



Proposed Residential Developments off Hillbank Street and Church Avenue, Middleton

Preliminary Ecological Appraisal & BNG Report

Produced for:



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1 INTRODUCTION

1.1 The Scheme

- 1.1.1 Etive Ecology Ltd was commissioned by (Harrison Construction Ltd) to undertake a preliminary ecological appraisal of existing garage sites off Hillbank Street and Church Avenue, Middleton. The plots are centred on National Grid Reference SD 8853 0875 and SD 8854 0881.
- 1.1.2 The sites are proposed for residential redevelopment, with the existing garages being demolished and replaced by six residential units across the two sites. This Preliminary Ecological Appraisal (PEA) and Biodiversity Net Gain Report has been undertaken to inform the planning application.

1.2 Scope of this Report

- 1.2.1 The ecological appraisal of the proposed scheme is broadly based upon the *Guidelines for Preliminary Ecological Appraisal* (Chartered Institute of Ecology and Environmental Management, 2017).
- 1.2.2 The aim of the assessment is to obtain information on the existing ecological composition and value of the site, and to conduct a preliminary assessment of the likely significance of ecological impacts. To achieve this, the following steps were taken:
- The field survey area and the 'zone of influence' of the scheme, have been identified.
 - A desk study has been undertaken to establish the site baseline, including the use of aerial imagery, site photographs and the purchase of records from Cofnod.
 - Baseline information on the site and surrounding area has been recorded through an 'extended UKHab survey', including a UKHab survey (UKHab 2020) and consideration of notable and/or protected habitats and species (IEA 1995).
 - The ecological features found to be present have been evaluated (CIEEM, 2023).
 - Invasive plant and animal species (such as those listed on Schedule 9 of the Wildlife & Countryside Act [WCA]) have been identified.
 - Potential constraints to the proposed development and any ecological impacts arising from the development have been identified.
 - Recommendations for further survey have been made, where appropriate.
 - Mitigation recommendations have been provided based on current information.
- 1.2.3 A UKHab Map of the survey area is presented in **Appendix A**. Target notes are marked on the UKHab Map and are used to link the report text to locations on site. Photographs taken during the survey are presented in **Appendix B**. A copy of the biological records returned for the site are found in **Appendix C**.
- 1.2.4 The site has also been subject to a Biodiversity Net Gain (BNG) Assessment using the Statutory BNG Metric.

2 METHODOLOGY

2.1 Desk Study

- 2.1.1 A desk study was undertaken to identify any nature conservation sites within 1km of the site. The desk-based exercise also considered the potential for protected and/or notable species of fauna to be found within 1km of the site.
- 2.1.2 The following sources of information were utilized:
- MAGIC website (<http://www.magic.gov.uk/MagicMap.aspx>)
 - Natural Resources Wales (<https://naturalresourceswales.gov.uk/?lang=en>)
 - Gwynedd County Council website (<https://www.gwynedd.gov.uk/>)
- 2.1.3 A data request was made to RECoRD for a standard search criterion with a 1km search radius from the centre of the site. This included all statutory and non-statutory designated nature conservation sites and all legally protected and/or notable species of flora and fauna.

2.2 UKHab Survey

- 2.2.1 The initial site visit was made on the 13th June 2024.
- 2.2.2 The survey comprised an extended UKHab Survey. This survey method follows the habitat assessment and classification procedure outlined by the UKHAB Handbook (UKHab, 2020), whereby all habitats are identified, described, and mapped using a standard classification.
- 2.2.3 The extended component of the survey is developed from the methodology described in Guidelines for Baseline Ecological Assessment (IEA, 1995). All habitats and features within the survey area are assessed for their potential to support legally protected or notable species (nationally or locally).
- 2.2.4 These species include:
- **Amphibians:** ponds within 250m of the site were considered for their suitability to support a range of amphibians, including great crested newts (GCN).
 - **Reptiles:** the site was assessed for suitable habitats including rough grassland, cloddiau, brownfield sites and habitat edges in general which would provide cover, basking and foraging habitat for reptile species.
 - **Otters:** watercourses within 100m of the site were checked for signs of otter and assessed for their suitability to support the species.
 - **Water voles:** watercourses on site were checked for signs of water vole presence and assessed for their potential to support the species.
 - **Bats:** all trees and structures on site were assessed as to their suitability to support roosting bats at any point during the year. Trees and structures were then categorised for their potential to support roosting bats as per the *Bat Surveys for Professional Ecologists – Good Practice Guidelines* (Collins, J., 2023).
 - **Birds:** the site was assessed for suitable habitats for nesting birds, including habitats suitable for ground-nesting species.
 - **Badgers:** all habitats within 30m of the site were surveyed where possible to identify the presence of any setts or signs of badger activity.

- **Invasive plant species:** this assessment does not constitute a full Schedule 9 species survey. The potential for any Schedule 9 species was assessed and any species that were encountered were mapped and noted.

2.3 Preliminary Roost Appraisal

- 2.3.1 The appraisal of all buildings and structures follows the methodology and procedure outlined by the Bat Conservation Trust guidelines (2023). This includes a walkover to identify the potential value of the site for bats, to map and record any features or habitats of particular value and to consider what kind of bat activity might be associated with these features, e.g. roosting, commuting, foraging.
- 2.3.2 An external appraisal of all buildings and structures was undertaken to identify any structural features which may provide bats with suitable roost sites or with access into the fabric of the buildings/structures, where suitable roosting features may be present. The following external features are commonly associated with bat roosts;
- Pre-20th century or early 20th century construction
 - Agricultural buildings of traditional brick, stone or timber construction.
 - Large and complicated roof void with unobstructed flying spaces.
 - Large (>20 cm) roof timbers with mortice joints, cracks and holes.
 - Entrances for bats to fly through.
 - Poorly maintained fabric providing ready access points for bats into roofs and/or walls, but at the same time not too draughty and cool.
 - Roof warmed by the sun, in particular south facing roofs.
 - Weatherboarding and/or hanging tiles with gaps.
 - Low level of disturbance by humans.
 - Nearby foraging habitat such as mature trees, woodland or wetlands, particularly in rural settings.
- 2.3.3 An internal inspection of all of the garages could not be undertaken due to access restrictions, but all internal areas were at least visible through windows.
- 2.3.4 A systematic search for evidence of bat usage was undertaken of the external areas, starting with the ground at the base of external walls, particularly below any potential access points, and working up the walls and along the eaves and roof-line. Evidence indicating bat usage includes;
- Droppings
 - Urine staining
 - Corpses
 - Bat-fly pupal cases
 - Scratch marks
 - Staining from fur oils
 - Feeding remains
 - Squeaking and chattering from bats in occupation at the time of survey

2.4 Assessment of Ecological Value

2.4.1 The value and sensitivity of ecological features was determined based on the guidance given in *Guidelines on Ecological Impact Assessment* (CIEEM, 2023). Individual ecological receptors (habitats and species that could be affected by the development) were assigned levels of importance for nature conservation in one of the following categories:

- International
- UK
- National
- County
- District;
- Local, or
- within the immediate zone of influence or site only.

2.4.2 For a given receptor, determination of value includes consideration of the size, secondary or supporting value/function, conservation status and quality of the species or feature.

2.5 Limitations

2.5.1 The site survey was undertaken within the recommended survey season for UKHab survey. All habitats on site could be accurately and confidently identified, classified and mapped.

2.5.2 All land within the red line site boundary was accessible at the time of survey. It was not possible to access inside all of the garages to carry out a bat inspection, although the internal areas could be seen through windows in most cases. Land immediately surrounding the application site boundary is not owned by the applicant and was therefore not accessible, although much of the adjacent land was at least visible to the surveyor.

2.5.3 There are therefore considered to be no significant limitations to the undertaking or accuracy of the survey work or subsequent ecological appraisal.

3 RESULTS

3.1 Desk Study

Designated Sites

3.1.1 There is one statutory site for nature conservation located within 1km of the site:

- Rochdale Canal SSSI / SAC; located 100m to the west of the application site and designated on the basis of being an important habitat for submerged aquatic plants and emergent vegetation, including extensive colonies of the nationally scarce SAC Annex II species floating water plantain *Luronium natans*. The site also supports a diverse assemblage of aquatic flora, notably its assemblage of pondweeds, *Potamogeton* spp; the nine species of which found in the canal represent a balanced community which reflects the quality of water.

3.1.2 There are five non-statutory nature conservation sites located <1km of the site:

- Hopwood Woodlands Local Nature Reserve (LNR); located 500m to the southwest and designated as a number of small woodland blocks in the grounds of Hopwood Hall, which support common toad and various breeding birds.
- Rochdale Canal Site of Biological Importance (SBI); located 100m to the west and comprising a linear blue/green corridor which supports a diverse assemblage of aquatic and marginal vegetation.
- Lords Wood SBI; located 430m to the southeast and comprising a block of mixed semi-natural woodland and a pond.
- A627M by Tandle Hill SBI; located 900m to the east and designated as a block of woodland and scrub with a pond.
- Hopwood Clough SBI; located 930m to the southwest and comprising a block of mixed semi-natural woodland with streams and a pond.

Species Records

3.1.3 A full list of the species records within a 1km radius of the site is presented in **Appendix C** and a summary is given below:

- Amphibians; common toad and GCN.
- Bats; common pipistrelle, Pipistrelle sp. and Noctule bats.
- Birds; various bird species including barn owl, kingfisher, little ringed plover, bullfinch, cuckoo, dunnock, house sparrow, linnet, song thrush and starling.
- Invertebrates; none.
- Mammals; badger, brown hare, hedgehog and water vole.
- INNS; white-clawed crayfish, New Zealand pigmyweed, Himalayan balsam and Japanese knotweed.

NERC Act 2006, Section 41 List

3.1.4 Section 40 of the Natural Environment and Rural Communities (NERC) Act 2006 requires all public bodies to have regard to biodiversity conservation when carrying out their functions. This is commonly referred to as the 'Biodiversity Duty'.

3.1.5 The Section 41 list has been produced identifying those habitats and species of principle importance in England. The following relevant habitats and species are found on this list:

Table 3.1.1 Relevant Section 7 Habitats/Species

Habitats	Species
Hedgerows	Hedgehog
Lowland mixed deciduous woodland	Various bat species
Open mosaic habitat on previously developed land	Various bird species
	GCN
	Common toad

3.2 Extended UKHab Survey

- 3.2.1 The walkover survey was undertaken by Russell Grey (BSc, CEnv, MCIEEM) and Lisa Borghesi. The survey was undertaken on a mild and overcast summer day, with no constraints to the survey of any part of the red line application site other than inside some of the garages.
- 3.2.2 The application site is located approximately 3km to the north of Middleton, with the M62 1km to the north and the A627M 1km to the east. The site is split into two areas of garages located to the east of the A664 Manchester Road. The garage sites comprise two rows of single-storey single garages of prefabricated construction. Land to the east is dominated by pastoral farmland. Land to the west comprises pastoral farmland, the Rochdale Canal and Manchester Golf Club course. There are no ponds located on site and none within 250m of the site. The Rochdale Canal SSSI/SAC is located 100m to the west.

Habitats

- 3.2.3 The habitats present within the survey area are described in the following Target Notes, with potential ecological receptors identified:
- 3.2.4 The site comprises two distinct and separate land parcels. One off Church Avenue and one off Hillbank Street. Both sites are comprised of a similar habitat arrangement; rows of storage garages (buildings, sealed surfaces) surrounded by sparsely vegetated land (vacant/derelict) to the rear and sides, with a hardcore surface to the front (artificial unvegetated unsealed).
- 3.2.5 The Church Avenue site is comprised of a u-shaped arrangement of garages, which were comprised either entirely of timber panels with a shallow pitched roof, or of pebble-dashed fabricated panels and a flat roof. The central portion of the site is a compacted gravel or hardcore surface, where vehicles have accessed and parked. The small spaces in between the garages and to the rear of the garages has become colonised by a mix of garden escapes and early colonising species including; ragwort, cherry laurel, geranium, forsythia, field horsetail, ivy, common nettle, bramble and bindweed. Surround the site on adjacent land are mixed native and non-native hedgerows including laurel, hawthorn, privet and occasional rowan, oak and cherry trees.
- 3.2.6 The Hillbank Street site is comprised of a line of garages along the northern edge and a line of garages along the southern edge of the site. Similar to the Church Street site, the garages are a mix of timber and pre-fabricated construction, with an area of compacted gravel and/or hardcore in the centre. The site is access via Hillbank Street to the west along a sealed driveway. The vegetation surrounding the garages and the periphery of the site is also a mix of garden escapes, ruderals and rough vegetation, but with a sparse coverage. Species present include contoneaster sp, rosebay willowherb, ribwort plantain, broadleaved dock, bindweed, common nettle, yellow archangel and ground elder. There is a single semi-

mature sycamore tree behind one of the garages on the northern boundary and a number of stems of Japanese knotweed behind the western garages on the south side of the site.

- 3.2.7 In summary, the sites are typical plot of land within a residential area that have been left unkempt and unmanaged allowing garden escapes and non-natives to establish. The presence of various INNS will need to be addressed. None of the vegetation or habitats present on site were found to be of any notable or significant ecological value.

Protected Species

- 3.2.8 The following text summarises the suitability of the survey area to support various legally protected species, based on the descriptions provided above.

Amphibians

- 3.2.9 There are no ponds located within the site boundary and no ponds within 250m shown on the OS map.
- 3.2.10 The terrestrial habitat found within the application site is considered to be of low value to amphibians. The site is dominated by made ground (buildings, gravel, bare ground) and sparse vegetation cover. These habitats are likely to offer little in the way of foraging or sheltering value to amphibians. It is noted that the surrounding land is of a similar residential nature but that the ditch to the east of the Hillbank Street site may be a corridor for amphibian movement.
- 3.2.11 There are records for GCN and common toad >500m to the west and south of the site and on the opposite side of the A664 and the Rochdale Canal. Therefore, given the absence of any potential breeding sites <250m and the presence of records >500m away, it is concluded that GCN and other amphibians are likely absent from the application site boundaries.

Badgers

- 3.2.12 The application site offers very few opportunities for badgers. The open nature of the site means that it offers little cover, shelter or protection for badgers. The site may offer some low foraging value during certain times of the year. The surrounding land is dominated by residential properties, which are of a similarly low value to badgers and pose disturbance to badger activity. No evidence of any badger activity could be found during the site survey, either within the survey area or <30m of the boundary.
- 3.2.13 Badger have been recorded within 1km of the site but all such records are >100m away and are on the opposite side of significant barrier such as the A664, Rochdale Canal or A627M. Therefore, it is concluded that badgers are currently absent from <30m of the application site boundaries.

Bats

- 3.2.14 None of the garages currently on site were found to be suitable to support roosting bats. All of the garages were found to be in active use and subject to disturbance, or to be completely full with storage items such that no bats could access. Externally, the pre-fabricated garages were well-fitted such that no access points or external features were present. The timber garages were generally found to be in a good external condition, with no obvious potential roosting features identified. No evidence of any bat activity could be found anywhere inside

or outside of any garages. All garages were therefore assessed to be of **Negligible Bat Roost Potential (BRP)**.

- 3.2.15 The sites offer relatively low foraging value, comprising predominantly short vegetation and a majority of made ground or buildings. Adjacent vegetation in the form of garden hedgerows and trees are likely to be of value to species such as pipistrelles which may be present locally.
- 3.2.16 There are records for numerous species of any bats within 1km of the site, including a common pipistrelle roost from 2009 approximately 50m to the north of Church Avenue. Other bat records are clustered along the Rochdale Canal, the A664 and the industrial estate to the south. Overall, roosting bats are considered to be likely absent from the application sites and foraging/commuting value is expected to be low.

Birds

- 3.2.17 Suitable opportunities for nesting birds are present within the garages and some of the more dense vegetation, including the sycamore tree. However, the overall value of the site to nesting birds, and therefore the risk of them being present during the nesting season, is considered to be low.
- 3.2.18 Numerous species of nesting bird have been recorded within 1km of the site, the closest of note being starling, lapwing and house sparrow. Therefore, based on the low suitability of the habitat present, nesting birds are considered to be potentially present in low numbers within the application sites.

Reptiles

- 3.2.19 The composition of the site – artificial surfaces, buildings and sparse vegetation – is unsuitable to support reptiles. These habitats offer no opportunities for foraging, breeding, basking or sheltering and are heavily disturbed as a result of the residential use of the surrounding land.
- 3.2.20 There are no records of any reptile species within 1km of the sites. No reptiles were encountered on site during the survey, although direct sightings are rare even in suitable habitat. In summary, due to the low suitability of the site, reptiles are considered to be absent from within the application boundaries.

Riparian Mammals

- 3.2.21 The Rochdale Canal SSSI / SAC is located approximately 50m to the west of the site. As a designated site, this water-course is well monitored and surveyed. Water vole have been recorded along various sections of the canal but no otter have been found present. There is a minor ditch that flows to the east of the Millbank Street site, which outfalls into the canal via a culvert beneath the A664. Overall, there are no habitats within the application sites that are suitable to support either water vole or otter, given the high level of disturbance and poor level of vegetation cover. No evidence or signs of otter or water vole presence were noted at the time of survey.
- 3.2.22 Water vole have been recorded <1km of the site along the Rochdale Canal, but otter have not been recorded within the area. Therefore, given the lack of suitable habitat, these

species are both considered to be absent from the site boundaries and immediately surrounding land.

3.3 Notable Species

- 3.3.1 The site has the potential to support notable species such as hedgehog and a small number of common invertebrate species. It is noted that hedgehog have been recorded <1km of the site.
- 3.3.2 Given the current usage of the site, there is no potential for notable flora to be present and no records of any such species within close proximity of the site.

3.4 Invasive Non-Native Species (INNS)

- 3.4.1 Japanese knotweed and cotoneaster sp, have all been found to be present within the application site boundaries. All of these species are INNS that are listed on Schedule 9 of the Wildlife and Countryside Act 1981 (as amended). Other species of INNS that have been recorded <1km include white-clawed crayfish and New Zealand pigmyweed.

3.5 Key Ecological Receptors

- 3.5.1 The extended UKHab Survey has identified the following key ecological receptors associated with the site:
- Designated Sites; the site is ~100m to the east of the Rochdale Canal SSSI/SAC. *National Value*.
 - Nesting Birds; potential for nesting birds within site boundary vegetation. *Local Value*
 - Notable Species; site has the potential to support hedgehog and invertebrates. *Local value*
 - INNS; Japanese knotweed and cotoneaster sp. are present on site. *Local scale*
- 3.5.2 The protected species / ecological receptors not bullet-pointed above are considered to be of *less than local value*.

3.7 Biodiversity Net Gain (BNG)

- 3.6.1 The site has been assessed using the Statutory BNG Metric Tool (November 2023). The baseline BNG score is as follows:
- 0.069ha of Vacant/Derelict land; sealed surface = 0.14 Habitat Units.
 - 0.058ha of Artificial unvegetated; unsealed surface = 0 Habitat Units.
 - 0.06ha of Developed land; sealed surface = 0 Habitat Units.
 - 0.0163ha of Urban Tree in Moderate Condition (see condition assessment attached) = 0.13 Habitat Units.
 - Total Baseline Score = **0.27 Habitat Units**.

4 DISCUSSION

4.1 Proposed Scheme

The Development

- 4.1.1 The proposed development is to demolish all of the existing garages and to replace them with two residential units on land off Church Avenue and four residential units on land of Hillbank Street. Each residential unit will benefit from parking to the front and rear gardens to the rear, with additional gardens also offered to the front of properties off Hillbank Street.
- 4.1.2 The existing site access points will be retained and enhanced, with some introduced shrub planting along the access off Hillbank Street.
- 4.1.3 Full details of the proposed scheme are provided within the submitted planning application. The Proposed Site Layout is shown as **Figure 2** in Appendix A.

4.2 Likely Impacts

Designated Sites

- 4.2.1 The proposed scheme will pose no direct impacts to any designated sites as all lie outwith the development footprint. The closest such site is the Rochdale Canal SSSI/SAC which is ~100m to the west. The canal is designated for its aquatic vegetation. In between the application site and this designated site, the only potential hydrological connection is the ditch that flows adjacent to the east of the Hillbank site and outfalls into the canal. No works will take place to the ditch and the closest development activity to this ditch will be the creation of new gardens.
- 4.2.2 In this context, it is considered highly unlikely that the proposed development would pose any adverse impact on any interest features associated with the Rochdale Canal SSSI/SAC. The most impacting phase of the development would be during demolition and construction, when there would be a very low risk of accidental pollution that could enter the adjacent ditch.
- 4.2.3 Therefore it is considered that the risk of indirect adverse impacts on the Rochdale Canal SSSI/SAC arising from the proposed scheme is minor.

Nesting Birds

- 4.2.4 The scheme is likely to pose a minor impact on a small number of common/widespread species of breeding bird, either through small areas of habitat loss or through disturbance during development works. The magnitude of these impacts will partly depend on the timing of site clearance and construction activities.

Notable Species

- 4.2.5 The proposed scheme poses a risk of direct harm to any hedgehogs and invertebrates that may be present on site at the time of site clearance and of construction works.

INNS

- 4.2.6 The proposed scheme has the potential to cause Schedule 9 listed species of flora to spread both on-site and off-site. At least two species of INNS have been identified on site, including the highly invasive Japanese knotweed, which can spread from any small vegetative fragment. The site clearance phase poses a very high risk of causing these species to be spread around the site and potentially off-site either through waste removal or on the wheels/tyres of machinery or the boots of site personnel. The magnitude of the impact of spreading these species on/off site would be significant at the Local scale and potentially greater scale depending on the distances that they might be transported.

4.3 Recommendations

Designated Sites

- 4.3.1 To further minimise the risk of any indirect impacts on the nearby Rochdale Canal SSSI/SAC, it is recommended that a Construction Environmental Management Plan (CEMP) be prepared which clearly states how the risk of pollution incidents and the magnitude of any such incidents will be minimised. Once approved the CEMP must be implemented in full from the start of any development related activities on site, including demolition, site clearance or any kind of ground investigation works.

Nesting Birds

- 4.3.2 It is recommended that all vegetation clearance is undertaken outside of the nesting bird season, taken as March to August inclusive. Where this is not possible, the site must be checked by a suitably experienced ecologist to confirm the absence of any nests before any clearance can take place.
- 4.3.3 It is recommended that one nest box is installed on four of the newly constructed properties. The most suitable locations would be on north or easterly facing elevations, as close to the eaves as possible. Two integrated swift boxes ([Integrated Bird Boxes | NHBS Practical Conservation Equipment](#)) and two regular integrated bird boxes ([Integrated Bird Boxes | NHBS Practical Conservation Equipment](#)) would be appropriate.

Notable Species

- 4.3.4 Measures to enhance the site for hedgehog and invertebrates should include the provision of hedgehog gaps at the base of new timber fences and the provision of new native planting as part of all landscaping and garden design.
- 4.3.5 It is also recommended that one bat box is installed onto three of the newly constructed buildings. The most suitable locations would be on the south-facing elevations. Integrated boxes suitable to support a range of species should be used, such as the Integrated Eco Bat Box (<https://www.nestbox.co.uk/products/integrated-eco-bat-box>).
- 4.3.6 To ensure potential impacts from artificial lighting are avoided, all new lighting installed as part of the proposed development should follow these guidelines;
- No new lighting elements should be located within 5m of any retained or adjacent trees / hedgerow.
 - All new lighting should be capped to direct light below the horizontal plane.
 - No lighting should spill onto land within 2m of adjacent hedgerow or trees.

- Lighting should be motion-sensor activated.
- Where possible, all new lighting should comprise low lux levels from lighting elements emitting warm white light (and ideally red light).

INNS

- 4.3.7 It is recommended that an INNS Management Plan be prepared for the scheme and implemented in full, to ensure the eradication of all Schedule 9 listed species from the site. Measures included within the plan should include herbicide application of knotweed prior to the start of any construction works, identification and demarcation of all INNS on site and targeted actions to eradicate the plants whilst carrying out development works.

4.4 Biodiversity Net Gain (BNG)

- 4.4.1 The proposed development of the site is anticipated to result in the following Post Intervention score:
- 0.123ha of Developed land; sealed surface = 0 Habitat Units.
 - 0.056ha of Vegetated garden = 0.11 Habitat Units.
 - 0.009ha of Introduced shrub = 0.02 Habitat Units.
 - Total Post Intervention Score = **0.13 Habitat Units.**
- 4.4.2 The BNG score for the site represents a -52.26% change in the biodiversity value of the site (-0.14 Habitat Units). This does not meet the mandatory 10% BNG target, which equates to a post-intervention score of 0.30 Habitat Units for this site. Additionally, the trading rules have also not been met as there is a -0.13 change in Medium Distinctiveness habitat and a -0.01 change in Low Distinctiveness habitat.
- 4.4.3 It is recommended that the 0.17 Habitat Units that are required to meet the mandatory BNG target, are obtained from either on Off-Site Habitat Bank or from Statutory BNG Credits. Given the uncertainty over grant of planning permission, it is recommended that details of these units be provided as a pre-commencement condition.

5 CONCLUSION

- 5.1 Etive Ecology Ltd was commissioned by Harrison Construction Ltd to undertake an ecological appraisal of the existing garage sites off Hillbank Street and Church Avenue, Middleton. The sites are proposed for residential redevelopment.
- 5.2 The assessment comprised of an Extended UKHab survey, a desk study, a preliminary roost appraisal, an assessment of the likely impacts on the ecological value of the site and recommendations for further survey and/or mitigation measures to be implemented. A BNG Metric Assessment was also undertaken.
- 5.3 A desktop data search identified one statutory nature conservation sites <1km; Rochdale Canal SSSI/SAC and five non-statutory sites. The closest of these sites is the Rochdale Canal, located 100m to the west. Protected species records for <1km of the site include GCN, various bat and bird species, badger, water vole and various INNS.
- 5.4 The site is located 3km to the north of Middleton, with the M62 to the north and the A627M to the east. The site is split into two areas of garages located to the east of the A664 Manchester Road. The garage sites comprise rows of single garages of timber or prefabricated construction, surrounded by sparsely vegetated ground. Surrounding land comprises residential properties, pastoral farmland, the Rochdale Canal and Manchester Golf Club course. There are no ponds located on site and none within 250m of the site.
- 5.5 The two sites comprised numerous garages, all in use for storage. There are existing access points for each site, with bare ground for parking and sparse vegetation surrounding the garages. Comprising a mix of garden escapes, ruderals and indicators of enriched ground. The land off Hillbank Street included a single semi-mature sycamore tree and three small stands of Japanese knotweed along the southern boundary. The sites have the potential to support nesting birds, hedgehogs and invertebrates. The Hillbank Street site is potentially hydrologically connected to the Rochdale Canal SSSI/SAC. The baseline BNG score was calculated as 0.27 Habitat Units.
- 5.6 The proposed development will result in the demolition of all garages and the redevelopment of the whole site. Existing access points would be retained and enhanced. A total of six new residential units would be built, each with parking and garden areas. There will be temporary impacts on hedgehogs, invertebrates and nesting birds. There would also be a risk of spreading INNS and of impacting the nearby Rochdale Canal SSSI/SAC. The BNG Post Intervention score was 0.13 Habitat Units, which represents a -52.26% change in biodiversity value. Off-site Units will be required to meet the 10% BNG target.
- 5.7 Recommendations are made to avoid the nesting bird season, to provide artificial bat roosting opportunities, to minimise artificial lighting and to create gaps in fence-lines for hedgehogs. It is also recommended that a CEMP is prepared to control the risks posed to the nearby SSSI/SAC, and that an INNS Management Plan be prepared to eradicate INNS from the site.
- 5.8 In conclusion, the proposed development site is found to be of low ecological value. The proposed scheme is predicted to deliver a -52.26% BNG. Provided the recommendations made herein are implemented (including the purchase of off-site BNG units), there should be no residual ecological impacts arising from the scheme.

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Appendix A - Figure 1

UKHab Baseline Map

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Garages at Hillbank St & Church Avenue - UKHab Baseline Map



Appendix A - Figure 2

Proposed Site Layout

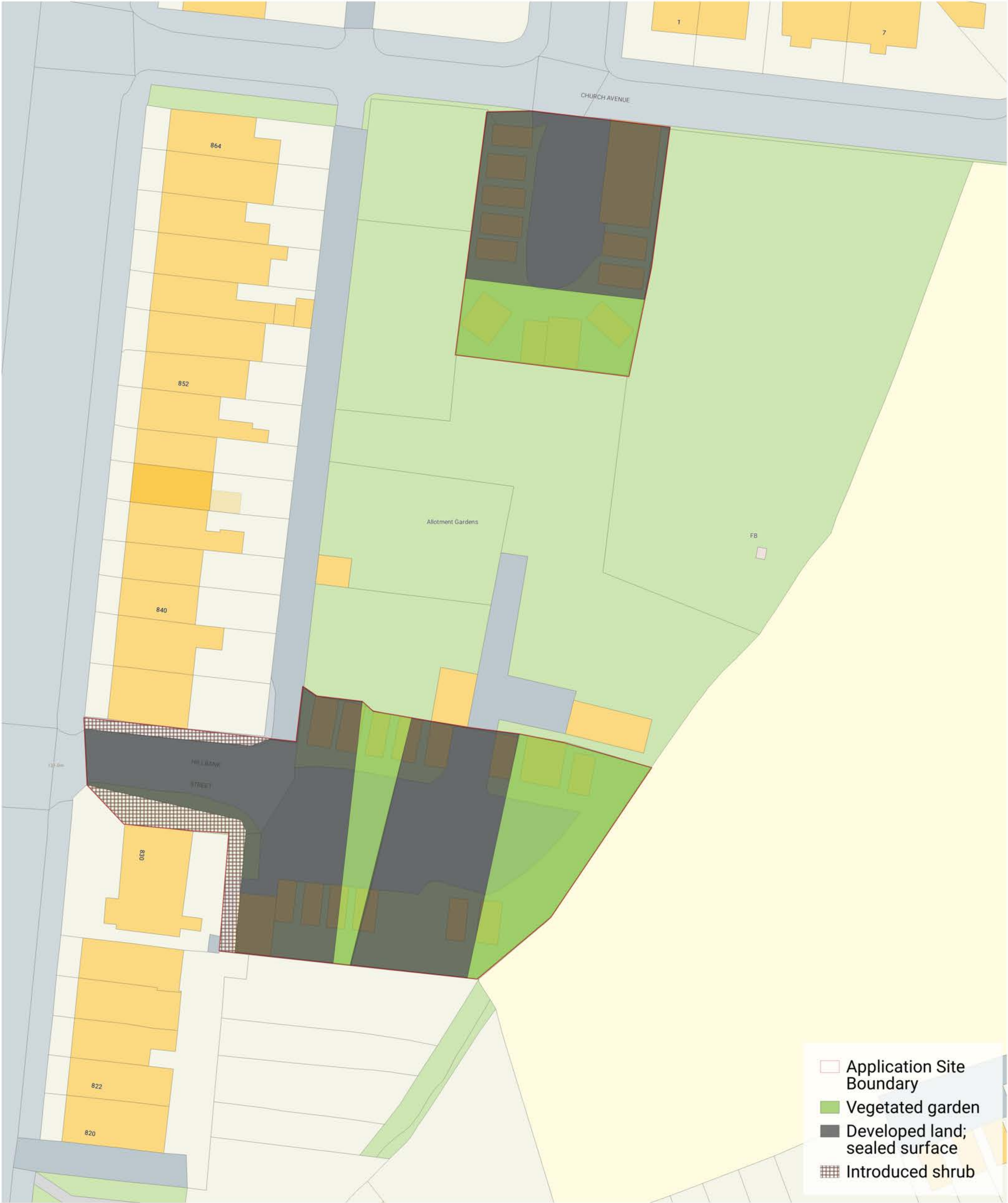
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Appendix A - Figure 3

UKHab Post Intervention Map

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Garages at Hillbank St &
Church Avenue - UKHab Post
Intervention Map



Appendix B - Site Photographs

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Church Avenue, looking south.



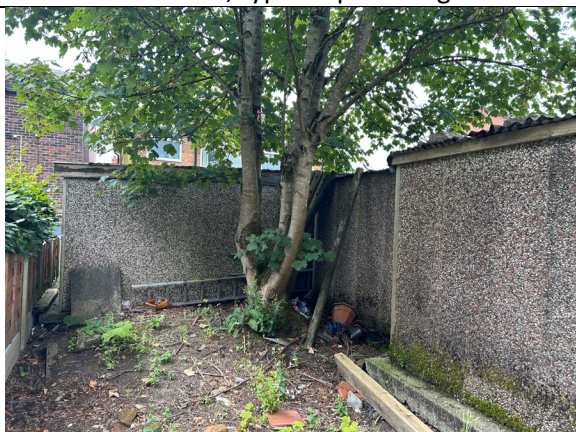
Church Avenue, typical garages



Church Avenue, typical sparse vegetation



Hillbank Street, typical vegetation



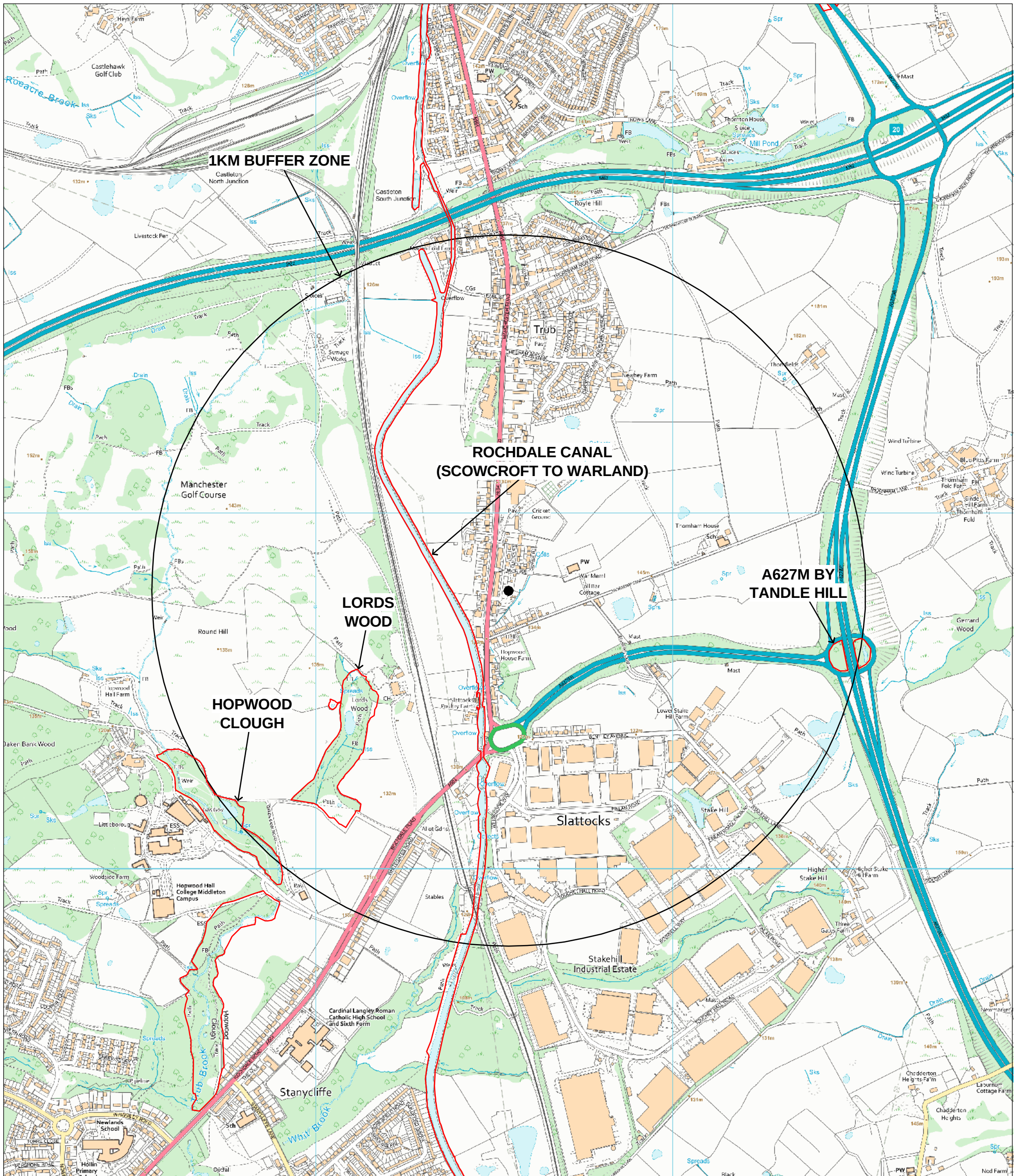
Hillbank Street, sycamore tree



Hillbank Street, Japanese knotweed

Appendix C – Biological Records

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**GREATER MANCHESTER ECOLOGY UNIT
ECOLOGICAL SEARCH - SD 8854 0878
HILLBANK STREET - MAP 1**

KEY
SITE OF BIOLOGICAL IMPORTANCE
 **SBI BOUNDARY**

SCALE 1:10,000

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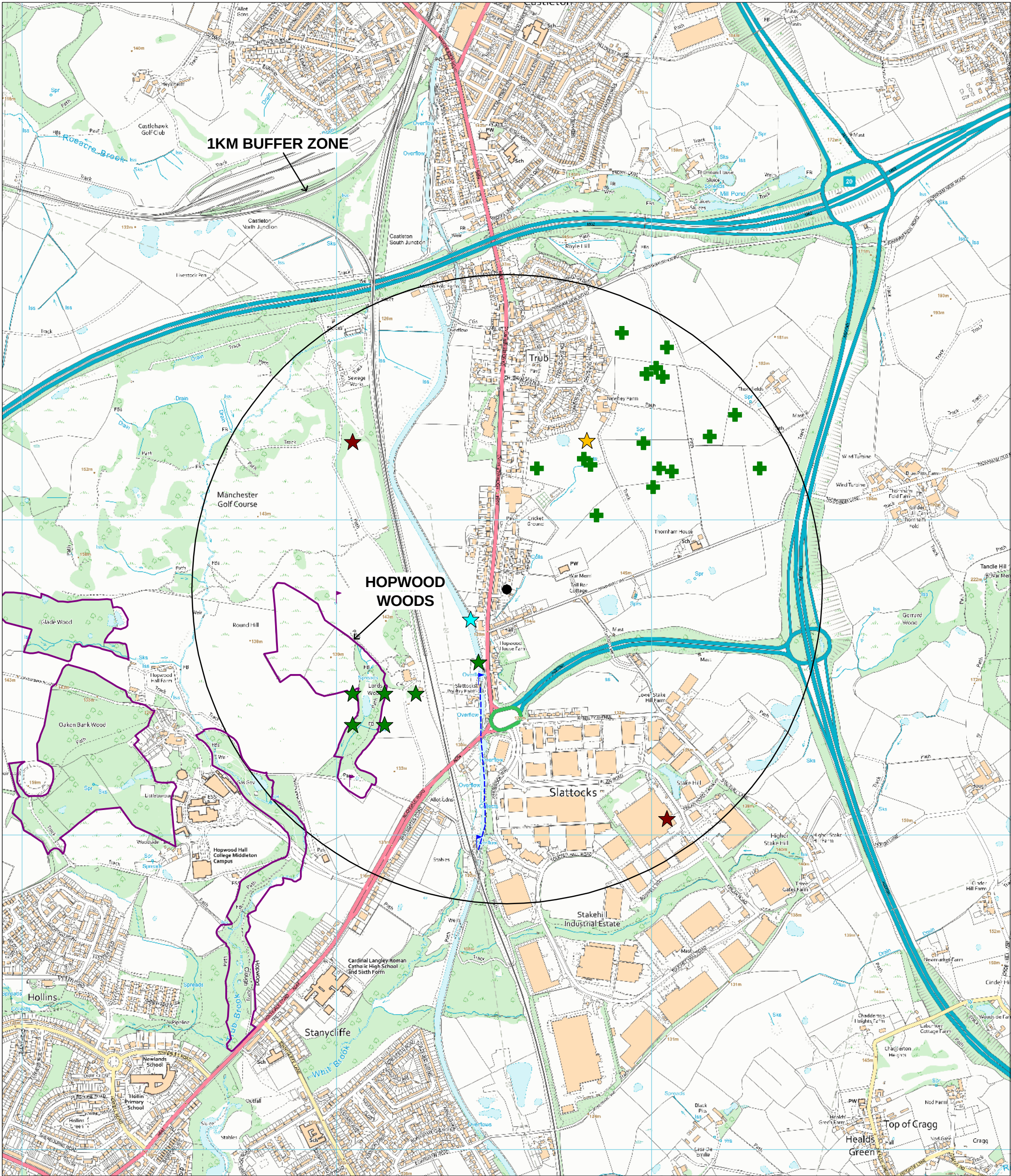
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Date Produced: 15/08/2024



- KEY**
- PROTECTED SPECIES**
- GREAT CRESTED NEWT
 - WATER VOLE
 - WATER VOLE SIGNS
 - ✚ BROWN HARE
 - ★ BARN OWL
 - ★ KINGFISHER
 - ★ LITTLE RINGED PLOVER
 - ★ WHITE-CLAWED CRAYFISH

SITES

LOCAL NATURE RESERVES

GREATER MANCHESTER ECOLOGY UNIT
ECOLOGICAL SEARCH - SD 8854 0878
HILLBANK STREET - MAP 2

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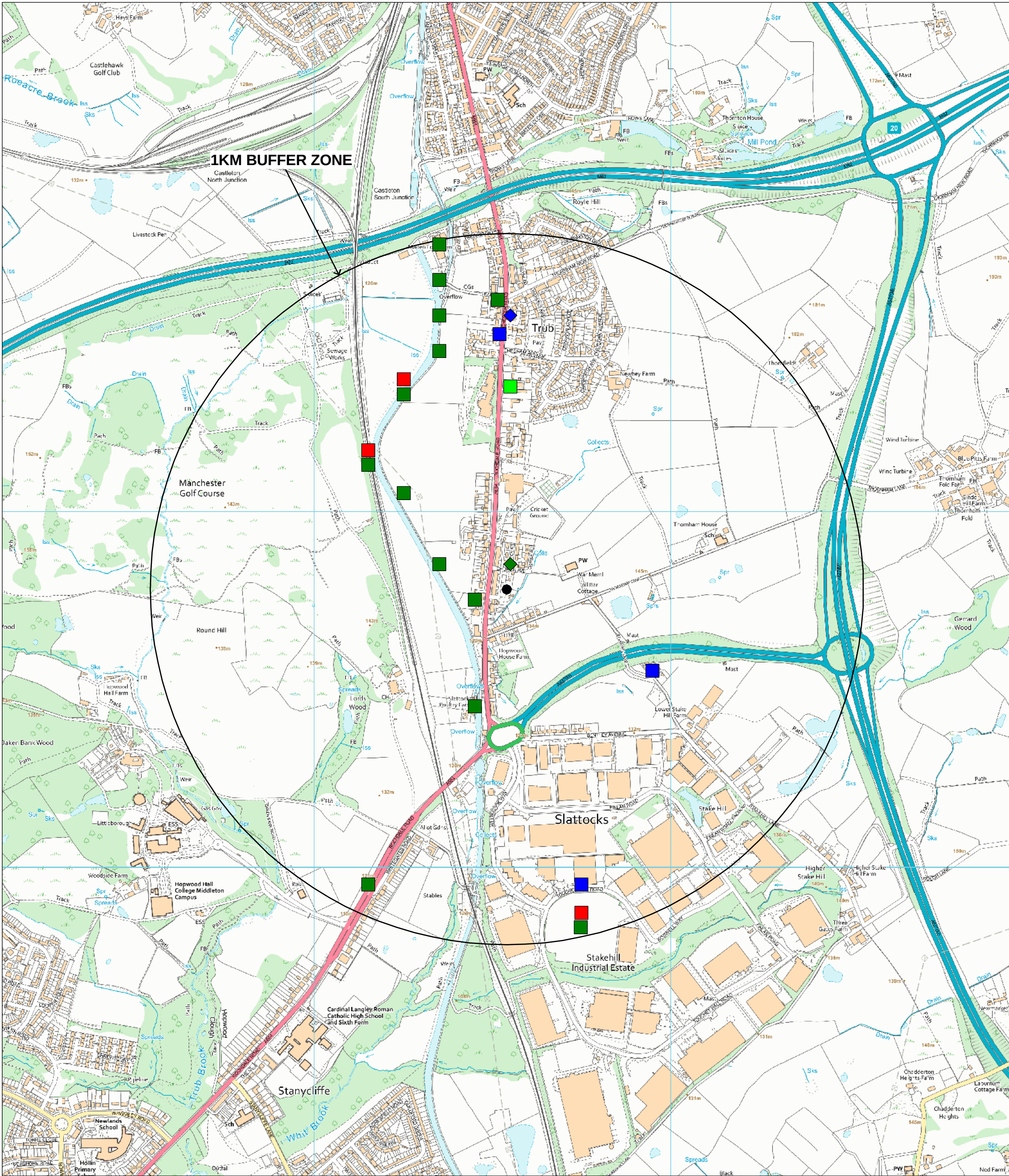
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KEY
BAT ROOSTS

- ◆ COMMON PIPISTRELLE
- ◆ PIPISTRELLE SP

BATS OTHER SIGNS

- BAT SP
- COMMON PIPISTRELLE
- NOCTULE BAT
- PIPISTRELLE SP

GREATER MANCHESTER ECOLOGY UNIT
ECOLOGICAL SEARCH - SD 8854 0878
HILLBANK STREET - MAP 4

SCALE 1:10,000

BAT DATA COURTESY OF SOUTH LANCS BAT GROUP

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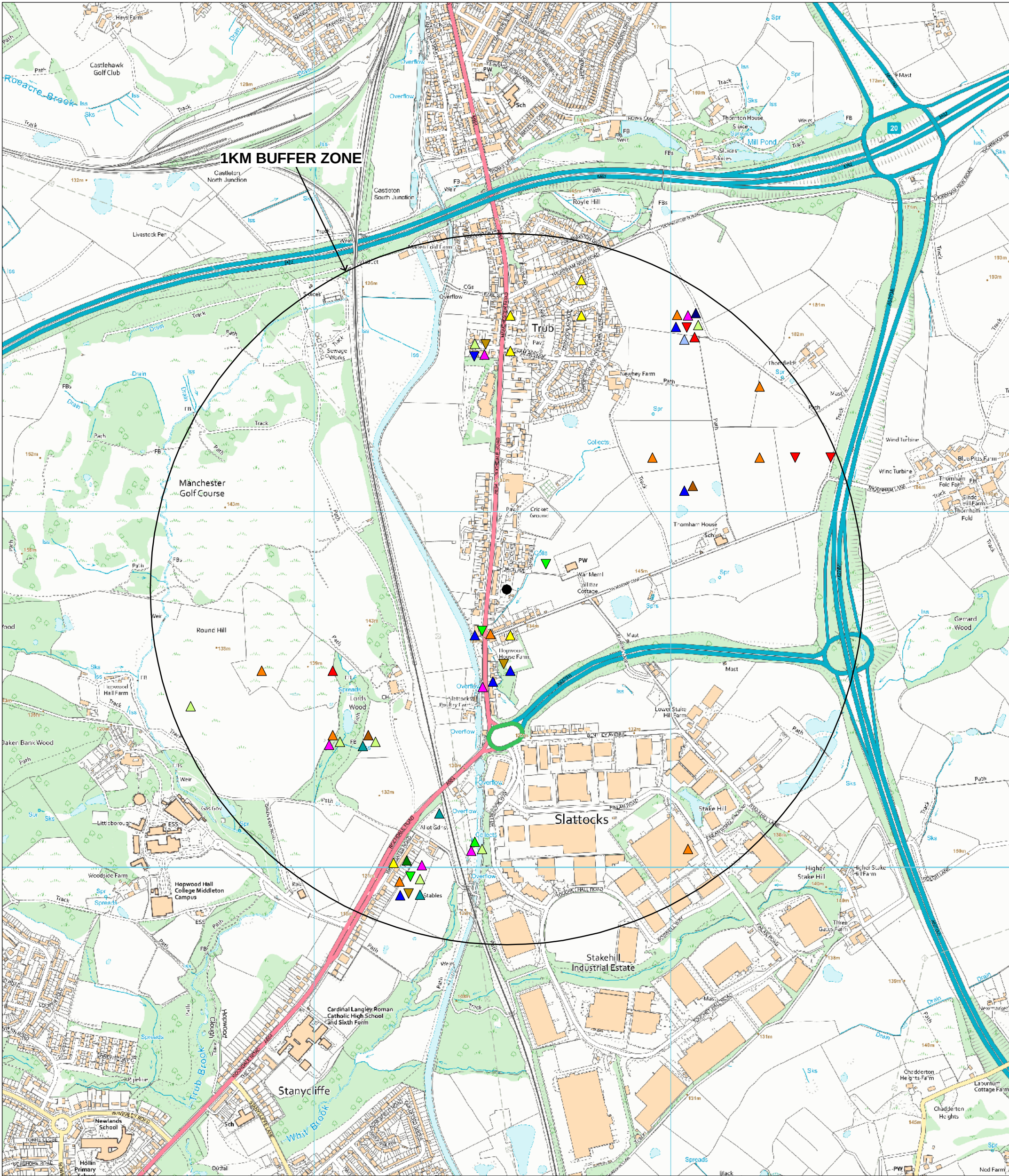
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KEY
SECTION 41 SPECIES

- | | |
|---------------------|------------------|
| ▲ BULLFINCH | ▲ LAPWING |
| ▲ COMMON TOAD | ▲ LESSER REDPOLL |
| ▲ CUCKOO | ▲ LINNET |
| ▲ DUNNOCK | ▲ REED BUNTING |
| ▲ GR.HOPPER WARBLER | ▲ SKYLARK |
| ▲ HEDGEHOG | ▲ SONG THRUSH |
| ▲ HERRING GULL | ▲ STARLING |
| ▲ HOUSE SPARROW | ▲ WILLOW TIT |

GREATER MANCHESTER ECOLOGY UNIT
ECOLOGICAL SEARCH - SD 8854 0878
HILLBANK STREET - MAP 5

SCALE 1:10,000

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Appendix D – Biodiversity Metric & Condition Assessment

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Condition Sheet: INDIVIDUAL TREES Habitat Type			
Habitat Types			
Individual trees – Urban trees Individual trees – Rural trees Complete a condition sheet for each tree or block of trees. Please see the separate Line of trees condition sheet for a line of <u>rural</u> trees. You should only use the Line of trees condition assessment and record that habitat type in <u>rural</u> locations.			
Habitat Description			
Semi-mature sycamore. Three stems, each ~200mm in diameter at breast height.			
Individual trees (description applied to the urban or rural environment): Young trees over 7.5 cm in diameter at breast height whose canopies are not touching. Urban Perimeter / Linear Blocks and Groups (description applied to the urban environment only): Groups or stands of trees (size requirement as defined above) within and around the perimeter of urban land. This includes those along urban streets, highways, railways and canals, and also former field boundary trees incorporated into developments. Canopies should predominantly overlap continuously. Groups of urban trees that don't match the descriptions for woodland may be assessed within this category.			
On-site or off-site, site name and location	Garages off Hillbank Street.	Survey date and Surveyor name	Russell Grey, 13th June
Limitations (if applicable)	None	Survey reference (if relating to a wider survey)	n/a
Grid reference	SD88530876	Habitat parcel reference	n/a
Condition Assessment Criteria		Criterion passed (Yes or No)	Notes (such as justification)
A	The tree is a native species (or at least 70% within the block are native species).	N	Sycamore
B	The tree canopy is predominantly continuous, with gaps in canopy cover making up <10% of total area and no individual gap being >5 m wide (individual trees automatically pass this criterion).	Y	Canopy cover is continuous - no gaps.
C	The tree is mature (or more than 50% within the block are mature) ¹ .	N	Not yet fully mature.
D	There is little or no evidence of an adverse impact on tree health by human activities (such as vandalism, herbicide or detrimental agricultural activity). And there is no current regular pruning regime, so the trees retain >75% of expected canopy for their age range and height.	Y	Tree has been left undisturbed.
E	Natural ecological niches for vertebrates and invertebrates are present, such as presence of deadwood, cavities, ivy or loose bark.	N	Tree canopy is raised above garages and tree stems are all in perfect condition with no features.
F	More than 20% of the tree canopy area is oversailing vegetation beneath.	Y	~30% of the canopy oversails vegetation.
Number of criteria passed			
Condition Assessment Result (out of 6 criteria)	Condition Assessment Score	Score Achieved ×/✓	
Passes 5 or 6 criteria	Good (3)		
Passes 3 or 4 criteria	Moderate (2)	✓	
Passes 2 or fewer criteria	Poor (1)		
Note that 'Fairly Good and Fairly Poor' condition categories are not available for this broad habitat type.			
Suggested enhancement interventions to improve condition score ²			

Tree will be lost to the development footprint.

Condition Sheet: URBAN Habitat Type			
Habitat Types			
Sparsely vegetated land - Ruderal/Ephemeral Sparsely vegetated land - Tall forbs Urban - Allotments Urban - Biodiverse green roof Urban - Bioswale Urban - Cemeteries and churchyards Urban - Facade-bound green wall Urban - Ground based green wall Urban - Intensive green roof Urban - Open mosaic habitats on previously developed land Urban - Rain garden Urban - Sustainable drainage system (SuDS) Urban - Vacant or derelict land Urban - Bare ground			
Habitat Description			
Sparsely vegetated land in between garages - common nettle, ragwort, bindweed, etc.			
See the Statutory Biodiversity Metric User Guide for green roofs and UK Habitat Classification (UKHab) for other habitats:			UKHab – UK Habitat Classification
On-site or off-site, site name and location	Garages off Hillbank Street.	Survey date and Surveyor name	Russell Grey, 13th June 2024
Limitations (if applicable)	None	Survey reference (if relating to a wider survey)	n/a
Grid reference	SD88530876	Habitat parcel reference	n/a
Condition Assessment Criteria		Criterion passed (Yes or No)	Notes (such as justification)
Core Criteria - must be assessed for all urban habitat types :			
A	Vegetation structure is varied, providing opportunities for vertebrates and invertebrates to live, eat and breed. A single structural habitat component or vegetation type does not account for more than 80% of the total habitat area.	Y	Varied vegetation type, height and structure.
B	The habitat parcel contains different plant species that are beneficial for wildlife, for example flowering species providing nectar sources for a range of invertebrates at different times of year.	N	Predominantly rank species of little wildlife value, including some INNS.
C	Invasive non-native plant species (listed on Schedule 9 of WCA ¹) and others which are to the detriment of native wildlife (using professional judgement) ² cover less than 5% of the total vegetated area ³ . Note - to achieve Good condition, this criterion must be satisfied by a complete absence of invasive non-native species (rather than <5% cover).	N	Japanese knotweed is present.
Additional Criterion - must be assessed for Open mosaic habitat on previously developed land only:			
D	The parcel shows spatial variation and forms a mosaic of bare substrate PLUS: - At least four early successional communities (a) to (i); Communities: (a) annuals; (b) mosses/liverworts; (c) lichens; (d) ruderals; (e) inundation species; (f) open grassland; (g) flower-rich grassland; (h) heathland, (i) pools.		
Additional Criteria - must be assessed for Bioswale and SuDS habitat types only:			
E1	Plant species are mostly native. If non-native species are present, they should not be detrimental to the habitat or native wildlife ⁴ .		
E2	The vegetation is comprised of plant species suited to wetland or riparian situations.		
Additional Criterion - must be assessed for Intensive green roofs only:			

F	The roof has a minimum of 50% native and non-native wildflowers. 70% of the roof area is soil and vegetation (including water features).		
Additional Criterion - must be assessed for Biodiverse green roofs only:			
G	The roof has a varied depth of 80 – 150 mm; at least 50% is at 150 mm and is planted and seeded with wildflowers and sedums or is pre-prepared with sedums and wildflowers. Note – to achieve Good condition some additional habitat, such as sand piles, stones, logs etc. are present.		
Essential criteria relevant for habitat type achieved (Yes or No)			No
Number of criteria passed			1
Condition Assessment Result		Condition Assessment Score	Score Achieved ×/✓
Results for habitats requiring assessment of 3 core criteria only (all listed urban habitats except Open mosaic habitat on previously developed land, Bioswale, SuDS and Green roofs):			
• Passes all 3 core criteria; AND • Meets the requirements for Good condition within criterion C.		Good (3)	
• Passes 2 of 3 core criteria; OR • Passes 3 of 3 core criteria but does not meet the requirements for Good condition within criterion C.		Moderate (2)	
• Passes 0 or 1 of 3 core criteria.		Poor (1)	✓
Results for Green roofs and Open mosaic habitat on previously developed land (requiring assessment of 4 criteria only - core criteria plus additional criterion specified for habitat type):			
• Passes all 3 core criteria; AND • Meets the requirements for Good condition within criterion C; AND • Passes additional criterion relevant to specific habitat type (D, F or G).		Good (3)	
• Passes 2 or 3 of 4 criteria; OR • Passes 4 of 4 criteria but does not meet the requirements for Good condition within criterion C.		Moderate (2)	
• Passes 0 or 1 of 4 criteria.		Poor (1)	
Results for Bioswale or SuDS (requiring assessment of 5 criteria - core criteria plus additional criteria specified for habitat type):			
• Passes all 3 core criteria; AND • Meets the requirements for Good condition within criterion C; AND • Passes all additional criteria relevant to specific habitat type (Group E)		Good (3)	
• Passes 3 or 4 of 5 criteria; OR • Passes 5 of 5 criteria but does not meet the requirements for Good condition within criterion C.		Moderate (2)	
• Passes 2 or fewer of 5 criteria.		Poor (1)	
Suggested enhancement interventions to improve condition score			
Habitat will be lost to the proposed scheme.			
Footnotes			