the site.
- 4.4.2 The scrub and building provide suitable nesting habitat for the species of birds detected within the wider during the survey (including house sparrow, a Priority Species). Consideration of birds (including protection of breeding birds and recommended enhancements for Priority Species) are presented at **Section 5.3**, below.

5.0 RECOMMENDATIONS AND ECOLOGICAL ENHANCEMENT

5.1 Introduction

- 5.1.1 These recommendations aim to ensure that the development is implemented in accordance with relevant wildlife legislation, Natural England guidance, the principles of the National Planning Policy Framework (NPPF), local planning policy and best practice.
- 5.1.2 Where possible, opportunities to enhance the ecological interest and habitat connectivity and seek biodiversity gain through appropriate landscape planting and habitat creation have been identified, as required by the NPPF and other relevant planning documents.
- 5.1.3 All recommendations are appropriate to the geographical area, the habitats in the wider area, the wildlife present in the local area (and likely to use the site post-construction) and take into consideration the end use of the site as a retail outlet.

5.2 Invasive Plant Species

- 5.2.1 It is an offence under the *Wildlife and Countryside Act 1981* (as amended) to cause the spread of Indian Balsam and Montbretia in the wild.
- 5.2.2 It is recommended that a specialist contractor is appointed and an Invasive Species Management Plan is adopted for Indian Balsam, Montbretia and Field Horsetail during the clearance of the site.

³ Using the terms presented at Section 4.7 of *Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine* (CIEEM, 2018), i.e. International and European, National, Regional, Local Authority-wide area, River Basin District, Estuarine system / Coastal cell or Local. The term 'site' value is additionally used to highlight ecological features considered to be of importance in the context of the wider site habitats, but which are of negligible value in the context of the local area.

5.3 Birds

Protection of Nesting Birds

- 5.3.1 All wild birds are protected under the *Wildlife and Countryside Act 1981* (as amended) while they are breeding. It is advised that any works such as vegetation clearance that will affect habitats suitable for use by nesting birds are scheduled to commence outside the bird nesting season. Commencement of works in the nesting season must be informed by a pre-works nesting bird survey, carried out by a suitably experienced ecologist. The bird breeding season typically extends between March to August inclusive (Natural England, 2015).

Enhancing Habitats for Nesting Birds

House Sparrow

- 5.3.2 House sparrows are associated with suburban areas. Monitoring suggests a severe decline in the UK house sparrow population, estimated as halving in rural areas, and dropping by 60% in towns and cities since the mid-1970's (RSPB, 2018).
- 5.3.3 The installation of two house sparrow terrace nest boxes is recommended at the proposed new building. The boxes will be not be positioned over windows or doorways where droppings may become a nuisance. RSPB advice states that boxes should ideally be sited facing north to east, to avoid exposure to direct sunlight, which may cause overheating of chicks in the nest. An example of a suitable house sparrow bird box is given below, in **Insert 1**:



Insert 1: House sparrow nesting terrace

- 5.3.4 Such bird boxes are available from the NHBS (www.nhbs.com) or Wild Care Shop (www.wildcareshop.com). ERAP Ltd will advise on the siting of bird boxes.

5.4 Landscape Planting

- 5.4.1 It is recommended that the landscape planting within the site is composed from native species and species known to be of value for the attraction of wildlife
- 5.4.2 It is recommended that trees which support blossom and fruit which will attract insects are incorporated into the landscape planting. Suitable species are presented at **Table 5.1**.

Table 5.1: Suitable Native Species for Tree and Shrub Planting

Scientific Name	Common Name	Scientific Name	Common Name
<i>Acer campestre</i>	Field Maple	<i>Prunus spinosa</i>	Blackthorn
<i>Corylus avellana</i>	Hazel	<i>Rosa arvensis</i>	Field Rose
<i>Crataegus monogyna</i>	Hawthorn	<i>Rosa canina</i>	Dog-rose
<i>Ilex aquifolium</i>	Holly	<i>Sambucus nigra</i>	Elder
<i>Malus sylvestris</i>	Crab Apple	<i>Sorbus aucuparia</i>	Rowan
<i>Prunus avium</i>	Wild Cherry	<i>Ulmus glabra</i>	Wych Elm
<i>Prunus padus</i>	Bird Cherry	<i>Viburnum opulus</i>	Guelder Rose

- 5.4.3 The understorey and ground cover planting design should be prepared to optimise the attraction of invertebrates such as feeding bumblebees and butterflies. Where possible the use of native species should be maximised but where necessary non-native species known to be attractive to invertebrates should be used.
- 5.4.4 Planting schemes that include flowering species such as *Calluna*, *Ceanothus*, *Hebe*, *Lavendula*, *Lonicera*, *Potentilla*, *Rosemarinus* and *Vinca* can maximise opportunities for feeding invertebrates and for the attraction of foraging bats and birds.
- 5.4.5 For further plants suitable for the attraction of pollinators please refer to the *Perfect for Pollinators Plant List* (Royal Horticultural Society, 2012). It is recommended that the selection of plant species at the site ensures that a variety of flowering species are available throughout the year.

6.0 CONCLUSION

- 6.1 This ecological appraisal has demonstrated that the proposed development at the site is feasible and acceptable in accordance with ecological considerations and the National Planning Policy Framework.
- 6.2 It is possible to implement reasonable actions for the protection and long-term conservation of fauna such as nesting birds associated with the site.
- 6.3 Redevelopment at the site will provide an opportunity to secure ecological enhancement for fauna typically associated with suburban areas such as breeding birds.

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8.0 APPENDIX: TABLES, PHOTOGRAPHS AND FIGURES

8.1 Plant Species List

Table 8.1: Plant Species List for Vegetation Colonising Hard Standing

Scientific Name	Common Name	DAFOR	% Cover
Woody Species			
<i>Acer pseudoplatanus</i>	Sycamore	O	<1%
<i>Betula pendula</i>	Silver Birch	O	<1%
<i>Buddleja davidii</i>	Butterfly-bush	VLF	<1%
<i>Corylus avellana</i>	Hazel	VLA	<1%
<i>Salix caprea</i>	Goat Willow	O/VLF	<1%
<i>Sorbus aucuparia</i>	Rowan	R	<1%
<i>X Cuprocyparis leylandii</i>	Leyland Cypress	R	<1%
Herb Species			
<i>Agrostis stolonifera</i>	Creeping Bent	VLF	<1%
<i>Arrhenatherum elatius</i>	False Oat-grass	VLF	<1%
<i>Bellis perennis</i>	Daisy	R	<1%
<i>Briza maxima</i>	Greater Quaking-grass	R	<1%
<i>Calystegia sepium</i>	Hedge Bindweed	R	<1%
<i>Chamerion angustifolium</i>	Rosebay Willowherb	O	<1%
<i>Cirsium arvense</i>	Creeping Thistle	O/VLF	<1%
<i>Crocsmia x crocosmiiflora</i>	Montbretia	R	<1%
<i>Dactylis glomerata</i>	Cock's-foot	R	<1%
<i>Epilobium montanum</i>	Broad-leaved Willowherb	O/VLF	<1%
<i>Equisetum arvense</i>	Field Horsetail	VLF	<1%
<i>Geranium robertianum</i>	Herb-Robert	O/VLF	<1%
<i>Hedera helix</i>	Ivy	R	<1%
<i>Hieracium</i> sp.	Hawkweed species	R	<1%
<i>Holcus lanatus</i>	Yorkshire-fog	O	<1%
<i>Impatiens glandulifera</i>	Indian Balsam	R	<1%
<i>Lolium perenne</i>	Perennial Rye-grass	R	<1%
<i>Poa annua</i>	Annual Meadow-grass	R	<1%
<i>Prunella vulgaris</i>	Selfheal	R	<1%
<i>Rubus fruticosus</i> agg.	Bramble	VLA	<1%
<i>Rumex obtusifolius</i>	Broad-leaved Dock	O	<1%
<i>Sagina procumbens</i>	Procumbent Pearlwort	VLF	<1%
<i>Senecio jacobaea</i>	Common Ragwort	VLF	<1%
<i>Sonchus asper</i>	Prickly Sow-thistle	O	<1%
<i>Stellaria media</i>	Common Chickweed	R	<1%
<i>Taraxacum officinale</i> agg.	Dandelion	O/VLF	<1%
<i>Tussilago farfara</i>	Colt's-foot	R	<1%
<i>Urtica dioica</i>	Common Nettle	R	<1%
¹ Key to DAFOR: D=Dominant, A=Abundant, F=Frequent, O=Occasional, R=Rare, V=Very, L=Local and *denotes a constant species			

8.2 Photographs



Photo 1: Hard standing with colonising ruderal herbs and north-eastern elevation



Photo 2: Building 1, north-eastern elevation, northern end



Photo 3: Building 1, north-eastern elevation, southern end



Photo 4: Building 1, eastern corner



Photo 5: Building 1, south-eastern elevation



Photo 6: Hard standing and shrubs at the south-eastern end of the site, and south-western elevation of Building 1



Photo 7: Building 1, north-western elevation



Photo 8: Building 1, void over main showroom



Photo 9: Building 1, internal area at south-western-end of the building

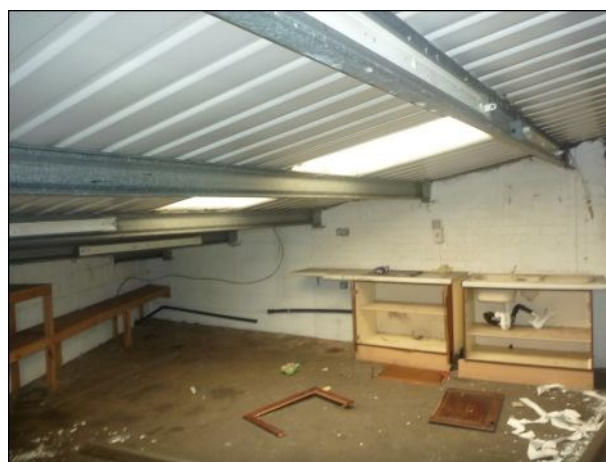


Photo 10: Building 1 at the northern end of the site

8.3 Figures

Figure 1: Aerial Image of the Site and its Surroundings



Figure 2: Phase 1 Habitat and Vegetation Map

