Land at Piccadilly Wharf, Store Street, Manchester M1 2WA

UPDATED ECOLOGICAL SURVEY AND ASSESSMENT

November 2025

ERAP (Consultant Ecologists) Ltd Reference: 2025-356

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SUMMARY

Introduction and Scope

i. This ecological survey and assessment presents the ecological, biodiversity and nature conservation status of land at Piccadilly Wharf, Store Street, Manchester M1 2WA. The assessment was requested in connection with proposals to develop the site to a 16 storey block of apartments. This report updates a previous study completed at the site by ERAP (Consultant Ecologists) Ltd in 2021.

ii. This report presents the results of an updated desktop study and extended Phase 1 Habitat Survey carried out in November 2025. The scope of survey undertaken is appropriate to identify potential ecological constraints, the remit of mitigation required and opportunities for biodiversity associated with the development proposals.

iii. The site comprises an area of cleared earth with colonising ruderal herbs, and a small area of scrub at the site's northern margin. In 2021 the site supported an area of recently cleared Italian Alder trees and scrub vegetation.

Results of Survey and Assessment

iv. The proposals will have no adverse direct or indirect effect on statutory or non-statutory designated sites for nature conservation. The proposals will have no adverse effect on the statutory designated sites for nature conservation present in the wider area. Impacts to non-statutory designated sites can be reasonably discounted at this stage; recommendations for an appropriate lighting scheme to ensure artificial light from the proposals is not detrimental to the Ashton Canal (West) Site of Biological Importance are presented at **Section 5.2**

v. Only common and widespread plant species were found. None of the habitats present are representative of semi-natural habitat. The NVC communities present are typical of the geographical area and conditions present. No Priority Habitat or irreplaceable habitats have been detected at the site. The habitats located within the site are not considered to hold any importance in a geographical context. The trees and scrub formerly present at the site (prior to the 2021 report) were considered by the 2021 report to have likely been of 'local' importance prior to their removal.

vi. Measures for the protection of the habitats adjacent to the site during the construction phase of the proposed development are presented at **Section 5.2**.

vii. No invasive plant species listed under Schedule 9 of the *Wildlife and Countryside Act 1981* (as amended) were detected within the site.

viii. The site is located adjacent to habitats which are suitable for use by nesting birds. All wild birds are protected while they are nesting under the *Wildlife and Countryside Act 1981* (as amended); measures for the protection of nesting birds during the construction phase of the proposed development are presented at **Section 5.2**. Habitats adjacent to the site are suitable for foraging and commuting bats. Recommendations relating to the retention of features suitable for use by foraging and commuting bats are presented at **Section 5.2**. The presence of protected or notable species is otherwise reasonably discounted at the site.

ix. Features to enhance habitats for wildlife associated with urban areas as part of the proposed development are presented at **Section 5.3**

Recommendations

x. The recommendations in **Section 5.0** outline all the mandatory measures and additional actions to be applied to ensure compliance with wildlife legislation, the National Planning Policy Framework (NPPF) and best practice.

xi. The proposals will secure an opportunity to implement beneficial measures such as habitat creation that will safeguard habitats for wildlife such as birds and bats, with the aim of providing a net gain in biodiversity in accordance with the principles of the NPPF.

Conclusion

xii. It is concluded that the proposals are feasible and acceptable in accordance with ecological considerations and relevant planning policy. Development at the site will provide an opportunity to secure ecological enhancement for wildlife associated with urban areas.

1.0 INTRODUCTION

1.1 Background and Rationale

1.1.1 ERAP (Consultant Ecologists) Ltd was commissioned by Merebridge Construction to carry out an ecological assessment of land at Piccadilly Wharf, Store Street, Manchester M1 2WA (hereafter referred to as the 'site'). The Ordnance Survey (OS) grid reference at the centre of the site is SJ 84986 98076. An aerial image of the site and its surrounding habitats is appended at **Figure 1** (source image: ESRI World Imagery).

1.1.2 The assessment was requested in connection with proposals to develop the site to a 16 storey block of apartments. This report updates *2021-033 Land at Piccadilly Wharf, Store Street, Manchester M1 2WA: Ecological Survey and Assessment* (ERAP (Consultant Ecologists) Ltd, 2021), hereafter the '2021 report'.

1.2 Scope of Works

1.2.1 The scope of updated ecological works undertaken in November 2025 comprised:

a. A desktop study for known ecological information at the site and the local area (data search information gathered in 2021 has additionally been used to inform this report);

b. An Extended Phase 1 Habitat Survey and assessment, and assessment of the habitats present at the site using the UK Habitats Classification;

c. Assessment of the ecological value of the habitats within the site with the use of the National Vegetation Classification (NVC) and the Ratcliffe criteria, as presented in *A Nature Conservation Review* (Ratcliffe, 1977);

d. Survey and assessment of all habitats for relevant statutorily protected species[1] and other wildlife including badger (*Meles meles*), bats, bird species and reptiles;

e. The identification of any potential ecological constraints on the proposals and the specification of the scope of mitigation and ecological enhancement required in accordance with wildlife legislation, planning policy guidance and other relevant guidance; and

f. The identification of any further surveys or precautionary actions that may be required to inform the progression of the site through the planning process or prior to the commencement of any construction activities.

[1] In accordance with Government Circular: Biodiversity and Geological Conservation – Statutory Obligations and Their Impact on the Planning System (Office of the Deputy Prime Minister, 2005) developers should not be required to undertake surveys for protected species unless there is reasonable likelihood of the species being present and affected by the development. In this instance (for example) there are no ponds within an unobstructed radius of 500 metres from the site, and no water bodies or water courses within or adjacent to the site; there has been no requirement to consider great crested newt (*Triturus cristatus*), water vole (*Arvicola amphibius*) or otter (*Lutra lutra*) as part of this assessment.

2.0 METHOD OF SURVEY

2.1 Desktop Study and Data Search

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

a. MAGiC Maps: A web-based interactive map which brings together geographic information on key environmental schemes and designations, including details of statutory nature conservation sites;

b. Ancient Tree Inventory (Woodland Trust, 2025): An online database of ancient and veteran trees;

c. Greater Manchester Local Nature Recovery Strategy;

d. Greater Manchester Local Record Centre (GMLRC) gathered in 2021 for the 2021 report; and

e. Greater Manchester Biodiversity Action Plan (BAP).

2.2 Vegetation and Habitats

2.2.1 An updated Extended Phase 1 Habitat Survey of the site was carried out by Brian Robinson on 5th November 2025. The weather was dry with overcast, with a light air (Beaufort scale 1) and an air temperature of 14°C.

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

2.2.3 On site habitat mapping was assisted via use of GPS technology and QField on-site mapping software, using ESRI World Imagery and *Topographical Survey of Land at: Store St, Manchester Drawing Ref S20-SST-T* (G.E.O (UK) Ltd, 2021) as base plans.

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

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

2.2.6 Habitats within the site were assessed in accordance with *The UK Habitat Classification Version 2.0* (UKHab Ltd, 2023). The UK Habitat Classification, or 'UKHab' has been designed to function at two scales of minimum mappable unit (MMU): fine scale (25m^2 or 5 metres length) and large scale (400m^2 or 20 metres length). It has been considered for the purposes of this survey that the fine scale of 25m^2 or 5 metres length MMU is appropriate.

2.2.7 Searches were made for uncommon, rare and statutorily protected plant species, those species listed as protected in the *Wildlife and Countryside Act 1981* (as amended) and species which are indicators of important and uncommon plant communities. Plant nomenclature follows *New Flora of the British Isles 3rd Edition* (Stace, 2010).

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

2.3 Animal Life

Badger

2.3.1 The survey area for badger covered the site (as annotated on **Figures 1** and **2**) and extended to accessible land within a radius of 50 metres from the site boundary. Private gardens / land were excluded from the survey.

2.3.2 The survey was conducted in accordance with guidance presented within *Badgers and Development* (Natural England, 2007) and Badgers*: advice for making planning decisions* (Natural England, 2022).

2.3.3 The following signs of badger activity were searched for:

a. Sett entrances, e.g. entrances that are normally 25 to 35cm in diameter and shaped like a 'D' on its side;

b. Large spoil heaps outside sett entrances;

c. Bedding outside sett entrances;

d. Badger footprints;

e. Badger paths;

f. Latrines;

g. Badger hairs on fences or bushes;

h. Scratching posts; and

i. Signs of digging for food.

2.3.4 Habitats within and surrounding the site were assessed in terms of their suitability for use by foraging and sheltering badger in accordance with their known habitat preferences as detailed in current guidance and *Badger* (Roper, 2010).

Bat Species

Habitat Assessment for Commuting / Foraging Bats

2.3.5 Habitats within and adjacent to the site were assessed for their value and suitability for commuting and foraging bats in accordance with Table 4.1 of *Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th edn)* (Collins, J. (ed), 2023). Reference has been made to the categories, descriptions and examples presented in **Table 2.1**.

Table 2.1: Consideration of Suitability of Foraging and Commuting Habitat for Bats

Suitability	Potential Flight Paths and Foraging Habitats
None	No habitat features on site likely to be used by any commuting or foraging bats at any time of the year (i.e. no habitats that provide continuous lines of shade / protection for flight-lines, or generate/shelter insect populations available to foraging bats).
Negligible [a]	No obvious habitat features on site likely to be used as flight-paths or by foraging bats; however, a small element of uncertainty remains in order to account for non-standard bat behaviour.
Low	Habitat that could be used by small numbers of bats as flight-paths such as a gappy hedgerow or unvegetated stream, but isolated, i.e. not very well connected to the surrounding landscape by other habitat. Suitable, but isolated habitat that could be used by small numbers of foraging bats such as a lone tree (not in a parkland situation) or a patch of scrub.
Moderate	Continuous habitat connected to the wider landscape that could be used by bats for flight-paths such as lines of trees and scrub or linked back gardens. Habitat that is connected to the wider landscape that could be used by bats for foraging such as trees, scrub, grassland or water.
High	Continuous, high-quality habitat that is well connected to the wider landscape that is likely to be used regularly by bats for flight-paths such as river valleys, streams, hedgerows, lines of trees and woodland edge. High-quality habitat that is well connected to the wider landscape that is likely to be used regularly by foraging bats such as broadleaved woodland, tree-lined watercourses and grazed parkland. Site is close to and connected to known roosts.
[a] Negligible is defined as 'so small or unimportant as to be not worth considering, insignificant'. This category may be used where there are places that a bat could roost or forage (due to one attribute) but it is unlikely that they actually would (due to another attribute).	

Bird Species

2.3.6 Bird species observed and heard during the survey were recorded.

2.3.7 Habitats throughout the site and in the immediate surrounding area were assessed for their value to roosting, feeding and nesting birds, as indicated by the amount of shelter, feeding value, woody vegetation structure and species diversity of tree and shrub species in the site.

Reptile Species

2.3.8 The site and its surroundings were assessed in terms of their suitability for use by reptile species using the important characteristics for reptiles outlined in the draft document *Reptile Mitigation Guidelines* (Natural England, 2011), and the *Reptile Habitat Management Handbook* (Edgar, et al., 2010). These habitat characteristics are outlined in **Table 2.2**.

Table 2.2: Important Habitat Characteristics for Reptiles

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

Other Wildlife

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

2.3.10 Habitats have been assessed for their suitability for Priority Species identified in the data search results where this is considered relevant to the application.

2.4 Survey and Reporting Limitations

2.4.1 The survey was conducted in November, when many plant species are in a state of senescence. The surveyor is experienced in surveying plant species from their vegetative characteristics, and it has been possible to reliably identify the habitats and principal plant species present. It was not considered feasible to complete updated surveys of the aquatic vegetation present at the nearby Ashton Canal (West) Site of Biological Importance in November; data from the 2021 report relating to the aquatic plant species present at the canal in proximity to the site has been provided within this report.

2.4.2 All measurements within this report are approximate only, and have been either measured (using QField) or estimated whilst on site or calculated using mapping software (QGIS) or internet-based mapping services such as MAGiC Maps and Google Earth.

2.5 Evaluation Methods

2.5.1 The habitats, vegetation and animal life were evaluated with reference to standard nature conservation criteria as described in *A Nature Conservation Review* (Ratcliffe, 1977) and *Guidelines for the Selection of Biological SSSIs* (Bainbridge, et al., 2013). These are size (extent), diversity, naturalness, rarity, fragility, typicality, recorded history, position in an ecological or geographical unit, potential value and intrinsic appeal.

2.5.2 Habitats have been assessed to determine whether they meet those described in *UK Biodiversity Action Plan: Priority* Habitat *Descriptions* (Maddock, A (ed), 2008); these lists are used to help draw up the statutory lists of Priority Habitats, as required under Section 41 of the *Natural Environment and Rural Communities* (NERC) *Act 2006*. Where suitable, the ecological value of the habitats present has been assessed using the terms outlined in *Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine* (CIEEM, 2018). Each habitat and individual trees have been assessed to determine whether they are 'irreplaceable habitat', defined in *National Planning Policy Framework* (Ministry of Housing, Communities & Local Government, 2024)[2] as '*Habitats which would be technically very difficult (or take a very significant time) to restore, recreate or replace once destroyed, taking into account their age, uniqueness, species diversity or rarity. They include ancient woodland, ancient and veteran trees, blanket bog, limestone pavement, sand dunes, salt marsh and lowland fen'*. The further detail presented in *The Biodiversity Gain Requirements (Irreplaceable Habitat) Regulations 2024* (GOV.UK, 2024) has also been referred to.

2.5.3 Government advice on wildlife, as set out in the NPPF and associated government circulars has been taken into consideration. Legislation relating to protected species, such as those listed under Schedules 1, 5, 6 and 8 of the *Wildlife and Countryside Act 1981* (as amended) and *The Conservation of Habitats and Species*

[2]Hereafter the NPPF

(Amendment) (EU Exit) Regulations 2019, is referenced where applicable, and any impacts to protected species are evaluated in accordance with current guidance.

2.5.4 The presence of any Priority Species, as listed under Section 41 of the *Natural Environment and Rural Communities (NERC) Act 2006* is noted, and habitats are assessed in terms of their suitability and value for these species. The presence of habitats and / or species listed by the Greater Manchester Biodiversity Action Plans has been taken into account in the evaluation of the site.

3.0 SURVEY RESULTS

3.1 Desktop Study and Data Search

Statutory Designated Sites for Nature Conservation and SSSI Impact Risk Zones

3.1.1 The site is not and does not form part of any statutory designated site for nature conservation.

3.1.2 The site lies within the SSSI Impact Risk Zone for the Rochdale Canal Site of Special Scientific Interest (SSSI) and the overlapping Rochdale Canal Special Area of Conservation (SAC), located 5 kilometres to the north-east of the site and designated for their importance for submerged aquatic plants and emergent vegetation, including extensive colonies of Floating Water-plantain (*Luronium natans*), a European Protected Species.

3.1.3 The SSSI Impact Risk Zone requires the Local Planning Authority to consult with Natural England on likely risks from the following development categories (Natural England, 2025):

a. **Infrastructure:** Airports, helipads and other aviation proposals.

b. **Air Pollution:** Any industrial / agricultural development that could cause air pollution, including industrial processes, livestock and poultry units with a floorspace greater than 500m², slurry lagoons greater than 750m² and manure stores greater than 3500 tonnes.

c. **Combustion:** General combustion processes greater than 50 megawatts energy input, including energy from waste incineration, other incineration, landfill gas generation plant, pyrolysis / gasification, anaerobic digestion, sewage treatment works, other incineration / combustion.

3.1.4 The proposals do not meet any of the development categories which would require further consultation with Natural England on likely risks from the proposed development to the statutory designated sites for nature conservation present in the wider area.

Non-statutory Designated Sites for Nature Conservation

3.1.5 The site has no non-statutory designated site for nature conservation.

3.1.6 The site lies 20 metres to the south-west of Ashton Canal (West) Site of Biological Importance (SBI), designated for its importance as a wildlife corridor and for its important accessible natural greenspace in an otherwise urban landscape. Canals are a Greater Manchester Biodiversity Habitat.

3.1.7 Rochdale Canal: Stott's Lane to Ducie Street Basin SBI is located 180 metres to the north of the site and is designated for its artificial manmade habitats and the aquatic plant species it supports.

Local Nature Recovery Strategy

3.1.8 The site is not located within and Core Local Nature Sites or Opportunity Areas identified by the Greater Manchester LNRS, although it is noted that an Opportunity Area is located adjacent to the eastern site boundary.

Priority Habitats Inventory

3.1.9 The Priority Habitats Inventory[3] was checked via MAGiC Maps. No Priority Habitats are identified at the site by the inventory.

Ancient Tree Inventory

3.1.10 No ancient or veteran trees are identified at the site by the inventory.

Protected and Notable Species

3.1.11 The data provided by GMLRC to inform the 2021 report has been presented below for ease of reference.

3.1.12 GMLRC hold no records of protected and notable species for the site. Records of protected and notable species for a 2 kilometre radius of the site are summarised at **Table 3.1**.

Table 3.1: Records of Protected Species Within a 2 Kilometre Radius of the Site

Taxon Group	Species Name and Designations[1] and Notes
Birds	***WCAs1 & GMBAP*** Black redstart (*Phoenicurus ochruros*).
	WCAs1 Hobby (*Falco subbuteo*), kingfisher (*Alcedo atthis*), little ringed plover (*Charadrius dubius*) and peregrine (*Falco peregrinus*).
	PS Bullfinch (*Pyrrhula pyrrhula*), cuckoo (*Cuculus canorus*), dunnock (*Prunella modularis*), herring gull (*Larus argentatus*), house sparrow (*Passer domesticus*), lapwing (*Vanellus vanellus*), lesser redpoll (*Carduelis cabaret*), linnet (*Carduelis cannabina*), song thrush (*Turdus philomelos*), spotted flycatcher (*Muscicapa striata*), starling (*Sturnus vulgaris*) and yellow wagtail (*Motacilla flava*).
	A grey heron heronry (a nesting site for herons) is located 1 kilometre to the west of the site. Nesting birds, their nests and eggs are protected under the *Wildlife and Countryside Act 1981* (as amended).
Flowering Plants	***PS*** Grass-wrack Pondweed (*Potamogeton compressus*) and Yellow Bird's-nest (*Monotropa hypopitys*)
Insects (moths)	A record of an unspecified Priority Species of moth is reported for the wider area.
Terrestrial mammals	Brown long-eared bat (*Plecotus auritus*): EPS, PS, WCAs5 & GMBAP. 1 record of activity located 1.8 kilometres to the west of the site.
	Common pipistrelle (*Pipistrellus pipistrellus*): EPS, WCAs5 & GMBAP. 20 records of roosts and at least 65 records of activity. The closest record is approximately 100 metres from the site.
	Daubenton's bat (*Myotis daubentonii*): EPS, WCAs5 & GMBAP. 1 record of activity located 1.2 kilometres to the north-west of the site.

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

Taxon Group	Species Name and Designations[1] and Notes
	Myotis species (*Myotis* sp.): EPS, WCAs5 & GMBAP. 1 record of a roost located 400 metres to the south of the site.
	Pipistrelle species (*Pipistrellus* sp.): EPS, WCAs5 & GMBAP. 4 records of roosts and 15 records of activity. The closest record is 200 metres from the site.
	Soprano pipistrelle (*Pipistrellus pygmaeus*): EPS, PS, WCAs5 & GMBAP.
	Badger (*Meles meles*): PBA92. 4 records, including 1 sett; the closest record is over 1 kilometre from the site.
	Hedgehog (*Erinaceus europaeus*): PS. 1 record of a roost and 2 records of activity, the closest of which is 500 metres to the west of the site.
[1]Key to Designation Codes: EPS = European Protected Species under the *Conservation of Habitats and Species Regulations 2017.* WCAs1 = Species receives full protection under Schedule 1 of the *Wildlife and Countryside Act 1981* (as amended). WCAs5 = Species receives full protection under Schedule 5 of the *Wildlife and Countryside Act 1981* (as amended). PBA92 = Protection of Badger Act 1992 PS = Priority Species listed under Section 41 of the NERC Act 2006 GMBAP = Species listed on the Greater Manchester Action Plan	

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

2021 Report Summary

3.1.14 The site is described as follows in the 2021 report:

'The approximately 0.06 hectare site is located within urban surroundings and supports recently felled (estimated to be within the last 12 months) trees and scrub, the majority of which was (as based on the felled stems and branches) composed of Italian Alder (Alnus cordata) with locally abundant Elm species (Ulmus sp.) and Bramble (Rubus fruticosus agg.).

The site currently supports a single Italian Alder tree, occasional Ash (Fraxinus excelsior), Wild Cherry (Prunus avium) and Elder (Sambucus nigra) saplings, occasional Bramble and very locally frequent Common Nettle (Urtica dioica) and Ivy (Hedera helix), a majority of which is growing on the north-western wall of the site.'

3.1.15 No invasive plant species listed under Schedule 9 of the *Wildlife and Countryside Act 1981* (as amended) were detected.

3.1.16 The site was assessed to be located in proximity to habitats suitable for use by foraging and commuting bats and supported habitats suitable for use by nesting birds. The presence of protected or notable species was otherwise reasonably discounted.

3.2 Vegetation and Habitats

Habitats within the Site

3.2.1 The appended **Figure 2** can be referred to for all habitat descriptions. Photographs are appended in **Section 8.2**.

3.2.2 The approximately 0.06 hectares site is located within urban surroundings, and (at the time of the survey) supported disturbed ground with colonising ruderal herbs, and an area of scrub at its northern end.

3.2.3 The northern-western site boundary is defined by a fence and wall, beyond which lies Store Street and buildings. The north-eastern site boundary is defined by fencing, beyond which lies an area of trees and ornamental planting. The south-eastern site boundary is defined by fencing, beyond which lies a car park associated with residential dwellings, and the south-western site boundary is defined by fencing, beyond which lies an industrial building.

3.2.4 Refer to **Photos 1** and **2**. The recently disturbed ground supports colonising herbs characterised by occasional and locally frequent Common Fumitory (*Fumaria officinalis*), occasional Hedge Bindweed (*Calystegia sepium*), Creeping Thistle (*Cirsium arvense*), Ribbed Melilot (*Melilotus officinalis*), Broad-leaved Dock (*Rumex obtusifolius*) and Groundsel (*Senecio vulgaris*) and very locally frequent Creeping Buttercup (*Ranunculus repens*). A plant species list is appended at **Table 8.1**.

3.2.5 The vegetation colonising the cleared ground is not typical of any NVC community. The habitat is classified as J1.3 Cultivated / disturbed land – ephemeral / short perennial in Phase 1 Habitat Survey terminology, and is described by the UKHab as u1c artificial unvegetated, unsealed surface with the secondary codes 82 vacant or derelict land and 517 recent management.

3.2.6 Refer to **Photos 3** and **4**. The small area of scrub located at the northern site boundary is characterised by occasional and locally frequent Wild Cherry (*Prunus avium*), locally abundant Italian Alder (*Alnus cordata*), locally frequent Norway Maple (*Acer platanoides*) and Hazel (*Corylus avellana*) and very locally frequent Elder (*Sambucus nigra*). Ivy is constant and frequent. A plant species list is appended at **Table 8.2**.

3.2.7 The scrub is not typical of any NVC community. The habitat is classified as A2.1 Dense continuous scrub in Phase 1 Habitat Survey terminology, and is described by the UKHab as h3h mixed scrub.

Ashton Canal (West) SBI

3.2.8 Refer to **Photos 5** and **6**. A 100 metres long section of the canal closest to the site was surveyed in 2021; plant species detected comprised locally abundant Nuttall's Waterweed (*Elodea nuttallii*) and rare Small Pondweed (*Potamogeton berchtoldii*). No other aquatic plant species were detected.

Invasive Plant Species

3.2.9 No invasive plant species listed under Schedule 9 of the *Wildlife and Countryside Act 1981* (as amended) were detected within the site.

3.3 Animal Life

Badger

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

Bat Species

Habitat Assessment for Commuting and Foraging Bats

3.3.2 The former trees and scrub would have been be suitable for and would have contributed to the wider foraging area of low numbers of common species of edge-feeding foraging bats associated with urban habitats, such as common pipistrelle (*Pipistrellus pipistrellus*).

3.3.3 A diverse range of species and / or a large number of bats are considered unlikely at the site owing to the small size of the site. Overall the site is assessed to be of 'low' suitability for use by foraging bats. The Ashton Canal (West) BHS, located within 20 metres of the site, is considered to be of 'high' suitability for use by foraging and commuting bats.

Bird Species

3.3.4 Birds detected in the site in April 2021 and / or in November 2025 are listed in **Table 3.2**.

Table 3.2: Bird species Detected on 22nd April 2021 and / or 5th November 2025

Scientific Name	Common Name	BOCC Status[1]
Columba palumbus	Woodpigeon	Amber
Cyanistes caeruleus	Blue tit	Green
Erithacus rubecula	Robin	Green
Parus major	Great tit	Green
Passer domesticus	**House sparrow**	**Red**
Pica pica	Magpie	Green
Troglodytes troglodytes	Wren	Amber
Turdus merula	Blackbird	Green
[1]BOCC: Birds of Conservation Concern (Stanbury, et al., 2021). Priority Species are presented in **bold**.		

3.3.5 The former trees and shrubs were suitable for use by nesting passerine (i.e. perching) species, including those detected close to the site during the survey. This is considered further at **Section 4.4**.

Reptiles

3.3.6 The 0.06 hectares site is located within an area characterised by urban development and is not linked to any habitats favourable for use by reptile species, and there are no records of reptile for the site or the wider area. The presence of reptiles within the site is reasonably discounted.

Other Wildlife

3.3.7 The site is unlikely to provide suitable habitat for other Priority Species of wildlife associated with urban areas, such as hedgehog (*Erinaceus europaeus*), due to its small size and recently cleared nature. The site is located adjacent to areas which may provide suitable habitat, such as the ornamental shrub planting

beyond the southern site boundary, and the scrub and trees located beyond the eastern site boundary. The suitability of the site for other wildlife species such as hedgehog is considered further at **Section 4.4**.

4.0 EVALUATION AND ASSESSMENT

4.1 Introduction and Description of Proposals

4.1.1 In accordance with *Store Street, Manchester City Centre: Proposed Plans – Level 16 (Roof) Drawing Number 25-008-FA-XX-16-DR-A-04316* (Four Architects, 2025), hereafter the proposals plan, it is proposed to develop the site to a 16 storey block of apartments.

4.1.2 **Section 4.2** provides an assessment of any impacts of the proposed development on the designated sites for nature conservation present in the wider area. The ecological value of habitats within the site is evaluated at **Section 4.3**, and protected and notable species are considered at **Section 4.4**.

4.2 Designated Sites for Nature Conservation

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

4.2.2 An assessment in relation to the potential for the development to cause additional shading upon the Ashton Canal (West) SBI (and thereby create negative effects on aquatic plant species associated with the canal) has been completed by Gia Chartered Surveyors for a 15 storey block of apartments. The results of this assessment are presented below:

'Whilst there will be additional evening shade from the proposed development on the canal, this will be transient and limited to the early afternoon and evening. In order to understand the potential impact, and where substantial permanent shade may be caused by the proposed development, the BRE Guide provides the 'sun-on-ground indicator' (SHOG) methodology for the assessment of overshadowing from proposed developments. The assessment applies to both new and existing gardens/amenity areas, which are affected by new developments. The BRE Guidelines suggest that the Spring Equinox (21st March) is a suitable date for the assessment. Using specialist software, the path of the sun is tracked to determine where the sun would reach the ground and where it would not.

The BRE Guidelines recommend that at least half of a garden or amenity area should receive at least 2 hours of sunlight on March 21st or the area which receives 2 hours of direct sunlight should not be reduced to less than 0.8 times its former value (i.e. there should be no more than a 20% reduction).

The canal will continue to receive direct sunlight throughout the morning up to around 1pm. After that point, the sun will be sufficiently low enough to project the shadowing from the proposed development onto the canal, however only onto areas which will have received high levels of direct sunlight throughout the morning, and into the afternoon. In our view therefore, there will be no increase in the area of the canal that does not receive 2 hours of sunlight on March 21st and there is no potential for meaningful impact.'

4.2.3 The above shading assessment concludes that there will be no meaningful impact in terms of shading from the proposed development to the aquatic life associated with the canal and impacts can therefore be reasonably discounted.

4.2.4 It is considered that the relatively minor increase in height from a 15 to 16 storey development is unlikely to significantly increase the shading effects of the proposed development onto the Ashton Canal (West) BHS.

4.2.5 Due to the proposed height of the building it is considered that the proposals could create impacts on the Ashton Canal (West) SBI in terms of increased artificial lighting; increased artificial lighting could create negative effects on the canals' suitability as a wildlife corridor and for foraging and commuting bats. It is recommended at **Section 5.2** that an assessment of the impacts of the proposals in terms of artificial lighting to the wider area is completed to inform the proposals, and that this may be completed under a suitably worded planning condition.

4.2.6 Otherwise impacts to other non-statutory designated sites are reasonably discounted.

4.3 Vegetation and Habitats

4.3.1 Only common and widespread plant species were found. None of the habitats present are representative of semi-natural habitat. The NVC communities present are typical of the geographical area and conditions present. No Priority Habitat or irreplaceable habitats have been detected at the site.

4.3.2 The habitats located within the site are not considered to hold any importance in a geographical context[4]. The trees and scrub formerly present at the site (prior to the 2021 report) were considered by the 2021 report to have likely been of 'local' importance prior to their removal.

4.3.3 Measures for the protection of the habitats adjacent to the site during the construction phase of the proposed development are presented at **Section 5.2**.

4.3.4 No invasive plant species listed under Schedule 9 of the *Wildlife and Countryside Act 1981* (as amended) were detected within the site.

4.4 Protected Species and Other Wildlife

4.4.1 The scrub within the site is unlikely to be suitable for use by nesting birds as it is thin and unlikely to provide sufficient cover. The site is located adjacent to denser areas of trees and scrub and ornamental planting at its eastern and southern boundaries; these habitats are suitable for use by nesting birds. All wild birds are protected while they are nesting under the *Wildlife and Countryside Act 1981* (as amended); measures for the protection of nesting birds during the construction phase of the proposed development are presented at **Section 5.2**.

4.4.2 Habitats adjacent to the site are suitable for foraging and commuting bats. Recommendations relating to the retention of features suitable for use by foraging and commuting bats are presented at **Section 5.2**, and features to enhance habitats for roosting bats at the site are presented at **Section 5.3**.

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

5.0 RECOMMENDATIONS AND ECOLOGICAL ENHANCEMENT

5.1 Introduction

5.1.1 These recommendations aim to ensure that the development is implemented in accordance with relevant wildlife legislation, Natural England guidance, the principles of the NPPF, local planning policy and best practice.

5.1.2 In accordance with Chapter 15, paragraph 193(d) of the NPPF:

'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'.

5.1.3 Where possible, opportunities to enhance the ecological interest and habitat connectivity and seek biodiversity gain through appropriate landscape planting and habitat creation have been identified.

5.1.4 All recommendations are appropriate to the geographical area, the habitats in the wider area, the wildlife present in the local area (and likely to use the site post-construction) and take into consideration the end use of the site as an apartment building.

5.2 Protection of Existing Vegetation

Protection of Trees and Shrubs at Site Boundaries

5.2.1 During the construction phase, temporary protective demarcation fencing will be used to protect the trees and shrubs at the site boundaries. The fencing must extend outside the canopy of the retained trees and must remain in position until all areas have been developed to ensure protection is provided throughout the construction phase.

5.2.2 The fencing will be in accordance with *BS5837:2012 Trees in Relation to Design, Demolition and Construction: Recommendations* (BSI, 2012).

Lighting

5.2.3 Paragraph 185(c) in Chapter 15 (conserving and enhancing the natural environment) of the NPPF states that development should:

'limit the impact of light pollution from artificial light on local amenity, intrinsically dark landscapes and nature conservation.'

Construction Phase

5.2.4 Any lighting to be used at the site during construction should be directional and screened where possible, this specification should be included within a Construction Environment Management Plan (CEMP), or similar.

Development Lighting Design

5.2.5 The lighting scheme to be implemented at the developed site must involve the use of appropriate products and screening, where necessary, to ensure no excessive artificial lighting shines over the Ashton Canal (West) SBI, as lighting overspill may deter use by wildlife such as foraging and commuting bats.

5.2.6 The lighting scheme will be designed with reference to current guidance, namely:

a. Guidance Note 08/23: Bats and Artificial Lighting at Night (Institution of Lighting Professionals & Bat Conservation Trust, 2023); and

b. Bats and lighting: Overview of current evidence and mitigation guidance (Stone, 2014).

5.2.7 It is respectfully suggested that this may be completed under a suitably worded planning condition.

Protection of Nesting Birds

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

5.2.9 If breeding birds are detected the ecologist will issue guidance in relation to the protection of the nesting birds in conjunction with the scheduled works. This may involve cordoning off an area of the site until the young birds have fledged.

Protection of Other Wildlife

5.2.10 It is recommended that the following Reasonable Avoidance Measures (RAMs) are adopted during the demolition and construction phases of the proposed development.

a. All site personnel must be made aware of this RAMs, and the RAMs should be made part of the site induction for all personnel involved in soil strip, ground clearance, or other relevant activities;

b. Prior to any soil strip, vegetation will be strimmed to a height of no less than 0.15 metres and all arisings removed;

c. During construction, any holes, trenches or other pits which hedgehog (or other wildlife) could fall into will be covered overnight, or have sloped banks or ramps top allow escape; and

d. If any wildlife species (such as hedgehog) is detected it must be carefully picked up by an operative wearing clean gloves, placed in a clean bucket, and moved to an area of suitable habitat beyond the construction zone.

5.3 Ecological Enhancements to Incorporate into the Site Design

5.4 Enhancing Habitats for Roosting Bats

5.4.1 Whilst the site is not currently suitable for use by roosting bats and is currently of negligible suitability for foraging bats, evidence shows that common pipistrelle can hibernate within large buildings such as apartment blocks within urban areas (Korsten, et al., 2016). Due to the type of building proposed, it is considered that bat access panels installed at the upper floors of the proposed buildings may provide

suitable features for use by roosting bats (including hibernating common pipistrelle), despite the lack of favourable surrounding foraging and commuting habitats within the immediate surroundings of the site.

5.4.2 The bat access panels, which can be faced to match the external render or cladding of the proposed building, should not be positioned over windows or doorways where bat droppings may become a nuisance. Once the development layout has been finalised, an Ecologist should advise on appropriate positions for the bat access panels. Suitable bat access panels are available from NHBS Ecology (www.nhbs.com) or Habibat (http://www.habibat.co.uk/) and are presented at **Insert 1**:



Insert 1: Example of commercially available bat access panels (Schwegler 2FR and Habibat). Note that both types can be faced to match external render or cladding.

Enhancing Habitats for Nesting Birds

House Sparrow

5.4.3 House sparrows are associated with urban and suburban areas. Monitoring suggests a severe decline in the UK house sparrow population, estimated as dropping by 71 per cent between 1977 and 2008 with large falls in both rural and urban populations (RSPB, 2023).

5.4.4 The installation of house sparrow terrace nest boxes is recommended at the proposed new housing. The boxes will not be positioned over windows or doorways where droppings may become a nuisance. RSPB advice states that boxes should ideally be sited facing north to east, to avoid exposure to direct sunlight, which may cause overheating of chicks in the nest.

5.4.5 Such bird boxes are available from the NHBS (www.nhbs.com) or Wild Care (www.wildcare.co.uk). ERAP (Consultant Ecologists) Ltd will advise on the siting of bird boxes.

5.4.6 An example of a suitable house sparrow bird box is given below at **Insert 2**.



Insert 2: Schwegler 1SP House Sparrow Nesting Terrace

Swift

5.4.7 The swift (*Apus apus*) has been added to *The Birds of Conservation Concern* (Stanbury, et al., 2021) Red list owing to the recorded recent declines and its identified status as a high conservation priority.

5.4.8 The construction of the apartment block provides an opportunity for the installation of additional nesting opportunities for swift to assist their conservation. Suitable swift nest boxes are illustrated at **Insert 3**.



Insert 3: Examples of swift nest boxes[5]

Landscape Planting

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

Table 5.1: Suitable Native Species for Tree and Shrub Planting

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

5.4.10 The understorey and ground cover planting design should be prepared to optimise the attraction of invertebrates such as feeding bumblebees and butterflies. Where possible the use of native species should be maximised but where necessary non-native species known to be attractive to invertebrates should be used.

5.4.11 Planting schemes that include flowering species such as *Viburnum, Ceanothus, Hebe*, *Lavandula*, *Lonicera, Potentilla, Rosmarinus* and *Vinca* can maximise opportunities for feeding invertebrates and for the attraction of foraging bats and birds.

[5] From left to right No. 17A Schwegler Swift Nest Box (Triple Cavity) as installation (centre), Manthorpe Swift Nesting Box (right) and Ibstock Eco-habitat for Swift (right), all available from www.NHBS.com and / or Wild Care (www.wildcare.co.uk).

5.4.12 For further plants suitable for the attraction of pollinators please refer to the *Perfect for Pollinators Plant List* (Royal Horticultural Society, 2012). It is recommended that the selection of plant species at the site ensures that a variety of flowering species are available throughout the year.

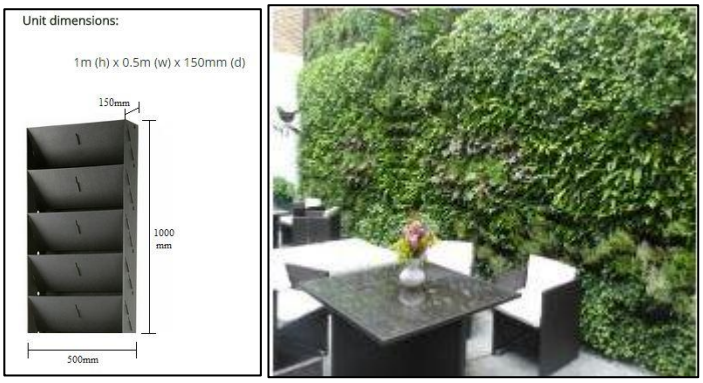
Green Walls

5.4.13 Areas of green wall, either using modern trellis systems or installing living wall systems could be integrated into the design of the building to provide an opportunity for further greenspace within the site, adding an attractive feature to the building and site, and providing valuable habitat for foraging and sheltering invertebrates and potentially bird species.

5.4.14 Stainless steel trellis systems provided by (for example) Green Wall Systems (http://www.green-walls.co.uk/) could be installed at areas of the building, and climbing plants such as Ivy or *Pyracantha* used to create the green wall.

5.4.15 A living wall system of integrated boxes filled with a suitable growing media, such as those supplied by Tree Box (http://www.treebox.co.uk/products/easiwall-green-wall.html) could alternatively be used to create a different planting regime.

5.4.16 **Insert 4** gives the minimum dimensions of a green wall box as provided by Tree Box[6] and example of a green wall space.



Insert 4: Minimum dimensions of Tree Box green wall, and example of usage within a courtyard area

Bee Hotels

5.4.17 Bee hotels such as those presented at **Insert 5**, can provide suitable nesting habitat for solitary bees associated with suburban and urban areas such as the red mason-bee (*Osmia bicornis*), mining bee species (*Andrena* sp.) and other pollinating invertebrates found within urban areas and would be suitable to install at rooftop areas.

[6] i.e. 1 metre in height, 0.5 metres width and 150 millimetres depth.



Insert 5: Bee hotels

5.4.18 Such bee hotels are available from the NHBS (www.nhbs.com) and Wild Care Shop (www.wildcareshop.com). If used, ERAP Ltd will advise on the siting of the bee hotels.

Recommended Plants for Use as Roof Terrace Planting

Table 5.2: Recommended Plants for Use as Roof Terrace Planting

Flowers for Borders	
Aubretia species (*Aubretia* sp.)	Michaelmas Daisy (*Aster* sp.)
Candytuft (*Iberis sempervirens*)	Night-scented Stock (*Matthiola longipetala*)
Cherry pie (*Heliotropium arborescens*)	Oxeye Daisy (*Leucanthemum vulgare*)
Corncockle (*Agrostemma githago*)	Fiddleneck (*Phacelia tanacetifolia*)
Cornflower (*Centaurea cyanus*)	Poached Egg Plant (*Limnanthes douglasii*)
Corn Marigold (*Glebionis segetum*)	Primrose sp. (*Primula* sp.)
Corn Poppy (*Papaver rhoeas*)	Red Campion (*Silene dioica*)
Coneflower species (*Echinacea* sp.)	Common Valerian (*Valeriana officinalis*)
Bluebell (*Hyacinthoides non-scripta*)	Scabious species (*Scabiosa* sp.)
Evening primrose (*Oenothera biennis*)	St John's Wort species (*Hypericum* sp.)
Honesty (*Lunaria annua*)	Sweet William (*Dianthus barbatus*)
Ice plant 'Pink lady' (*Delosperma cooperi*)	Tobacco Plant species (*Nicotiana* sp.)
Knapweed species (*Centaurea* sp.)	Vervain species (*Verbena* sp.)
Mallow species (*Malva* sp.)	Wallflower species (*Erysimum* sp.)
Mexican aster (*Cosmos bipinnatus*)	
Herbs	
Wild Angelica (*Angelica sylvestris*)	Hyssop (*Hyssopus officinalis*)
Bergamot (*Monarda didyma*)	Lavender species (*Lavandula* sp.)
Borage (*Borago officinalis*)	Lemon Balm (*Melissa officinalis*)
Coriander (*Coriandrum sativum*)	Marjoram (*Origanum majorana*)
English Marigold (*Calendula officinalis*)	Rosemary (*Rosmarinus officinalis*)
Fennel (*Foeniculum vulgare*)	Sweet Cicely (*Myrrhis odorata*)
Feverfew (*Tanacetum parthenium*)	Thyme species (*Thymus* sp.)

5.4.19 The understorey and ground cover planting design should be prepared to optimise the attraction of invertebrates such as feeding bumblebees and butterflies. Where possible the use of native species should be maximised but where necessary non-native species known to be attractive to invertebrates should be used.

5.4.20 Planting schemes that include flowering species such as *Viburnum, Ceanothus, Hebe*, *Lavandula*, *Lonicera, Potentilla, Rosmarinus* and *Vinca* can maximise opportunities for feeding invertebrates and for the attraction of foraging bats and birds.

5.4.21 For further plants suitable for the attraction of pollinators please refer to the *Perfect for Pollinators Plant List* (Royal Horticultural Society, 2012). It is recommended that the selection of plant species at the site ensures that a variety of flowering species are available throughout the year

6.0 CONCLUSION

6.1 This ecological assessment has demonstrated that the development of a residential apartment block at the site is feasible and acceptable in accordance with ecological considerations and the NPPF.

6.2 It is possible to implement reasonable actions for the protection and long-term conservation of fauna such as commuting / foraging bats associated with the local area.

6.3 Development at the site will provide an opportunity to secure ecological enhancement for fauna typically associated with urban areas such as breeding birds and roosting bats.

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8.0 APPENDIX: PHOTOGRAPHS, TABLES AND FIGURES

8.1 Plant Species Lists

Table 8.1: Plant Species List for Vegetation Colonising Cleared Ground

Scientific Name	Common Name	DAFOR	Cover
Woody Species			
Acer platanoides	Norway Maple (sapling)	R	<1%
Buddleja davidii	Butterfly-bush (sapling)	R	<1%
Prunus avium	Wild Cherry (sapling)	R	<1%
Prunus spinosa	Blackthorn (sapling)	R	<1%
Rosa canina	Dog-rose (sapling)	R	<1%
Herbaceous Species			
Anthriscus sylvestris	Cow Parsley	R	<1%
Aquilegia vulgaris	Columbine	R	<1%
Calystegia sepium	Hedge Bindweed	O	<1%
Cirsium arvense	Creeping Thistle	O	<1%
Fumaria officinalis	Common Fumitory	O/LF	<1%
Galium aparine	Cleavers	R	<1%
Linaria purpurea	Purple Toadflax	R	<1%
Lycopersicon esculentum	Tomato	R	<1%
Melilotus officinalis	Ribbed Melilot	O	<1%
Pentaglottis sempervirens	Green Alkanet	R	<1%
Ranunculus repens	Creeping Buttercup	VLF	<1%
Rubus fruticosus agg.	Bramble	O/VLF	1%
Rumex crispus	Curled Dock	R	<1%
Rumex obtusifolius	Broad-leaved Dock	O	<1%
Senecio vulgaris	Groundsel	O	<1%
Sonchus oleraceus	Smooth Sow-thistle	O	<1%
Stellaria media	Common Chickweed	R	<1%
Tanacetum parthenium	Feverfew	R	<1%
Taraxacum officinale agg.	Dandelion	O	<1%
Trifolium repens	White Clover	R	<1%
Veronica chamaedrys	Germander Speedwell	O	<1%

[1]**Key to DAFOR:** D=Dominant, A=Abundant, F=Frequent, O=Occasional, R=Rare, V=Very, L=Local and *denotes a constant species

Table 8.2: Plant Species List for Scrub at the Northern Site Boundary

Scientific Name	Common Name	DAFOR	Cover
Woody Species			
Acer platanoides	Norway Maple	LF	5%
Alnus cordata	Italian Alder	LA	10%
Buddleja davidii	Butterfly-bush	R	<1%
Corylus avellana	Hazel	LF	5%
Fraxinus excelsior	Ash	R	<1%
Lonicera nitida	Wilson's Honeysuckle	R	<1%
Prunus avium	Wild Cherry	O/LF	5%
Sambucus nigra	Elder	VLF	<1%
Herbaceous Species			
Hedera helix	Ivy	F*	5%
Rubus fruticosus agg.	Bramble	O	5%
Urtica dioica	Common Nettle	O	<1%
[1]**Key to DAFOR:** D=Dominant, A=Abundant, F=Frequent, O=Occasional, R=Rare, V=Very, L=Local and *denotes a constant species			

8.2 Photographs

Table 8.3: Photographs of the Site



Photo 1: Recently disturbed ground



Photo 2: Recently disturbed ground



Photo 3: Scrub at the northern end of the site



Photo 4: Scrub at the northern end of the site

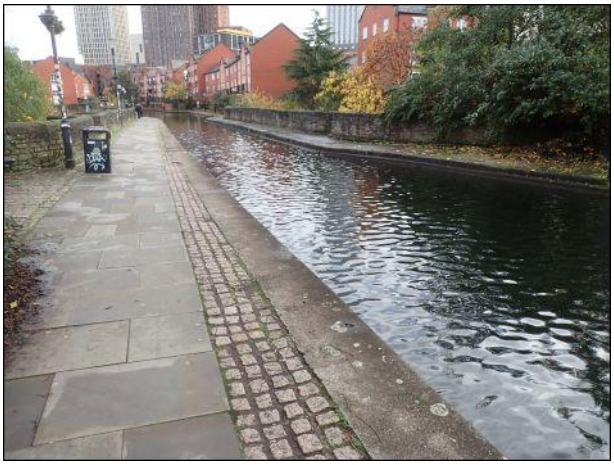


Photo 5: Ashton Canal (West) SBI, section located within 20 metres of the site



Photo 6: Ashton Canal (West) SBI, section located within 20 metres of the site

8.3 Figures

Figure 1: Aerial Image of the Site and its Surroundings

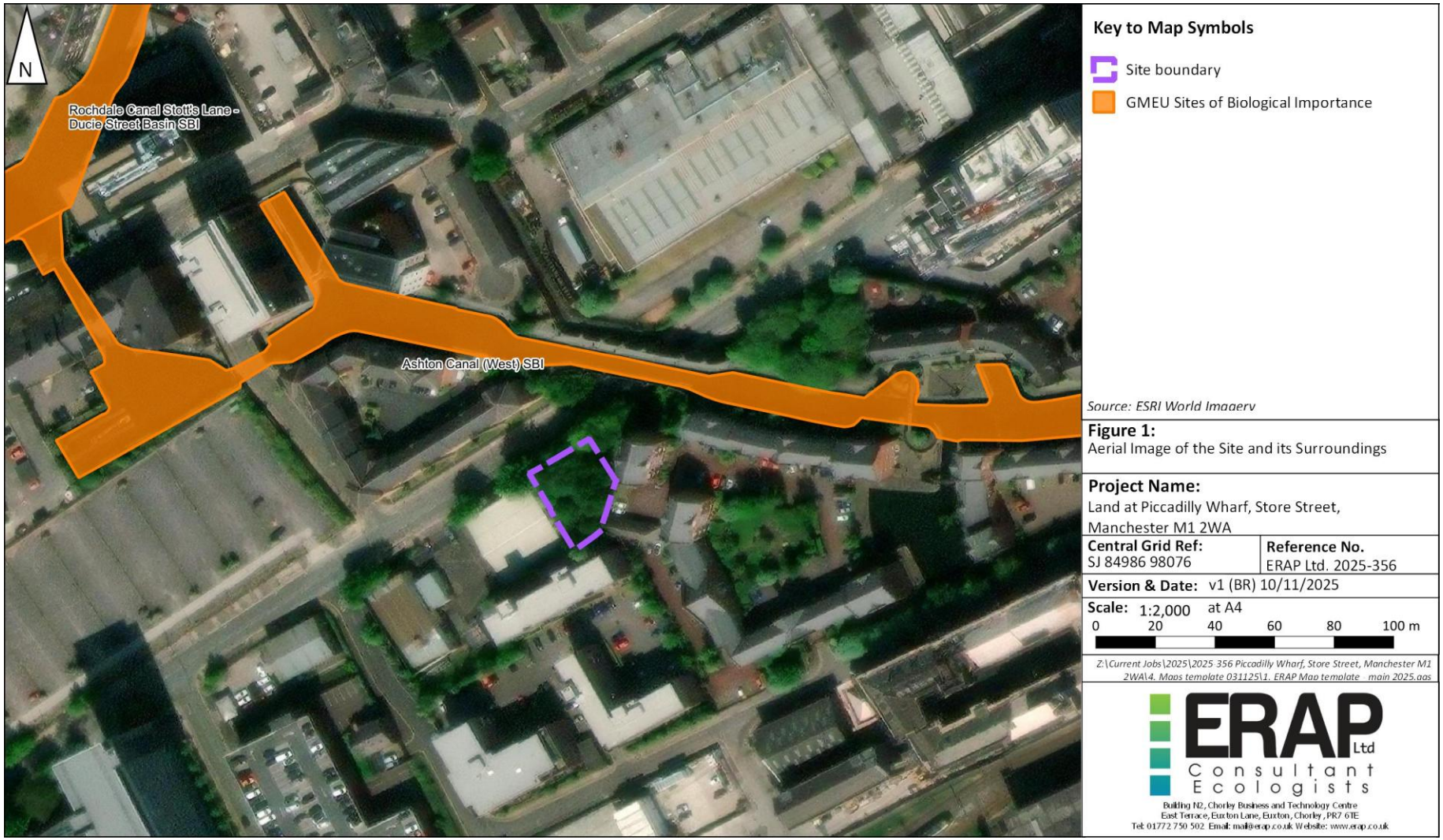


Figure 2: Phase 1 Habitat and Vegetation Map of the Site

