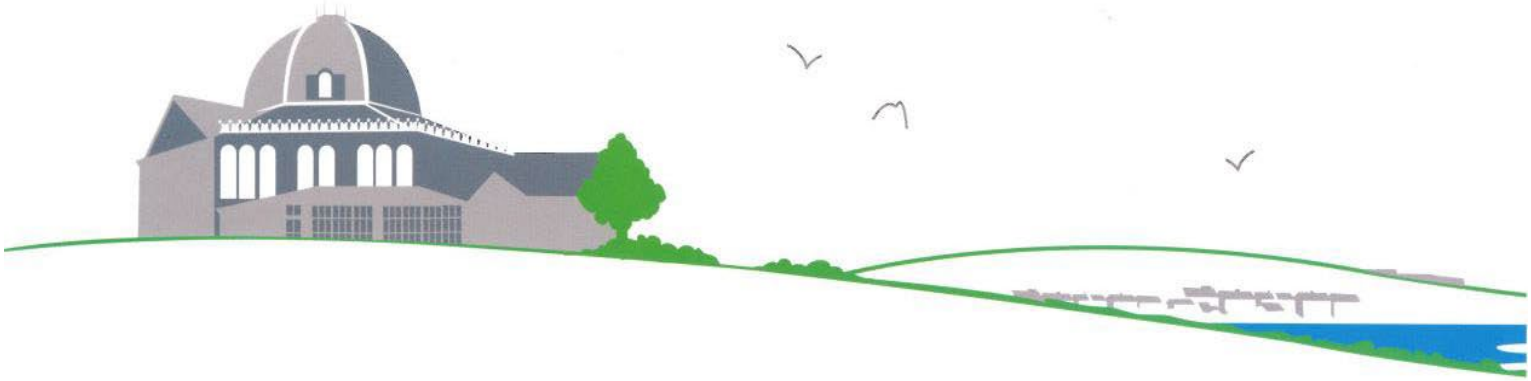
Penny Anderson Associates Ltd
CONSULTANT ECOLOGISTS

FIRST STREET DEVELOPMENTS LTD

PLOT 10A, FIRST STREET REGENERATION AREA, MANCHESTER

EXTENDED PHASE 1 HABITAT SURVEY AND BASELINE BIODIVERSITY NET GAIN ASSESSMENT



Penny Anderson Associates Ltd
CONSULTANT ECOLOGISTS

FIRST STREET DEVELOPMENTS LTD

PLOT 10A, FIRST STREET REGENERATION AREA, MANCHESTER

EXTENDED PHASE 1 HABITAT SUVEY AND BASELINE BIODIVERSITY NET GAIN ASSESSMENT

Penny Anderson Associates Limited
'Park Lea'
60 Park Road
Buxton
Derbyshire
SK17 6SN

Project Manager
Sarah Ross BSc (Hons), PhD, MCIEEM, CEnv (Associate Director)

Authors
Sarah Ross
Stephen Griffith BSc (Hons), MSc (Assistant Ecologist)

January 2023

This project has been undertaken in accordance with PAA policies and procedures on quality assurance.

Signed: Sarah Ross

CONTENTS

Page

1. INTRODUCTION 1
Site Description 1
Legislative Context 1
Aims of Report 3
2. METHODS 4
Desk Study 4
Extended Phase 1 Habitat Survey 4
Limitations 4
Biodiversity Net Gain Baseline Approach 4
Habitat and Linear Feature Assessment 5
3. DESK STUDY RESULTS 6
Desk Study 6
Protected Sites 6
European Sites 6
Sites of Special Scientific Interest 6
Other Protected Sites 6
Priority Habitats 6
Protected and Notable Species 6
Granted European Protected Species Applications 6
Bats 7
Badger and Hedgehog 7
Otter and Water Vole 7
Birds 8
Amphibians and Reptiles 8
Terrestrial Invertebrates 8
White-clawed Crayfish and Notable Fish 8
Notable Plant Species 8
Additional Information 9
4. ASSESSMENT RESULTS 10
Extended Phase 1 Habitat Survey 10
Main Habitats Present 10
Buildings, Hardstanding and Bare Ground 10
Scrub 10
Ephemeral/Short Perennial Grassland 10

Protected Species 10
Breeding Birds 10
Bats 11
Baseline Biodiversity Net Gain 11
Existing Habitats 11
Baseline Biodiversity Units 11
5. DISCUSSION AND RECOMMENDATIONS 12
Sites of Nature Conservation Interest 12
Habitats 12
Protected Species 12
Bats 12
Breeding Birds 12
Biodiversity Net Gain Baseline 12
Recommendations 12
Biodiversity Enhancement Opportunities 13

TABLES

1 Bat European Protected Species Licenses 7
2 Bat Roost Records 7
3 Bird Species of Principal Importance 8
4 Summary of Baseline Habitats and Features for Plot 10a 11
5 Baseline Biodiversity Units as Calculated for Plot 10a 11

FIGURE

1 Phase 1 Habitats Plot 10a Update Aug 2022

APPENDICES

1 Relevant Species Summary Legislation
2 Botanical Species List
3 Photographs

1. INTRODUCTION

1.1 Penny Anderson Associates Ltd (PAA) was commissioned in August 2022 to undertake an extended Phase 1 habitat survey on an area of land known as Plot 10, part of the First Street Regeneration Area, Manchester. This site is broken down into two sections, Plot 10a and Plot 10b, to be taken forward by First Street Developments Ltd and House of 1 Social Ltd, respectively. The sites are centred on grid reference SJ 83799728. This report relates to the Plot 10a site only being delivered by First Street Developments Ltd.

1.2 Surveys have been previously completed on this area (also previously known as Plot 6) in 2015 (PAA 2016) and 2018 (PAA 2018). A survey was also completed at the adjacent Plot 9A in 2021 (PAA 2021). The report presents updated survey results for Plot 10a in the context of these previous assessments, providing updated recommendations where necessary.

1.3 The report also presents the baseline Biodiversity Net Gain (BNG) assessment results for Plot 10a.

Site Description

1.4 Plot 10a, First Street (hereafter referred to as the 'site') is an urban city centre site comprising concrete and hardstanding with small patches of ephemeral/short perennial grass. The wider surrounding land use is primarily urban development comprising roads, offices and residential buildings. The River Medlock runs in a culvert some 250m north of the site.

1.5 The site is bound by River Street to the north, the vacant Plot 10b development plot to the east, Hulme Street to the south, and the under construction development Plot 9a to the west. The site currently consists of an area of hardstanding that has previously been used as a surface car park and temporary outdoor entertainment venue.

1.6 The wider area is characterised by a mix of uses including primarily office and leisure uses to the north, Plot 9 to the west is office accommodation whilst the east is mixed-use predominantly residential, and student residential to the south.

Legislative Context

1.7 A range of international and national legislation has been established in the UK to protect important nature conservation sites and priority species. At the international level, European Union (EU) Directives require individual member states to implement their conservation provisions nationally for the benefit of Europe as a whole. These Directives have been transposed into UK law by the Conservation of Habitats and Species Regulations 2017 (amended).

1.8 Other international conventions include: the Bern Convention on the Conservation of European Wildlife and Natural Habitats (1979), which requires the maintenance of populations of wild flora and fauna, giving particular protection to endangered and vulnerable species; and the Bonn Convention on the Conservation of Migratory Species of Wild Animals (1979), which requires the protection of migratory species throughout their entire range. The above conventions are implemented in England and Wales via the Wildlife and Countryside Act (WCA), 1981 (as amended) and Countryside and Rights of Way (CRoW) Act 2000. This legislation also protects important habitats and sites such as Sites of Special Scientific Interest (SSSI).

1.9 At the national level, Biodiversity 2020 (Defra 2011) forms England's national biodiversity strategy. Building on the Natural Environment White Paper published in 2011, this provides a means of delivering the UK's commitments to maintaining and protecting biodiversity. Under Biodiversity 2020, the Priority Species and Habitats referred to are those of 'Principal Importance' for the conservation of biodiversity in England as listed on Section 41 (England) of the Natural Environment and Rural Communities (NERC) Act 2006 (amended).

1.10 More recently, the Environment Act 2021 further supports this commitment to, and strengthens the legislation in respect of, maintaining and also enhancing biodiversity in England, and Part 6 Nature and Biodiversity includes the following key areas:

- Strengthened biodiversity duty for public authorities in England;
- Biodiversity net gain to ensure developments deliver at least 10% increase in biodiversity;
- Local Nature Recovery Strategies to support a Nature Recovery Network;
- Duty upon Local Authorities to consult on street tree felling;
- Strengthen woodland protection enforcement measures; and
- Protected Site Strategies and Species Conservation Strategies to support the design and delivery of strategic approaches to deliver better outcomes for nature.

1.11 Finally, the National Planning Policy Framework (NPPF 2021) provides guidance for local authorities on the content of the Local Plans and is a material consideration in determining planning applications. Briefly, with an overall focus on sustainable development, the NPPF states that developments should aim to engender positive outcomes for habitats and biodiversity, with a particular focus on the maintenance and creation of ecological networks.

1.12 The NPPF identifies the following principals that should be applied by local planning authorities when determining planning applications:

a. if significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused;

b. development on land within or outside a SSSI, and which is likely to have an adverse effect on it (either individually or in combination with other developments), should not normally be permitted. The only exception is where the benefits of the development in the location proposed clearly outweigh both its likely impact on the features of the site that make it of special scientific interest, and any broader impacts on the national network of SSSI;

c. development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons and a suitable compensation strategy exists; and

d. development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to improve biodiversity in and around developments should be integrated as part of their design, especially where this can secure measurable net gains for biodiversity or enhance public access to nature where this is appropriate.

1.13 The NPPF states that the planning system should contribute to and enhance the natural environment through a range of actions, including:

- protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils;
- recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services; and
- minimising impacts on biodiversity and providing net gains for biodiversity including establishing coherent ecological networks that are more resilient to current and future pressures.

1.14 To protect and enhance biodiversity and geodiversity, plans should:

- Identify, map and safeguard components of local wildlife-rich habitats and wider ecological networks, including the hierarchy of international, national and locally designated sites of importance for biodiversity; wildlife corridors and stepping stones that connect them; and

areas identified by national and local partnerships for habitat management, enhancement, restoration or creation; and

- promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species; and identify and pursue opportunities for securing measurable net gains for biodiversity.

1.15 The Greater Manchester Five-Year Environment Plan includes a high-level commitment to supporting the delivery of Biodiversity Net Gain across the city region. As part of proposals being brought forward by the Government's 25-Year Environment Plan and the Environment Bill, all developments under the Town and Country Planning Act will need to achieve net gain for biodiversity of 10%[1].

1.16 In terms of local policies, Manchester's Local Development Framework Core Strategy Development Plan Document (MCC 2012) presents Core Strategy EN15 Biodiversity and Geological Conservation, which states that the '*Council will seek to maintain or enhance sites of biodiversity and geological value throughout the City'* and further directs that development should '*identify and implement reasonable opportunities to enhance, restore or create new biodiversity, either on-site or adjacent to the site, contributing to linkages between valuable or potentially valuable habitat areas where appropriate*'. Several documents are referenced as part of this policy including the Manchester Biodiversity Strategy and the Green Infrastructure Framework for Greater Manchester.

1.17 A summary of the relevant protected species legislation is given in Appendix 1.

Aims of Report

1.18 The aim of this report is to provide an up-to-date assessment of the ecological features on the site, identify any ecological constraints relevant to the proposed development and make recommendations on further survey work and/or mitigation and compensation where considered necessary.

1.19 The report is set out as follows:

- Methods to assessment approach (Section 2);
- Results of the desk review – covers all of Plot 10 (Section 3);
- Results of the assessment – Plot 10a (Section 4); and
- Overall discussion and recommendations for Plot 10a (Section 5).

[1] *www.greatermanchester-ca.gov.uk/what-we-do/environment/natural-environment/biodiversity-net-gain (accessed 06/07/22)*

2. METHODS

Desk Study

2.1 A request for details of protected and notable species and locally designated sites within 1km of the centre of the site was made to Greater Manchester Ecology Unit (GMEU) with data returned in August 2022. Additionally, the Multi-Agency Geographic Information for the Countryside[2] (MAGIC) website was consulted for details of statutory designated sites and Priority Habitats within a 1km search area from the centre of the site.

2.2 It is important to note that the desk study results provide an indication of the species present in and around the site and do not confirm current presence or absence of any particular species. Protected species are often under-recorded in county wildlife databases.

Extended Phase 1 Habitat Survey

2.3 The survey was conducted on 8th August 2022 by Assistant Ecologist, Stephen Griffith[3] under warm, dry conditions with good visibility.

2.4 The Phase 1 habitat survey was carried out by an experienced surveyor and the survey methodology was based on guidance set out in the *Handbook for Phase 1 Habitat Survey* (JNCC 2010). The broad habitat types were mapped, with each habitat type coded according to the standard JNCC Phase 1 habitat survey procedure.

2.5 In addition, plant species lists were collated for habitats across the area delineated for the survey. Each plant species was assigned abundance codes within each habitat. This was done using the 'DAFOR' scale (where: D = dominant; A = abundant; F = frequent; O = occasional; R = rare), which provides an indication of the relative abundance of each plant species present within a particular habitat. The plant species present within the site are listed in Appendix 2, which shows both common and scientific names according to Stace (2019). Common names only are referred to in the text.

2.6 The survey was 'extended' following the approach set out in the Institute of Environmental Assessment (1995) and CIEEM (2017) to include an assessment of the potential for/presence of protected species.

Limitations

2.7 The site was fully accessible at the time of the survey and carried out at an appropriate time of year for this type of survey, and there were no significant constraints.

Biodiversity Net Gain Baseline Approach

2.8 The Calculator applied in this assessment is the Biodiversity Metric 3.1, which replaces the earlier Defra Metric versions. This Metric is used to calculate the biodiversity units of a site before the proposed development (i.e. the baseline). The Calculator spreadsheet and associated guidance notes were available via the Natural England 'Access to Evidence' web pages[4].

---

[2] https://magic.defra.gov.uk/MagicMap.aspx (last accessed 05/09/2022)

3 Qualifying Member of the Chartered Institute of Ecology and Environmental Management (CIEEM)

4 www.publications.naturalengland.org.uk/publication/6049804846366720 (downloaded June 2022)

2.9 The information required to complete the Calculator is:

- Area of each habitat (ha) and length of linear features (km), e.g. hedgerows;
- Habitat type; and
- Habitat condition.

Habitat and Linear Feature Assessment

2.10 The existing habitats, linear features and habitat condition calculations are based on a Phase 1 habitat map for the site.

2.11 Existing habitats were digitised accurately to British National Grid using Ordnance Survey vector mapping as a base, along with high resolution aerial photography as a guide, as part of the previous Phase 1 habitat survey results preparation.

2.12 The Calculator requires that each habitat is given a 'distinctiveness' score that includes parameters such as species-richness, diversity, rarity and the degree to which habitats support species rarely found in other habitats. This is completed automatically by the Calculator when the habitat type is selected, and the categories comprise:

- Very High;
- High;
- Medium;
- Low; and
- Very Low.

2.13 The Calculator also requires a 'condition' assessment for each habitat and feature, and this is allocated to each habitat based on the guidelines and targets provided in the methodology (Panks *et al*. 2022a, 2022b) and the Phase 1 habitat survey results, along with ecological expertise and knowledge of the site where necessary. Condition categories available, which vary slightly depending on the habitat in question, within the Calculator are:

- Good;
- Fairly Good;
- Moderate;
- Fairly Poor;
- Poor; and
- Not Applicable.

2.14 Finally, the 'strategic significance' of the habitat is allocated depending on the identification of the habitat in that location being nationally or locally significant. This is evaluated from local plans, designations, etc. In the absence of any relevant strategic documentation indicating the habitat in that area is of strategic significance for biodiversity, then the area is given a value of 1.

2.15 Linear features, such as hedgerows, ditches and streams are assessed separately within the methodology. The current length of the feature is entered and the feature condition is selected based on the guidelines presented in the methodology.

2.16 The 'biodiversity units' associated with each habitat feature are then calculated by the Metric to identify the total number of baseline biodiversity units for the site.

3. DESK STUDY RESULTS

Desk Study

3.1 The desk study utilised data obtained from GMEU in August, searching within a 1km radius of the Plot 10 site centre. The MAGIC search engine was also used to obtain additional data on European Protected Species (EPS) licences, as well as designated and non-designated sites and notable habitats.

Protected Sites

European Sites

3.2 European protected sites include Special Areas of Conservation (SAC), Special Protection Areas (SPA), RAMSAR wetland sites, possible SAC, potential SPA and proposed RAMSAR sites. No European protected sites were identified within the 5km search area.

Sites of Special Scientific Interest

3.3 SSSI represent a selection of this country's best wildlife and geological sites and cover approximately 7% of the terrestrial area of the country (with over 4,000 separate sites in England). No SSSI are located within the 2km search area, however, the site does fall within the Impact Risk Zone[5] (IRZ) of Rochdale Canal SSSI.

Other Protected Sites

3.4 No National or Local Nature Reserves were identified within the 2km search area.

3.5 No Sites of Biological Interest were identified within the 1km search area.

Priority Habitats

3.6 Three areas of Priority Habitat Open Mosaic Habitats on Previously Developed Land were identified within the 1km search area. The closest of the areas lies 150m north-east of the site boundary and is immediately adjacent to Manchester Oxford Road train station.

Protected and Notable Species

Granted European Protected Species Applications

3.7 Six granted European Protected Species (EPS) licence applications for bats were returned within the 1km search area on MAGIC. One was granted for common pipistrelle (*Pipistrellus pipistrellus*) and soprano pipistrelle (*P. pygmaeus*) roosts, four for common pipistrelle roosts and one for a brown long-eared bat (*Plecotus auritus*) roost. Table 1 shows the location and date of each licence granted.

3.8 No records were presented for licenses relating to other EPS within the search area.

[5] *The Impact Risk Zones are a GIS tool developed by Natural England to make a rapid initial assessment of the potential risks to SSSIs posed by development proposals. They define zones around each SSSI which reflect the particular sensitivities of the features for which it is notified and indicate the types of development proposal which could potentially have adverse impacts.*

Table 1 Bat European Protected Species Licenses

Species	License to Allow	Date License Granted	Date License Expires	Distance from Site Boundary
Common pipistrelle and soprano pipistrelle	Destruction of resting place	2014	2017	960m NE
Common pipistrelle	No data	2013	2016	100m N
Common pipistrelle	Destruction of resting place	2012	2013	725m N
Common pipistrelle	Destruction of resting place	2018	2040	930m N
Common pipistrelle	Destruction of resting place	2020	2025	660m N
Brown long-eared	Destruction of breeding and resting site	2012	2015	725m N

Bats

3.9 Six bat roosts were recorded in the 1km search area within the GMEU dataset. Table 2 shows the number of roost records of each bat species recorded in the 1km search zone and the proximity to the site of the closest record for each species.

3.10 In addition, numerous records were returned for signs/sightings of bats (away from a roost) within the 1km search area; these recordings were for common pipistrelle (32 records), pipistrelle species (five records), soprano pipistrelle (one record) and unidentified bat species (three records). The closest record to the site is for common pipistrelle, located 260m north-west of the site boundary.

Table 2 Bat Roost Records

Common Name	Scientific Name	No. of Records	Closest Record (approximate distance and direction from site boundary)
Common pipistrelle	*Pipistrellus pipistrellus*	4	125m N
Pipistrelle species	*Pipistrellus* sp.	2	820m NE

Badger and Hedgehog

3.11 Two records for signs of badger (*Meles meles*) were identified within the 1km search area. These records are both located over 500m for the site boundary. Due to the sensitive nature of this data the precise locations are not presented in this report. No records of badger setts were returned during the data search.

3.12 Seven records for hedgehog (*Erinaceus europaeus*) were identified within the 1km search area, the closest record to the site boundary is dated 2020 and located 260m south-west.

Otter and Water Vole

3.13 No records for otter (*Lutra lutra*) or water vole (*Arvicola amphibius*) were identified within the 1km search area.

Birds

3.14 A small number Schedule 1 species, including peregrine (*Falco peregrinus*), kingfisher (*Alcedo atthis*) and black redstart (*Phoenicurus ochruros*), were recorded within the 1km search area but due to the confidentiality of this data the species are not presented in detail in this report.

3.15 All other protected and notable bird species records within the 1km search area are listed in Table 3, along with their conservation status. They comprise species typical of urban locations, parks and gardens with the exception of lapwing (*Vanellus vanellus*) which is a ground nesting bird that typically favours more open grassland/short ruderal habitat areas.

Table 3 Bird Species of Principal Importance

Common Name	Scientific Name	Amber[6] Listed	Red Listed	Section 41 Priority Species[7]
Dunnock	*Prunella modularis*	x		x
Herring gull	*Larus argentatus*		x	x
House sparrow	*Passer domesticus*		x	x
Lapwing	*Vanellus vanellus*		x	x
Song thrush	*Turdus philomelos*	x		x
Starling	*Sturnus vulgaris*		x	x

Amphibians and Reptiles

3.16 No great crested newt (*Triturus cristatus,* GCN*)* records were returned within the 1km search area. Consultation with MAGIC also revealed no known locations with confirmed presence of GCN within 1km of the central grid reference.

3.17 An Ordnance Survey map search confirmed a section on the Manchester Canal 70m north of the site. No ponds were found within 500m of the site boundary.

3.18 No records for other amphibians or reptiles were returned in the 1km search area.

Terrestrial Invertebrates

3.19 Six records for the Section 41 moth species cinnabar moth (*Tyria jacobaeae*) were returned from the 1km data search. The closest record to the site boundary is located 700m south and dates from 2013.

White-clawed Crayfish and Notable Fish

3.20 No records of white-clawed crayfish (*Austropotamobius pallipes*) or notable fish species were identified within the 1km search area.

Notable Plant Species

3.21 No records for notable plant species were returned from the 1km data search.

[6] *The UK's birds can be split in to three categories of conservation importance - red, amber and green. Red is the highest conservation priority, with species needing urgent action. Amber is the next most critical group, followed by green. Stanbury et al 2021.*

[7] *Species of Principal Importance under Section 41 of the NERC Act 2006.*

Additional Information

3.22 A known bat roost is located in a culvert approximately 250m to the north of the site. Details of the roost are provided by PAA (2011). Briefly, it comprises a small common pipistrelle roost of up to 50 bats within the River Medlock culvert.

3.23 The presence of black redstart, a Schedule 1 species, is known within the City Centre and the site is just on the edge of the Black Redstart Priority Area for Greater Manchester (Jones 2009).

4. ASSESSMENT RESULTS

Extended Phase 1 Habitat Survey

4.1 Figure 1 presents the habitat map of Plot 10a (the habitats on the adjacent Plot 10b are shown 'greyed out' for context only). A botanical species list for the habitats across Plot 10 is presented in Appendix 2 with illustrative photographs in Appendix 3.

Main Habitats Present

4.2 The site is dominated by hardstanding and open areas of artificial compacted substrate (Figure 1). There are small patches of ephemeral/short perennial grassland scattered across the site. Security fencing borders the site to the north, east and south of the site, with Plot 9a immediately adjacent to the west and Plot 10b to the east. A disused building (B1) is present at the north of the site, with the majority of the building occurring within the adjacent Plot 10b area.

Buildings, Hardstanding and Bare Ground

4.3 The site is dominated by hardstanding and bare ground (including concrete and asphalt), previously used for car parking (Photo 1). These areas have very little vegetation developed across them either because of recent use (for example heavy machinery) or due to the relatively intact nature of the hardstanding.

4.4 The building (B1) partly sited on Plot 10a is of brick construction with a metal flat roof and metal roller door (Photo 2) and is likely to be used as for secure storage. The brickwork is in very good condition and there are no gaps, crevices or other features that could potentially support roosting bats or enable access into the interior of the structure. There was no evidence of nesting birds using the structure and no sheltered ledges/gaps where nests might be built.

Scrub

4.5 Scattered butterfly-bush was present, with occasional bramble and creeping thistle. No significant areas of scrub were mapped for Plot 10a.

Ephemeral/Short Perennial Grassland

4.6 Patches of ephemeral/short perennial grassland are present throughout the site and were mainly concentrated at the western site boundary (Photo 3). Yorkshire-fog was frequent, with occasional daisy, dandelion, wild parsnip and common ragwort. Species occurring rarely included tufted vetch, hogweed, red clover, common poppy, aster species and sun spurge. Sow-thistle species were locally abundant, with locally frequent species including silverweed and ribbed melilot.

Protected Species

4.7 The site is isolated from any larger areas of natural or semi-natural habitat. Due to the lack of shelter or suitable habitat for protected species, it was concluded that the only species relevant to this assessment are foraging bats and foraging black redstart. The site lies adjacent to the western edge of the Greater Manchester Black Redstart Priority Area (Greater Manchester Biodiversity Partnership 2008).

Breeding Birds

4.8 The suitability of the site for black redstarts is considered to be very limited due to the dominance of intact hard standing and the frequently disturbed nature of the site (heavy machinery was in use on the site at time of survey). Occasional use of the site by small numbers of foraging black redstarts cannot be ruled out, as there are some localised areas of sparsely vegetated stony ground suitable for foraging along with the green/brown roof provided by Number One, First Street. The site is, however, unlikely to form an important forage resource for this species.

Bats

4.9 The site contains no potential tree roost sites for bats as there are no mature or larger trees on or adjacent to the site. There are no buildings on the site suitable for use by roosting bats.

4.10 The hardstanding provides no significant foraging habitat for bats. Street lighting, together with the lack of vegetation and connectivity to other semi-natural habitats, significantly diminishes its potential for bat foraging.

4.11 The site is 250m from the closest bat roost which is a common pipistrelle roost within the culvert of the River Medlock. Surveys on this roost in 2015 (completed by PAA as part of the post-development monitoring for EPS licence works at Plots 1 and 3) have indicated that bats forage along the river corridor and not more widely on the surrounding land. Because of this, development of the site is unlikely to significantly impact upon the local population of bats.

Baseline Biodiversity Net Gain

Existing Habitats

4.12 The site is dominated by hardstanding and built structures (Figure 1). There are small patches of ephemeral/short perennial grassland scattered across the site, with self-seeded butterfly-bush present. A disused building (B1) is present at the north of the site, with the majority of the building occurring within the adjacent Plot 10b area. No linear habitat features were present on the site.

4.13 In terms of condition, the ephemeral/short perennial vegetation was in Poor condition, as it failed a number of targets set for this habitat. A summary of the baseline habitats on site and their condition in relation to the BNG assessment are provided in Table 4.

Table 4 Summary of Baseline Habitats and Features for Plot 10a

Pre-Development Habitat Area Type	Ha	Distinctiveness	Condition
Ephemeral / short perennial	0.0198	Low	Poor
Developed land; sealed surface (building)	0.0060	V. Low	N/A - Other
Developed land; sealed surface (hardstanding)	0.3396	V. Low	N/A - Other

Baseline Biodiversity Units

4.14 The overall baseline biodiversity units for the Plot 10a site are calculated as 0.04 biodiversity units. These relate to area habitats as no linear features occur on site. The only habitat present on site is ephemeral/short perennial, therefore, all the biodiversity units are derived from this habitat type.

4.15 Table 5 presents the output from the Metric 3.1 calculator for Plot 10a.

Table 5 Baseline Biodiversity Units as Calculated for Plot 10a

On-site baseline biodiversity units Plot 10a	Habitat units	0.04
	Hedgerow units	0.00
	River units	0.00

5. DISCUSSION AND RECOMMENDATIONS

Sites of Nature Conservation Interest

5.1 The site contains no statutory nature conservation sites, none are within 1km of the site and those situated further afield are considered unlikely to be impacted by the proposed development.

Habitats

5.2 The habitats and plant species recorded within the site are widespread and common throughout Greater Manchester and the UK. None of the plant species recorded within the site are either Nationally Scarce or Nationally Rare (Hill *et al.* 2004) or of any other conservation significance (Cheffings and Farrell 2005, as amended; Stroh *et al*. 2014).

Protected Species

Bats

5.3 The site provides a small area of low quality foraging habitat and is unlikely to be used by significant numbers of foraging bats. The loss of, or disturbance to, the vegetation due to predicted increased public use and lighting of the site under the proposed development is, therefore, predicted to have a negligible impact on the conservation status of bats within the local area and Greater Manchester.

5.4 There is a known common pipistrelle bat roost within the River Medlock culvert which runs underneath the wider First Street North development site (Arup 2008, PAA 2011). The 2011 surveys were followed up with post-development monitoring surveys in 2015 by PAA, which showed foraging behaviour was confined to the river corridor so it is unlikely bats would commute to or across the site to forage.

5.5 As the site is 250m from the culvert it is highly unlikely that indirect effects from noise, lighting and increased public use of this site would significantly affect bats within the culvert roost.

Breeding Birds

5.6 The site is considered to provide a relatively limited foraging resource for local populations of birds.

5.7 The site holds only very limited foraging potential for black redstart and is unlikely, therefore, to form a key part of the foraging habitat for any local populations of black redstart.

5.8 There is no significant habitat suitable for nesting birds on site, however, if shrub/scrub areas develop on site over time, these should be inspected by an Ecologist prior to removal if being removed within the nesting season (March to August inclusive).

Biodiversity Net Gain Baseline

5.9 Plot 10a provides a total of 0.04 biodiversity units, and these are all derived from the small area of ephemeral/short perennial vegetation on site.

5.10 There are no linear features such as hedgerows, lines of tree or rivers/streams on site.

Recommendations

5.11 The nests and eggs of breeding birds are protected, therefore, works should occur outside of the key nesting period which is March to August inclusive. If site clearance occurs during March to August then a suitably experienced and qualified Ecologist should undertake an inspection of the

vegetation to be removed no more than 48 hours prior to demolition starting, to confirm the absence of active birds' nests.

5.12 Any active birds' nests present on site should be retained and protected with a suitable undisturbed buffer until the nest is deemed inactive by the ecologist.

5.13 In terms of habitats and BNG, soft landscaping proposals should aim to provide a net gain in biodiversity units by selecting biodiverse planting schemes that create sufficient areas of habitat appropriate to the site's size and location.

5.14 A full Metric 3.1 BNG assessment should be completed as the landscape designs become available and then be reviewed/updated as landscape designs evolve.

5.15 A landscape management plan should be developed and implemented to ensure any habitats proposed attain and maintain the Condition allocated to them under the BNG assessment, to secure the value of the habitats into the future.

Biodiversity Enhancement Opportunities

5.16 The site is currently of limited ecological value and development presents an opportunity to increase biodiversity. Potential enhancement measures comprise:

- Use of British native or pollinator-friendly tree, shrub and herbaceous species in any landscape planting, for example, inclusion of species that provide nectar for invertebrates or berries to provide a food source for birds;
- Inclusion of integrated bat roost features, such as bat bricks or bat tubes, to increase opportunities for roosting bats, coupled with a suitable lighting strategy to avoid unnecessary lighting of roost features;
- Designing any soft landscaping features to link to and, therefore, enhance the existing features around the wider First Street development area would be beneficial to biodiversity; and
- Including a green/brown roof design would enhance/expand forage opportunities for any local populations of black redstart, if the design allows, and contribute to the creation of additional BNG.

6. REFERENCES

Arup, 2008. *First Street, Manchester Medlock Culvert Bat Report*. Unpublished report prepared for Ask Developments.

Cheffings, C., and Farrell, L., (eds), 2005. *The Vascular Plant Red Data List for Great Britain (revised 2006)*. Joint Nature Conservation Committee.

CIEEM, 2017. *Guidelines for Preliminary Ecological Appraisal. 2nd Edition. Technical Guidance Series*. Chartered Institute of Ecology and Environmental Management.

Defra, 2011. *Biodiversity 2020: A strategy for England's wildlife and ecosystem services*. Defra.

Greater Manchester Biodiversity Partnership, 2008. *Make Room for Black Redstarts – Species Action Plan*. Greater Manchester Ecology Unit.

Hill, M.O., Preston, C.D. and Roy, D.B., 2004. *PLANTATT Attributes of British and Irish Plants: Status, Size, Life History, Geography and Habitats.* NERC Centre for Ecology and Hydrology.

Institute of Environmental Assessment, 1995. *Guidelines for Baseline Ecological Assessment*. E. & F.N. Spon.

JNCC, 2010. *Handbook for Phase 1 Habitat Survey – a technique for environmental audit*. Joint Nature Conservation Committee (revised edition 2010).

Jones, G., 2009. *Black Redstart Species Action Plan*. Greater Manchester Biodiversity Project.

MCC, 2012. *Manchester's Local Development Framework Core Strategy Development Plan Document. Adopted 11th July 2012*. Manchester City Council.

NPPF, 2021. *National Planning Policy Framework, updated July 2021*. Ministry of Housing, Communities and Local Government.

PAA, 2011. *First Street Manchester, Bat Survey Report*. Unpublished report prepared for Ask Property Developments Ltd.

PAA, 2016. *Plot 8 First Street, Greater Manchester, Extended Phase 1 Habitat Survey*. Unpublished report prepared for Southside Regeneration Ltd.

PAA, 2018. *Plot 9A First Street, Manchester. Extended Phase 1 Habitat Survey*. Unpublished report prepared for Ask Development Ltd.

PAA, 2021. *Plot 9A First Street, Manchester. Extended Phase 1 Habitat Survey*. Unpublished report prepared for First Street Developments Ltd.

Panks, S., White, N., Newsome, A., Potter, J., Heydon, M., Mayhew, E., Alvarez, M., Russell, T., Scott, S. J., Heaver, M., Scott, S.H., Treweek, J., Butcher, B., Stone, D., 2022a. *The Biodiversity Metric 3.1: auditing and accounting for biodiversity value. Technical supplement*. Natural England.

Panks, S., White, N., Newsome, A., Nash, M., Potter, J., Heydon, M., Mayhew, E., Alvarez, M., Russell, T., Cashon, C., Goddard, F., Scott, S. J., Heaver, M., Scott, S.H., Treweek, J., Butcher, B., Stone, D., 2022b. *The Biodiversity Metric 3.1: auditing and accounting for biodiversity value. User guide*. Natural England.

Stace, C., 2019. *New Flora of the British Isles. Fourth Edition*. C&M Floristics.

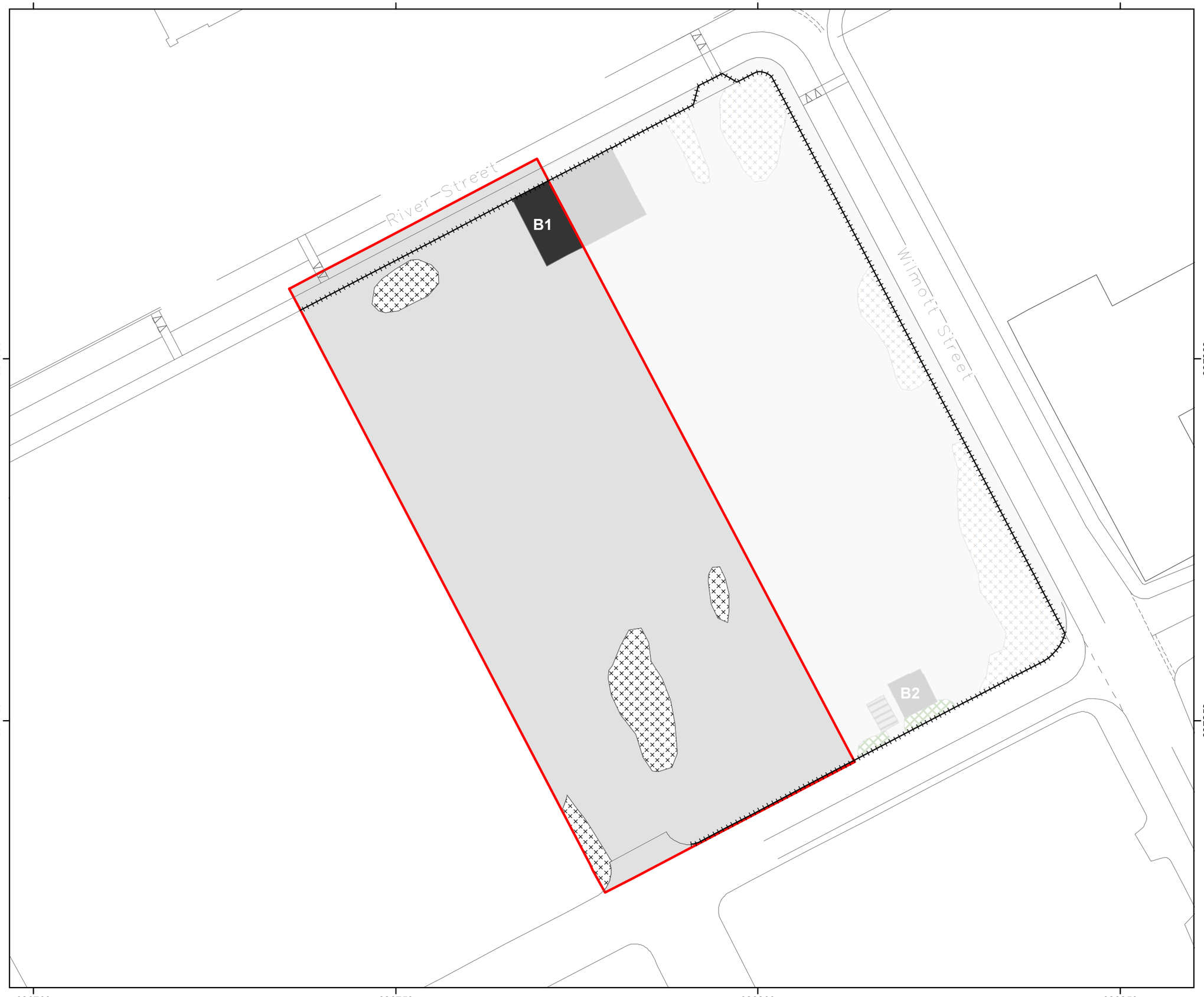
Stanbury, A.J., Eaton, M.A., Aebischer, N.J., Balmer, D., Brown, A.F., Douse, A., Lindley, P., McCulloch, N., Noble, D.G. & Win, I. 2021. Birds of Conservation Concern 5: The Status of All Regularly Occurring Birds in the UK, Channel Islands and Isle of Man. *British Birds*. **114**: 723-747.

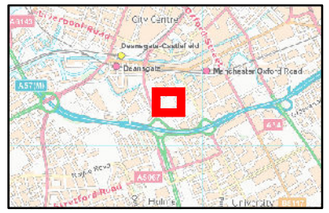
Stroh, P.A., Leach, S.J., August, T.A., Walker, K.J., Pearman, D.A., Rumsey, F.J., Harrower, C.A., Jay, M.F., Martin, J.P., Pankhurst, T, Preston, C.D., and Taylor, I., 2014. *A Vascular Plant Red List for England*. BSBI.

7. ABBREVIATIONS

BNG	Biodiversity Net Gain
CIEEM	Chartered Institute of Ecology and Environmental Management
CRoW	Countryside Rights of Way
EPS	European Protected Species
EU	European Union
GCN	Great Crested Newt
GMEU	Greater Manchester Ecology Unit
IRZ	Impact Risk Zone(s)
JNCC	Joint Nature Conservation Committee
MAGIC	Multi-Agency Geographic Information for the Countryside
NERC	Natural Environment and Rural Communities
NPPF	National Planning Policy Framework
PAA	Penny Anderson Associates Ltd
SAC	Special Area(s) of Conservation
SPA	Special Protection Area
SSSI	Sites of Special Scientific Interest
WCA	Wildlife and Countryside Act

FIGURE





Legend

Plot 10a

Habitat

- Building
- Ephemeral/short perennial
- Hardstanding
- Fence

N

British National Grid
Projection: Transverse Mercator
False Easting: 400000.000000
False Northing: -100000.000000
Central Meridian: -2.000000
Scale Factor: 0.999601
Latitude Of Origin: 49.000000

ISO A3

0 2.5 5 10 15 20 Metres

Penny Anderson Associates Ltd
Consultant Ecologists

Penny Anderson Associates Ltd,
Parklea, 60 Park Road,
Buxton, Derbyshire, SK17 6SN.
Telephone 01298 27086

Project Name: First Street, Manchester

Discipline: Ecology

Title:

PHASE 1 HABITATS
PLOT 10a
UPDATE AUG 2022

Scale 1:500		Drawing No. Figure 1	
Drawn By CC	Originator SG	Date 16/09/2022	
PAA Ref.		Revision 1.0	

Contains OS data © Crown copyright [and database right] (2020)

Figure 1 - Phase 1 Habitats - Plot 10a First Street Manchester - CHC001 CC 220909.mxd

APPENDICES

APPENDIX 1

Relevant Species Summary Legislation

SUMMARY OF THE LEGISLATION RELATING TO BATS

All wild species of bat are protected under the Wildlife and Countryside Act (WCA) 1981, which has also been amended by later legislation, including the Countryside and Rights of Way (CRoW) Act 2000. Bats are listed on Schedule 5 of the WCA and are therefore subject to some the provisions of Section 9 which, with the amendments, make it an offence to:

- Intentionally or recklessly disturb a bat while it is occupying a structure or place which it uses for shelter or protection (S9:4b).
- Intentionally or recklessly obstruct access to any structure or place used for shelter or protection by a bat (S9:4c).

There are additional offences in relation to buying and selling (S9:5) any live or dead animal of this species or anything derived from them.

Bat species are also listed under Annexes IIa and IVa of the EC Directive on the Conservation of Natural Habitats and of Wild Fauna and Flora, also known as the 'Habitats Directive'. Inclusion on Annex IVa means they are consequently identified as European Protected Species (EPS) and protected under the Conservation of Habitats and Species Regulations 2017 (amended).

The Conservation of Habitats and Species Regulations 2017 (amended) state that a person commits an offence if they:

(a) deliberately capture, injure or kill any wild animal of a European protected species,

(b) deliberately disturb wild animals of any such species, in such a way as –

  (i) to impair their ability to survive, to breed or reproduce, or to rear their young, or

  (ii) in the case of animals of a hibernating or migratory species, to hibernate or migrate, or

  (iii) to affect significantly the local distribution or abundance of the species to which they belong;

(c) deliberately take or destroy the eggs of such an animal, or

(d) damage or destroy a breeding site or resting place of such an animal.

Under these Regulations it is an offence to damage or destroy a breeding site or resting place whether the animal is in occupation or not, and protection extends to all life stages of the animal in question. There are additional offences relating to possession, control and sale of a live or dead bat or part of such an animal.

In addition, seven native British bat species, including the soprano pipistrelle (*Pipistrellus pygmaeus*) and the brown long-eared bat (*Plecotus auritus*), are listed as 'species of principal importance' for the conservation of biodiversity in England under Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006 (amended). In Wales, Section 7 of the Environment (Wales) Act 2016 provide a list of organisms of 'principal importance for maintaining and enhancing biodiversity' and lists several species of bat including the common pipistrelle (*Pipistrellus pipistrellus*) which is absent from England's S41 list.

Please note: the above text provides a brief summary of the legislation in relation to bats and their roosts and the original Acts, Regulations and any amendments should be referred to for the precise wording.

SUMMARY OF LEGISLATION RELATING TO BLACK REDSTART

All wild species of breeding birds and their nests and eggs are protected under Part 1 of the Wildlife and Countryside Act (WCA) 1981, as amended by later legislation including the Countryside and Rights of Way (CRoW) Act 2000.

Black redstarts (*Phoenicurus ochruros*) are additionally protected as they are listed on Schedule 1 of the WCA. Therefore, black redstarts, their nests, eggs and young are fully protected at all times throughout England and Wales.

Part 1 (Section 1:1) of the WCA states that:

'If any person intentionally,

(a) kills, injures or takes any wild bird;

(b) takes, damages or destroys the nest of any wild bird while that nest is in use or being built; or

(c) takes or destroys an egg of any wild bird,

he shall be guilty of an offence.'

Part 1 (Section 1:5) of the WCA (amended by the CRoW Act 2000) states that:

'If any person intentionally or recklessly,

(a) 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

(b) disturbs dependent young of such a bird,

he shall be guilty of an offence and liable to a special penalty.'

In addition, the black redstart is identified as a bird species of Moderate conservation concern ('Amber' listed) due to its declining breeding population and its rarity as a breeding species within Britain (Stanbury *et al.* 2021).

Stanbury, A.J., Eaton, M.A., Aebischer, N.J., Balmer, D., Brown, A.F., Douse, A., Lindley, P., McCulloch, N., Noble, D.G. & Win, I. 2021. Birds of Conservation Concern 5: The Status of All Regularly Occurring Birds in the UK, Channel Islands and Isle of Man. *British Birds.* **114:** 723-747.

Please note: the above text provides a brief summary of the legislation in relation to black redstart for England and Wales and the original Act and any amendments should be referred to for the precise wording.

SUMMARY OF THE LEGISLATION RELATING TO BREEDING BIRDS

All wild species of breeding birds and their nests and eggs are protected under Part 1 of the Wildlife and Countryside Act (WCA) 1981, as amended by later legislation including the Countryside and Rights of Way (CRoW) Act 2000. This legislation applies in England and Wales.

Part 1 (Section 1:1) of the WCA states that:

> 'If any person intentionally,
>
> (a) kills, injures or takes any wild bird;
>
> (b) takes, damages or destroys the nest of any wild bird while that nest is in use or being built; or
>
> (c) takes or destroys an egg of any wild bird,
>
> he shall be guilty of an offence.'

Part 1 (Section 1:5) of the WCA (amended by the CRoW Act 2000) refers to specific birds listed on Schedule 1 of the WCA, and states that:

> 'If any person intentionally <u>or recklessly</u>,
>
> (a) 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
>
> (b) disturbs dependent young of such a bird,
>
> he shall be guilty of an offence and liable to a special penalty.'

Schedule 1 includes birds such as Western barn owl (*Tyto alba*), black redstart (*Phoenicurus ochruros*), woodlark (*Lullula arborea*) and Cetti's warbler (*Cettia cetti*). Please refer to the WCA for a complete list of Schedule 1 species[1].

Some provisions are made to allow the killing and taking of certain species under certain circumstances, as follows:

- Birds listed on Schedule 2 (Part 1) of the Act may be taken or killed outside of the 'close season' for each individual species (the 'close season' is defined by the Act). This includes various wild duck and geese species.
- Birds listed on Schedule 2 (Part 2) of the Act may be killed or taken by <u>authorised</u> persons at all times. This includes species such as carrion crow (*Corvus corone*), Eurasian magpie (*Pica pica*), feral pigeon[2] (*Columba livia*) and greater Canada goose (*Branta canadensis*). An 'authorised person' is defined as a person who has written authorisation to undertake the act from the relevant statutory authority. The written authority is in the form of a licence, either a general licence which covers a number of the more typical 'pest' species, or an individual licence for other individual species. In England these licences are issued by Natural England and in Wales by the Welsh Assembly Government.

Please note: the above text provides a brief summary of the legislation in relation to breeding birds in England and Wales and the original Act and any amendments should be referred to for the precise wording.

[1] *https://www.legislation.gov.uk/ukpga/1981/69/schedule/1*

[2] *Also known as rock dove*

APPENDIX 2

Botanical Species List

Appendix 2 Botanical Species List, Plot 10 First Street Manchester

Common Name	Scientific Name	DAFOR
Woody Species		
Bramble	*Rubus fruticosus* agg.	O
Butterfly-bush	*Buddleja davidii*	F
Herbs, Grasses and Ferns		
Aster species	*Asteraceae sp.*	R
Common poppy	*Papaver rhoeas*	R
Common ragwort	*Jacobaea vulgaris*	O
Creeping thistle	*Cirsium arvense*	O
Daisy	*Bellis perennis*	O
Dandelion	*Taraxacum officinale* agg.	O
Hogweed	*Heracleum sphondylium*	R
Red clover	*Trifolium pratense*	R
Ribbed melilot	*Melilotus officinalis*	LF
Silverweed	*Potentilla anserina*	LF
Sow-thistle species	*Sonchus* sp.	LA
Sun spurge	*Euphorbia helioscopia*	R
Tufted vetch	*Vicia cracca*	R
Wild parsnip	*Pastinaca sativa sylvestris*	O
Yorkshire-fog	*Holcus lanatus*	F

KEY
D-Dominant, A-Abundant, F-Frequent, O-Occasional, R-Rare, L-Locally

APPENDIX 3

Photographs

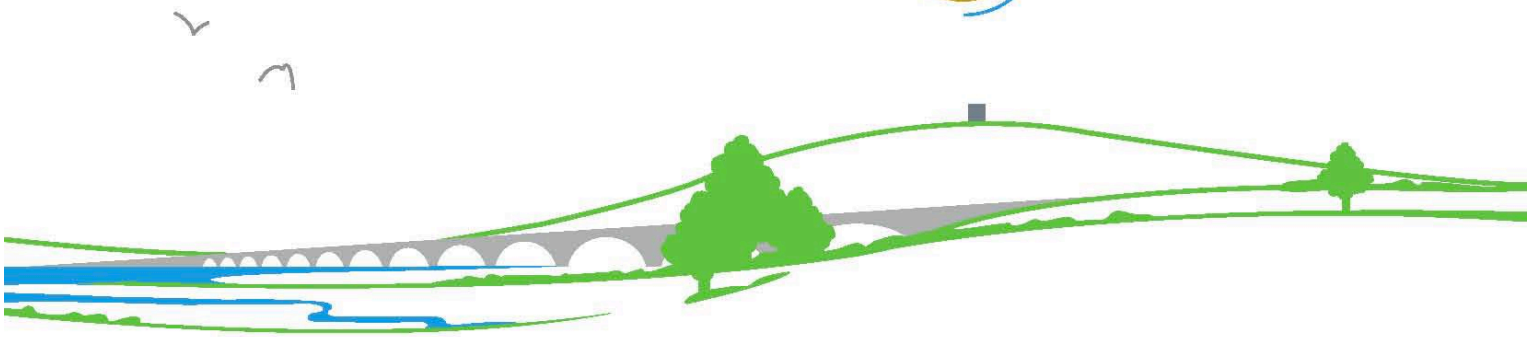
Photo 1 Hardstanding

Photo 2 Building B1, only partly on Plot 10a

Photo 3 Ephemeral/ short perennial habitat with self-seeded butterfly-bush

Penny Anderson Associates Ltd

CONSULTANT ECOLOGISTS



Park Lea, 60 Park Road, Buxton, Derbyshire SK17 6SN

Registered Office as Above | Registered in England & Wales | Company No. 4223109 | Directors: Mrs P Anderson Mr P Worrall Miss S Rogers