

PRELIMINARY ECOLOGICAL APPRAISAL

AUGUST 2021

Unit 4

Brown Street
Littleborough
OL15 8BW

U R B A N
G R E E N



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Prepared By:	Katie Bird	Signature:		Qualifications: Senior Ecologist MEnvSci ACIEEM
Checked By:	Mark Blacker	Signature:		Qualifications: Senior Ecologist, MSc, ACIEEM
Checked By:	Maisie McKenzie	Signature:		Qualifications: Ecologist, MSc, ACIEEM
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NON-TECHNICAL EXECUTIVE SUMMARY

Casey Group are proposing to develop land at Unit 4, Brown Street in Littleborough (hereafter referred to as 'the site'). The proposals include the demolition of existing buildings to facilitate the erection of a residential apartment block with associated car park and landscaping.

Urban Green have been appointed to complete an updated Preliminary Ecological Appraisal of the site. A Preliminary Ecological Appraisal was completed by Urban Green in March 2020. The objectives of the assessment are to identify habitats on site and determine the suitability for any 'protected and/or notable' species may occur on site, with consideration of potential impacts on nearby designated sites. Further surveys and ecological mitigation is recommended to aim to minimise potential impacts on ecology, due to the proposed development.

Following the survey work, the key recommendations are summarised in the following table:

Current Site Use and Adjacent Site Use	The site comprises commercial buildings and a storage unit with associated parking. Residential housing is located to the east and south, and commercial units to the west. The northern aspect of the site lies within a park.
Potential Impacts on Designated Sites	Rochdale Canal SSSI and SAC is located approximately 300m south of the site, separated via residential housing and roads. No direct impacts are anticipated to incur on the designated site, however due to the potential risk of increase of pollution during construction works via groundwater systems, a Construction Environmental Management Plan has been recommended to minimise potential risks.
Habitats	The site comprised predominantly buildings and hardstanding, with mixed broadleaved woodland to the north.
Ecological Constraints	The following potential ecological constraints were identified during the assessment: • Non-native invasive species wall cotoneaster and montbretia were present on site. • Building 1a was assessed as having moderate bat roosting potential. • Building 1b and 1c were assessed as having low bat roosting potential. • Suitable habitats present on site for badger, common amphibians, hedgehog and nesting birds.
Recommended Ecological Mitigation	The following mitigation measures are recommended to minimise potential impacts due to the proposed development: • Precautionary Working Methods during the construction phase for bats, badgers, common amphibians and hedgehog. Removal of non-native invasive species, following best practice guidance. • Lighting considerations during the construction and operational phases to minimise impacts to commuting and foraging bats, and other nocturnal species. • If any vegetation require removal, it should be completed outside of the breeding bird season (March to September, inclusive). If this is not feasible, a Nesting Bird Check is to be completed by a qualified ecologist within 48 hours before removal is completed.

Recommended Further Surveys and Reports	Further nocturnal bat surveys are recommended to further assess the buildings for bat roosting suitability: • B1a requires a minimum of two surveys to be carried out between May and September (at least one survey to be carried out between May-August). • B1b and B1c require a minimum of one survey to be carried out between May-August.
Recommended Ecological Enhancements	The National Planning Policy Framework (NPPF) (2019) highlights the requirement for planning policies and decisions to conserve and enhance the natural environment. The proposed development provides the opportunity to enhance the site and ecological enhancements have been recommended.

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1 Introduction

1.1 Background to the Scheme

Casey Group are proposing to develop land at Unit 4, Brown Street in Littleborough (hereafter referred to as 'the site'). The proposals include the demolition of existing buildings to facilitate the erection of a residential apartment block with associated car park and landscaping.

Urban Green have been appointed to complete an updated Preliminary Ecological Appraisal of the site. A Preliminary Ecological Appraisal was completed by Urban Green in March 2020, as detailed in Section 2.

The author of the report is Katie Bird, MEnvSci, ACIEEM, Senior Ecologist at Urban Green. Katie has experience providing ecological consulting services for a range of development schemes across the UK, including residential, commercial mineral extraction and road infrastructure schemes. Katie holds a bat Class 2 surveying licence (ref: 2020-48950-CLS-CLS) and has been accredited on multiple European Protected Species Licences for bats.

1.2 Site Context

The site is located at National Grid Reference SD 93517 16412 and comprises a total area of approximately 0.43ha (see Figure 1).

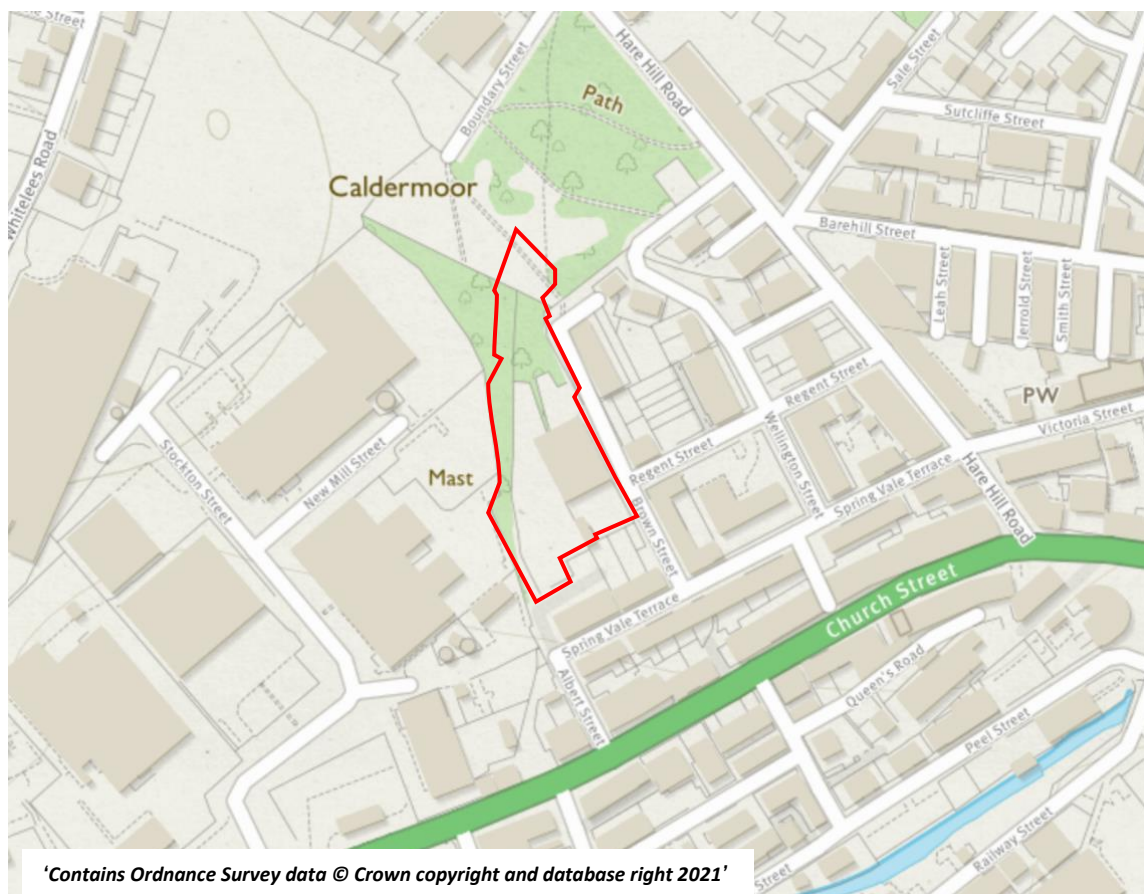


Figure 1 – Site Extent

The site is located in a predominantly urban area of Littleborough, approximately 5km north-east from Rochdale town centre. Residential properties are present to the south and east of the site.

1.3 Purpose of this Report

This report has been produced to set out the methods, results, and conclusions of a PEA. The purpose of the PEA report is to identify habitats on site and determine the site's potential value for protected and/or notable fauna and flora, with the addition of potential impacts on designated site. This will inform the need for any further ecological surveys and/or mitigation to minimise the potential impacts on ecology on site and within the local area.

Further information and details of UK legislation for those species which are formally protected is defined in Appendix 1, which are considered throughout the assessment.

The National Planning Policy Framework (NPPF 2021) and other Local Planning Policies are considered with the PEA. Ecological enhancements are advised to be in line with relevant Planning Policies.

2 Previous Reports

2.1 Preliminary Ecological Appraisal (2020)

A PEA was conducted by Urban Green in March 2020 (Urban Green, 2020a). This was supplemented by a Arboricultural Impact Assessment (AIA) also produced by Urban Green (2020b). The findings of the PEA are outlined in Table 1.

Table 1 – Summary of the PEA (Urban Green, 2020a)

Ecological Feature	Recommendations
Habitats	Where possible, it is recommended that the woodland, scattered trees and hedgerow are retained and protected on-site, to maintain the sites landscape connectivity and quality of the most ecologically valuable habitats. Construction works could have the potential to have significant negative impact upon the local habitats if not undertaken properly. A Construction and Environmental Management Plan (CEMP) could therefore be compiled and implemented on-site to protect on- and off-site habitats. A Landscape and Ecological Management Plan (LEMP) could also be compiled and implemented on-site to enhance the biodiversity and overall ecology of the site, whilst taking into consideration the landscaping of the site development.
Badger	No signs of badgers were observed on (or within 30m of) the site. Badgers are a mobile species and may become established on the site between the time of writing and the start of works. Therefore, it is recommended that a pre-commencement check for badgers should be undertaken onsite (and 30m from the site boundary) 1-3 months prior to when works are due to begin.
Roosting Bats	The building and shipping containers on site were determined to have either ‘moderate’ or ‘low’ suitability for use by roosting bats. It is noted that prior bat roost assessment and nocturnal bat surveys have been completed only on the onsite building by Angela Graham Consulting in 2019, which details a dusk emergence survey being completed with no emergence recorded within the site boundary. However, due to incomplete survey information provided and records of bats utilising the site for commuting/foraging purposes, further survey effort is required. Further survey work is required to determine the presence/likely absence of roosting bats on site in order to assess the likelihood that the proposed development would impact these species: • The building on site with moderate suitability requires two surveys to be carried out between May and September (at least one survey to be carried out between May-August). • Shipping containers with low suitability require one survey to be carried out between May-August.
Commuting and Foraging Bats	Any site lighting (construction and permanent) should be designed in accordance with Guidance Note 08/18 issued by the Bat Conservation Trust and Institute of Lighting Professionals (BCT & ILP, 2018) to minimise the risk of causing disturbance to commuting and foraging bats that are likely to use the nearby off-site habitats.

Ecological Feature	Recommendations
Nesting Birds	Where necessary, woody vegetation (introduced shrub, scrub and scattered trees) and building removal should be undertaken outside of the breeding bird season (March to August inclusive). If this is not possible, a suitably experienced ecologist should check the habitat for breeding bird activity no more than 48 hours before clearance. If nesting activity is found, nests must be left in situ until the young have fledged. It should be noted that not undertaking necessary vegetation clearance outside of the bird nesting season and subsequently relying on a nesting bird check during the bird nesting season frequently leads to delays in schedule. It is therefore strongly recommended to undertake vegetation clearance outside of bird nesting season to avoid such delays.
Hedgehogs	On-site vegetation suitable to support hedgehogs was found on the site within ground level vegetation, in particular scrub. Therefore, checks for hedgehogs should be carried out immediately prior to scrub removal to avoid harming this species during works. Any development should be made permeable to hedgehogs to allow free movement throughout the site.

2.2 Bat Surveys (2019)

During the dusk emergence survey completed by Angela Graham Consulting Limited (2019), there was no observations of roosting bats in the building on site. However, common pipistrelles (*Pipistrellus pipistrellus*) were recorded regularly commuting along the west of the site, with some incidental feeding observations. In addition, three common pipistrelles were also recorded in the north-east of the site, but with no mention of activity from this observation.

3 Methods

The PEA assessment and Report follows the good practice methodology as detailed within the *Guidelines for Preliminary Ecological Appraisal* (CIEEM, 2019).

3.1 Desk Study

3.1.1 Online Resources and Local Records Centre

Due to the size of the proposed development and being located within an urban area of Littleborough, a 1km Local Data Search was conducted as it is deemed an appropriate distance for the Zone of Influence. The data obtained during the previous PEA, has been included as part of this assessment (Urban Green, 2020a).

Sources of information used in the desk study are presented in Table 1.

Table 2 – Desk Study Sources of Information

Source	Date Consulted	Information Sought
MAGIC website (www.magic.gov.uk)	10/08/2021	Locations of statutory designated sites within 1km of the site boundary. Locations of the designated sites within the National Site Network (Ramsar, SAC and SPA) within 5km of the site boundary. Locations of granted European Protected Species Licences (EPSL) and Class Licences within 1km.
Natural England (https://designatedsites/.naturalengland.org.uk/)	10/08/2021	Relevant statutory designated site citations.
Joint Nature Conservation Committee (JNCC) (https://jncc.defra.gov.uk/)	10/08/2021	Information on European wildlife sites. Details of relevant Section 41 species and habitats.
Greater Manchester Local Biodiversity Action Plans	10/08/2021	Locally designated wildlife sites within 1km of site boundary. Records of protected and notable species within 1km of the site boundary.
Greater Manchester Local Record Centre	12/03/2020 (Urban Green, 2020a)	Locally designated wildlife sites within 1km of site boundary. Records of protected and notable species within 1km of the site boundary.

MAGIC was also searched to assess whether the site fell within any Impact Risk Zones (IRZ) associated with a statutory designated site or a site forming part of the National Site Network. IRZ's have been identified by Natural England for use by Local Planning Authorities to assess planning applications for likely impacts on these sites and to determine when to consult Natural England for further advice.

3.2 Field Survey

3.2.1 Vegetation

The site was subject to a field survey on 11th August 2021, by Katie Bird, Senior Ecologist at Urban Green. The weather conditions were 18°C, with cloud cover but no precipitation.

The methods were based on the standard methodology as detailed by *JNCC Handbook for Phase 1 Habitat Survey* (JNCC, 2010). A Phase 1 Habitat Plan has been produced to demonstrate habitats within the proposed development and the surrounding area. The mapping techniques are based on *the Phase 1 Habitat Survey* (JNCC, 2010) guidance. Plant common and latin names were taken from the *Online Atlas of British and Irish Flora* (<https://www.brc.ac.uk/plantatlas/>), a continually updated directory of plant nomenclature developed in partnership by the Botanical Society of Britain and Ireland, the Biological Records Centre, the UK Centre for Ecology and Hydrology, and the JNCC.

Flora species listed as protected in the *Wildlife and Countryside Act 1981* (as amended) and species which are indicators of important and/or uncommon habitats, were searched for during the survey.

Species abundance is described using the DAFOR scale as shown in Table 3. Percentages are an approximate indication rather than a quantitative measure.

Table 3 – Key to Species Abundance

		Description	Indicative Percentage Ranges
D	Dominant	Covers most of the area	90% or greater
A	Abundant	Very common throughout the area.	50 – 90%
F	Frequent	Common or with many individuals.	20 – 50%
O	Occasional	Occurs in several places but not throughout. Populations are not large.	5 – 20%
R	Rare	Occurs in low numbers in relation to size of area.	Less than 5%

“L” will be used to indicate abundance in a localised area, e.g. LA = Locally abundant

Any invasive species, including those listed on the revised (April 2010) Schedule 9 of the *Wildlife and Countryside Act 1981* (as amended) were noted during the field survey when sighted.

3.2.2 Fauna

A site search for field signs of protected and notable fauna was undertaken, and incidental sightings are detailed. The searches completed were as follows:

- Suitability of any ponds to support notable and protected amphibians, and the suitability of the site’s terrestrial habitats to support amphibians.
- Suitability of the site to support reptiles by way of habitat structure and refuge piles, as well as links to the wider landscape.
- Search of any watercourses for signs or suitability for white clawed-crayfish (*Austropotamobius pallipes*), water vole (*Arvicola amphibius*) and otter (*Lutra lutra*) by way of burrows, resting places, holts and foraging signs.

- Suitability of the site to support notable bird species. Bird nests and droppings of notable and protected bird species.
- Suitability of the site to support notable invertebrates.
- Search of the site for any invasive species.
- Badger (*Meles meles*) field signs such as setts, mammal, paths, snuffle holes and latrines.
- Suitability of the site to support notable terrestrial mammals including harvest mouse (*Micromys minutus*) and brown hare (*Lepus europaeus*).

3.3 Bat Assessment

3.3.1 Preliminary Roost Assessment

A Preliminary Roost Assessment (PRA) was carried out on the site buildings and trees using a high-powered torch and close-focussing binoculars to examine the interior and exterior of the building.

The PRA methodology is based on information contained within the Bat Conservation Trust (BCT) guidelines, 3rd edition (Collins, 2016). The categorisation within this report is based on that set out in Table 4, which is used as a basis for determining the requirement for further surveys.

Table 4 – Suitability of Trees and Buildings for Roosting Bats (adapted from Collins, 2016)

Category of Suitability	Typical Characteristics	Further Survey Requirements
High Roost Suitability	A structure/tree with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions and surrounding habitat.	Three separate survey visits. At least one dusk emergence and a separate dawn re-entry survey. Surveys can be undertaken between May and September, with at least two surveys between May and August.
Moderate Roost Suitability	A structure/tree with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions and surrounding habitat but are unlikely to support a roost of high conservation status.	Two separate survey visits. One dusk emergence and a separate dawn re-entry survey. Surveys can be undertaken between May and September with at least one survey between May and August.
Low Roost Suitability	A structure/tree with one or more potential roost sites that could be used by individual bats opportunistically. However, these potential roost sites do not provide enough space, shelter, protection, appropriate condition and/or suitable surrounding habitat to be used on a regular basis by larger numbers of bats.	Buildings: One survey visits, either one dusk emergence or a separate dawn re-entry survey. Trees: No further survey required but precautionary methods of felling recommended.

Category of Suitability	Typical Characteristics	Further Survey Requirements
Negligible Suitability	Negligible habitat features on site likely to be used by roosting bats.	No further work required.

3.3.2 Commuting and Foraging Bats

The site was assessed for its suitability for use by commuting and foraging bats.

The commuting and foraging assessment methodology is based on information contained within the Bat Conservation Trust guidelines 3rd edition (Collins, 2016). The categorisation within this report is based on that set out in Table 5, which is used as a basis for determining the requirement for further surveys.

Table 5 – Suitability of Site for Foraging and Commuting Bats (adapted from Collins, 2016)

Category of Suitability	Typical Characteristics
High Suitability	Continuous high-quality habitat that is well connected to the wider landscape that is likely to be used regularly by commuting or foraging bats such as; river valleys, streams, hedgerows, lines of trees or woodland edge. Site is close to or connected to known roosts.
Moderate Suitability	Continuous habitat connected to the wider landscape that could be used by commuting bats such as lines of trees, scrub or linked back gardens. Habitat connected to wider landscape that could be used for bats for foraging such as; trees, scrub, grassland or water.
Low Suitability	Habitat that could be used by small number of commuting bats such as; defunct hedgerow, isolated features not well connected to surrounding habitat or Isolated habitat that could be used by a small number of foraging bats such as a lone tree or patch of scrub.
Negligible Suitability	No features on site suitable for use by commuting and foraging bats.

3.4 Constraints to the Survey

Whilst every effort has been made to provide a comprehensive description of the site, no investigation could ensure the complete characterisation and prediction of the natural environment.

This PEA does not constitute a full botanical survey. The protected species assessment provides a view of the likelihood of protected species occurring on the site based on the known distribution of species in the local area and the suitability of the habitat. It should not, however, be taken as providing a full and definitive survey of any protected species group.

No internal access to the building was possible due to being in use, however an inspection of a unit associated with B1b was completed. The previous PRA completed in March 2020 (Urban Green, 2020a), was able to gain access to the building and the previous assessment has been considered within the PRA. This therefore not considered to be a significant constraint to the assessment provided within this report.

Where a lack of records is found during the desk search for a defined geographical area, it does not necessarily mean that there is a lack of ecological interest; the area may be simply under-recorded.

The conclusions and recommendations detailed in this report are based upon the site redline boundary and the development proposals as outlined by the client at the time of writing. Should there be any changes to the site redline boundary or development proposals at a later stage, this assessment should be reviewed to determine whether any amendments or additional survey work is required.

The findings of this report represent the professional opinion of qualified ecologists and do not constitute professional legal advice. The client may wish to seek professional legal interpretation of the relevant wildlife legislation cited within this document.

3.5 Lifespan of Report

In accordance with CIEEM's Advice Note on the Lifespan of Ecological Reports and Surveys (CIEEM, 2019), the details of this report will remain valid for a period of **18 months** from the date of the survey (i.e. until 11th February 2023). After this date, this assessment should be reviewed to determine whether any updated surveys are required.

3.6 Definitions

For the purposes of this report, the term 'protected and notable species' relates to:

- Species included on Schedules 2 and 4 of *The Conservation of Habitats and Species Regulations 2017*;
- Species included on Schedules 1, 5 and 8 of the *Wildlife and Countryside Act 1981* (as amended), excluding species that are only protected in relation to their sale (see section 9[5] and 13[2]);
- Invasive non-native species included on Schedule 9 of the *Wildlife and Countryside Act 1981* (as amended);
- Species of principal importance for the conservation of/maintaining and enhancing biodiversity as required under: Section 41 of the *Natural Environment and Rural Communities Act 2006* (England), Section 7 of the *Environment (Wales) Act 2016*, Section 2[4] of the *Nature Conservation (Scotland) Act 2004*;
- Local species of importance as identified within various local biodiversity action plans; and,
- Badgers, which are protected under the *Protection of Badgers Act 1992*.

4 Baseline Ecological Conditions

4.1 Desk Study

4.1.1 Site Location

The site is located within a predominately urban area of Littleborough with residential housing to the east and south, and commercial units to the west.

An untitled park is located immediately north, comprising grassland and woodland, with Hare Hill Park located approximately 175m northeast of the site. It is anticipated that these parkland habitats provide value for fauna such as birds and bats.

4.1.2 Designated Sites

One statutory and two non-statutory designated sites are present within 1km of the site boundary and are detailed in Table 6. Three sites forming part of the National Site Network were located within 5km of the site boundary also detailed in Table 6.

Table 6 – Designated Sites within the Search Areas

Designated Site	Approx. Distance from Site	Details
Statutory designated sites		
Rochdale Canal Sites of Special Scientific Interest (SSSI)	300m southeast	A 26.37ha site. Its designation was selected due to its important habitats for submerged aquatic plants and emergent vegetation. Species include the nationally scarce floating water-plantain (<i>Luronium natans</i>), a diverse assemblage of pondweeds (<i>Potamogeton</i> spp) including the nationally rare American pondweed (<i>Potamogeton epihydrus</i>), water violet (<i>Hottonia palustris</i>) as well as the locally uncommon species including royal fern (<i>Osmunda regalis</i>) and freshwater sponge (<i>Spongilla lacustris</i>). The site also supports in excess of 112 invertebrate species, 13 of these are of local importance and nationally scarce species including water beetle (<i>Agabus uliginosus</i>) and the pea mussel (<i>Pisidium pulchellum</i>). A number of waterfowl are attracted to the canal habitat, including kingfisher (<i>Alcedo atthis</i>) which is a Schedule 1 species of the Wildlife and Countryside Act 1981 (as amended). The site also falls within the IRZ of the Rochdale Canal SSSI.
Rochdale Canal Special Area of Conservation (SAC)	300m southeast	A 24.86ha site, its designation was selected due to its important habitats for submerged aquatic plants and emergent vegetation, primarily the nationally scarce floating water-plantain.

Designated Site	Approx. Distance from Site	Details
South Pennine Moors SAC and Special Protection Area (SPA)	1.7km southeast	This 65024.32ha site expands across several regions such as Cheshire, Derbyshire and Nottinghamshire, Greater Manchester, Lancashire, North Yorkshire, Shropshire and Staffordshire, South Yorkshire and West Yorkshire. This site was designated due to the presence of Annex I habitats such as European dry heaths and blanket bogs at the southern end of the Pennine range, old sessile oak woods with <i>Ilex</i> spp and <i>Blechnum</i> spp, as well as North Atlantic wet heaths with <i>Erica tetralix</i> and transition mires and quaking bogs.
Non-statutory designated sites		
Rochdale Canal (Scowcroft to Warland)	300m southeast	A site containing important habitats for submerged aquatic plants and emergent vegetation.
Hollingworth Lake and surrounds	960m southeast	A site containing a lake and surrounding woodland and fields.

4.1.3 Flora and Fauna

The following section summarises protected and/or notable species records that have been recorded within 1km of the site, as detailed with the previous PEA (Urban Green, 2020a).

Vascular Plants

The data search returned eight records of floating water-plantain (*Luronium natans*) recorded within 1km of the site boundary, with the closest record located approximately 365m south in 2011.

Invertebrates (Section 41 species)

The data search returned 62 records of Section 41 (NERC Act, 2006) invertebrate species including autumnal rustic (*Eugnorisma glareosa*), blood-vein (*Timandra comae*), buff ermine (*Spilosoma luteum*), cinnabar (*Tyria jacobaeae*), common carpet (*Epirrhoe alternata*), dot moth (*Melanchra persicariae*), grey dagger (*Acronicta psi*), knot grass (*Acronicta rumicis*), mouse moth (*Amphipyra tragopoginis*), neglected rustic (*Xestia castanea*), rosy minor (*Mesoligia literosa*), sallow (*Cirrhia icteritia*), small phoenix (*Ecliptopera silaceata*), small squared-spot (*Diarsia rubi*), white ermine (*Spilosoma lubricipeda*) and white-letter hairstreak (*Satyrium w-album*). The closest record of a Section 41 invertebrate species is of autumnal rustic, blood-vein, buff ermine, cinnabar, common carpet, dot moth, grey dagger, knot grass, mouse moth, neglected rustic, rosy minor, sallow, small phoenix, small squared-spot and white ermine which were all recorded approximately 830m southwest of the site in 2010-2017.

Common Toad

The data search returned one record of common toad (*Bufo bufo*), an approximate distance of 820m southwest from the site in 2017.

Bats

The data search returned six records of bat roosts recorded within 1km of the site boundary, with the closest record of a pipistrelle species (*Pipistrellus* sp.) mixed roost located 120m north-west of the site in 2014. A further 13 records of bat roosts records were also returned within 1km of the site boundary.

In addition, 69 additional bat records were returned for pipistrelle species. The closest to the site was a field record 240m north-west of the site in 2014.

A search on MAGIC identified no bat EPSLs within 1km of the site.

Birds

From a total of 186 records, the following bird species have been identified within the local area:

Schedule 1 Protected Birds

The data search returned 14 records of Schedule 1 of Wildlife and Countryside Act (WCA) 1981 (as amended) protected birds including kingfisher (*Alcedo atthis*), little ringed plover (*Charadrius dubius*) and peregrine (*Falco peregrinus*). The closest record of a Schedule 1 protected bird is of a peregrine, that was recorded approximately 210m northwest of the site in 2013.

In addition, six additional nesting records were returned within 1km for kingfisher and little ringed plover. The exact locations and dates of these records remain confidential.

Section 41 Birds

The data search returned 164 records for Section 41 (NERC Act, 2006) listed birds including bullfinch (*Pyrrhula pyrrhula*), cuckoo (*Cuculus canorus*), curlew (*Numenius arquata*), dunnock (*Prunella modularis*), grasshopper warbler (*Locustella naevia*), grey partridge (*Perdix perdix*), herring gull (*Larus argentatus*), house sparrow (*Passer domesticus*), lapwing (*Vanellus vanellus*), reed bunting (*Emberiza schoeniclus*), skylark (*Alauda arvensis*), song thrush (*Turdus philomelos*), spotted flycatcher (*Muscicapa striata*) and starling (*Sturnus vulgaris*). The closest record of a Section 41 protected bird is of a song thrush, that was recorded approximately 210m northwest of the site in 2012.

LBAP Birds

The data search returned 72 records for LBAP species for the Greater Manchester region, including bullfinch, grey partridge, reed bunting, skylark, song thrush and spotted flycatcher. The closest record of a LBAP species is of a song thrush, that was recorded approximately 210m north-west of the site in 2015.

Birds of Conservation Concern Red Listed Birds

The data search returned 81 records of species on the Birds of Conservation Concern (BoCC4) Red list. These included birds that may be globally threatened, experienced historical or recent population declines in the UK, or reduction of breeding ranges. Current red list birds returned in the data search included cuckoo, curlew, grasshopper warbler, grey partridge, herring gull, house sparrow, lapwing, reed bunting, skylark, song thrush, spotted flycatcher and starling. The closest record of a BoCC Red Listed species is of a song thrush, that was recorded approximately 210m northwest of the site in 2015.

Birds of Conservation Concern Amber Listed Birds

The data search returned 81 records of species on the Birds of Conservation Concern (BoCC4) Amber Listed species. These birds have undergone similar, though less severe, population and range declines to those species listed on the Red List. Current amber-listed birds returned in the data search included cuckoo, dunnock, kingfisher and reed bunting. The closest record of a BoCC Amber Listed species is a dunnock sighting approximately 210m northwest of site in 2014.

Hedgehog

The data search returned one record of hedgehog (*Erinaceus europaeus*), an approximate distance of 820m southwest from the site in 2014.

Water Vole

The data search records of burrows and feeding signs of water vole, with the closest record located approximately 500m south in 2007.

Badger

The data search returned 10 records of badgers within 1km of the site boundary.

Five records of badger setts and one field sign were also returned, recorded within 1km of the site. The exact locations and dates of these records remain confidential.

No Records Returned

The data search returned no records for:

- Great crested newt and no granted EPSLs located within 1km of the site.
- Reptile species
- Hazel dormice (*Muscardinus avellanarius*)
- White-clawed crayfish
- Otter
- Brown hare
- Harvest mouse
- Invasive non-native fauna and flora species

4.2 Field Survey

The site habitats and accompanying Target Notes are presented in the Phase 1 Habitat Map in Appendix 3.

4.2.1 Hardstanding and Buildings

The site predominantly comprised buildings with associated hardstanding consisting of stone (See Photograph 1), used for car parking purposes. Limited vegetation was observed within these areas, consisting of occasional spurge (*Euphorbia* sp.) and common nettle (*Urtica dioica*).



Photograph 1 – Hardstanding and storage containers

Please refer to Appendix 2 for a detail description of the buildings as part of the PRA.

4.2.2 Ornamental Shrub

Scattered areas of ornamental shrub were located within the ornamental hardstanding areas (see Photograph 2). Species consisted of culver's root (*Veronicastrum virginicum*), Japanese holly (*Ilex crenata*) and juniper species (*Juniperus* sp.).



Photograph 2 – Ornamental shrub within the site

4.2.3 Mixed Broadleaved Woodland

The northern aspect comprised a section of mixed broadleaved woodland (see Photograph 3 and 4). Abundant species within this woodland comprised frequent ash (*Fraxinus excelsior*), willow (*Salix* sp.), Leyland cypress (*Cupressus × leylandii*), sycamore (*Acer pseudoplatanus*), with rare cherry (*Prunus* sp.), field maple (*Acer campestre*), Lawson cypress (*Chamaecyparis lawsoniana*), goat willow (*Salix caprea*), silver birch (*Betula pendula*) and alder (*Alnus glutinosa*).



Photograph 3 – Mixed broadleaved woodland



Photograph 4 – Mixed broadleaved woodland

The understorey comprised holly (*Ilex aquifolium*), wall cotoneaster (*Cotoneaster horizontalis*), Japanese laurel (*Aucuba japonica*), bramble (*Rubus fruticosus* agg.), and Darwin's barberry (*Berberis darwinii*). With ground flora of abundant ivy (*Hedera helix*), wood avens (*Geum urbanum*), herb robert (*Geranium robertianum*), cleavers (*Galium aparine*) and ground ivy (*Glechoma hederacea*). Occasional species included creeping buttercup (*Ranunculus repens*), foxglove (*Digitalis purpurea*) and mallow (*Malva sylvestris*).

4.3 Site Suitability for Protected and Notable Species

4.3.1 Species Discounted from Assessment

Water vole and white-clawed crayfish have been discounted from assessment. No aquatic habitats are located onsite or within its vicinity. The closest aquatic habitat relates to the Rochdale Canal located 300m south of the site, separated by buildings and roads.

Hazel dormouse mainly occur in southern counties, especially in Devon, Somerset, Sussex and Kent. There are few recorded localities north of the Midlands, though they are present in parts of the Lake District and in scattered Welsh localities (Matthews *et al.*, 2018). The species are not generally known to be present within the Littleborough area (Wembridge *et al.*, 2016). The habitats on site are of limited value due to limited areas of extensive woodland and scrub. As such, the species are reasonably discounted from site.

Red squirrel have been discounted from the assessment. Red squirrel populations are limited to small areas of northern England and are not known to be present in the Littleborough area; with no previous records returned in the data search. It is anticipated that high abundances of grey squirrel are present within this region (Shuttleworth/RSST n.d.), with observations noted on site. This species will displace red squirrel through competition as well as cause increased red squirrel mortality through the spread of squirrel pox (The Mammal Society, 2020).

4.3.2 Vascular Plants

No notable flora was noted during the field survey, with only common and widespread species observed. In addition, the data search returned records of notable flora in association with aquatic habitats which are not present on site.

As such, notable vascular plants are considered likely absent from the site and not considered further within this report.

4.3.3 Invertebrates

No deadwood, aquatic habitats or habitats with high floristic diversity were located on site which would provide an important resource for invertebrates during their life cycle.

The woodland to the north will provide the highest value for invertebrates and may provide value for a number of notable species returned in the data search such as buff ermine and rosy minor. However due to the size and used of the woodland, it is not anticipated to be significant value.

Notable invertebrates may be present on site.

4.3.4 Amphibians

No ponds were located within site or within 250m of the site boundary. As great crested newts' upper dispersal limit is generally considered to be up to 250m from a waterbody (though occurrence of greater distances does exist), great crested newts are not anticipated to be present on site (English Nature, 2001).

The woodland may provide suitable foraging and refuge for common amphibians that may be present within the local area.

Therefore, great crested newts are reasonably discounted, though common amphibians may be present within the site boundaries.

4.3.5 Reptiles

Generally, reptiles require a mosaic of habitats. However, much of the site comprised a monoculture of bare ground which lacked a variety of heights and structure that is important to reptiles to avoid predation (NARRS, 2007). The woodland on site and associated parkland is isolated from extensive suitable habitats and would not be able to support a population of reptiles.

Overall, the habitats on site were of limited value and no records of the species group were identified. Reptiles are not considered to be present on site and are not discussed further within this report.

4.3.6 Birds

Ground Nesting

The data search returned records of ground nesting birds in the local area, such as skylark. The bare ground habitats will provide negligible value for ground nesting birds due to very limited vegetation present and species would be exposed to predation.

As such ground nesting birds are deemed absent from site.

Passerine

The woodland may provide value to nesting birds. In addition, several notable passerine bird records were returned as present on-site including dunnock, house sparrow and starling. It is anticipated that these species may utilise the habitats on site and within the wider area.

Birds of Prey

One record of prey species were returned in the data search, comprising peregrine. No suitable food source such as small rodents were noted throughout the site and wider area and. In addition, the relatively small size of the site limits the foraging habitat for birds of prey and are likely to utilise more suitable habitat within the nearby agricultural areas.

4.3.7 Bats

Preliminary Roost Assessment

A PRA was completed on all trees and buildings located on site and adjacent. All trees contained no PRFs or suitable holes/crevices deep enough for roosting opportunities and were assessed as having negligible bat roosting potential.

The following buildings were assessed having bat roosting potential:

- B1a was assessed as having moderate bat roosting potential due to a number external PRFs.
- B1b and B1c was assessed as having low bat roosting potential due to a limited number of external PRFs observed relating to the asbestos roof panels.

Commuting and Foraging Bats

The site comprises habitat suitable to be used by commuting and foraging bats, namely within the site and to the north of the site boundary. However, this habitat comprises a fraction of available habitat in the local area and close vicinity of the site, due to the urban and residential nature of land to the east, south and west of the site.

As such, the site was assessed as having low commuting and foraging value.

4.3.8 Hedgehog

The woodland is anticipated to provide suitable cover and foraging habitats for the species.

Therefore, hedgehog is likely to be present within the site.

4.3.9 Badger

No badger setts were noted on the site or within 30m where access was possible. Additionally, no evidence of badger activity was noted throughout the site, including snuffle holes, signs of digging, or latrines.

The hardstanding and buildings will offer limited value for badger due to use. However, the woodland may provide suitable foraging and sett building opportunities for the species.

Badgers are currently absent from site but suitable habitats is present.

4.4 Invasive Species

4.4.1 Flora

Wall cotoneaster was present within the woodland, whilst an additional area of wall cotoneaster and montbretia (*Crocsmia x crocosmiiflora*) was present within the centre of the site, on the western aspect of B1a (please refer to the Habitat Map in Appendix 2 for location). This species is listed under Schedule 9 of the *Wildlife and Countryside Act 1981* (as amended) as an invasive non-native species. It was located within eastern and northern boundaries.

5 Ecological Constraints and Recommended Mitigation

5.1 Proposed Development

The proposals include the demolition of existing buildings to facilitate the erection of a residential apartment block with associated car park and landscaping.

5.2 Designated Sites

The site is located within the impact risk zone of Rochdale Canal SSSI and SAC, which is located approximately 300m south from the site. The designated sites and the site are separated by anthropogenic barriers such as urban areas and roads, as such no direct impacts as a result of development are anticipated. A MAGIC search also demonstrated that the development does not fall within any of the impact categories of the designated sites which would recommend further consultation with Natural England.

The site may be hydrologically connected via groundwater systems and there is potential risk of pollutants entering the water course as a result of the proposed construction activities. As such it is recommended that a Construction Environmental Management Plan (CEMP) is adopted with the aim to minimise the risk of negatively impacting the designated site. The objectives of the CEMP should be to:

- Demonstrate the role and responsibilities on site of Ecological Clerk of Works (ECoW) and details of when the ECoW is required to oversee specific works as part of the construction phase.
- Demonstrate the responsible persons and lines of communication.
- Demonstrate and mitigate for the potential impacts on the nearby designated sites and protected/notable fauna and habitats anticipated to be on site, in relation to the proposed construction activities.
- Consider appropriate lighting mitigation to minimise the potential impacts during the construction to nocturnal species.
- Describe the provision and maintenance of shelter for protected/notable species during the construction phase using protective fences, exclusion barriers and warning signs (where necessary).
- Demonstrate the locations of 'Biodiversity Protection Zones' and outline the working methods to be followed during the construction phase, regarding retained habitats and associated fauna (where necessary).
- Outline monitoring procedures of ecological features within the site during the construction phase (where necessary).

5.2.1 Habitats

The site comprised habitats that were found to be widespread within the local area; however, they did contain value for wildlife such as bats, birds, common amphibians and terrestrial mammals. The woodland is of highest value, though the building may provide suitable roosting opportunities for bats.

The AIA (Urban Green, 2021) details the required removal of trees and the retention of the woodland to the north.

Generally, the protection measures of retained trees will be through used of temporary protective demarcation fencing to protect the trees and shrubs detailed within the AIA (Urban Green, 2021). The fencing must extend outside the canopy of the retained trees and must remain in position until all plots have been developed to ensure protection is provided throughout the construction phase. The fencing will be in accordance with BS 5837:2012 Trees in Relation to Design, Demolition and Construction: Recommendations.

It is recommended that replacement tree planting to compensate for loss of any trees is included within the landscape design. It is recommended that the planting comprises native species and species known to be of value for the attraction of wildlife. This will include fruiting and flowering species.

5.3 Fauna

5.3.1 Invertebrates

The woodland was found to provide potential value for a range of invertebrate species identified within 1km of the site boundary. The development has been designed to retain the woodland to the north, as such no loss of suitable habitats for invertebrates will incur.

As such, no significant impacts to invertebrates are anticipated.

5.3.2 Amphibians

Great crested newts were deemed unlikely to be present on site and no further consideration for the species is required. However, there is a possibility that common amphibians such as common toad may be present on site.

It is recommended that Reasonable Avoidance Measures are to be followed during site clearance. All site contractors are to be inducted to the potential presence of the species. Any debris is to be cleared by hand, and any common amphibians located moved carefully, by hand, to outside of the development area.

5.3.3 Birds

Vegetation removal should be undertaken outside of the breeding bird season (March to September, inclusive). If this is not possible, a suitably experienced ecologist should check the habitat for breeding bird activity no more than 48 hours before clearance. If nesting activity is found, nests must be left in situ until the young have fledged.

Due to the retention of the woodland, it is not anticipated that there will be an impact on the local bird population.

5.3.4 Bats

Foraging and Commuting Bats

Habitats on site were of limited suitability for foraging bats due to their small extent and lack of floristic diversity which would attract invertebrates. The woodland is likely of greatest value and is to be retained. As a result, no further surveys are required, as a result of low value for foraging and commuting bats and the aim to retain the woodland on site.

Bats are sensitive to lighting and may be impacted by the proposed development, should no mitigation for lighting be considered.

Lighting mitigation should follow the guidance outlined in the Institute for Lighting Engineers document “Guidance for the Reduction of Obtrusive Lighting” (2005) and BCT’s “Bats and Artificial Lighting in the UK” (2018). The construction lighting may impact bats which are sensitive to light. Directional lighting will be achieved by angle and orientation of beam, use of a cowl, louvre or other light shield, or a combination of these.

An External Lighting Scheme had not been produced on the writing of this report. As such, the following recommendations are to be considered within the scheme during its condition, to minimise impacts of lighting. The recommendations are as follows:

- Keep site lighting to minimum levels.
- Luminaries should lack UV elements and preferably LED lighting with a warm white light should be used over cool white light (ideally <2700Kelvin).
- Lighting should feature peak wavelengths greater than 550nm.
- Internal lighting should be positioned away from windows to minimise light spill.
- Light placement should be downward facing to prevent excess horizontal or vertical light spill.
- The use of integrated fittings such as cowls, shields, louvres, and hoods, that effectively contain light spill from unintended areas.
- The use of hard landscaping features to block light and create dark corridors.
- Avoid illuminating any suitable bat habitats, particularly retained scattered trees, that are likely valuable commuting and foraging habitat for bats.
- Use of timed security lights should be set on motion-sensors and using short, 1-minute timers, to minimise light use.
- Column heights of lighting can be considered to minimise light spill.

5.3.5 Hedgehog

Hedgehog may be present on site, as such checks for hedgehogs should be carried out prior to vegetation removal to avoid harming this species during works. Precautionary working methods (detailed in Section 5.3.6) will help to avoid harm to this species.

5.3.6 Badger

Suitable commuting and foraging habitat for badger is present on site and as such the following Precautionary Working Methods should be adhered to during construction phase to ensure that no badgers are impacted by the proposed development:

- All site operatives will be inducted to the potential presence of the species and the species legal protection.
- All site operatives will be inducted as to identifying potential badger setts and should be vigilant if they suspect they locate a new sett during works and inform the site manager immediately. A minimum 20m buffer will be maintained from the potential sett until an ecologist has been to site.

- All excavations will be battened at a 45 degree angle or ramps to be positioned to allow escape should animals become trapped.
- All site machinery and materials will be appropriately stored to avoid harm to the species, notably between July and November each year when extra care is needed to avoid potential impacts on pregnant females.

5.3.7 Invasive Species

Non-native invasive flora species were identified during the site walkover. As such, it is recommended, prior to the development, that the species should be eradicated following the most current guidance set out by the Environment Agency by a qualified contractor.

6 Further Surveys

6.1 Bat Survey

As several buildings were identified as having bat roosting potential, further surveys in the form of emergence and/or re-entry surveys are recommended to confirm presence or absence of roosting bats.

The surveys would involve situating a number of suitably qualified surveyors around identified PRFs to monitor for bats emerging from potential roost locations (dusk emergence survey) or entering potential roost locations (dawn re-entry survey) for a specified amount of time. The surveys should be completed between May – September (inclusive), and include:

- B1a requires a minimum of two surveys to be carried out between May and September (at least one survey to be carried out between May-August).
- B1b and B1c require a minimum of one survey to be carried out between May-August.

7 Opportunities for Enhancement

The National Planning Policy Framework (NPPF) (2021) highlights the requirement for planning policies and decisions to conserve and enhance the natural environment.

Paragraph 170 states that this should be achieved by (in terms of this assessment only):

- a) *protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory status or identified quality in the development plan);*
- b) *minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures;*

Specific enhancement recommendations for the site include the following:

- Bat and bird boxes could be placed on the new buildings / retained trees. A plan to show the locations of these boxes and the specifications should be produced by a suitably qualified ecologist once the layout is finalised.
- Planting of native wildflower meadows to benefit the local invertebrate population.
- Planting of linear features such as hedgerows and trees with green space where possible, to add commuting features withing the site.
- The inclusion of ‘hedgehog highways’ to facilitate movement across the site. This includes holes of 13 x 13cm at the bases of fence panels, leaving a sufficient gap beneath gates and/or leaving brick spaces at the bases of brick walls.

8 Conclusion

The PEA has met the objectives of the report, by demonstrating the following:

- The major habitats identified on site included hardstanding and buildings, with mixed broadleaved woodland to the north.
- Potential ecological constraints identified included badgers, birds, bats, hedgehogs and common amphibians and are detailed in Section 5.
- Mitigation recommendations to be completed prior and during the construction phase for badgers, birds, bats, hedgehogs and common amphibians have been detailed in Section 5.
- Further bat surveys are deemed necessary to inform the proposed planning application.
- General ecological enhancements are detailed in Section 7, targeting local wildlife.

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Appendix 1 – Relevant Legislation

Legislation relating to European Protected Species (e.g. bats)

European Protected Species and their resting places (e.g. bat roosts) are protected under the Wildlife and Countryside Act 1981 (as amended), the Countryside and Rights of Way (CROW) Act 2000, and the Conservation of Habitats and Species Regulations 2017.

The Conservation of Habitats and Species Regulations 2017 transposed the European Union's 'Habitats Directive' (Council Directive 92/43/EEC) on the Conservation of Natural Habitats and of Wild Fauna and Flora (EC Habitats Directive) into UK law. The Regulations provide for the designation and protection of 'European Sites', the protection of 'European Protected Species' (EPS), and the adaptation of planning and other controls for the protection of European Sites. EPS are listed on Schedule 2 of the Conservation of Habitats and Species Regulations 2017.

Under the Wildlife and Countryside Act 1981 (as amended) it is an offence to:

- Intentionally kill, injure or take certain animals listed in Schedule 5;
- Intentionally or recklessly damage or destroy any structure or place which any wild animal specified in Schedule 5 uses for shelter or protection;
- Intentionally or recklessly disturb any such animal while it is occupying a structure or place which it uses for shelter or protection; or
- Intentionally or recklessly obstruct access to any structure or place which any such animal uses for shelter or protection.

In addition, under this legislation there are offences relating to sale, possession and control of wild animals listed in Schedule 5.

- Under the Conservation of Habitats and Species Regulations 2017 it is an offence to:
- Deliberately capture, injure or kill any wild animal listed as a European Protected Species;
- Deliberately disturb wild animals of any such species in such a way as to be 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.
- Deliberately take or destroy the eggs of such an animal, or;
- Damage or destroy a breeding site or resting place of such an animal.

In addition, under this legislation there are offences relating to possession, control sale and exchange of an EPS.

Great crested newt, otter and several species of bat are listed as a Species of Principle Importance (SoPI) under Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006.

Legislation for amphibians (other than great crested newt)

Under the Wildlife and Countryside Act 1981 (as amended) the four widespread amphibian species, smooth newt (*Triturus vulgaris*), palmate newt (*Triturus helveticus*), common toad (*Bufo bufo*) and common frog (*Rana temporaria*) receive limited protection through section 9(5) only which makes selling, offering for sale, possessing or transporting for the purpose of sale (live or dead animal, part or derivative) an offence.

Common toad is listed as a SoPI under Section 41 of the NERC Act 2006.

Legislation relating to badger

Badgers are protected under the Protection of Badgers Act 1992 (as amended) which makes it an offence to:

- wilfully kill, injure, take, possess or cruelly ill-treat a badger, or to attempt to do so;
- intentionally or recklessly damage, destroy or obstruct access to a badger sett; and
- disturb a badger when it is occupying a sett.

These provisions have implications for construction or preparation works undertaken in the vicinity of an active sett and may be confounded by distance from the sett entrance. Any works resulting in ground penetration, vibration or noise near an identified badger sett entrance/s have the potential to disturb badgers and advice should be sought from a suitably experienced ecologist under such circumstances. If disturbance to an active sett is probable, then a licence may need to be obtained from Natural England before any works commence.

Legislation relating to breeding birds

All birds, their nests and eggs are protected by the Wildlife and Countryside Act 1981 (as amended) and it is an offence, with certain exceptions, to:

- Intentionally kill, injure or take any wild bird;
- Intentionally take, damage or destroy the nest of any wild bird while it is in use or being built;
- Intentionally take or destroy the egg of any wild bird; and
- Intentionally or recklessly disturb any wild bird listed on Schedule 1 while it is nest building or is in, on or near a nest with eggs or young; or disturb the dependent young of such a bird.

Schedule 1 of the Wildlife and Countryside Act 1981 provides further protection for selected species (including peregrine falcon (*Falco peregrinus*), barn owl (*Tyto alba*), little ringed plover (*Charadrius dubius*) and black redstart (*Phoenicurus ochruros*) during the breeding season. 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 disturb dependent young of such a bird. That person shall be guilty of an offence.

A number of bird species are listed as SoPI under Section 41 of the NERC Act 2006.

Conservation status - Birds of Conservation Concern (Eaton et al., 2015)

The UK's leading bird conservation organisations have worked together on the third quantitative review of the status of the birds that occur regularly in the UK, updating the last review in 2011. The status of birds within the UK have been regularly monitored through a series of surveys, including the national Breeding Bird Survey, Common Bird Census, sea bird monitoring programs and

wetland monitoring programs. The result of this review and continued monitoring is The Population Status of Birds in the UK, Birds of Conservation Concern 4: 2015.

Birds are assessed against criteria to place each species on one of three alert lists, red, amber or green. Red list species are considered to be of high conservation concern, being either globally threatened, having historical UK population declines, having a rapid population decline or breeding range contraction of 50% or more in the last 25 years.

Amber list species are considered to be of medium conservation concern as they meet one or more of the following criteria (but none of the red list criteria): Red listed for historical decline in a previous review but with substantial recent recovery (more than doubled in the last 25 years), a UK breeding range contraction of between 25% and 49%, a reduction of breeding or non-breeding population of 25-49% in the last 25 years, a 5-year mean of 1-300 breeding pairs in the UK, an unfavourable European conservation status, at least 50% of the UK breeding population found in 10 or fewer sites, or where the breeding population in the UK represents 20% or more of the European breeding populations.

Green list species are considered to be of low conservation concern. They include all regularly occurring species that do not qualify under any of the red or amber criteria are green listed. The green list also includes those species listed as recovering from Historical Decline in the last review that have continued to recover and do not qualify under any of the other criteria.

Legislation relating to invasive plant species

Several non-native invasive plant species including (but not limited to) Himalayan balsam (*Impatiens glandulifera*), giant hogweed (*Heracleum mantegazzianum*), Japanese rose (*Rosa rugosa*), variegated yellow archangel (*Lamium galeobdolon*), rhododendron (*Rhododendron ponticum*) and Japanese knotweed (*Fallopia japonica*) are listed under Schedule 9 of the Wildlife and Countryside Act, 1981 (as amended), which makes it an offence to ‘...plant or otherwise cause the species to grow in the wild’. This includes spreading or transferring contaminated soil from one area to another.

Estate Managers and landowners have a duty to pro-actively treat knotweed outbreaks. Under the Natural Environment and Rural Communities Act 2006 (NERC), subsection 14ZA (1), makes it an offence to sell, offer or expose for sale, or to have in one’s possession or transport for the purpose of sale, any Schedule 9 animal or plant or anything from which such an animal or plant can be propagated, including rhizomes of Japanese knotweed. Under subsection 14ZA (2) it is also an offence to publish or cause to be published any advertisement for the purchase or sale of these animals and plants.

The Environmental Protection Act 1990 (EPA 1990) contains a number of legal provisions concerning controlled waste. Any Japanese knotweed contaminated soil or plant material that is intended for discard is likely to be classified as controlled waste.

The Environmental Protection (Duty of Care) regulations 1991 also imposes a ‘duty of care’ on persons concerned with controlled waste, which includes any materials incorporating Japanese knotweed including soil, grass cuttings, general wastes and ash arising from the burning of knotweed. The duty applies to any person, who produces, imports, carries, keeps, treats or disposes of controlled waste. Failure to appropriately dispose of any material containing Japanese knotweed may lead to prosecution under Section 33 and 34 of the EPA 1990 and Section 14 (2) of the Wildlife & Countryside Act 1981 (as amended).

If knotweed stands are to be treated with herbicides, The Control of Pesticides Regulations (1986) applies. These regulations require any person who uses a pesticide to take all reasonable precautions to protect the health of human beings, creatures and plants, safeguard the environment and in particular

avoid the pollution of water. If pesticides are to be used in or near to a watercourse, the Environment Agency should be contacted, and approval must be sought (application to use herbicides in or near water).

Waste leaving the site must be handled responsibly and in accordance with the law at all stages between its production and final recovery or disposal. Waste must be transferred to an authorised person, who is either a registered waste carrier or exempted from registration by the Controlled Waste (Registration of Carriers and Seizure of Vehicles) Regulations 1991.

Additional legislation regarding the transport of Japanese knotweed contaminated materials is covered by the Hazardous Waste Regulations 2005 (HWR, 2005). This contains provisions about the handling and movement of hazardous waste. Consignment notes must be completed when any hazardous waste is transferred, which includes details about the hazardous waste properties and any handling requirements. Untreated Japanese knotweed is not classed as hazardous waste, but material containing knotweed which has been treated with certain herbicides, may be classified as hazardous waste.

If any waste soil or knotweed is sent for landfill either before or after treatment, it must go to a landfill that is authorised to receive it.

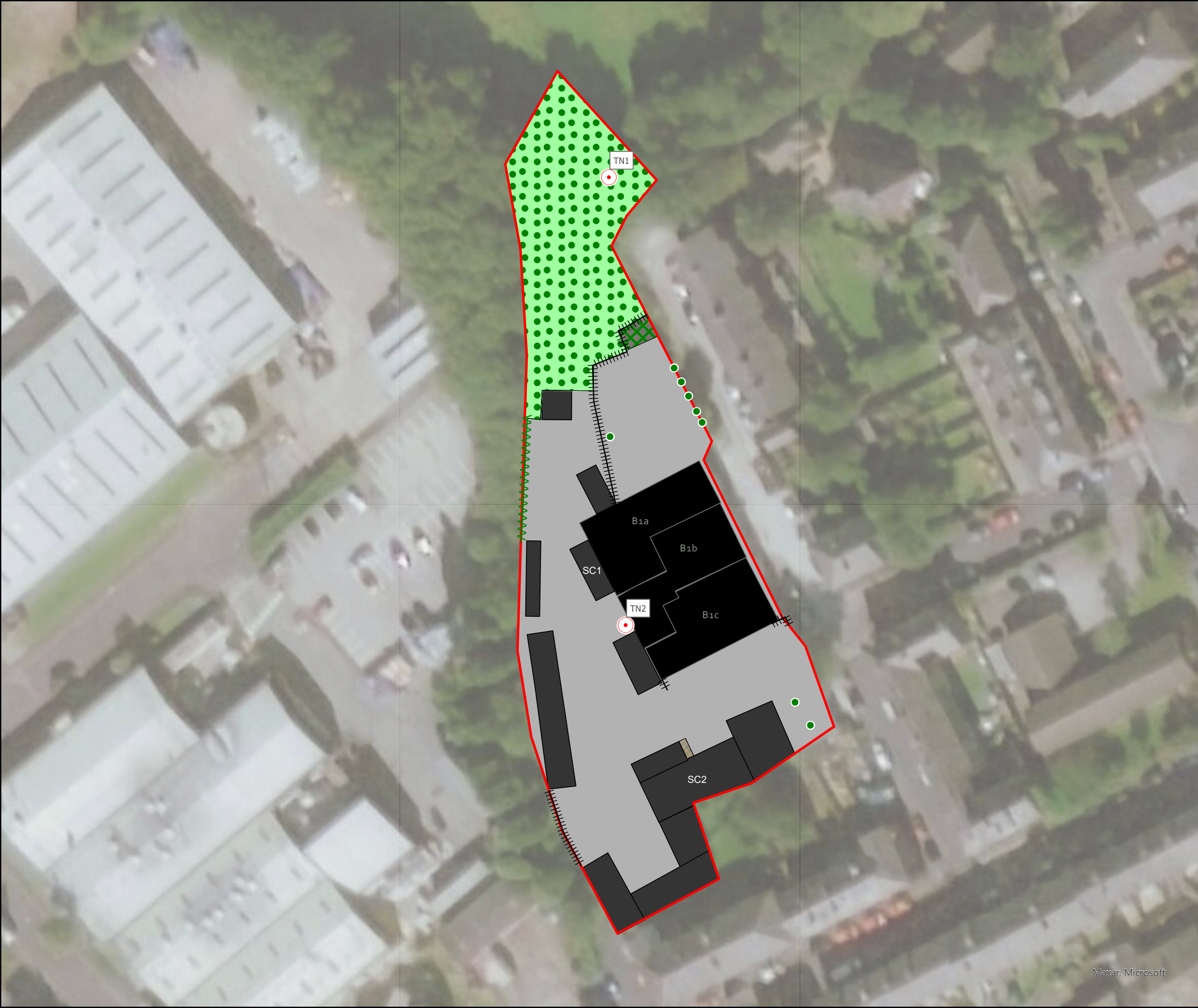
Appendix 2 – Preliminary Roost Assessment

Building Ref.	Description and Suitability	Photograph
B1a	Constructed of bare red brick on the northern and western aspect, connected to B1b on its southern section. The eastern and southern upper aspect comprised metal sheeting which was well-sealed with no suitable crevices or access points present. Many windows were glass, though a number were either covered in wooden boarding, or bricked up. A gap between the wooden boards and brick was present and may provide a suitable PRF for crevice dwelling species. A number of crevices were present within the external brickwork and in relation to the window and door arches, where mortar was missing. The roof was constructed of slate tiles and ridge tiles. Numerous slipped and missing slate tiles were present on all aspects of the roof, whilst mortar was missing on a number of ridge tiles. These gaps may provide suitable access to the building and/or suitable PRF. Wooden fascia was present on the northern aspect, where gaps were also present, providing suitable a crevice for bats. The previous PRA (Urban Green, 2020a) did not identify any obvious PRFs internally, though it could not be fully inspected due to being used for storage. Due to the number of PRFs the building was assessed as having moderate bat roosting potential.	

Building Ref.	Description and Suitability	Photograph
B1b	Situated between B1a and B1c, consisting of metal cladding walls on its eastern and western aspect. It was well-sealed with no crevices observed within the metal sheeting. The roof was constructed of single panelled asbestos with asbestos trim. Minor crevices between the trim and panels were present and may provide a PRF. A metal roller door was present on the eastern aspect, leading to the internal aspect of the building. It was in used for commercial purposes. Internally, the building consisted of breeze block walls with a metal frame supporting the asbestos panels. From the internal aspect, no PRFs were found. The previous PRA (Urban Green, 2020a) did not identify any obvious PRFs internally, though it could not be fully inspected due to being used for storage. As such, the building was assessed as having low bat roosting potential.	
B1c	It was of similar construction as B1b, with the southern aspect of similar construction as the eastern and western aspects. As such, the building was assessed as having low bat roosting potential.	

Building Ref.	Description and Suitability	Photograph
Shipping containers	Numerous metal shipping containers were present across the site. The previous PRA (Urban Green, 2020a) assessed two containers (as referenced as SC1 and SC2) as having low bat roosting potential due to access points to within the containers. However, following a review of the previous assessment and considering that the containers were of metal construction, with no suitable PRFs internally, they were assessed as having negligible bat roosting potential.	

Appendix 3 – Habitat Map and Target Notes



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Scattered tree

Species poor hedge

Fence

Introduced shrub

Red Line Boundary

Dense scrub

mixed semi-natural woodland

Shipping / metal container

Building

Hardstanding

TN1 Wall cotoneaster

TN2 Montbretia and wall cotoneaster

051020Meters

URBAN
GREEN

A: Ground Floor, The Tower,
Deva City Office Park, Trinity Way,
Manchester M3 7BF
T: +44 (0) 161 312 3131
weareurbangreen.co.uk

Client:

Casey Group

Project:

Brown Street, Littleborough

Title:

Phase 1 Habitat Survey Map

Issue:

01

Drawn:
MC

Checked:
KB

Approved:
KB

Project:
UG1240

Scale @ A3:
NTS

Date:
18/08/2021

Dwg No:
UG_1240_ECO_HM_01

Revision:
01

Maxar, Microsoft