
EXTENDED PHASE 1 HABITAT SURVEY & DAYTIME BAT SURVEY

BRUNSWICK PLACE, BRADFORD ROAD, MANCHESTER



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1.0 INTRODUCTION

Site Information

- 1.1 Rachel Hacking Ecology Limited was commissioned in 2021 by Maryland Securities Ltd to carry out an Extended Phase 1 Habitat Survey & Daytime Bat Survey Brunswick Mill, Bradford Road, Manchester. The site is located on the southern side of Bradford Road, Manchester (O.S. grid reference: SJ 85854 98728 – see Figure 1). The proposed development site currently comprises a large multi-storey mill building, set in areas of hardstanding, tall, ruderal herb, ephemeral/short perennial, continuous scrub and trees. The site is directly adjacent to Ashton Canal to the south with residential and commercial development, and other metropolitan infrastructure in all directions.

An Extended Phase 1 Habitat Survey is required to provide an overview of the habitats present within the site and to assess any potential protected species issues on the site or immediately adjacent to the site. A daytime bat survey is required to assess the potential use of the building by bats.

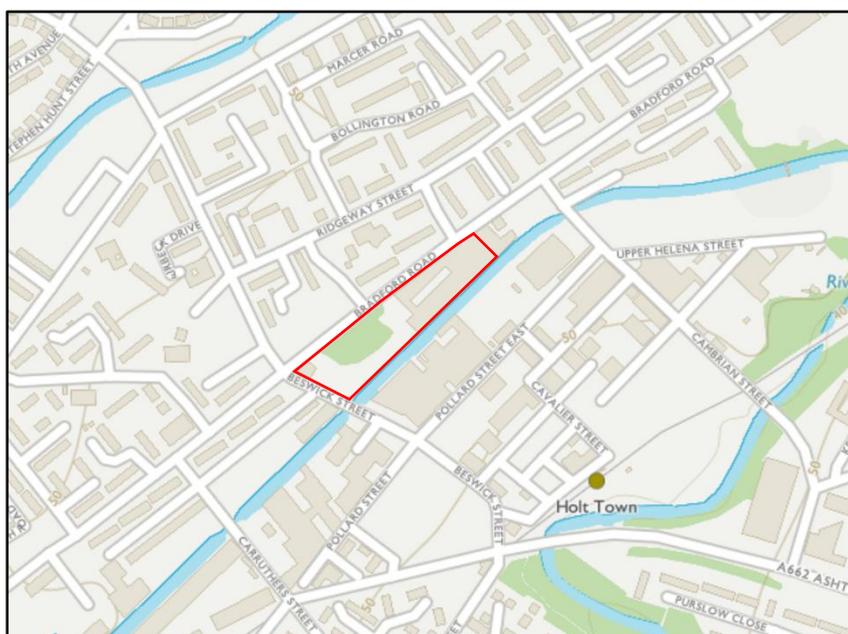


Figure 1 showing the location of the site

Description of Development

- 1.2 The site will be the subject of a planning application for residential development.

Biodiversity in Planning

- 1.3 Biodiversity is a material consideration, and Local Planning Authorities (LPAs) have a requirement to consider biodiversity and protected species when determining planning applications. Section 15 of the National Planning Policy Framework (February 2019) gives specific reference to minimising the impacts of development on biodiversity. Local and Neighbourhood plans also provide guidance towards protecting and enhancing biodiversity, including priority habitats and notable species.



2.0 METHODOLOGY

Extended Phase 1 Habitat Survey

- 2.1 A Phase 1 Habitat survey was undertaken to JNCC standards (JNCC, 2010). The site was walked and each habitat was assigned a Phase 1 habitat category. Species lists were taken at locations of botanical interest. All botanical nomenclature follows Stace, 2019. A Phase 1 map was produced showing habitat boundaries.
- 2.2 During the Extended Phase 1 survey, the habitats were assessed for their potential to support protected species. This included, for example, looking for signs of Badger activity (e.g. setts, paths, latrines and hairs on fences), assessing any waterbodies on site or near the site for their potential to support populations of Water Vole and Otter and a ground-level assessment of the trees on site for potential bat roost features.
- 2.3 The site was also surveyed for invasive, non-native plant species such as Japanese Knotweed and Giant Hogweed.

Daytime Bat Survey

- 2.4 A daytime bat survey of the site was undertaken to search for, and to assess the potential for, a bat roost.
- 2.5 An external assessment of the affected building on the site was undertaken, which included, for example, looking for gaps between any soffit boards and walls, gaps between window frames and the walls, and looking for bat droppings on the walls and window ledges. An internal assessment was also carried out, with particular focus on gaps in walls, cracks in roof beams, and any evidence of bat activity, such as bat droppings, in the internal spaces.
- 2.6 A ground-level assessment of any trees affected by the proposals was also undertaken. This involved a search for potential roosting features (PRF's), including peeled bark, knot holes and branch splits.
- 2.7 A pair of close-focussing binoculars, a high-powered torch and, where necessary, an endoscopic camera, were used to search for evidence of bats.

Personnel and Seasonal Timing

- 2.8 Ben Crossthwaite (Senior Ecologist) and Joe Cooper (Ecologist) carried out the Extended Phase 1 Habitat survey and daytime bat survey on the 11th March 2021. Ben is an experienced ecologist and fully trained in botanical surveys and protected species assessments and holds a Natural England Level 2 Class Licence for bats (Ref: 2020-48541-CLS-CLS). March is a sub-optimal time of the year for botanical work, however due to the type of habitats present on site, a thorough assessment could be undertaken. The weather at the time of the survey was overcast, dry and cool. Daytime bat surveys can be undertaken at any time of year.



Survey Constraints

- 2.9 The site was fully accessible. However, due to the size of the mill building, large parts of the building's exterior were inaccessible and therefore could not be surveyed thoroughly.



3.0 EXTENDED PHASE 1 HABITAT SURVEY

Description of Habitats

- 3.1 The Phase 1 Habitat Map can be found at the back of the report. The habitats on the proposed development site are described below.

Continuous Scrub

- 3.2 Continuous scrub is present along part of the southern boundary of the site between two fences (see Photograph 1). This habitat is dominated by Bramble *Rubus fruticosus* agg., Elder *Sambucus nigra*, Butterfly Bush *Buddleja davidii*, Ash *Fraxinus excelsior*, Goat Willow *Salix caprea*, Sycamore *Acer pseudoplatanus* and Common Nettle *Urtica dioica*.



Photograph 1 showing the continuous scrub

Ephemeral/Short Perennial

- 3.3 This habitat is abundant across the western part of the site and has established over large spoil piles and across areas of bare ground (see Photograph 2). Species present include Mugwort *Artemisia vulgaris*, Perennial Rye-grass *Lolium perenne*, Stinging Nettle *Urtica dioica*, Dandelion *Taraxacum officinale* agg., Annual Meadow-grass *Poa annua*, Broad-leaved Dock *Rumex obtusifolius*, Ribwort Plantain *Plantago lanceolata*, Greater Plantain *Plantago major*, Wavy Bitter-cress *Cardamine flexuosa*, Creeping Bent *Agrostis stolonifera*, Bird's-foot Trefoil *Lotus corniculatus*, Common Mouse-ear *Cerastium fontanum*, Creeping Buttercup *Ranunculus repens*, Spear Thistle *Cirsium vulgare*, Colt's-foot *Tussilago farfara*, Dove's-foot Crane's-bill *Geranium molle*, Herb-Robert *Geranium robertianum*, Great Mullein *Verbascum thapsus*, Knotgrass *Polygonum aviculare*, Yorkshire Fog *Holcus lanatus*, Common Vetch *Vicia sativa* and Oxeye Daisy *Leucanthemum vulgare*.





Photograph 2 showing an area of ephemeral/short perennial on site

Tall, Ruderal Herb

- 3.4 This habitat is located adjacent the mill's southern walls at the edges of bare ground (see Photograph 3). This habitat is dominated by Bramble *Rubus fruticosus* agg. with Stinging Nettle *Urtica dioica*, Broad-leaved Dock *Rumex obtusifolius*, Butterfly Bush *Buddleja davidii*, Mugwort *Artemisia vulgaris*, Dandelion *Taraxacum officinale* agg. and Ivy-leaved Toadflax *Cymbalaria muralis* also abundant.



Photograph 3 showing an area of tall, ruderal herb



Scattered Trees

- 3.5 Scattered trees are found within the area of continuous scrub and long the site boundaries (see Photograph 1 above and 4 below). The trees are all self-seeded and of a similar semi-mature age. Tree species are dominated by Sycamore *Acer pseudoplatanus*, Ash *Fraxinus excelsior* and Goat Willow *Salix caprea* with Alder *Alnus glutinosa* also present.



Photograph 4 showing some of the trees on site

Bare Ground

- 3.6 This habitat is present across the site comprising areas of hardstanding, compact crush-and-run and bare earth (see Photograph 5). Ephemeral/short perennial species have established within cracks and crevices and around the peripheries of the hardstanding areas.





Photograph 5 showing an area of compact crush-and-run

Spoil

- 3.7 Spoil piles are located across the south-western half of the site and comprise building material and general waste (see Photograph 6).



Photograph 6 showing one of the spoil piles on site

Building

- 3.8 A large brick-built, multi-storey mill building dominates the eastern half of the site (see cover page above).

Boundaries

- 3.9 Many of the site boundaries are marked with fencing and brick walls.

PROTECTED SPECIES

Great Crested Newt

- 3.10 Great Crested Newt *Triturus cristatus* is a European Protected Species (EPS) under the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 and the species is fully protected under the Wildlife and Countryside Act 1981 (as amended).
- 3.11 No waterbodies exist on the site. No ponds exist within 250metres of the site. Ashton Canal is located directly adjacent to the southern boundary of the site. The canal offers no suitable breeding habitat for Great Crested Newt, therefore is discounted. The site supports suitable Great Crested Newt terrestrial habitat. The tall, ruderal herb and continuous scrub habitats provide cover and foraging opportunities for Great Crested Newts.

Bats

- 3.12 All bat species are European Protected Species. This is implemented in the UK through the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019. Bats are also protected under The Wildlife and Countryside Act 1981 (as amended), the Countryside and Rights of Way Act 2000 and the Natural Environment and Rural Communities Act (NERC, 2006).

Daytime Bat Survey

External Survey

- 3.13 The mill building proposed to be affected by the plans is large and set over multiple floors. The external masonry is a mixed condition with the majority in reasonable condition and well-sealed with mortar. However, sections of the brickwork, particularly across the southern gable, have holes, cracks and sections missing offering potential entry points into the internal spaces and cavies (see Photographs 7, 8 and 9).





Photograph 7 showing the south-west gable wall of the mill building



Photograph 8 showing the south-east facing external wall of the mill building



Photograph 9 showing some of the cracks and missing sections of masonry on the south-west facing gable of the mill building

- 3.14 The window and door frames across the building are wood. These are showing signs of age, however, are sealed to the surrounding masonry (see Photograph 10). Many of the windows are bricked/boarded up on the internal side. Small gaps and crevices are present between the external walls and the walls blocking the window (see Photograph 11). Many windows across the upper floors of the building are missing resulting in open access into the internal spaces (see Photograph 12).



Photograph 10 showing the exterior of the mill building



Photograph 11 showing some of the gaps between the external wall and the masonry blocking the window



Photograph 12 showing some of the missing windows across the mill building

- 3.15 The majority of the mill has flat roofs covered with bitumen-based membranes (see Photographs 13, 14 and 15). The roofs are showing signs of age but appear to be in reasonable condition with standing water present. No obvious rips or tears are present, and the roof edges are well-sealed to the surrounding masonry.



Photograph 13 showing one of the flat roofs of the mill building



Photograph 14 showing one of the flat roofs of the mill building



Photograph 15 showing one of the flat roofs of the mill building

- 3.16 Two pitched roofs sections are located towards the northern boundary of the site covering parts of the single-storey section of the mill (see Photograph 16). These are covered in slate roof tiles of which are in good condition with no slipped or missing tiles found. The lead flashings are also in good condition and fitted flush to the surrounding masonry and tiles.



Photograph 16 showing the two pitched roof sections of the building

Internal Survey

- 3.17 The internal spaces are set over multiple floors, many of which consist large open spaces currently not in use (see Photographs 17, 18 and 19). Small commercial unit spaces are occupied within the lower floors of the mill building.



Photograph 17 showing one of the internal spaces



Photograph 18 showing one of the internal spaces



Photograph 19 showing one of the internal spaces

- 3.18 The internal walls are constructed from brick. These are in reasonable condition and well-sealed with mortar (see Photograph 20). Small cracks and crevices appear where mortar is missing and window and door frames are missing. Heavy use of Pigeon is located across most of the upper floor spaces, gaining access through the missing window sections (see Photograph 21).



Photograph 20 showing one of the internal spaces



Photograph 21 showing evidence of Pigeon

- 3.19 The upper internal spaces are cold, draughty and damp due to the missing window sections (see Photograph 22). Flaking render and cracks and crevices are abundant offering potential bat roost habitat.



Photograph 22 showing a section of missing windows on the north-east corner of the mill building

- 3.20 The trees on site were all inspected for bat roosting features, such as cavities, limb damage or peeling bark. None of the trees on site support such features.
- 3.21 The adjacent Ashton Canal offers suitable foraging and commuting habitat for bats, as does the linear feature of continuous scrub along the southern site boundary.

Badger

- 3.22 Badgers *Meles meles* are protected under the Protection of Badgers Act 1992 and The Wildlife and Countryside Act 1981 (as amended). These Acts, for example, make it illegal to disturb a Badger whilst it is in a sett, to kill, injure or take a Badger and to obstruct the entrance to a Badger sett.
- 3.23 No Badger sett was located on the site or immediately adjacent to the site. No evidence of Badger activity such as latrines or snuffle holes was located on site.

Water Vole

- 3.24 The adjacent Ashton Canal was surveyed for evidence of Water Vole.
- 3.25 Water Vole *Arvicola terrestris* is fully protected under The Wildlife and Countryside Act 1981 (as amended). This makes it an offence to:
- intentionally or recklessly damage, destroy or obstruct access to any structure or place used for shelter or protection;
 - intentionally or recklessly disturb Water Voles whilst occupying a structure or place used for that purpose;
 - intentionally kill, injure or take Water Voles;

- possess or control live or dead Water Voles or derivatives;
- sell Water Voles or offer or expose for sale or transport for sale;
- publish or cause to be published any advertisement which conveys the buying or selling of Water Voles.

3.26 The Ashton Canal is approximately 12 meters wide with vertical man-made banks (see Photograph 23). The 'site side' bank consists of a busy, hard standing towpath. The water quality is deemed to be poor with no aquatic or marginal vegetation present. No evidence of Water Vole was found along either bank of the canal.



Photograph 23 showing a stretch of the Ashton Canal adjacent to the site

Otter

3.27 The adjacent Ashton Canal was surveyed for evidence of Otter.

3.28 Otter *Lutra lutra* is a European Protected Species under the Conservation (Natural Habitats etc.) Regulations 1994. This is implemented in the UK through the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019. Otter is also protected under the Wildlife and Countryside Act 1981 (as amended). The legislation protects Otters from, for example, deliberate killing, capturing and disturbing and Otter and damaging or destroying a breeding place or resting place of an Otter.

3.29 No field signs of Otter were located during the survey, such as Otter holts, spraints or footprints. The banks of the canal are not considered to be suitable Otter foraging habitat with them being man-made. Otters usually use tree roots to build their holts. No signs of a holt or any other Otter activity was found.

Nesting Birds

- 3.30 All bird species are protected at their nest under the Wildlife and Countryside Act 1981. Evidence of nesting Pidgeon was found across all the floors of the mill building (see Photograph 24). The continuous scrub and trees on site offer good bird nesting habitat. Evidence of nesting bird was also found amongst the continuous scrub.



Photograph 24 showing two squabs on a nest

INVASIVE SPECIES

- 3.31 No non-native, invasive species listed on Schedule 9 Part II (plants) of the Wildlife and Countryside Act 1981 (as amended) are present on or immediately adjacent to the site.

PROTECTED SITES

- 3.32 No statutory protected sites lie on the site or immediately adjacent to the site boundary. One statutory protected site is located within 2.5km of the site boundary. This is Clayton Vale Local Nature Reserve (LNR) and is located over 1.5km east of the site boundary.
- 3.33 The site lies within a SSSI Impact Risk Zone, which lists certain types of development that may have a deleterious impact on protected sites nearby. Residential development is not listed as a concern.
- 3.34 No non-statutory protected sites exist on site. Ashton Canal Site of Biological Importance (SBI) runs adjacent to the southern boundary of the site. Rochdale Canal SBI is located approximately 300metres north.

4.0 ASSESSMENT

Habitats

- 4.1 The Phase 1 Habitats present on the site are common throughout the UK. No nationally rare or locally rare plant species were located during the Extended Phase 1 Habitat Survey.
- 4.2 The site comprises large areas of bare ground and ephemeral/short perennial with tall, ruderal herb, continuous scrub and scattered trees also present. The tall, ruderal herb and scrub habitats offer cover from predation, foraging habitat and moderate pollen and nectar source for invertebrates. The scrub and trees also offer nesting bird habitat.

Development Context

- 4.3 The development proposals involve the loss of the majority of the habitats on site. It is recommended a suitable landscaping scheme is created to help mitigate the loss of the habitats on site.

PROTECTED SPECIES

Great Crested Newt

- 4.4 The proposed development will not involve the loss of any Great Crested Newt breeding habitat. Furthermore, no ponds or other waterbodies suitable for Great Crested Newt are present within 250 metres of the site boundary. The hardstanding, bare ground and ephemeral/short perennial habitats that dominate the site are considered a hostile habitat for Great crested Newt. The tall, ruderal herb and continuous scrub habitats provide cover and foraging opportunities for Great Crested Newts. However, these are isolated within expanses of bare ground.
- 4.5 Given the lack of breeding habitat directly linked to the site in the locality and hostile habitat that dominates the development site, it is reasonably likely that Great Crested Newt does not occur on the development site. Great Crested Newt is not considered to be a constraint on the development at this time.

Bats

- 4.6 The large mill building on site has been the subject of a daytime bat survey. No evidence of bat activity was found. However, due to the size of the building, not all areas could be surveyed. Countless potential entry points and bat roost features were found across the building's exterior and interior spaces. Open access into the internal spaces through missing windows increases the suitability of the internal features. Due to this, and the presence of suitable foraging and commuting habitat along Ashton Canal, it is considered the mill building offers **high bat roost suitability**. Further bat survey work is necessary to determine presence/likely absence of bats at the mill building, and the type of bat roost present. Three bat activity surveys are required.

- 4.7 The adjacent Ashton Canal offers suitable bat foraging and commuting habitat. However, the canal is largely isolated from any other suitable bat foraging and commuting habitats. Therefore, it is considered that Ashton Canal offers **low bat foraging and commuting suitability**. To determine if the canal and the sites linear feature of continuous scrub are used as bat foraging and commuting habitat, it is recommended bat transect surveys are carried out. The proposed works on site have the potential to affect the adjacent Ashton Canal as bat foraging and commuting habitat during the construction/renovation phases and the post development phases.
- 4.8 No potential bat roost features were identified on any of the trees on site. Therefore, it is considered the sites trees offer **negligible bat roost suitability**.

Badger

- 4.9 No Badger sett was located on the site or immediately adjacent to the site. No evidence of Badger activity was located. Badgers are not considered to be a constraint on development.

Water Vole

- 4.10 No evidence of Water vole was found along the banks of the Ashton Canal. The steep, man-made banks offer little/no burrowing habitat for Water Vole. The canal lacks aquatic vegetation and marginal vegetation. No evidence of Water Vole was found along the canal bank or within the immediate habitats. The canal bank adjacent to the site is currently considered to be sub-optimal Water Vole habitat. Water Vole is not considered to be a constraint on the development at this time.

Otter

- 4.11 The banks of Ashton Canal were surveyed for Otter. No field signs were located during the survey, such as Otter holts, spraints or footprints. The banks of the canal are not considered to be suitable Otter habitat due to being man-made and the terrestrial habitat consisting hardstanding. Otters usually use tree roots to build their holts. No signs of a holt or any other Otter activity was found. Therefore, Otter is considered not to be a constraint on the development at this time.

Nesting Birds

- 4.12 The site supports suitable nesting habitats for birds within the mill building, scattered trees and continuous scrub. Evidence of nesting Pigeon was found in the mill building. Mitigation for the loss of bird nesting habitat will be required. Nesting birds can be mitigated for by allowing no works to potential nesting habitats to be carried out within the bird nesting season (which is generally March – August) unless a nesting bird survey is undertaken first.

INVASIVE SPECIES

- 4.13 No non-native, invasive species listed on Schedule 9 Part II (plants) of the Wildlife and Countryside Act 1981 (as amended) are present on or immediately adjacent to the site.

PROTECTED SITES

- 4.14 No statutory or non-statutory protected sites lie within the proposed development site or immediately adjacent. One statutory protected site lies within 2.5km of the site boundary. Clayton Vale LNR is located over 1.5km from the site boundary. At this distance, and with barrier habitats between, there is expected to be no deleterious impact on the protected site from the development.
- 4.15 The site lies within a SSSI Impact Risk Zone, which lists certain types of development that may have a deleterious impact on protected sites nearby. Residential development is not listed as a concern.
- 4.16 Ashton Canal SBI runs adjacent to the southern boundary of the site. It is recommended that a Construction Environmental Management Plan (CEMP) is implemented during site clearance and construction phases to protect Ashton Canal SBI. Other recommendations include a suitable Sustainable Urban Drainage System (SUDS) and a Landscape and Ecological Management Plan (LEMP).

5.0 RECOMMENDATIONS

Summary of Findings

5.1 Protected species are a material consideration when a planning authority is considering a planning application. The presence of protected species, the effect of the proposed development and suitable mitigation, if required, must be established before planning permission can be granted. Following the findings from the Extended Phase 1 Habitat Survey, the following survey may be required:

- **Nesting Birds** – It is recommended the conversion/renovation of the mill building and any vegetation clearance works is carried out outside the nesting bird season (generally March – August). If the conversion/clearance work needs to be carried out within the bird nesting season, then a nesting bird survey will be required immediately prior to work commencing.
- **Bird Nest Boxes** – Bird nest boxes are to be erected on the external walls of the mill building and newly constructed buildings. This is to mitigate for the loss of nesting habitat on site. This can be secured by way of a suitably worded condition on the full planning permission.
- **Bats** - Further bat survey work is necessary on the mill building due to the reduced access available across parts of the building's exterior and countless number of potential roosting features across the building's interior and exterior. This is to determine presence/likely absence within the building and if so, the type of bat roost present. Three bat activity surveys are required. The surveys must be undertaken between May and September inclusive, in suitable weather conditions and with enough surveyors to observe the building.
- The results of the bat activity survey will help to determine the mitigation required at the site. If a bat roost is to be destroyed then mitigation will be either bat boxes or a dedicated bat loft, for example.
- If the results show that an active bat roost is present on site, a Natural England licence will need to be obtained to destroy the existing bat roost. The licence can only be applied for following full planning permission being granted.
- Bat transect surveys are to be carried out along the adjacent Ashton Canal SBI to assess for the presence/likely absence of foraging and commuting bats. If it is found bats use the adjacent canal to forage and commute, site mitigation will be required, for example, a sensitive lighting scheme.

Ashton Canal SBI

- 5.2 It is recommended that buffer habitats are implemented into the landscaping scheme between the development and Ashton Canal where possible. A suitable SUDS, CEMP, LEMP and Impact Assessment is recommended to protect the adjacent SBI.

Habitat Enhancement

- 5.3 General recommendations to bring biodiversity gain to the site are:
- Soft landscaping should include the provision of native and non-native flowering perennial species, to provide a pollen and nectar source for invertebrates.
 - Bird boxes and bat boxes should be erected on the newly converted building or newly constructed buildings where possible.
 - Tree planting of native species where practically possible.

6.0 REFERENCES

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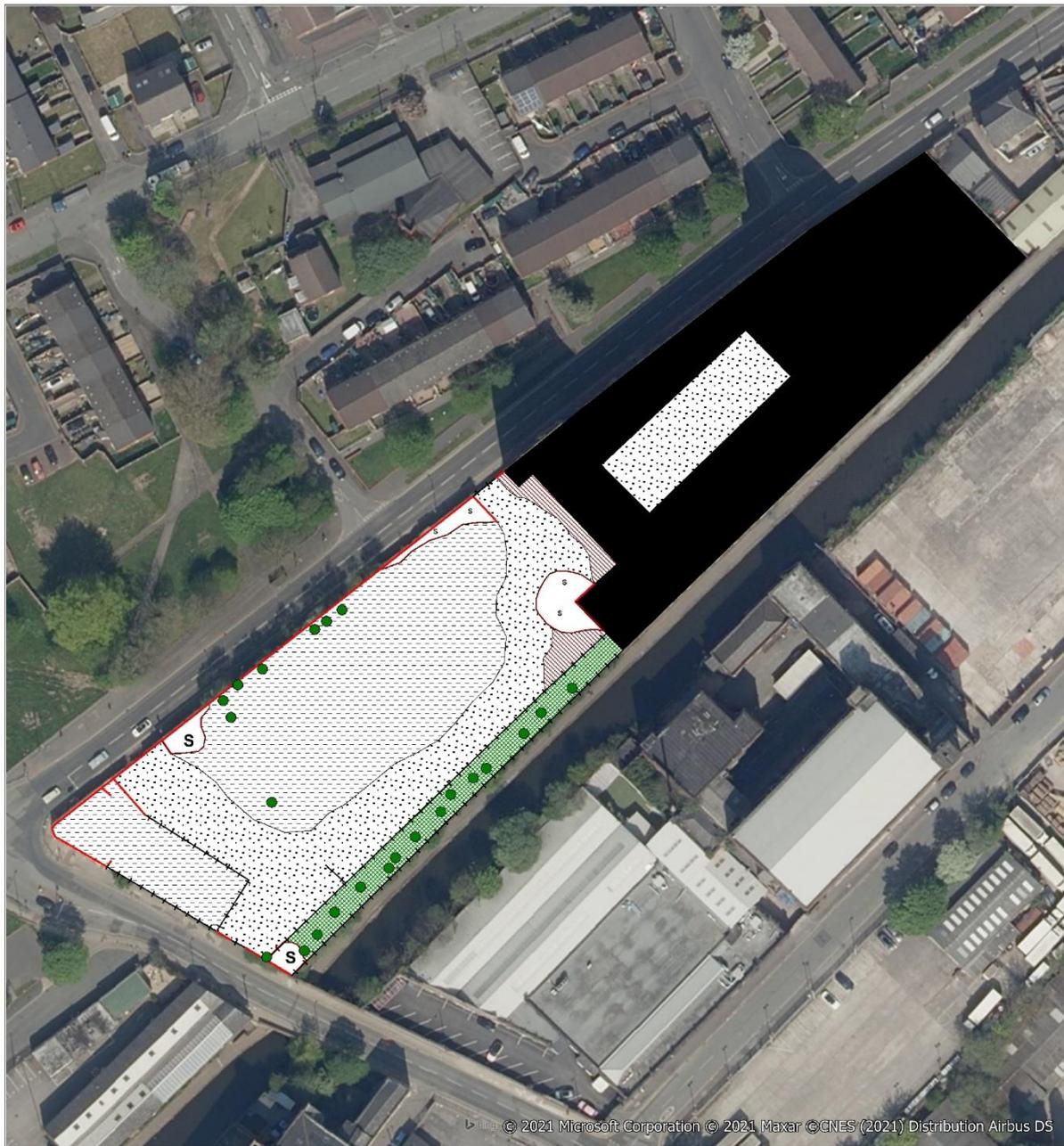
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APPENDIX A PHASE 1 HABITAT MAP



Key

	Building
	Bare Ground
	Continuous Scrub
	Ephemeral/Short Perennial
	Spoil
	Tall, Ruderal Herb
	Fence
	Wall
	Scattered Tree



PHASE 1 HABITAT MAP

**Brunswick Mill,
Bradford Road,
Manchester**

NOT TO SCALE

**Date: 16/03/2021
Drawn by: BC**



RACHEL HACKING ECOLOGY