

**Whitcher Wildlife Ltd.
Ecological Consultants.**



LAND OFF PITT STREET, WOMBWELL.

OS REF: SE 40315 04236.

ECOLOGICAL IMPACT ASSESSMENT.

Ref No: 250334.

Date: 20th November 2025.

TABLE OF CONTENTS.

	Page Number
1. INTRODUCTION.	3
2. SURVEY METHODOLOGY.	4
3. SURVEY RESULTS.	8
4. ASSESSMENT OF IMPACTS, MITIGATION AND RESIDUAL EFFECTS.	68
5. COMPENSATION AND ENHANCEMENT MEASURES.	76
6. REFERENCES.	77
Appendix I. BAT INFORMATION.	79
Appendix II. NESTING BIRD INFORMATION.	81
Appendix III. REPTILE INFORMATION.	82
Appendix IV. HEDGEHOG INFORMATION.	84
Appendix V. PROPOSED DEVELOPMENT PLAN.	86
Appendix VI. ANNOTATED MAP OF THE SURVEY AREA.	87
Appendix VII. POST-DEVELOPMENT HABITAT MAP.	88
Appendix VIII. TARGET NOTES.	89
Appendix IX. OFF-SITE BIODIVERSITY NET GAIN AREA - BASELINE.	90
Appendix X. SUMMARY OF BREEDING BIRD SPECIES RECORDED.	91
Appendix XII - XVI. BREEDING BIRD SURVEY MAPS	93
Appendix XVII. SPECIES LISTS.	99
Appendix XVIII. OFF-SITE SPECIES LISTS.	102

1. INTRODUCTION.

1.1. JRP Associates have plans to submit outline planning permission for land off Pitt Street, Wombwell. The proposed development plan has been appended to this report.

1.2. Whitcher Wildlife Ltd was commissioned to carry out a Preliminary Ecological Appraisal of the site to establish whether there are any issues that may affect the proposed works.

1.3. The initial site survey was carried out on 1st April 2025 with subsequent bat, reptile and bird surveys from April 2025 to October 2025. This report outlines the findings of all surveys.

1.4. The report has been converted to an Ecological Impact Assessment suitable for submission to the Local Authority. This report should be submitted alongside the statutory metric and condition assessment sheets.

1.5. Appendices I to IV of this report provide additional information on specific species and are designed to assist the reader in understanding the contents of this report.

1.6. This report will be accompanied by a Statutory Metric and Condition Assessment sheets.

2. SURVEY METHODOLOGY.

2.1. Prior to visiting the site, the survey area was cross referenced to maps and aerial photographs to give a general idea of the habitats and potential issues within the area and to identify potential access and walking routes.

2.2. The survey area was walked where access was agreed and public rights of way were used where no access was agreed. All habitats within and immediately around the survey area were documented and the dominant species within that habitat listed in line with the UK Habitat Classification methodology to identify the primary habitat types throughout the survey area. All primary habitats are accompanied by secondary codes which are used to add further specific details where necessary. Each primary habitat and unique set off secondary codes will be shown individually in the appended annotated map.

2.3. The survey area and immediate surrounding area was thoroughly searched for evidence of badger (*Meles meles*) activity by looking for the following signs in line with Harris S, Cresswell P and Jefferies D (1989). *Surveying Badgers*. Mammal Society: -

- * Badger setts.
- * Badger latrines or dung pits.
- * Badger snuffle holes and evidence of foraging.
- * Badger paths.
- * Badger prints in areas of soft mud.
- * Badger hairs caught on fencing.

2.4. The survey area was searched for watercourses and where found all watercourses within the survey area and for approximately 100m in each direction were thoroughly searched for evidence of water vole (*Arvicola amphibius*) activity by looking for the following signs, in line with Dean M, Strachen R, Gow D and Andres R (2016). *The Water Vole Mitigation Handbook (The Mammal Society Mitigation Guidance Series)*. Eds Fiona Mathews and Paul Chanin. The mammal Society, London: - (2011). *Water Vole Handbook: Third Edition*: -

- * Water vole burrows.
- * Water vole faeces and latrines.
- * Water vole feeding stations.
- * Water vole runs.
- * Water vole prints in areas of soft mud.
- * Water vole lawns.
- * Predator field signs.

2.5. The survey area was searched for watercourses and where found all watercourses within the survey area and for approximately 50m in each direction were thoroughly searched for evidence of otter (*Lutra lutra*) activity by looking for the following signs in line with the P Chanin (2003). *Monitoring the Otter and Conserving Natura 2000 Rivers: Monitoring Series No10 Guidelines*: -

- * Otter prints in soft mud.
- * Otter spraints.
- * Otter Holts.

2.6. The survey area was searched for watercourses and waterbodies. Where found, and where safe to enter the water, all were thoroughly searched for the presence of crayfish, for approximately 50m in each direction of the site, by searching under rocks and logs. Where stated, crayfish traps were also deployed into the watercourse. All survey work was carried out in accordance with the *Conserving Natural 2000 Rivers Monitoring Series No 1, Protocol for Monitoring the White Clawed Crayfish*.

2.7. The survey area was searched for trees and structures and where found these were checked for potential bat roosting sites in line with Collins, J. (ed.) (2023) *Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th edition)*, by looking for the following signs: -

- * Holes, cracks or crevices.
- * Bat Droppings.

2.8. The land immediately adjacent to the survey area was assessed for bat roosting potential and bat foraging potential. Connective routes and flight lines were also assessed whilst on site and using maps of the area.

2.9. The area within 500m of the survey site was cross referenced to maps to highlight all ponds close to the site. Where possible, all ponds identified were accessed using agreed access or public rights of way to assess the potential for great crested newts (*Triturus cristatus*) to be present.

2.10. The survey area was assessed for the potential for reptiles and suitable reptile habitats. Where applicable the area was also searched for the presence of reptiles.

2.11. Where appropriate, the habitat within and surrounding the survey area was searched for species such as hazel, oak, honeysuckle, bramble and other species which may provide potential habitat for hazel dormice (*Muscardinus avellanarius*). Field signs such as feeding remains and nests were also searched for where possible, in line

with P Bright, P Morris and T Mitchell-Jones *The Dormouse Conservation Handbook 2nd Edition*.

2.12. Where appropriate, the area within and surrounding the survey area was assessed for its potential to house habitat for red squirrels. Field signs of red squirrels were searched for at least every 50m, looking for any dreys, feeding signs or sightings of red squirrels.

2.13. The survey area was searched for all alien invasive plant species as listed on Schedule 9 of the Wildlife and Countryside Act 1981. The location of all plants identified were recorded and listed within the survey report along with appropriate recommendations to avoid causing the plants to spread in the wild.

2.14. All surveys were carried out in line with the Chartered Institute of Ecological and Environmental Management (CIEEM) survey standards and advice.

2.15. This document is prepared in line with The National Planning Policy Framework (NPPF). This sets out the government policy on biodiversity and nature conservation and places a duty on Planning Authorities to give material consideration to the effect of a development on legally protected species when considering planning applications. The NPPF and the Planning Practice Guidance on “Natural Environment” also promote sustainable development by ensuring that developments take account of the role and value of biodiversity and that it is conserved and enhanced within the development.

2.16. The subsequent bat activity surveys and dusk emergence surveys were undertaken in line with the Bat Conservation Trust Good Practice Guidelines 4th Edition. The bat activity surveys comprised the recommended combination of Nighttime Bat Walkovers (NBWs) and automated surveys. The dusk emergence surveys were undertaken in line with guidance, including the use of Night Vision Aids (NVAs)

2.17. The breeding bird surveys included six surveys between May and July, immediately following instruction. The surveys were undertaken in line with Bird Survey & Assessment Steering Group. (2024). *Bird Survey Guidelines for assessing ecological impacts*. More specific details of the methodology have been included within the breeding bird section of this report.

2.18. The initial site survey was and bat work was led by Sam White BSc ACIEEM. Sam has had experience in a professional capacity as an Ecologist focusing primarily on survey work for protected species and Phase 1 Habitat surveys. Sam has a BSc in Environmental Conservation from Sheffield Hallam University and Graduated in 2015.

Sam joined Whitcher Wildlife Ltd in May 2018 as an Ecological Consultant. Sam holds a survey licence for Great Crested Newts *Triturus cristatus*, Barn Owl *Tyto alba* and a Level 2 Class Licence for Bats. Sam is an Associate Member of the Chartered Institute of Ecology and Environmental Management and is accredited to undertake River Condition Assessments.

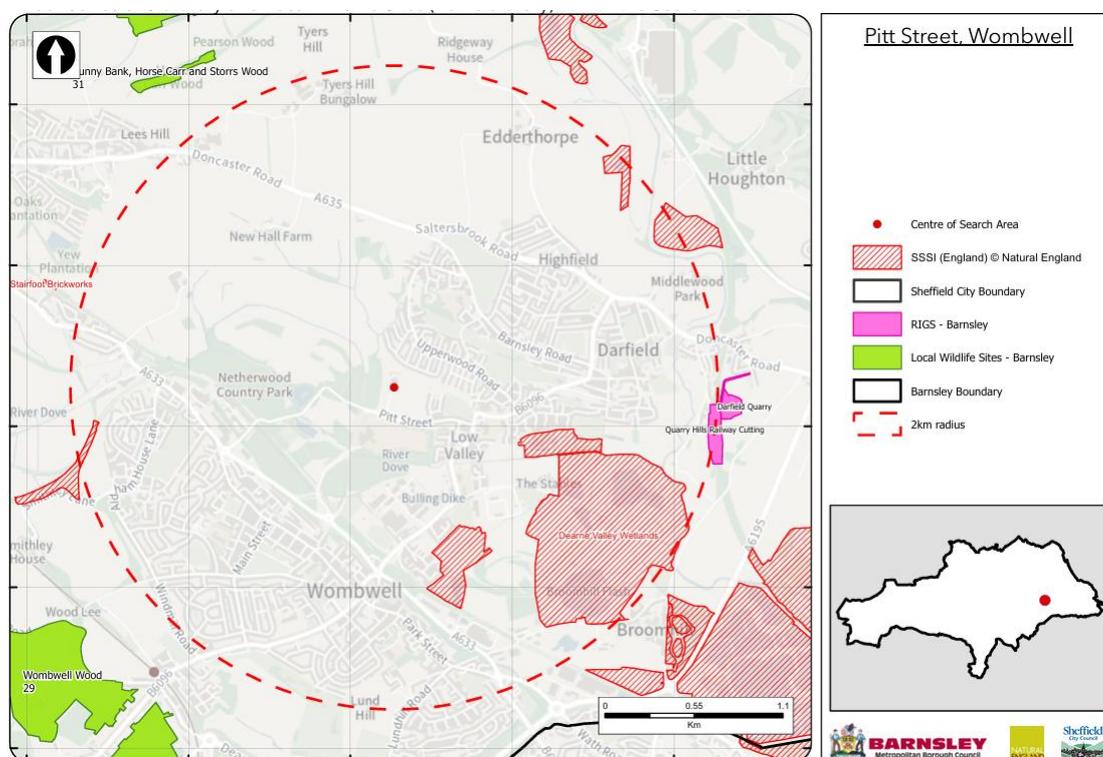
2.19. The subsequent breeding bird surveys were led by Jess Mason BSc MSc ACIEEM FRGS. Since 2018 Jess has had experience in a professional capacity as an Ecologist carrying out ecology surveys and phase I habitat surveys. Jess holds Natural England survey licences in respect of bats, barn owls, and great crested newts, and a Scottish Natural Heritage survey licence in respect of barn owls. She has also successfully completed a number of courses run by CIEEM and the FSC in the relative protected species and carrying out habitat surveys and has a MSc in Biological Recording. Jess is an Associate member of the Chartered Institute of Ecological and Environmental Management (CIEEM).

3. SURVEY RESULTS.

3.1. Data Search Results.

3.1.1. A data search request was submitted to the Barnsley Biological Records Centre for records of protected species and the location of designated sites within 2km of the survey area.

3.1.2. As shown below in the map taken from the data search, the survey area falls within approximately 600m of the Dearne Valley Wetland Site of Special Scientific Interest (SSSI) at the closest point. The survey area falls within Impact Risk Zone (IRZ) 3 of the SSSI. The following pre-application comments were received “*The proposals site is located within a Site of Special Scientific Interest (SSSI) Impact Risk Zone of the Dearne Valley Wetlands SSSI. Consultation with Natural England will be required for a residential development of 100 units or more. The applicant’s ecologist should consider the potential impact of the proposals upon the nearby SSSI parcels, i.e. increased visitor pressure, impact from pollution, etc.*” This has been further discussed in Section 5 of this report.



3.1.3. As shown in the above map, taken from the data search, the only non-statutory designated sites within 2km of the survey area are Quarry Hills Railway Cutting and

Darfield Quarry, both of which are Regionally Important Geological Sites (RIGS), lying over 1.9km east of the survey area.

3.1.4. The survey area falls within the Dearne Valley Green Heart Nature Improvement Area. Nature Improvement Areas are large areas targeted for improvement, in this case centred around the River Dearne.

3.1.5. BBRC returned no records of great crested newts, either recent or historic.

3.1.6. BBRC returned a small number of records of reptile. All of these are historical records, dating 2005 or older with one exception, a record of grass snake from 2016 at Parkhill Nature Reserve, approximately 1.1km southeast of the survey area.

3.1.7. BBRC returned two records of badger within 2km of the survey area. The closest record of the species is located 900m southeast of the survey area.

3.1.8. BBRC provided numerous records of common bat species, including common and soprano pipistrelle, Daubenton's bat and noctule. The majority of these records were historic, with the only records within the last ten years comprising soprano pipistrelle and noctule. The closest record to the survey area is of an unspecified bat species 540m to the east and another unspecified bat species 550m to the north.

3.1.9. BBRC returned six recent records of water vole, all dated in 2013 from Wombwell Ings, within Billing Dike. These records lie over 1.5km from the survey area.

3.1.10. BBRC also provided records of small number of mammal species listed on Section 41 of the NERC Act (2006) within a 2km radius. These include records of harvest mouse, hedgehog, otter and a single record of brown hare. None of these records were within or connected to the survey area.

3.1.11. Given the proximity of the site to the Dearne Valley Wetlands, BBRC returned approximately twenty-two thousand records of protected species. A thorough analysis of these is difficult given the volume of records and that most are only to four figure grid references. No records relate to the site directly, but numerous more common species have been recorded in the surrounding area, primarily common bird species such as blackbird and blue tit within the adjacent woodland.

3.1.12. BBRC returned a small number of insect species listed on Section 41 of the NERC Act, including small heath, wall butterfly, Shaded broad-bar moth and cinnabar and but none of these are relevant to the survey area.

3.1.13. There are eight recent records of barn owl within 2km of the site, the closest of these is 1.2km to the southeast.

3.1.14. The South Yorkshire Badger Group were contacted in relation to a previous proposal in the area, adjacent to the site and they hold no records within 2km of the site.

3.1.15. The South Yorkshire Bat Group do not hold any additional records of other species or closer records to the survey area.

3.2. The Survey Area.

3.2.1. The survey area lies within the Low Valley area between Darfield and Wombwell. The aerial map below shows the location of the survey area, indicated by the red boundary.



3.2.2. The site lies immediately north of Netherwood Academy and adjacent to an existing development off of Pitt Street and pocket of woodland. The approximate boundary of the survey area is shown on the below aerial image marked in red.



3.2.3. The survey area comprises Low Valley Farm, including the farm compound, grazed fields and hedgerows. Some examples of the habitats on site are shown below.





3.3. Survey Limitations.

3.3.1. The initial survey was undertaken outside of the optimal period for botanical surveys. As such, species may have been missed, predominantly spring annuals, may have been missed. The species list has therefore be updated throughout the additional surveys on the site.

3.3.2. Some buildings were in poor condition and not safe to enter as advised by the landowner. Others were obstructed by dense vegetation, which prevented entry. In all cases, this has been discussed in the building descriptions and has been considered when making an assessment of bat roost potential.

3.3.3. Whilst not a limitation, it should be noted the original survey area included the adjacent woodland and as such, this has also been thoroughly surveyed and the findings have been considered where appropriate.

3.4. Description of Habitats.

3.4.1. Appendix V of this report contains annotated maps marked up with the varying habitats that are cross referenced to target notes in Appendix VI of this report. The primary habitats on and adjacent to the site are: -

- g4 – Modified grassland.
- h3h – Mixed scrub.
- h3d – Bramble scrub.
- h3f – Hawthorn scrub.
- g3c – Other neutral grassland.
- u1f – Sparsely vegetated urban land.

- u1b – Developed land sealed surface.
- u1b5 – Building.
- u1c – Artificial unvegetated, unsealed surface.
- h2a – Native hedgerow.
- u1e – Built linear feature.

3.4.2. g4 – Modified grassland.

3.4.2.1. Secondary codes: 16 tall forbs, 103 horse grazed, 510 bare ground.

All fields within the survey area comprise modified grassland. These have been assessed as such, despite the relatively low level of grazing, these do not meet the requirements of g3c – Other Neutral Grassland, lacking the species density and greater number of tall forbs associated with g3c. The species list for the grassland has been appended to this report, however the grassland is generally dominated by cocksfoot *Dactylis glomerata*, meadow grass *Poa* sp. and bent *Agrostis* sp., with the most dominant tall forb being broadleaf dock *Rumex obtusifolius*.



3.4.2.2. Secondary codes: 10 scattered scrub, 16 tall forbs, 106 mown, 510 bare ground.

There is a small field with two static caravans that has been mown to a short and uniform sward, shown below. This grassland is dominated by perennial ryegrass *Lolium perenne*, white clover *Trifolium repens*, common bent *Agrostis capillaris*, annual meadowgrass *Poa annua* and fescue *Festuca* sp. It should be noted that the short sward made identification of species difficult and other species may be present.



3.4.3. h3h – Mixed scrub

Secondary codes: 16 tall forbs, 32 scattered trees.

There are small pockets of scrub within the survey area, largely in unmanaged corners of the farm yard and field boundaries. The species list for this habitat has been appended to this report, however the dominant species typically include hawthorn *Crataegus monogyna*, blackthorn *Prunus spinosa* and bramble *Rubus fruticosus*.



3.4.4. h3d – Bramble scrub.

In areas where the scrub is over 80% bramble *Rubus fruticosus*, these have been mapped as bramble scrub in line with UKHabs guidance.



3.4.5. h3f – Hawthorn scrub.

As above, where scrub is over 80% hawthorn *Crataegus monogyna*, the habitat has been mapped as hawthorn scrub.



3.4.6. g3c – Other neutral grassland.

Secondary codes: 10 scattered scrub, 16 tall forbs, 521 unmanaged.

There are small pockets of grassland within unused areas of the farm which have been left unmanaged and tall forbs have become more dominant within the grassland. As such, these areas have been assessed as g3c, as opposed to g4. The species list for this habitat has been appended to this report.



3.4.7. u1f – Sparsely vegetated urban land.

Secondary codes: 16 tall forbs, 82 ruderal/ephemeral.

Some areas of the farm yard have been left to grow over by early colonising ruderal species. These areas have been mapped as sparsely vegetated land, with the underlying artificial (gravel) surface still clearly visible. The species list for this habitat has been appended to this report.



3.4.8. u1b – Developed land sealed surface.

The majority of the farm yard comprises developed land with a sealed surface, typically concrete.



3.4.9. u1b5 – Building

There are eight buildings within the farm, each of which has been described below.

3.4.9.1. Building 1 (B1).

Building 1 comprises a stone farmhouse with both pitched and flat roof sections. The building is in a poor state of repair internally with a lot of water damage. The building has a loft space, which was partially accessible, however health and safety concerns prevented full access. The southern aspect of the building is shown below.



3.4.9.2. Building 2 (B2).

Building 2 comprises a derelict barn in the centre of the farmyard. The building has both stone walls and brick walls at different points and has a pitched asbestos roof. The landowner expressed health and safety concerns so the building was not entered, regardless, dense vegetation obstructed entry to the building. The landowner stated no loft space is present and pigeons are present within the building.



3.4.9.3. Building 3 (B3).

Building 3 comprises the stable block and attached open barn. The stable block is constructed from breezeblock and timber with a flat roof. The attached barn is again constructed from breezeblock with a pitched felt roof. Neither sections of the building have loft spaces present.



3.4.9.4. *Building 4 (B4).*

Building 4 comprises an open barn attached to the northern aspect of Building 2. This building was fully accessible. The building comprises corrugated metal sheets over a timber frame, with no loft space internally.



3.4.9.5. *Building 5 (B5).*

Building 5 comprises two trailers that have been grown over by dense scrub. There was no access to these ‘buildings’, with the western aspect being shown below.



3.4.9.6. *Building 6 (B6).*

Building 6 comprises a small brick garage with flat roof. Again, entry into this building was obstructed by debris and vegetation, however the internals could be observed through the open door and no loft space was visible. The below photograph shows the western aspect of the building.



3.4.9.7. *Building 7 (B7).*

Building 7 includes a breezeblock barn with pitched asbestos roof and an attached garage with flat roof covered by bitumen felt. Neither of these buildings have lofts internally. The southern aspect of B7 is shown below.

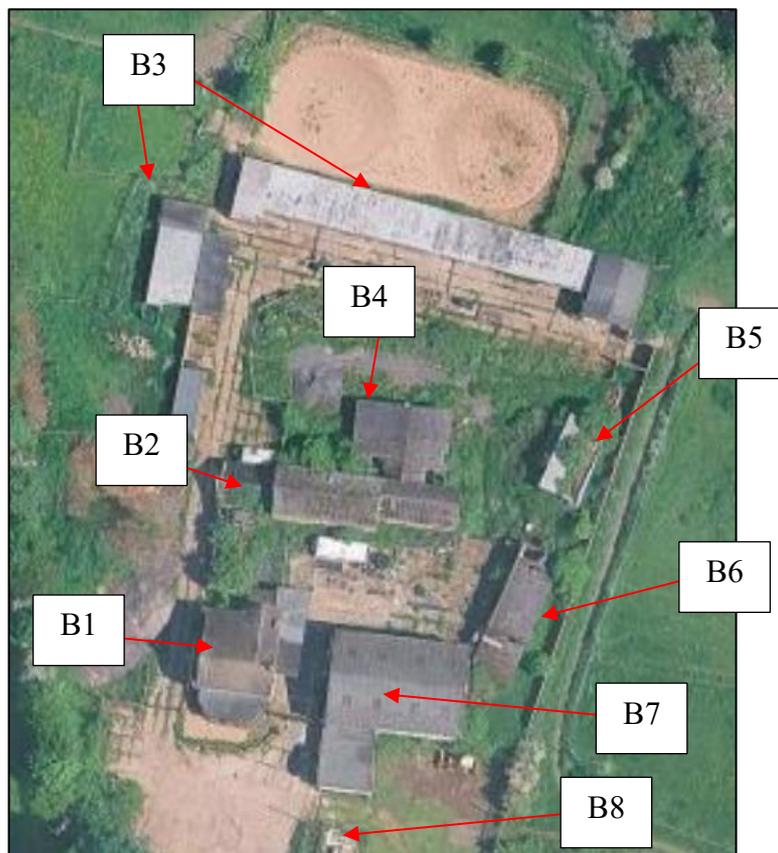


3.4.9.8. *Building 8 (B8).*

Finally, Building 8 comprises a small derelict building at the entrance of the farm. The building is constructed from breezeblocks with a pitched roof covered by bitumen roofing felt. No loft space is present within the building.



3.4.9.9. A plan of the buildings within the site is shown below.



3.4.10. u1c – Artificial unvegetated, unsealed surface.

The track leading to the farm and the parking area both comprise an artificial unvegetated, unsealed surface, as shown below.



3.4.11. h2a – Native hedgerow.

3.4.11.1. Secondary codes: 116 flailed hedgerow, 516 recent management.

The first group of hedgerows within the survey area includes a number of species poor hedgerows, which have largely been managed by the landowner, although some have also been left to grow taller. These hedgerows all have a similar species composition, including hawthorn *Crataegus monogyna*, blackthorn *Prunus spinosa*, elder *Sambucus nigra* and occasionally beech *Fagus sylvatica*. All of the hedgerows lack the four species within 30m to be considered species rich.





3.4.11.2. Secondary codes: 11 hedgerow with trees.

The hedgerow forming the western boundary of the site includes a hedgerow with trees. The species for this habitat have been included in the appendices of this report.



3.4.12. u1e – Built linear feature.

Secondary codes: 612 fence.

There are numerous fences surrounding the survey area. These include palisade and post and wire.



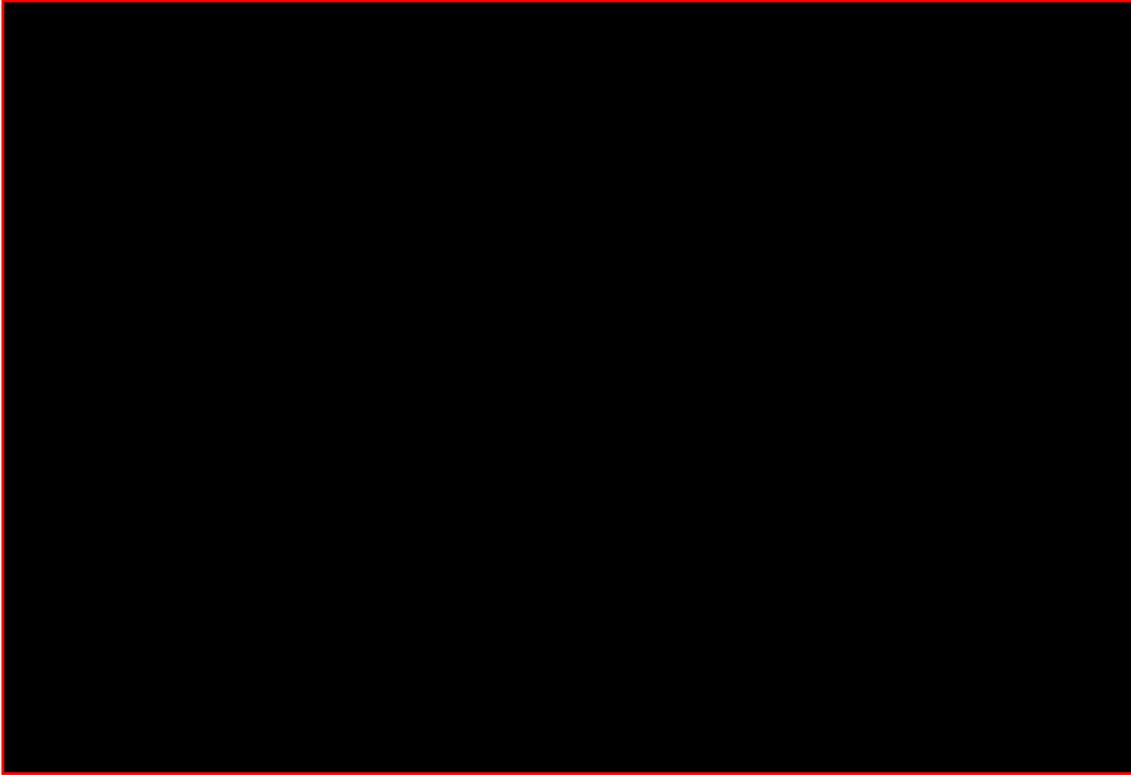
3.4.13. Scattered Trees.

Scattered trees are not separated within UKHabs methodology but must be considered as individual trees within Statutory Biodiversity Net Gain. The tree species within the survey area have been appended to this report. All of the individual trees within the survey area were either small or medium in size, measuring typically below 30cm diameter at breast height, with some individuals between 30 and 90cm.



3.5. Description of Fauna.

3.5.1. Badgers.



3.5.2. Riparian mammals and white clawed crayfish.

3.5.2.1. There is no watercourse within 10m of the site boundary, with the closest watercourse being located within the adjacent woodland, shown below.



3.5.2.2. No otter or water vole field signs were found within the watercourse, which lies over 30m from the site boundary at the closest point.

3.5.2.3. There is no evidence to suggest that the watercourse would support white clawed crayfish and the watercourse will not be directly affected by the proposed works. The watercourse was later found to be dry during the summer, completely ruling out the presence of white clawed crayfish.

3.5.3. Bats.

3.5.3.1. All buildings within the survey area were assessed against the Bat Conservation Trust Good Practice Guidelines 4th Edition.

3.5.3.1.1. Building 1.

3.5.3.1.1.1. The stone walls of Building 1 were largely in good condition with no major areas of missing mortar.

3.5.3.1.1.2. There were numerous areas where timber fascia boards did not sit flush against the stonework, these areas may provide potential access points for roosting bats.

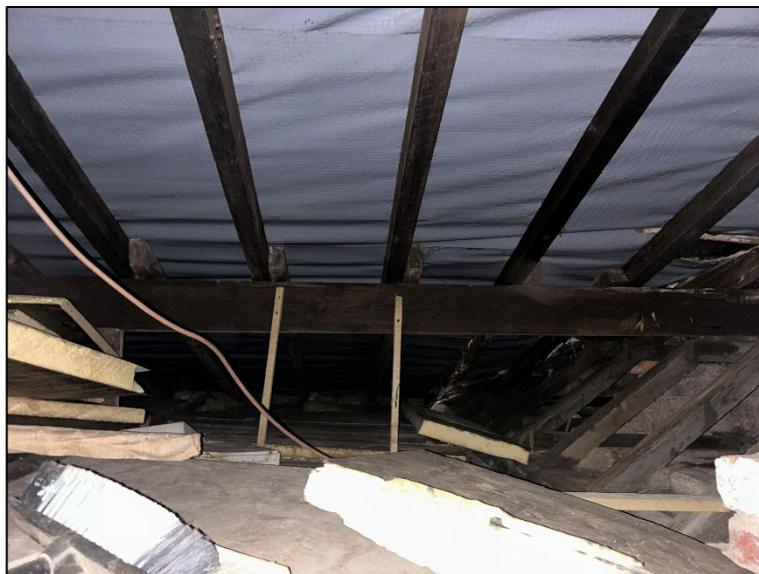


3.5.3.1.1.3. The roof of the building was largely in good condition, however there were numerous ridge tiles with missing mortar. In addition, there were areas of missing mortar on each gable end, allowing access to the internals of the building for roosting bats.



3.5.3.1.1.4. Internally, the loft space could not be thoroughly surveyed given health and safety concerns from water damage, although the loft was inspected from the hatch. However, light was visible at eaves height on the northern aspect of the building.

3.5.3.1.1.5. No bat field signs were visible inside the loft of the building. However, the roof is lined with a non-bituminous felt, which would conceal field signs of bats between the tiles and felt. The limitations of access should also be considered a constraint when looking for field signs.



3.5.3.1.1.6. Overall, whilst the building is in largely good condition, there are numerous entry points into the loft space, which provides suitability for a range of bat species. Given the possibility of bat field signs not being visible, a precautionary assessment of **high** bat roost potential in accordance with the Bat Conservation Trust Good Practice Guidelines 4th Edition is considered appropriate.

3.5.3.1.1.7. The building does not provide suitable hibernation potential for roosting bats as a classic site. However, the building may be used as a non-classic hibernation site for roosting bats, largely dependent on the presence of a summer roost as described in the Bat Conservation Trust Good Practice Guidelines 4th Edition.

3.5.3.1.2. *Building 2.*

3.5.3.1.2.1. The stone walls of Building 2 are in poor condition with numerous areas of missing mortar leading to the rubble filled cavity between the walls. Such features may be used by a large number of roosting bats.



3.5.3.1.2.2. The roof is constructed from corrugated asbestos panels, which are in poor condition. Where these panels overlap there is some potential for individual opportunistic bats, as asbestos does not heat as rapidly as normal corrugated metal sheets.

3.5.3.1.2.3. There was no internal access into the building during this survey, however, anecdotally buildings of this design typically offer potential predominantly within the stone walls with access from both the internals and externals of the building. No bat field signs were found on the externals of the building.

3.5.3.1.2.4. Given the limitations of the survey in combination of the numerous access points into the stone walls of the building, Building 2 has been assessed as providing **high** potential for roosting bats in accordance with the Bat Conservation Trust Good Practice Guidelines 4th Edition.

3.5.2.1.2.5. As with Building 1, Building 2 may be used as a non-classic hibernation site for bats, although this is almost entirely reliant on the building be used by summer roosting bats, as typically stone walls heat dramatically in sunlight.

3.5.3.1.3. *Building 3.*

3.5.3.1.3.1. The rendering over the breezeblock walls of Building 3 is in good condition and does not offer a potential feature to be used by roosting bats.

3.5.3.1.3.2. There are timber fascia boards along the building which are lifted at multiple points and as such, may be used by individual opportunistic roosting bats.



3.5.3.1.3.3. The roof design of Building 3, being constructed from bituminous felt, is unsuitable for roosting bats as it will heat dramatically in sunlight.

3.5.3.1.3.4. The internals of Building 3 are too open and exposed to provide potential for roosting bats, due to the design of the building.

3.5.3.1.3.5. No bat field signs were found either externally or internally within Building 3.

3.5.3.1.3.6. Overall, Building 3 offers **low** potential for roosting bats in accordance with the Bat Conservation Trust Good Practice Guidelines 4th Edition, only providing suitability for individual opportunistic bats.

3.5.3.1.3.7. Building 3 does not provide potential for hibernating bats. Even if summer roosting bats were found to be present, with the sole feature being lifted fascia boards, it is highly unlikely that the building would be used even as a non-classic hibernation site.

3.5.3.1.4. Building 4.

3.5.3.1.4.1. Building 4, being constructed solely from corrugated metal mounted on a timber frame is not of a suitable design for roosting bats. As such, the building has been assessed as having **negligible** potential for roosting bats in accordance with the Bat Conservation Trust Good Practice Guidelines 4th Edition.

3.5.3.1.4.2. In addition to the above, the building does not provide potential for hibernating bats, given the design of the building.

3.5.3.1.5. Building 5.

3.5.3.1.5.1. Building 5 comprises two trailers that have been left in situ. As with Building 4, the design of a trailer does not provide any potential roosting opportunities for roosting bats. As such, Building 5 is assessed as providing **negligible** potential for roosting bats in accordance with the Bat Conservation Trust Good Practice Guidelines 4th Edition.

3.5.3.1.5.2. Again, Building 5 is not of a suitable design to be used by hibernating bats, even as a non-classic hibernation site.

3.5.3.1.6. Building 6.

3.5.3.1.6.1. The walls of Building 6 are generally in good condition, although there are some areas of shallow missing mortar, shown below. The brick walls of the building are solid, with no cavity and as such, these features are only suitable for individual, opportunistic roosting bats.



3.5.3.1.6.2. The roof of the building is constructed from corrugated metal and is therefore, considered unsuitable for roosting bats.

3.5.3.1.6.3. There was no internal access to the building, although from the open entrances, no evidence of bats could obviously be seen. No external field signs were visible, however again the view of the building is largely obscured by vegetation. Regardless of the limitations, given the open nature of the building, it is unlikely to be used by a larger number of bats.

3.5.3.1.6.4. Therefore, Building 6 has been assessed as having **low** potential for roosting bats in accordance with the Bat Conservation Trust Good Practice Guidelines 4th Edition.

3.5.3.1.6.5. Given the open nature of Building 6 in combination with the shallow features. Building 6 is assessed as not providing potential for hibernation bats, even as a non-classic hibernation site.

3.5.3.1.7. Building 7.

3.5.3.1.7.1. The walls of Building 7 are in good condition with no potential features suitable for roosting bats. In addition, the timber fascia boards on the attached garage are flush and do not provide potential features for roosting bats.



3.5.3.1.7.2. Both the flat roof and corrugated roof present on Building 7 are of unsuitable design to be used by roosting bats.

3.5.3.1.7.3. Internally, no loft space is present and no bat field signs were found to be present.

3.5.3.1.7.4. Overall, Building 7 is assessed as providing **negligible** potential for roosting bats in accordance with the Bat Conservation Trust Good Practice Guidelines 4th Edition.

3.5.3.1.7.5. In addition to the above, the building is not of suitable design to be used by hibernating bats, even as a non-classic hibernation site.

3.5.3.1.8. *Building 8.*

3.5.3.1.8.1. The breezeblock walls of Building 8 are in good condition with no potential features for roosting bats.

3.5.3.1.8.2. The roof of Building 8 is constructed from bituminous felt over timber boards and as such, is entirely unsuitable for roosting bats.

3.5.3.1.8.3. Internally, no loft spaces was present and no bat field signs were present.



3.5.3.1.8.4. Overall, Building 8 is assessed as providing **negligible** potential for roosting bats in accordance with the Bat Conservation Trust Good Practice Guidelines 4th Edition.

3.5.3.1.7.5. In addition to the above, the building is not of suitable design to be used by hibernating bats, even as a non-classic hibernation site.

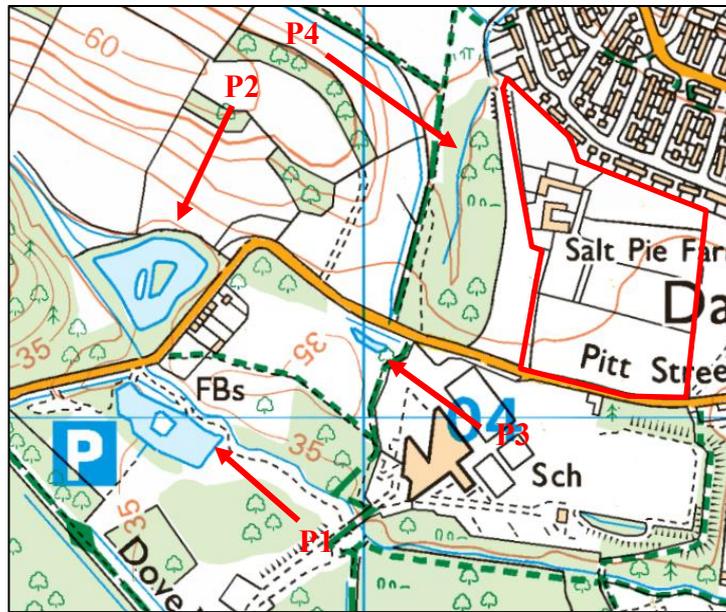
3.5.3.2. There are numerous trees within the survey area. All of these trees could be confidently assessed as having **negligible** potential for roosting bats in accordance with the Bat Conservation Trust Good Practice Guidelines 4th Edition. Even where ivy is present, the tree could be confidently inspected from the ground with no potential roost features present.

3.5.3.3. The current plans for the site retain the majority of boundary vegetation, with the removal of some internal hedgerows and grassland habitat. The hedgerows within the survey area provide **high** potential for foraging and commuting bats in accordance with the Bat Conservation Trust Good Practice Guidelines 4th Edition, in particular the western hedgerow with trees. The grassland habitat is generally low-lying, with very few taller herbs present. As such, this habitat is assessed as providing **low** suitability for foraging and commuting bats.

3.5.4. Great crested newts.

3.5.4.1. A review of aerial imagery and Ordnance Survey mapping found that there are three ponds within 500m of the survey area. In addition, there is a watercourse within

the adjacent woodland, which becomes stagnant as it widens (discussed in section 3.5.4.7. of this report). These waterbodies are shown on the below OS Map.



3.5.4.2. The furthest two ponds from the site are to the southwest, labelled as Ponds 1 and 2 are 450m and 470m from the survey area respectively. Pond 1 is separated from the site by the River Dove, a barrier to the movement of great crested newts.

3.5.4.3. Pond 2 is located 470m from the survey area at the closest point, although the actual distance an amphibian would need to travel to reach the site from the pond is far greater.



3.5.4.4. This pond could be accessed and a Habitat Suitability Index assessment could be undertaken to assess the potential of the pond for great crested newts. The results of the assessment are shown below, finding the pond to score less than 0.5, showing poor suitability for great crested newts.

SI No	SI Description	SI Value
1	Geographic location	1
2	Pond area	Omitted
3	Pond permanence	0.9
4	Water quality	0.33
5	Shade	0.2
6	Water fowl effect	0.01
7	Fish presence	0.33
8	Pond Density	0.6
9	Terrestrial habitat	1
10	Macrophyte cover	0.4
HSI Score		0.33

3.5.4.5. Pond 3 is located to the south of Pitt Street, approximately 160m southwest of the proposed development. The pond is surrounded by woodlands, however the banks of the pond are completely bare. Pitt Street was not originally expected to be a barrier to the dispersal of great crested newts, although through further surveys was found to be a busy road, preventing the dispersal of great crested newts to the site.



3.5.4.6. The pond could be accessed and a Habitat Suitability Index assessment could be undertaken to assess the potential of the pond for great crested newts. The results of

the assessment are shown below. Pond 3 was found to score 0.39 or be ‘Poor’ suitability for great crested newts.

SI No	SI Description	SI Value
1	Geographic location	1
2	Pond area	0.95
3	Pond permanence	1
4	Water quality	0.33
5	Shade	0.2
6	Water fowl effect	0.01
7	Fish presence	1
8	Pond Density	0.6
9	Terrestrial habitat	0.67
10	Macrophyte cover	0.3
HSI Score		0.39

3.5.4.7. Finally, Pond 4 is a linear watercourse, that was stagnant during the initial site survey, but was later found to be dry in June 2025. As such, this is not considered suitable for great crested newts.



3.5.4.8. The newly created SUDS adjacent to the site was dry at the time of the survey with no vegetation suggesting that the area regularly holds water. As such, this area is unsuitable for great crested newts.



3.5.4.9. Overall, all ponds except Pond 4 were fragmented from the survey area and Ponds 2 and 3 were found to be poor suitability for great crested newts, largely due to the presence of water fowl and the associated impacts on great crested newts. Pond 4 was later found to be dry in June 2025. As such, great crested newts are assessed as absent from the survey area.

3.5.5. Birds.

3.5.5.1. The survey area provides suitable habitat for bird species within the breeding bird season, which extends from March to August each year. This includes all vegetation within the survey area. It should be noted that birds recorded during this survey included wood pigeon, robin, great tit, chiffchaff, wren and dunnock.

3.5.5.2. The landowner reported the presence of barn owls foraging within the site on occasion. Throughout the subsequent surveys of the site, a barn owl was found to emerge multiple times from Building 2 and pellets were found within Building 3. No pair was ever recorded suggesting nesting activity and no foraging activity was recorded within the grassland within the survey area, which is not as tussocky as barn owls would typically prefer.

3.5.5.3. The survey area lies approximately 600m from the Dearne Valley Wetlands, well known for value to bird species. Wetland habitat is not present on the site and as such species typically found within Dearne Valley Wetlands are not expected to also be found within the survey area.

3.5.5.4. Subsequent breeding bird surveys were undertaken and have been summarised in section 3.8 of this report.

3.5.6. Reptiles.

3.5.6.1. The survey area provides suitable habitat for reptile species, with the edge habitat created between grassland and hedgerows providing potential habitat. In addition, the nearby watercourse makes the possible presence of reptiles significantly more likely. There are numerous areas of potential refugia throughout the site.

3.5.6.2. Subsequent reptile surveys were conducted and have been summarised below.

3.5.6.3. The plan below shows the approximate locations of the refugia laid out, primarily within the edge habitat of the grassland on site, where reptiles were most likely to be present.



3.5.6.4. The conditions and results of each survey are shown in the below table.

Date	Weather	Comments
24/04/2025	Refugia laid out.	
12/05/2025	18°C – Clear skies	No reptiles found
13/06/2025	19°C – Clear skies	No reptiles found
10/07/2025	16 °C – Sunny and dry	No reptiles found
22/07/2025	16 °C – Sunny	No reptiles found
14/08/2025	18 °C - Sunny	No reptiles found
02/09/2025	14 °C - Sunny	No reptiles found
10/09/2025	16 °C – Sunny spells during an otherwise overcast day	No reptiles found, refugia collected

3.5.6.5. Surveys were planned throughout the year to give a good overview of activity within the site, specifically targeting September, an optimal month for reptile species. No reptiles or amphibians were recorded during any of the surveys. As such, herpetofauna are assessed as absent from the survey area.

3.5.7. Geographically restricted mammals.

The survey area lies outside of the known UK distribution of both red squirrels and hazel dormice. As such, both species are assessed as absent from the survey area.

3.5.8. Invasive non-native species.

No non-native, invasive species listed on Schedule 9 of the Wildlife and Countryside Act 1981 were found within the survey area.

3.5.9. Hedgehogs.

The survey area provides suitable habitat for hedgehog, in particular within hedgerows throughout and surrounding the site.

3.6. Dusk Emergence Survey Results.

3.6.1. Dusk Emergence 28th May 2025.

3.6.1.1. The first dusk emergence survey was led by Sam White, who holds a CL18 Natural England survey licence in respect of bats (2024-11988-CL18-BAT).

3.6.1.2. The survey was carried out by 7 surveyors. The evening was partially cloudy but dry with a temperature of 14°C at the start of the survey and 12°C at the end of the survey. There was almost no breeze, registering 1 on the Beaufort scale. Sunset was at 21:20 and the survey lasted from 21:05 until 22:50.

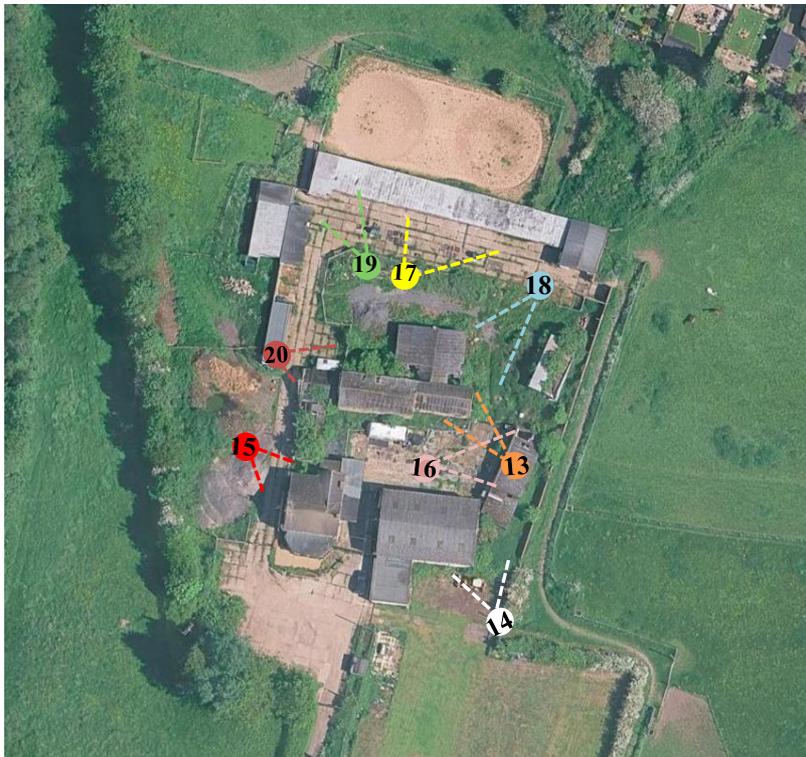
3.6.1.3. Surveyors were equipped with Batbox Duet detectors and two-way radios. Four Anabat Ranger static recorders were deployed around the site to record bat activity for subsequent computer analysis using Anabat Insight Software.

3.6.1.4. The aerial photograph below shows where the Surveyors (S) and Anabats (AB) were located throughout the survey.

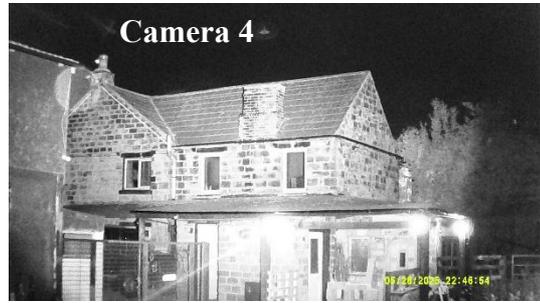
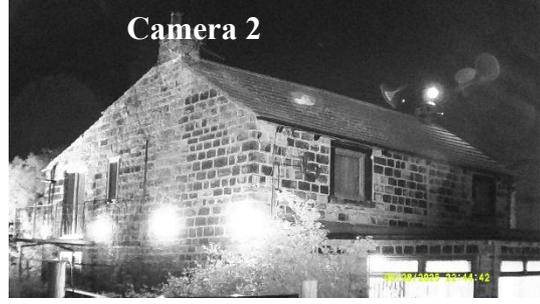


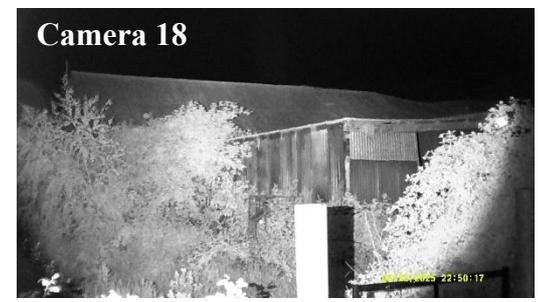
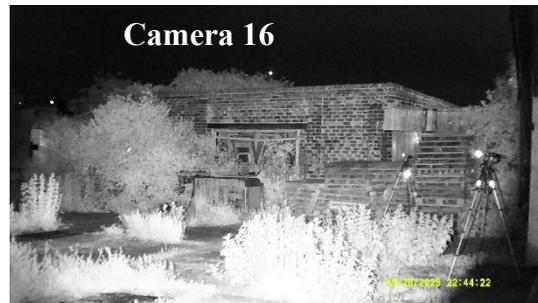
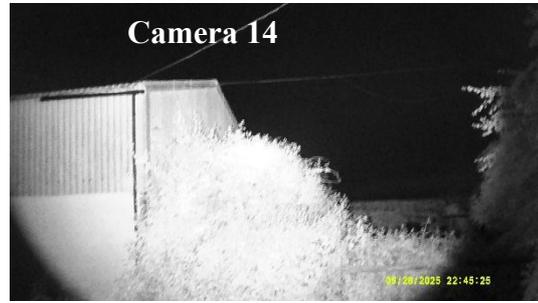
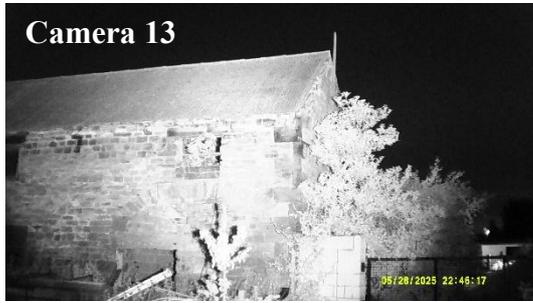
3.6.1.5. Twenty Night Vision Aids (NVA's) were also set up around the property, ensuring that all suitable features were covered.

3.6.1.6. The aerial photograph below shows where the NVA's were positioned along with their approximate field of view.



3.6.1.7. The photographs below show the view of each camera at the darkest point of the survey.





3.6.1.8. Moderate levels of bat activity were observed or recorded during this survey. The majority of the activity was recorded to the north-west of the survey area and along the access road to the south.

3.6.1.9. None of the surveyors observed bats emerge from the building, subsequent analysis of the video camera footage confirmed this to be the case.

3.6.1.10. The Anabats recorded a moderate amount of bat calls. The tables below demonstrate the species and numbers of calls recorded.

Species:	Number of calls:
Common Pipistrelle	177
Soprano Pipistrelle	23
Noctule	19
Whiskered/Brandt's	1

3.6.2. Dusk Emergence 18th June 2025.

3.6.2.1. The Second bat dusk emergence survey was led by Ruth Georgiou, who holds a CL18 Natural England survey licence in respect of bats (2015-11823-CLS-CLS).

3.6.2.2. The survey was carried out by 4 surveyors. The evening was partially cloudy but dry with a temperature of 16°C at the start of the survey and 15°C at the end of the survey. There was a very slight occasional light breeze measuring a 2 on the Beaufort scale. Sunset was at 21:38 and the survey lasted from 21:23 until 23:08.

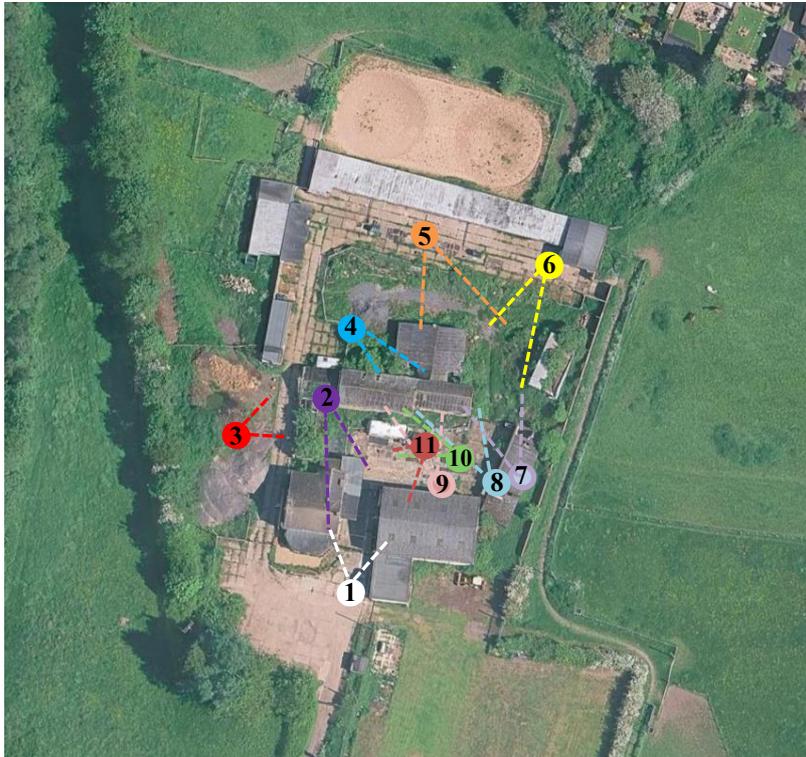
3.6.2.3. Surveyors were equipped with Batbox Duet detectors and two-way radios. Four Anabat Ranger static recorders were deployed around the site to record bat activity for subsequent computer analysis using Anabat Insight Software.

3.6.2.4. The aerial photograph below shows where the Surveyors (S) and Anabats (AB) were located throughout the survey.



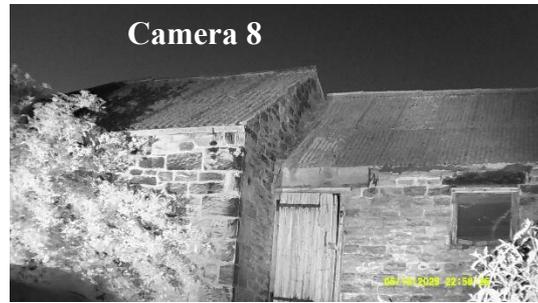
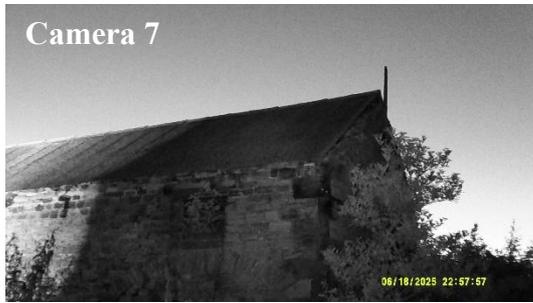
3.6.2.5. Eleven Night Vision Aids (NVA's) were also set up around the property, ensuring that all suitable features were covered.

3.6.2.6. The aerial photograph below shows where the NVA's were positioned along with their approximate field of view.



3.6.2.7. The photographs below show the view of each camera at the darkest point of the survey.





3.6.2.8. Moderate levels of bat activity were observed or recorded during this survey. The first bat was seen by Surveyor 1 at 22:25. From this time occasional bats, predominantly Common Pipistrelles, were observed passing and foraging on the site.

3.6.2.9. None of the surveyors observed bats emerge from the building, subsequent analysis of the video camera footage confirmed this to be the case.

3.6.2.10. The Anabats recorded a moderate amount of bat calls. The tables below demonstrate the species and numbers of calls that each Anabat recorded.

Species:	Number of calls:
Common Pipistrelle	194
Soprano Pipistrelle	11
Noctule	47
<i>Nyctalus</i> sp.	26

3.6.3. Dusk Emergence 9th July 2025.

3.6.3.1. The final dusk emergence survey was led by Sam White, who holds a CL18 Natural England survey licence in respect of bats (2024-11988-CL18-BAT).

3.6.3.2. The survey was carried out by 4 surveyors. The evening was partially cloudy but dry with a temperature of 18°C at the start of the survey and 17°C at the end of the survey. There was almost no breeze, registering 1 on the Beaufort scale. Sunset was at 21:33 and the survey lasted from 21:15 until 23:05.

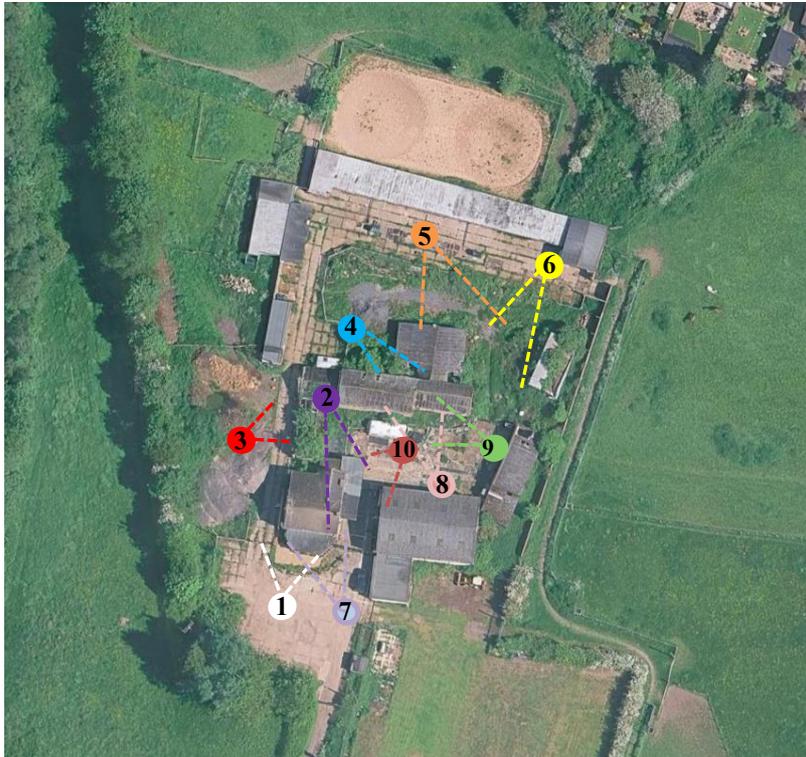
3.6.3.3. Surveyors were equipped with Batbox Duet detectors and two-way radios. Four Anabat Ranger static recorders were deployed around the site to record bat activity for subsequent computer analysis using Anabat Insight Software.

3.6.3.4. The aerial photograph below shows where the Surveyors (S) and Anabats (AB) were located throughout the survey.



3.6.3.5. Ten Night Vision Aids (NVA's) were also set up around the property, ensuring that all suitable features were covered.

3.6.3.6. The aerial photograph below shows where the NVA's were positioned along with their approximate field of view.



3.6.3.7. The photographs below show the view of each camera at the darkest point of the survey.





3.6.3.8. Low levels of bat activity were observed or recorded during this survey. The majority of the activity was recorded to the north-west of the survey area and along the access road to the south.

3.6.3.9. None of the surveyors observed bats emerge from the building, subsequent analysis of the video camera footage confirmed this to be the case.

3.6.3.10. The Anabats recorded a low amount of bat calls. The tables below demonstrate the species and numbers of calls recorded.

Species:	Number of calls:
Common Pipistrelle	192
Soprano Pipistrelle	6
Noctule	150
Nyctalus sp.	40

3.6.4. Overall, no bats were found to emerge from any of the buildings on site throughout any of the surveys.

3.7. Bat Activity Surveys.

3.7.1. As the proposed development could affect bat foraging habitat, especially where adjacent to the woodland, the decision was made to assess the bat activity across the site.

3.7.2. Automated Surveys.

3.7.2.1. Following instruction in April 2024, automated surveys were conducted in April, May, June, July, August, September and October.

3.7.2.2. Anabat Express units were used, with one unit positioned along the western boundary of the site and the other within a central hedgerow, which will be removed by the development.

3.7.2.3. The units were left in place for a minimum of five nights in line with good practice guidance, however where possible this was extended. The weather conditions for each period are shown below.

	24 th – 29 th April 2025	12 th – 18 th May 2025	8 th – 13 th June 2025	22 nd – 30 th July 2025	14 th – 19 th August 2025	10 th – 19 th September 2025	14 th – 19 th October 2025
Average temperature (°C)	14.6	15.1	17.6	17.4	20.4	14.5	9.6
Average wind speed (mph)	6.4	8.8	11.4	11.5	7.6	10.9	4.2
Average rainfall (mm)	0	0	0.2	0.1	0	1	0

3.7.2.4. With particular note to October, whilst throughout this period the temperature in particular was below the ideal temperature for bats through the night, this is indicative of these months and therefore does show a good sample of the bat activity on the site at this time of year.

3.7.2.5. The locations of the Anabat Express units is shown on the plan below. These locations were chosen to cover the areas of highest potential for foraging bats.



3.7.2.6. The total recordings for each species are listed below. This table has been collated using the highest count over five days, to allow for unbiased analysis where survey lengths are inconsistent.

3.7.2.7. The myotis species were found to be a combination of whiskered/Brandt's where calls were identifiable, however the majority of calls were not suitable to be taken to species level, which is challenging with myotis species when recorded in Zero Crossing (ZC) formats.

3.7.2.8. Likewise, separating *Nyctalus* calls is particularly difficult, especially in a cluttered environment, where calls become FM-QCF. In this case, there was no evidence to suggest that the *Nyctalus* sp. calls were anything other than ambiguous noctule calls, however these were recorded as *Nyctalus* as they could not be positively confirmed as noctule. There were no social calls or definitive Leisler's QCF calls.

3.7.2.9. Finally, AB2 in October failed due to a technical fault. This is not considered a limitation to the survey data when considering the low number of bats recorded and similarities between other months.

Species	24 th – 29 th April 2025		12 th – 18 th May 2025		8 th – 13 th June 2025		22 nd – 30 th July 2025		14 th – 19 th August 2025		10 th – 19 th September 2025		14 th – 19 th October 2025	
	AB1	AB2	AB1	AB2	AB1	AB2	AB1	AB2	AB1	AB2	AB1	AB2	AB1	AB2
Anabat Location	AB1	AB2	AB1	AB2	AB1	AB2	AB1	AB2	AB1	AB2	AB1	AB2	AB1	AB2
Common pipistrelle <i>Pipistrellus pipistrellus</i>	303	18	29	46	386	141	237	20	111	17	35	20	13	X
Soprano pipistrelle <i>Pipistrellus pygmaeus</i>	28	3	4	6	51	3	62	20	35	29	21	55	22	X
Myotis <i>Myotis sp.</i>	7	1	6	2		7	14	2	7	1	3	2	5	X
Whiskered/Brandt's <i>Myotis mystacinus/</i> <i>Myotis brandti</i>			1		1		2		3		1	1		X
Noctule <i>Nyctalus noctula</i>	1	6			56	33	20	6	2		1	3		X
Nyctalus <i>Nyctalus sp.</i>	46	1			199	4	17	11	6	7	32	5		X
Brown long-eared <i>Plecotus auritus</i>							2	1					1	X
Total calls recorded	378	29	40	54	693	188	364	60	164	54	93	96	42	X

3.7.2.10. The data collected showed the majority of the bat activity within the site to be found in the north-west, closer to the adjacent woodland. It should be noted that the calls above were record across five days and as such, the average number of calls per night was particularly low, suggesting the site is not regularly used by a large number of foraging bats.

3.7.2.11. Throughout the surveys, the peak months for activity were found to be April, June, July and August.

3.7.3. Manual Activity Survey.

3.7.3.1. Manual activity surveys were undertaken to supplement the information collected from the automated activity surveys. These were undertaken in the form of Night-time Bat Walkovers (NBWs) in each season.

3.7.3.2. Each of the surveys commenced with a 30 minute pause in one place to observe activity, followed by a steady walk around the site with occasional pauses to observe activity, in line with the Bat Conservation Trust Good Practice Guidelines 4th Edition. This was done at the shown start point, chosen as the most likely commuting point for bats over the site.

3.7.3.3. Each of the NBWs commenced directly at sunset, given the knowledge that the site is used by noctule, as a species that regularly emerges at sunset, it was essential to not delay the start time, as suggested within the Bat Conservation Trust Good Practice Guidelines 4th Edition, which allows delaying the start time by up to 1 hour after sunset.

3.7.3.4. The route followed by the NBW is shown below. Each NBW has been summarised with notes from the surveyor and a map showing any notable foraging activity.



3.7.3.5. Spring Nighttime Bat Walkover 19th May 2025.

3.7.3.5.1. The initial NBW was undertaken on 19th May 2025. Weather conditions on the night were fine and dry with a temperature of 14°C at sunset, which was 21:07. There was a slight breeze, registering 1 on the Beaufort Wind Scale.

3.7.3.5.2. There was extremely low activity recorded throughout the survey, with common pipistrelle recorded passing over at three specific locations.

3.7.3.5.3. The species recorded during the survey along with notable foraging or commuting routes have been recorded below.



Species	Number of calls recorded
Common pipistrelle <i>Pipistrellus pipistrellus</i>	3

3.7.3.5.4. Overall, activity was very low, in line with the automated survey data recorded.

3.7.3.6. Summer Nighttime Bat Walkover 19th August 2025.

3.7.3.6.1. The summer NBW was undertaken on 19th August 2025. Weather conditions on the night were fine and dry with a temperature of 16°C at sunset, which was 20:25. There was a slight breeze, registering 2 on the Beaufort Wind Scale. During this survey, the route was walked in reverse.

3.7.3.6.2. Throughout the survey only two bats were identified, a soprano pipistrelle (1) and Noctule (2). Both bats were commuting over the site and were not foraging.

3.7.3.6.3. The species recorded during the survey along with notable foraging or commuting routes have been recorded below.



Species	Number of calls recorded
Soprano pipistrelle <i>Pipistrellus pygmaeus</i>	1
Noctule <i>Nyctalus noctula</i>	1

3.7.3.6.4. Overall, as with the initial survey the number of bats recorded through the survey was low and shows that the site is not used by a large number of foraging bats.

3.7.3.7. Autumn Nighttime Bat Walkover 9th October 2025.

3.7.3.7.1. The autumn NBW was undertaken on 9th October 2025. Weather conditions on the night were overcast but dry with a temperature of 12°C at sunset, which was 18:30. There was a slight breeze, registering 2 on the Beaufort Wind Scale.

3.7.3.7.2. Activity during this survey was marginally higher than before, but again restricted to the same locations and in very small numbers.

3.7.3.7.3. The species recorded during the survey along with notable foraging or commuting routes have been recorded below.



Species	Number of calls recorded
Common pipistrelle <i>Pipistrellus pipistrellus</i>	2
Soprano pipistrelle <i>Pipistrellus pygmaeus</i>	2

3.7.3.7.4. Overall, the activity through this survey was higher than previous. This is likely to be due to a transitional roost being in close proximity to the survey area, which is further backed up from the findings of the dusk emergence results. Again the survey shows that the majority of the boundary of the site is used by foraging bats.

3.7.4. The combination of automated and manual activity surveys found that the site is rarely used by any more than occasional bats with no consistent high levels of use.

3.8. Breeding Bird Surveys.

3.8.1. Given the close proximity of the site to the Dearne Valley Wetlands, it was deemed appropriate to do breeding bird surveys to establish the species present.

3.8.2. Methodology

3.8.2.1. Prior to visiting the site, the survey area was cross referenced to maps and aerial photographs to give a general idea of the habitats and potential issues within the area and to identify potential access and walking routes.

3.8.2.2. Transects were mapped in advance of the site visit on an aerial map. Transect areas visited all areas of the quarry and the proposed extension areas and took in all broad habitat types.

3.8.2.3. Six visits were carried out to monitor the use of the site by breeding birds. The visits were carried out between March and August and spaced at least two weeks apart. Surveys were carried out in fair weather conditions, avoiding heavy rain, strong winds or poor visibility, and were carried out between half an hour before sunrise and 10:00am and one in the final hours of the day extending till at least an hour after sunset.

3.8.2.4. All species detected by song, call, or visually were identified to species and their locations recorded on a field-map. The activity of each registration was assigned a behaviour code in accordance with standard BTO methodology.

3.8.2.5. Behaviour indicating breeding on site included displaying or singing; if nests, eggs or young were found; adults observed repeatedly alarm calling; if distraction displays were recorded; adults carrying food or nesting material; and, if territorial disputes were observed.

3.8.2.6. All surveys were carried out in line with the Chartered Institute of Ecological and Environmental Management (CIEEM) survey standards and advice.

3.8.2.7. The first and second surveys were carried out by Jess Brown BSc (Hons) MSc ACIEEM FRGS. Since 2018 Jess has had experience in a professional capacity as an Ecologist carrying out protected species and habitat surveys. Jess holds a Natural England survey licences in respect of bats, great crested newts, and barn owls, and a Scottish Natural Heritage survey licence in respect of barn owls. She has also

successfully completed a number of courses run by FSC and CIEEM in the relative protected species and carrying out site assessments using vegetation and has completed a MSc in Biological Recording. Jess is an Associate member of the Chartered Institute of Ecology and Environmental Management (CIEEM).

3.8.2.8. The third and fourth surveys were carried out by Assistant Ecologist Lauren Roy. Lauren has gained experience carrying out a wide range of ecology and species-specific surveys, including preliminary ecological appraisals (PEA), dusk emergence surveys, transects, preliminary roost assessments (PRA), badger surveys, breeding, wintering and nocturnal bird surveys. She has also undertaken training on plant identification including non-native invasive species and specific species including hazel dormouse, bat and badger. Lauren holds a BSc (Hons) in Biological Sciences from the University of Liverpool and has previous experience surveying birds and bats throughout her studies and work.

3.8.2.9. The fifth and sixth surveys were carried out by ecologist Xanthe Walker. Xanthe has studied Wildlife and Conservation since 2016 and acquired a BA in Wildlife Media from the University of Cumbria in 2021. She has previous experience working with bats and with badgers throughout her work and studies. Since joining the company in June 2022, she has gained experience in a wide range of surveys including preliminary ecological appraisal (PEA), preliminary roost assessment (PRA), biodiversity net gain assessments and species-specific surveys including badger, bat, great crested newt and breeding bird surveys. Xanthe is a qualifying member of the Chartered Institute of Ecological and Environmental Management (CIEEM).

3.8.2.10. A summary table and maps of all species recorded during these surveys are provided in Appendix X to XVI.

3.8.3. *Breeding bird survey – visit 1*

3.8.3.1. The first visit was carried out on 29th April 2025. The weather conditions were good with no rain, a gentle breeze not exceeding Beaufort 2, sunny and good visibility. The survey started at 05:35 and finished by 08:00.

3.8.3.2. Bird species recorded during this survey comprised species typical of a semi-rural residential property, comprising a mix of common garden, woodland, and farmland species. Species included the red-listed species song thrush and common gull, the amber-listed dunnock, whitethroat, woodpigeon, and wren, and the green-listed

species blackbird, blue tit, carrion crow, and chiffchaff, coal tit, feral pigeon, goldcrest, great tit, grey heron, jackdaw, magpie, pheasant and robin.

3.8.3.3. The habitats on the site provided suitable nesting habitats for most of these species, apart from common gull, pheasant, and grey heron, which were likely to be commuting or foraging over the site.

3.8.4. *Breeding bird survey – visit 2*

3.8.4.1. The second visit was carried out on 29th May 2025. The weather conditions were good with no heavy rain, a gentle breeze not exceeding Beaufort 2, sunny and good visibility. The survey started at 05:30 and finished by 08:00.

3.8.4.2. Bird species recorded during this survey comprised species typical of a semi-rural residential property, comprising a mix of common garden, woodland, and farmland species. Three additional species were recorded during this survey but not in the first survey, including chaffinch, goldfinch, house sparrow, and swallow. Chaffinch, goldfinch, and swallow are all green-listed species. House sparrow is a red-listed species.

3.8.5. *Breeding bird survey – visit 3*

3.8.5.1. The third visit was carried out on 25th June 2025. The weather conditions were good with no heavy rain, a gentle breeze not exceeding Beaufort 2, a cloud coverage of around 90% and a temperature of 17°C at the start of the survey. The survey started at 04:50 and finished at 08:00.

3.8.5.2. Bird species recorded during this survey comprised species typical of a semi-rural residential property, comprising a mix of common garden, woodland, and farmland species. Five additional species were recorded during this survey which were not recorded during the previous two. These include blackcap and garden warbler, which are green-listed species, reed bunting and rook, which are amber-listed species, and linnet, which is a red-listed species.

3.8.5.3. The habitats on the site provided suitable nesting habitats for most of these species, and a juvenile robin and blue tit were identified during this survey.

3.8.6. *Breeding bird survey – visit 4*

3.8.6.1. The fourth visit was carried out on 10th July 2025. The weather conditions were sunny with no rain, a gentle breeze not exceeding Beaufort 2, a cloud coverage of around 10% and a temperature of 16°C at the start of the survey. The survey started at 05:20 and was completed by 08:00.

3.8.6.2. Bird species recorded during this survey comprised species typical of a semi-rural residential property, comprising a mix of common garden, woodland, and farmland species. No additional birds were identified during this survey that were not identified in previous surveys.

3.8.6.3. The habitats on the site provided suitable nesting habitats for most of the species identified, and juvenile birds were identified, including two robins, one great tit, one blue tit and one reed bunting.

3.8.7. Breeding bird survey – visit 5

3.8.7.1. The fifth visit was carried out on 15th July 2025. The weather conditions were cloudy with scattered showers, a moderate breeze not exceeding Beaufort 3 and a temperature of 16°C at the start of the survey. This was a dusk survey, beginning at 20:55 and finishing at 23:00.

3.8.7.2. Bird species recorded during this survey comprised species typical of a semi-rural residential property, comprising a mix of common garden, woodland, and farmland species. Two additional species were recorded during this survey that were not identified in previous surveys. These include barn owl which is a green-listed species and swift which is a red-listed species.

3.8.7.3. The habitats on the site provided suitable nesting habitats for most of the species identified, although swifts are not considered to be using the site to nest.

3.8.8. Breeding bird survey – visit 6

3.8.8.1. The sixth and final visit was carried out on 22nd July 2025. The weather conditions were sunny with short spells of moderate rain towards the end of the survey. The wind did not exceed Beaufort 3 and the temperature was 17°C at the start of the survey. The survey started at 05:30 and was completed by 08:15.

3.8.8.2. Bird species recorded during this survey comprised species typical of a semi-rural residential property, comprising a mix of common garden, woodland, and farmland species. One additional species was recorded during this survey that was not identified during previous surveys. This was sparrowhawk, an amber-listed species.

3.8.8.3. The habitats on the site provided suitable nesting habitats for most of the species identified, although it is unlikely that sparrowhawk will be using the site to nest.

3.9. Dearne Valley Wetland SSSI

3.9.1. The client received the following correspondence from the Local Planning Authority.

“The proposals site is located within a Site of Special Scientific Interest (SSSI) Impact Risk Zone of the Dearne Valley Wetlands SSSI. Consultation with Natural England will be required for a residential development of 100 units or more. The applicant’s ecologist should consider the potential impact of the proposals upon the nearby SSSI parcels, i.e. increased visitor pressure, impact from pollution, etc.”

As such, the below has been prepared to assess the potential impacts on the Dearne Valley Wetlands SSSI.

3.9.2. The citation for Dearne Valley Wetlands SSSI has been appended to this report, however the citation states the ‘Reasons for notification’ as:

“Dearne Valley Wetlands SSSI is of special interest for the following nationally important features:

- Breeding gadwall *Mareca strepera*, shoveler *Spatula clypeata*, garganey *Spatula querquedula*, pochard *Aythya ferina*, bittern *Botaurus stellaris*, black-headed gull *Chroicocephalus ridibundus* and willow tit *Poecile montanus klienschmidtii*.
- Non-breeding gadwall *Mareca strepera* and shoveler *Spatula clypeata*.
- Diverse assemblages of breeding birds of Lowland damp grasslands, Lowland scrub and a mixed assemblage of Lowland open waters and their margins and Lowland fen.”

3.9.3. Whilst visitor numbers for the entire SSSI, or even the closest sections of it, are not available, Capper 2019¹ states that visitor numbers at Old Moor, one of the RSPB reserves within the SSSI is over 100,000 per year. Therefore, the proposed development is expected to have no significant impact on the visitor numbers for the SSSI, given the small scale when compared to the visitor numbers.

3.9.4. The closest area of the Dearne Valley Wetlands SSSI is Wombwell Ings, a reserve managed by the RSPB. This would be the area most likely to be utilised by any residents from the new development.

3.9.4.1. Wombwell Ings has clearly established footpaths and walking routes easily capable of handling the additional capacity of the development, which is small in scale.

3.9.5. The other potential impact on the SSSI could be through pet ownership, in particular domestic cats *Felis catus*. The average domestic cat will stay within a 78m radius of their home at any given time², with the SSSI being over 600m from the survey area, there will be no noticeable increase in predation of bird species within the SSSI by domestic cats.

3.9.6. The comments from the LPA ask for pollution to be considered, this is outside of the remit of an Ecological Impact Assessment and would likely require specialist input. However, given that the site is located in close proximity to existing settlements, new developments and the Manvers Business Park. It is considered highly unlikely that this specific development would have any significant influence on the exposure of the SSSI to pollution.

3.9.7. Therefore, considering the above, it is not expected that the development would have any noticeable impact on Dearne Valley Wetlands SSSI.

3.10. Biodiversity Net Gain Offsetting Area.

¹ Capper, Matthew (2019). "Great bird reserves: RSPB Old Moor and the Dearne Valley". *British Birds*. **112** (2): 70–89.

² Robertson, Danielle. "What is the average size of a cat's home range?" <https://lostpetresearch.com/2011/01/what-is-the-average-size-of-a-cats-home-range> (Accessed 23.04.2025)

3.10.1. With the current plans for the site, it has not been possible to achieve the required 10% net gain within the site. As such, the client has explored offsite opportunities within their current landownership.

3.10.2. An area of grassland and sparsely vegetated land has been identified as being suitable for enhancements, approximately 310m to the south of the development site. The identified land is shown below marked in blue.



3.10.3. The site lies directly adjacent to the River Dove and an unnamed watercourse, as such, to prevent a need for any improvement of watercourse units, the offsetting will occur over 10m from either bank top.

3.10.4. A species list for the habitats on site has been appended to this report. However, broadly this comprises a northern section of other neutral grassland (g3c), a central area of sparsely vegetated land (S) and a southern area of other neutral grassland (g3c), but this time featuring more scattered scrub. The photographs below show a general view of the offsetting area.



3.10.5. Whilst some early successional plant species are present, the habitats do not represent Open Mosaic Habitat on Previously Developed Land as each habitat has a clear defined boundary and is over 0.25ha in size. A map of the habitats on the site has been appended to this report.

3.10.6. At this stage, it is only required to show that 10% net gain is achievable. This would be possible through either enhancing the current habitats present or completely replacing these. In either case, the use of the site for offsetting would be beneficial to the Dearne Valley Green Heart Nature Improvement Area.

3.10.7. Other benefits include enhanced ecological functionality for species present within the River Dove and potentially bird species present in Dearne Valley Wetlands SSSI.

3.10.8. The baseline biodiversity score for the offsetting area is shown below.

Habitat Type	Extent (ha)	Distinctiveness	Condition Assessment	Biodiversity Units
Other Neutral Grassland	1.4590	Medium	Poor	2.6
Sparsely Vegetated Land – Tall Forbs	0.5658	Low	Poor	6.71
Total	2.0248			9.31

3.10.9. The below shows an example of how these habitats could be improved in a practical way by enhancing the grassland, planting of scrub and trees to offset the units lost by the development and improve the ecological functionality of the site.

Enhanced Habitats

Habitat Type	Extent (ha)	Distinctiveness	Condition Assessment	Biodiversity Units
Other Neutral Grassland	1.4590	Medium	Good	14.58

Created Habitats.

Habitat Type	Extent (ha)	Distinctiveness	Condition Assessment	Biodiversity Units
Mixed Scrub	0.4	Medium	Good	3.87
Rural trees (30no.)	0.1221	Medium	Moderate	0.43
Other Neutral Grassland	0.1658	Medium	Good	1.60
Total				5.90

3.10.10. The above conditions are realistic and achievable with a proactive approach to habitat management and would meet the trading rules required to offset the onsite losses.

3.10.11. This area could then be encapsulated by hedgerow to offset the minor losses of linear units within the development. Approximately 500m of native hedgerow at moderate would be required to achieve a 13% gain in linear units.

4. ASSESSMENT OF IMPACTS, MITIGATION AND RESIDUAL EFFECTS.

4.1. Designated Sites.

4.1.1. Assessment.

4.1.1.1. There were no statutory or non-statutory designated sites within, or adjacent to, the survey area. However, the site does lie within Impact Risk Zone (IRZ) 3 of the Dearne Valley Wetlands SSSI. Potential impacts of the development on Dearne Valley Wetlands SSSI have been discussed further in section 3.9 of this report.

4.1.1.2. The survey area falls within the Dearne Valley Green Heart (DVGH) Nature Improvement Area. Nature Improvement Areas are large areas targeted for improvement, in this case centered around the River Dearne. The area is targeted to improve ecological functionality of the land surrounding the River Dearne. The existing fields comprise modified grassland, which is already a low value habitat. The development of the site, whilst removing this grassland, will provide enhanced opportunities for species such as birds and bats through the introduction of gardens and boxes on houses.

4.1.1.3. Furthermore, Nature Improvement Areas are broad in scope, at a landscape scale. This development individually will not be of major detriment to the ecological functionality of the landscape and as discussed above, has potential to improve the functionality for many species with appropriate enhancements in place. Additionally, the proposed development is subject to Biodiversity Net Gain and has a statutory requirement to achieve a 10% increase in units. With the mitigation hierarchy being followed, this will be within the catchment of the DVGH, benefiting the area.

4.1.2. Mitigation.

No further mitigation in relation to designated sites is required.

4.1.3. Residual Effects.

The proposed development will have **no negative ecological impact** on any designated sites.

4.2. Habitats.

4.2.1. Assessment.

Baseline biodiversity calculations have been carried out using the Statutory Metric tool, the current metric at the time of writing this report. It should be noted that given the time of year the survey was undertaken, the below is a guideline only.

4.2.2. Habitat Units.

The baseline area habitat calculations include all habitats that lie within the red line boundary of the survey area. The scores for each habitat and a total are shown below.

Habitat Type	Extent (ha)	Distinctiveness	Condition Assessment	Biodiversity Units
Other Neutral Grassland	0.1876	Medium	Poor	0.86
Modified Grassland	5.8312	Low	Poor	13.41
Hawthorn Scrub	0.0056	Medium	Moderate	0.05
Bramble Scrub	0.0402	Medium	N/A	0.18
Mixed Scrub	0.3622	Medium	Moderate	3.33
Developed Land Sealed Surface	0.1339	V. Low	N/A	0
Developed Land Sealed Surface (Buildings)	0.1604	V. Low	N/A	0
Artificial Unvegetated, Unsealed Surface	0.0620	V. Low	N/A	0
Sparsely Vegetated Land	0.2337	Low	Moderate	1.08
Individual Trees	0.0041	Medium	Poor	0.02
Individual Trees	0.0855	Medium	Moderate	0.79
Individual Trees	0.0326	Medium	Good	0.45
Total	7.0168 (excl trees)			20.17

4.2.3. Linear Units.

The baseline linear calculations include all habitats that lie within the red line boundary of the survey area. The scores for each habitat and a total are shown below.

Habitat Type	Extent (km)	Distinctiveness	Condition Assessment	Biodiversity units
Native Hedgerow w/ Trees	0.175	Medium	Moderate	1.61
Native Hedgerow	0.600	Low	Good	4.14
Total	0.875			5.75

4.2.4. Watercourse Units.

The development falls over 10m from the riparian zone of any watercourse and therefore, no watercourse units are present.

4.2.5. Mitigation.

4.2.5.1. It is required by the Local Planning Authority that the scheme shows the ability to achieve 10% gain in biodiversity units. Exact landscaping details do not need to be shown at this stage.

4.2.5.2. The below tables show both the created and retained habitats for the site. At this point, as no landscaping plan has been produced and the application is outline only, a 70/30 developed land vs vegetated gardens split has been applied, in line with the Statutory Metric User Guide. The onsite development is sensitive, with large areas of grassland and scattered trees to be planted, as can be seen in the proposed development layout.

Created area habitat

Habitat Type	Area (ha)	Condition Assessment	Distinctiveness	Biodiversity Units
Modified Grassland	2.6625	Moderate	Low	7.47
Mixed Scrub	0.0457	Moderate	Medium	0.35
Developed land sealed surface	3.5695	N/A	V. Low	0

Vegetated Gardens	1.5297	N/A	Low	2.95
Rural Tree	0.2514	Moderate	Medium	0.88
Total	7.02 (Excl trees)			11.66

Retained linear units.

Habitat Type	Extent (km)	Distinctiveness	Condition	Biodiversity units
Native Hedgerow w/ Trees	0.175	Medium	Moderate	1.61
Native Hedgerow	0.433	Low	Good	2.99
Total	0.608			4.6

4.2.5.3. As shown above, the proposals will lead to a loss of 42.23% of area units (-8.52) and 20.04% linear units (-1.15) if off-site solutions were not used.

4.2.5.4. However, using the offsite solutions proposed in section 3.10 of this report, the final results will be as shown below.

FINAL RESULTS		
Total net unit change (Including all on-site & off-site habitat retention, creation & enhancement)	<i>Habitat units</i>	2.64
	<i>Hedgerow units</i>	0.77
	<i>Watercourse units</i>	0.00
Total net % change (Including all on-site & off-site habitat retention, creation & enhancement)	<i>Habitat units</i>	13.09%
	<i>Hedgerow units</i>	13.43%
	<i>Watercourse units</i>	0.00%
Trading rules satisfied?	Yes ✓	

4.2.6. Residual Effects.

At this point it has been shown that through the use of off-site offsetting using land in the same ownership, the development can meet and exceed the 10% required uplift in biodiversity units. As such, there will be **no negative impact** on biodiversity units by the development.

4.3. Species.

4.3.1. Roosting Bats.

4.3.1.1. Assessment

Following the initial Preliminary Ecological Appraisal, a suite of dusk emergence surveys were undertaken. No bats were found to be roosting within the buildings on site.

4.3.1.2. Mitigation

Whilst no bats were found during the surveys of the buildings, individual opportunistic bats may roost almost anywhere and as such, the workforce will take due care through the demolition of the buildings on site. If at any point a bat is found, works will cease and further advice sought.

4.3.1.3. Residual Effect

With the above in place and proposed enhancements there will be **no negative residual impact** on roosting bats by the proposed works.

4.3.2. Foraging and Commuting Bats

4.3.2.1. Assessment

Both automated and manual activity surveys were conducted and found there to be low levels of foraging and commuting bats within the survey area.

4.3.2.2. Mitigation

4.3.2.2.1. The proposed plans for the site retain the habitat most used by foraging and commuting bats (Hedgerow with trees). In addition, the linked residential gardens created will absorb the foraging levels on the site.

4.3.2.2.2. The majority of the species recorded include pipistrelle species, these are typically light tolerant and are unlikely to be affected by additional lighting, however no lighting will be directed at the western boundary of the site.

4.3.2.2.3. Anecdotally, the improvement of habitats within the offsetting area would also almost certainly provide an improvement for foraging and commuting bats.

4.3.2.3. Residual Effect

Therefore, there will be **no negative impact** on foraging and commuting bats by the proposed works.

4.3.3. Nesting Birds.

4.3.3.1. Assessment.

4.3.3.1.1. The vegetation within the survey area was assessed as suitable for nesting birds. Any site clearance works carried out during the nesting bird season could have a high impact on nesting birds.

4.3.3.1.2. Breeding bird surveys were undertaken and found that the large majority of bird species recorded are using the woodland on and adjacent to the site. The species identified were typically garden birds that would continue to use the site after the works are completed. No bird species listed on Schedule 1 of the Wildlife and Countryside Act 1981 were found within the survey area during these surveys.

4.3.3.1.3. A barn owl was recorded within Building 2 during all three dusk emergence surveys and as such, the species is known to be present on the site. Whilst no nesting activity was recorded, the buildings on site are currently suitable for nesting barn owl.

4.3.3.1.4. The habitats on site were not assessed as suitable for wintering birds. Lapwing, which was mentioned in consultation with the LPA typically roost in wetter habitats. Should any wintering birds be present, these would be expected to be absorbed into the wider landscape, including the improvements in the BNG offsetting area.

4.3.3.2. Mitigation.

4.3.3.2.1. All vegetation clearance will be carried out outside the nesting bird season or will be preceded by a nesting bird survey carried out by a suitably experienced ecologist immediately before clearance. Any active nests found will be left undisturbed until the young have fledged.

4.3.3.2.2. Two barn owl boxes will be integrated into buildings within the site following the development. This is in accordance with good practice guidelines provided by the Barn Owl Trust to provide a lasting nesting opportunities for the species on the site.

4.3.3.2.3. The species identified within the breeding bird surveys will not require additional mitigation as these are expected to be absorbed within the gardens created by the development.

4.3.3.3. Residual Effects.

Therefore, the planned development will have a **no negative residual impact** on nesting birds.

4.3.4. Reptiles.

4.3.4.1. Assessment.

The site provided potential for reptile species and as such, a full suite of reptile surveys were undertaken to establish if any such species were present. These surveys found no reptile species to be present, although there is still potential for individual common reptiles to utilise the site.

4.3.4.2. Mitigation.

Despite the results of the surveys, given the suitability of the habitat present, a precautionary method statement will be drawn up to cover the clearance of the site.

4.3.4.3. Residual Effects.

Therefore, the planned development will have a **no negative residual impact** on reptile species providing the precautions outlined within the precautionary method statement are followed with due care by the workforce.

4.3.5. Hedgehogs.

4.3.5.1. Assessment.

There is potential for hedgehogs to be present within the survey area, particularly where piles of refugia are present and around the boundaries of the site.

4.3.5.2. Mitigation.

The precautions within the above recommended method statement for reptiles will also function for hedgehogs. 13cm x 13cm gaps will be left at the bases of garden fences to allow for the passage of small mammals and gates will be raised at least 15cm.

4.3.5.3. Residual Effects.

Providing the above precautions are followed, there will be **no negative residual impact** on hedgehogs by the development.

5. COMPENSATION AND ENHANCEMENT MEASURES.

5.1. Under the terms of National Planning Policy Framework, biodiversity enhancement measures should be provided within the development.

5.2. Integrated bat, bee bricks and universal swift boxes will be included within 10% of the houses within the survey area. This will represent a dramatic uptick in roosting opportunities on the site in particular and will be functionally linked to the adjacent woodland.

5.3. Whilst not a direct enhancement, should the off-site area be enhanced for Biodiversity Net Gain, this habitat would improve the ecological functionality of that area and is functionally linked to the river corridor.

Prepared by:	
Sam White BSc (Hons), ACIEEM	Date: 17 th November 2025

Checked by:	
Ruth Georgiou. BSc, MCIEEM.	Date: 24 th November 2025

6. REFERENCES.

- Amphibian and Reptile Groups of the United Kingdom (2010) *ARG UK Advice Note 5: Great Crested Newt Habitat Suitability Index*. ARGUK.
- Baker, J., Beebee T., Buckley, J., Gent, A. and Orchard, D. (2011). *Amphibian Habitat Management Handbook*. Amphibian and Reptile Conservation, Bournemouth.
- Bat Tree Habitat Key (2018) *Bat Roosts in Trees: a guide for identification and assessment for tree-care and ecology professionals*. Pelagic Publishing, Exeter
- Bird Survey & Assessment Steering Group (2023). *Bird Survey Guidelines for assessing ecological impacts, v.1.1.1*. Available at <https://birdsurveyguidelines.org> (Accessed 15/04/2024)
- Bright, P., Morris, P. & Mitchell-Jones, T. (2006) *The Dormouse Conservation Handbook*. English Nature, Peterborough.
- Chanin, P. (2003) *Ecology of the European Otter*. Conserving Natura 2000 Rivers Ecology Series No.10. English Nature, Peterborough.
- Chanin, P. (2003) *Monitoring the Otter Lutra lutra*. Conserving Natura 2000 Rivers Monitoring Series No.10. English Nature, Peterborough.
- CIEEM (2017) *Guidelines for Preliminary Ecological Appraisal, 2nd edition*. Chartered Institute of Ecology and Environmental Management, Winchester.
- CIEEM (2017) *Guidelines on Ecological Report Writing*. Chartered Institute of Ecology and Environmental Management, Winchester.
- Cresswell, P., Cresswell, W.J., and Woods, M. (1993) *The Country Life Guide to Artificial Badger Setts*. Country Life, London.
- Collins J. (ed.) 2023. *Bat Surveys for Professional Ecologist: Good Practice Guidelines (4th Edition)*. The Bat Conservation Trust, London.
- Dean, M., Strachan, R., Gow, D. and Andrews, R. (2016) *The Water Vole Mitigation Handbook* (Mammal Society Mitigation Guidance Series). Eds Fiona Mathews and Paul Chanin. Mammal Society, London.
- Department for Environment, Food & Rural Affairs (2024) *Biodiversity Net Gain*. Available at <https://www.gov.uk/government/publications/statutory-biodiversity-metric-tools-and-guides> (Accessed: 15/04/2024).
- Department for Environment, Food & Rural Affairs (2024) *Statutory Net Biodiversity Metric User Guide*. Available at <https://www.gov.uk/government/collections/biodiversity-net-gain> (Accessed: 15/04/2024).
- Department for Levelling Up, Housing and Communities (2023) *National Planning Policy Framework (NPPF)*. Available at <https://www.gov.uk/government/publications/national-planning-policy-framework--2> (Accessed: 15/04/2024).

Edgar, P., Foster, J. and Baker, J. (2010) *Reptile Habitat Management Handbook*. Amphibian and Reptile Conservation, Bournemouth.

English Nature (2001) *Great Crested Newt Mitigation Guidelines*. English Nature, Peterborough.

Froglife (1999) *Froglife Advice Sheet 10: reptile survey*. Froglife, London.

Gurnell, J., & Lurz, P. (2012) *Red Squirrel*. In: Cresswell, W.J., Birks, J.D.S., Dean, M., Pacheco, M., Trehella, W.J., Wells, D. and Wray, S. (2012). *UK BAP Mammals: Interim Guidance for Survey Methodologies, Impact Assessment and Mitigation*. The Mammal Society, Southampton.

Harris, S., Cresswell, P. and Jefferies D. (1989) *Surveying Badgers*. Occasional Publication No 9, The Mammal Society, London.

Langton, T.E.S., Beckett, C.L., and Foster, J.P. (2001), *Great Crested Newt Conservation Handbook*, Froglife, Halesworth.

Mitchell-Jones, A.J. (2004) *Bat Mitigation Guidelines*. English Nature, Peterborough.

Natural England (2022) *Hazel Dormice: Advice for making planning decisions*. Available at <https://www.gov.uk/guidance/hazel-dormice-advice-for-making-planning-decisions> (Accessed: 15/04/2024)

Natural England (2014) *Protected species and development: advice for local planning authorities*. (updated 2021) Available at: <https://www.gov.uk/guidance/protected-species-how-to-review-planning-applications> (Accessed: 05/03/2021).

Natural Environment and Rural Communities Act 2006 Available at <https://www.legislation.gov.uk/uksi/2019/579/contents/made> (Accessed: 15/04/2024).

Peay, S. (2003) *Monitoring the White-clawed Crayfish Austropotamobius pallipes*. Conserving Natura 2000 Rivers Monitoring Series No. 1. English Nature, Peterborough.

Stanbury, A. et al (2021) *The status of our bird populations: the fifth Birds of Conservation Concern in the United Kingdom, Channel Islands and Isle of Man and second IUCN Red List assessment of extinction risk for Great Britain*. *British Birds* 114: 723-747. Available at <https://britishbirds.co.uk/content/status-our-bird-populations> (Accessed 15/04/2024)

Joint Nature Conservation Committee (2004). *Common Standards Monitoring Guidance for Birds*. 2004 ed. JNCC, Peterborough.

The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 Available at <https://www.legislation.gov.uk/uksi/2019/579/contents/made> (Accessed: 15/04/2024).

The Protection of Badgers Act 1992 Available at <https://www.legislation.gov.uk/ukpga/1992/51/contents> (Accessed: 15/04/2024).

The Wildlife and Countryside Act 1981 (as amended). Available at <http://www.legislation.gov.uk/ukpga/1981/69> (Accessed: 15/04/2024).

UKHab Ltd (2023) *UK Habitat classification Version 2.0* Available at <https://www.ukhab.org>.

Appendix I. BAT INFORMATION.

Ecology

There are currently 18 species of bat residing in Britain, 17 of which are known to breed here. They are extremely difficult to identify in the hand and even more so in flight.

Many species appear to be diminishing in numbers, probably due to habitat change and shortage of food, caused by pesticides, as insects are their sole diet.

As their diet consists solely of insects, bats hibernate during the winter when their food source is at its most scarce. They will spend the winter in hollow trees, caves, mines and the roofs of buildings.

Certain species, particularly the pipistrelle (the commonest and most widespread British bat) can quickly adapt to man-made structures and will readily use these to roost and to rear their young.

Surveys

During walkover surveys, bat roosts can be identified by looking for:

- Suitable holes, cracks and crevices within any building, tree or other structure.
- Bat droppings along walls, window cills, or on the ground.
- Prey remains, such as insect wings.

Further investigations can be made using endoscopes, by carrying out aerial inspections of trees or by conducting bat activity surveys during dusk and dawn over summer months.

Legislation

Bats are protected under Appendix II and III of the Bern Convention (1982), Schedule 5 and 6 of the Wildlife and Countryside Act (1981), Annex IV of the Habitats Directive (some species under Annex II), Annex II of the Conservation of Habitats and Species

Regulations (2010) and EUROBATS agreement. Numerous species are also listed under section 41 of the Natural Environment and Rural Communities Act (2006) making them species of principal importance.

All bats and their roosts are therefore protected in the UK. This makes it an offence to kill, injure or take any bat, to interfere with any place used for shelter or protection, or to intentionally disturb any animal occupying such a place.

The UK has designated maternity and hibernacula areas as Special Areas of Conservation (SAC's) under the Habitats Directive. Implementation of the UK Biodiversity Action Plan also includes action for a number bat species and the habitats which support them.

Where development proposals are likely to affect a bat roost site, a licence is required from Natural England.

Appendix II. NESTING BIRD INFORMATION.

Ecology

The nesting season will vary according to the weather each year but generally commences in March, peaks during May and June and continues until September. It is also worth remembering that some birds nest in trees and scrub, but others are ground nesting or prefer man-made structures or buildings.

Surveys

Nesting bird surveys search for potential nest sites in vegetation, buildings etc. Potential nesting sites are observed over a suitable period of time for bird movements or calling male birds that would indicate the presence of a nest. The presence of a nest can be identified from the field signs without the necessity to see the nest itself, thereby avoiding any disturbance of the nests. The best way to avoid this issue is to plan for vegetation clearance to be carried out outside the bird-nesting season.

Legislation

Nesting birds are protected under The Wildlife and Countryside Act 1981.

Part 1. -(1) Of the Act states that: - If any person intentionally: - kills, injures or takes any wild bird; takes, damages or destroys the nest of any wild bird while that nest is in use or being built; or takes or destroys an egg of any wild bird, he shall be guilty of an offence.

Part 1. -(5) of the Act states that: - If any person intentionally: - disturbs any wild bird included in Schedule 1 while it is building a nest or is in, on, or near a nest containing eggs or young; or disturbs young of such a bird, he shall be guilty of an offence and liable to a special penalty.

The Countryside and Rights of Way Act 2000 amends the above by inserting after “intentionally” the words “or recklessly”.

Appendix III. REPTILE INFORMATION.

Ecology

There are five main species of reptile that reside in the UK; Common or Viviparous Lizard (*Lacerta vivipara*); Sand Lizard (*Lacerta agilis*); Slow Worm (*Anguis fragilis*); Grass Snake (*Natrix natrix*) and Adder (*Vipera berus*). The Adder is the only native species that is venomous although this is rarely harmful to humans.

Reptiles occupy a wide range of habitats including woodland, marshes, heathland, moors, sand dunes, hedgerows and bogs. Sand Lizards are confined to moorland and coastal sand dunes where they lay their eggs in the warm sand. The range of the Sand Lizard in the UK is therefore very limited. Slow Worms can be found in a wide variety of habitats throughout Britain and is the most likely reptile to be found in urban and suburban environments.

Maintaining the right body temperature is vital to reptiles' survival. In the morning, they find a warm basking site to heat up their bodies, then later they may move back into the shade because they do not sweat and have to be careful not to overheat. During hot summers, Adders will try to move to damper, cooler sites.

Over winter reptiles will hibernate in burrows or under logs where they are protected from the cold and predators, emerging from February onwards as the weather warms up.

Reptiles generally begin to mate April to May with young born in late July to September. The Common Lizard gives birth to live young, hence the term viviparous, meaning live bearing.

Surveys

Reptile surveys involve the searching of refuge such as logs and stones for any animal sheltering below. Artificial refuge may be laid out on site for the purpose of reptile surveys.

Legislation

Reptiles are protected under Appendix II (sand lizards) and Appendix III (common lizard, slow worms, smooth snake, grass snake and adders) of the BERN Convention (1982), partially protected under Schedule 5 of the Wildlife and Countryside Act (1981), Annex IV of the Habitats Directive and are all listed under section 41 of the Natural Environment and Communities Act (2006) making them a species of principal importance.

This makes it an offence to disturb any reptile while it is occupying a structure or place it uses for shelter or protection or to obstruct access to such a place.

Appendix IV. HEDGEHOG INFORMATION.

Ecology

The hedgehog was a common species once widespread throughout the country but it has suffered a major decline due to loss of habitat. They are now found distributed across the UK, but the population increases to the south and east. Hedgehogs are rare in Scotland, Wales and Northern Ireland.

The hedgehog is a small, spiny mammal around 20cm long with a long snout. The back and sides of the hedgehog are covered in 25mm (1”) long spines. These are absent from the face, legs and underside, which are covered with coarse, grey-brown fur.

Hedgehogs are highly active and range widely. They need to be able to move freely through a well-connected range of habitats to find food, mates and areas to nest. Studies show that hedgehogs can travel around 2km in a night in urban areas and 3km a night in rural landscapes. A viable population of urban hedgehogs is thought to need 0.9km² of well-connected habitat.

Hedgehogs nest year-round and produce different types of nest for daytime resting, breeding and hibernation. Daytime nests are a retreat during the active season, and are often temporary, flimsy and found in areas of rough grassland, loose leaf piles or garden vegetation. Breeding nests are made by females and are used to raise young. They tend to be more robust, like hibernation nests. Winter nests can be used for several months to hibernate through periods of cold weather and low food availability. The sturdiest nests rely on medium-sized deciduous leaves and a structure to hold the leaves in place. Bramble patches, log piles and open compost heaps are common locations for breeding and hibernation.

Hedgehogs are omnivores, but the bulk of their diet consists of macro-invertebrates such as beetles, worms, slugs, earwigs, caterpillars and millipedes. In urban areas, supplementary food in the form of cat, dog or formulated hedgehog food can make up a significant part of their diet. Access to water is also very important.

Surveys

Hedgehogs are nocturnal animals, so despite their spiny appearance they are often difficult to find.

All surveys should be conducted between May and November when hedgehogs are active.

Droppings can be found in grassland, farmland and in gardens. The droppings are crinkly, often studded with shiny fragments due to their diet of insects. They are variable in size, 15-50mm long and 8-10mm thick, blue/black in colour and sweet smelling with a hint of linseed oil.

Footprint tunnels and camera traps can also be used to survey for hedgehogs.

Further survey techniques can also be used to survey for hedgehogs, but these require a survey licence to carry out surveys involving trapping and torch or spotlight searches.

Legislation

The hedgehog is considered an endangered species, but it benefits only from general protection under the Wildlife and Countryside Act 1981. They are listed under Schedule 6 of the Act, which makes it illegal to kill, trap or capture wild hedgehogs, with certain methods listed. They are also listed under the Wild Mammals Protection Act (1996), which prohibits cruel treatment of hedgehogs and they are a species of 'principal importance' under the NERC Act, which confers a 'duty of responsibility to public bodies'.

However, none of these deal with the issues that are a threat to the hedgehog. The main threat is the increasing loss of habitat, the increasing traffic on our roads and the increasing use of herbicides, in particular those used to kill garden slugs.

Appendix V. PROPOSED DEVELOPMENT PLAN.



Appendix VI. ANNOTATED MAP OF THE SURVEY AREA



Site: Pitt Street, Wombwell

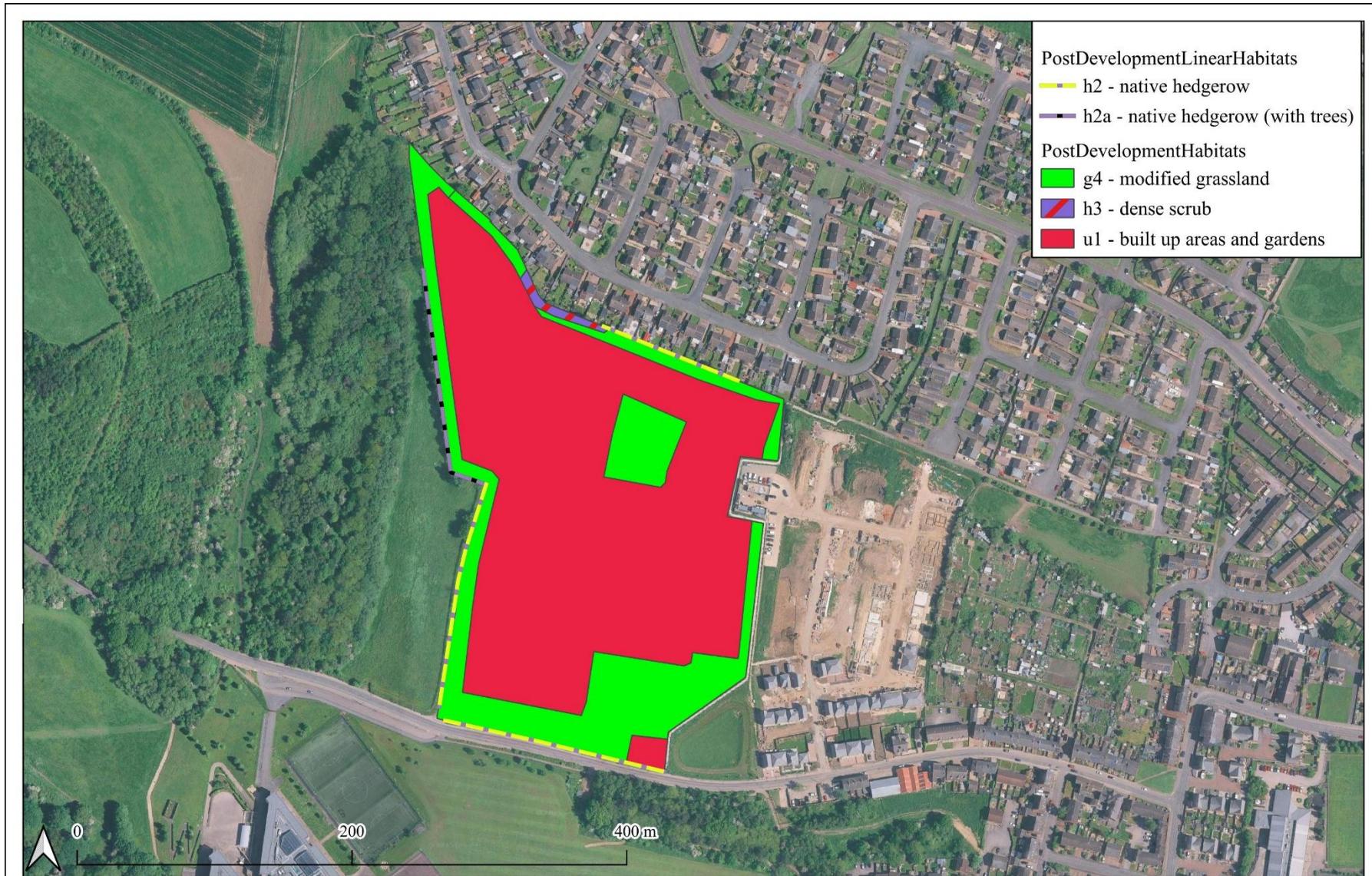
Reference: 250334

Date: 25.04.2025

Produced by: Sam White



Appendix VII. POST-DEVELOPMENT HABITAT MAP.



Site: Pitt Street Post Works

Date: 31.10.2025

Reference: 250334

Produced by: Sam



Appendix VIII. TARGET NOTES.

T1 – Location of rubble pile.

T2 – Location of piles of hay.

Appendix IX. OFF-SITE BIODIVERSITY NET GAIN AREA - BASELINE.



Site: Pitt Street Offsite

Date: 31.10.2025

Reference: 250334

Produced by: Sam



Appendix X. SUMMARY OF BREEDING BIRD SPECIES RECORDED

Species			No. birds recorded						Peak count	Conservation status
BTO code	Common name	Latin name	Visit 1	Visit 2	Visit 3	Visit 4	Visit 5	Visit 6		
B	Blackbird	<i>Turdus merula</i>	5	4	9	7	2	8	9	BoCC5 Green-list
BC	Blackcap	<i>Sylvia atricapilla</i>	0	0	2	2	0	0	2	BoCC5 Green-list
BO	Barn Owl	<i>Tyto alba</i>	0	0	0	0	1	0	1	BoCC5 Green-list
BT	Blue tit	<i>Cyanistes caeruleus</i>	3	4	3	5	0	2	5	BoCC5 Green-list
C	Carrion crow	<i>Corvus corone</i>	1	1	4	3	6	5	6	BoCC5 Green-list
CC	Chiffchaff	<i>Phylloscopus collybita</i>	3	1	1	2	0	0	3	BoCC5 Green-list
CH	Chaffinch	<i>Fringilla coelebs</i>	0	1	0	0	0	0	1	BoCC5 Green-list
CM	Common gull	<i>Larus canus</i>	4	0	0	0	0	0	4	BoCC5 Red-list
CT	Coal tit	<i>Parus ater</i>	1	0	0	0	0	0	1	BoCC5 Green-list
D	Dunnock	<i>Prunella modularis</i>	3	1	0	1	0	0	3	BoCC5 Amber-list
FP	Feral pigeon	<i>Columba livia</i>	9	5	15	11	1	10	15	BoCC5 Green-list
GC	Goldcrest	<i>Regulus regulus</i>	1	0	1	0	0	0	1	BoCC5 Green-list
GO	Goldfinch	<i>Carduelis carduelis</i>	0	5	4	6	0	0	6	BoCC5 Green-list
GT	Great tit	<i>Parus major</i>	3	1	3	5	0	1	5	BoCC5 Green-list
GW	Garden warbler	<i>Sylvia borin</i>	0	0	3	3	0	1	3	BoCC5 Green-list
H.	Grey heron	<i>Ardea cinerea</i>	1	0	0	0	0	0	1	BoCC5 Green-list
HS	House sparrow	<i>Passer domesticus</i>	0	4	6	8	0	0	8	BoCC5 Red-list; S41
JD	Jackdaw	<i>Corvus monedula</i>	6	4	10	9	100	17	100	BoCC5 Green-list
LI	Linnet	<i>Linaria cannabina</i>	0	0	9	3	0	1	9	BoCC5 Red-list
MG	Magpie	<i>Pica pica</i>	1	1	2	6	0	9	9	BoCC5 Green-list
PH	Pheasant	<i>Phasianus colchicus</i>	1	0	3	2	0	0	3	Introduced
R	Robin	<i>Erithacus rubecula</i>	5	4	3	4	2	4	5	BoCC5 Green-list
RB	Reed bunting	<i>Emberiza schoeniclus</i>	0	0	1	2	0	0	2	BoCC5 Amber-list
RO	Rook	<i>Corvus frugilegus</i>	0	0	1	0	0	1	1	BoCC5 Amber-list
SH	Sparrowhawk	<i>Accipiter nisus</i>	0	0	0	0	0	1	1	BoCC5 Amber-list

SI	Swift	<i>Apus apus</i>	0	0	0	0	1	0	1	BoCC5 Red-list
SL	Swallow	<i>Hirundo rustica</i>	0	1	0	0	0	1	1	BoCC5 Green-list
ST	Song thrush	<i>Turdu philomelos</i>	1	0	1	1	0	0	1	BoCC5 Red-list; S41
WH	Whitethroat	<i>Curruca communis</i>	1	1	0	0	0	0	1	BoCC5 Amber-list
WP	Wood pigeon	<i>Columba palumbus</i>	5	3	5	4	8	6	8	BoCC5 Amber-list
WR	Wren	<i>Troglodytidae</i>	4	1	3	2	1	2	4	BoCC5 Amber-list
WW	Willow warbler	<i>Phylloscopus trochilus</i>	1	1	0	2	0	0	2	BoCC5 Amber-list

Appendix XI. BREEDING BIRD SURVEY 1 MAP.



Site:

Date: 02.05.2025

Reference:

Produced by: Jess



Appendix XII. BREEDING BIRD SURVEY 2 MAP.



Site:

Date: 17.11.2025

Reference:

Produced by: Jess



Appendix XIII. BREEDING BIRD SURVEY 3 MAP.



Site:

Date: 14.07.2025

Reference:

Produced by: Lauren



Appendix XIV. BREEDING BIRD SURVEY 4 MAP.



Site:

Date: 10.07.2025

Reference:

Produced by: Lauren



Appendix XV. BREEDING BIRD SURVEY 5 MAP.



Site:

Date: 14.08.2025

Reference:

Produced by: Xanthe Walker



Appendix XVI. BREEDING BIRD SURVEY 6 MAP.



Site: _____ Date: 14.08.2025

Reference: _____ Produced by: Xanthe Walker



Appendix XVII. SPECIES LISTS – ON SITE.

Modified Grassland	
Scientific Name	Vernacular
<i>Agrostis capillaris</i>	Common Bent
<i>Arrhenatherum elatius</i>	False Oat-grass
<i>Cirsium arvense</i>	Creeping Thistle
<i>Dactylis glomerata</i>	Cock's-foot
<i>Dipsacus</i> sp.	Teasels
<i>Festuca</i> sp.	Fescue
<i>Galium aparine</i>	Cleavers
<i>Heracleum sphondylium</i>	Hogweed
<i>Holcus lanatus</i>	Yorkshire-fog
<i>Lamium purpureum</i>	Red Dead-nettle
<i>Lolium perenne</i>	Perennial Rye-grass
<i>Narcissus</i> sp.	Daffodils
<i>Phleum pratense</i>	Timothy
<i>Plantago lanceolata</i>	Ribwort Plantain
<i>Poa annua</i>	Annual Meadow-grass
<i>Poa pratensis</i>	Smooth Meadow-grass
<i>Prunus avium</i>	Wild Cherry
<i>Ranunculus repens</i>	Creeping Buttercup
<i>Rubus fruticosus</i>	Bramble
<i>Rumex crispus</i>	Curled Dock
<i>Rumex obtusifolius</i>	Broad-leaved Dock
<i>Sambucus nigra</i>	Elder
<i>Stellaria media</i>	Common Chickweed
<i>Trifolium repens</i>	White Clover
<i>Urtica dioica</i>	Common Nettle
<i>Vicia sativa</i>	Common Vetch

Other Neutral Grassland	
Scientific Name	Vernacular
<i>Achillea millefolium</i>	Yarrow
<i>Arabidopsis thaliana</i>	Thale Cress
<i>Arrhenatherum elatius</i>	False Oat-grass
<i>Buddleja davidii</i>	Butterfly-bush
<i>Chamaenerion angustifolium</i>	Rosebay Willowherb
<i>Cirsium arvense</i>	Creeping thistle
<i>Dactylis glomerata</i>	Cock's-foot
<i>Deschampsia cespitosa</i>	Tufted hair grass
<i>Dipsacus</i> sp.	Teasels
<i>Heracleum sphondylium</i>	Hogweed
<i>Lolium perenne</i>	Perennial Rye-grass

<i>Plantago lanceolata</i>	Ribwort Plantain
<i>Poa annua</i>	Annual Meadow-grass
<i>Rubus fruticosus</i>	Bramble
<i>Taraxacum officinale</i>	Dandelion

Mixed Scrub	
Scientific Name	Vernacular
<i>Alliaria petiolata</i>	Garlic Mustard
<i>Buddleja davidii</i>	Butterfly-bush
<i>Crataegus monogyna</i>	Hawthorn
<i>Dipsacus</i>	Teasels
<i>Fraxinus excelsior</i>	Ash
<i>Hedera helix</i>	Common Ivy
<i>Heracleum sphondylium</i>	Hogweed
<i>Ilex aquifolium</i>	Holly
<i>Prunus</i> sp.	Cherry
<i>Prunus spinosa</i>	Blackthorn
<i>Quercus</i> sp.	Oak
<i>Rubus fruticosus</i>	Bramble
<i>Sambucus nigra</i>	Elder

* The understory of this habitat includes species within g3c – other neutral grassland, these have been omitted from the above table to avoid confusion on habitat type.

Sparsely Vegetated Urban Land	
Scientific Name	Vernacular
<i>Agrostis capillaris</i>	Common Bent
<i>Arabidopsis thaliana</i>	Thale Cress
<i>Arrhenatherum elatius</i>	False Oat-grass
<i>Chamaenerion angustifolium</i>	Rosebay Willowherb
<i>Cirsium arvense</i>	Creeping Thistle
<i>Dactylis glomerata</i>	Cock's-foot
<i>Geranium robertianum</i>	Herb-Robert
<i>Poa annua</i>	Annual Meadow-grass
<i>Rubus fruticosus</i>	Bramble
<i>Taraxacum</i> sp.	Dandelion
<i>Trifolium repens</i>	White Clover
<i>Urtica dioica</i>	Common Nettle

Hedgerow with Trees	
Scientific Name	Vernacular
<i>Crataegus monogyna</i>	Hawthorn
<i>Fraxinus excelsior</i>	Ash
<i>Prunus sp.</i>	Cherry
<i>Prunus spinosa</i>	Blackthorn
<i>Sambucus nigra</i>	Elder

Scattered Trees	
Scientific Name	Vernacular
<i>Cupressus x leylandii</i>	Leyland cypress
<i>Fraxinus excelsior</i>	Ash
<i>Prunus sp.</i>	Cherry
<i>Quercus sp.</i>	Oak

Appendix XVIII. SPECIES LISTS – OFF SITE.

Other Neutral Grassland	
Scientific Name	Vernacular
<i>Dactylis glomerata</i>	Cock's Foot
<i>Arrhenatherum elatius</i>	False Oat Grass
<i>Impatiens glandulifera</i>	Himalayan balsam
<i>Cirsium arvense</i>	Creeping thistle
<i>Cirsium vulgare</i>	Spear thistle
<i>Taraxacum officinale</i> agg.	Dandelion
<i>Galium aparine</i>	Cleavers
<i>Melilotus albus</i>	White Sweetclover
<i>Centranthus ruber</i>	Red Valerian
<i>Trifolium repens</i>	White clover
<i>Trifolium pratense</i>	Red clover
<i>Geranium pratense</i>	Meadow cranesbill
<i>Lolium perenne</i>	Perennial ryegrass
<i>Chamaenerion angustifolium</i>	Rosebay willowherb
<i>Centaurea nigra</i>	Common knapweed
<i>Betula pendula</i>	Silver birch
<i>Rubus fruticosus</i>	Bramble
<i>Lotus corniculatus</i>	Birds-foot trefoil
<i>Plantago lanceolata</i>	Ribwort plantain
<i>Plantago major</i>	greater plantain
<i>Rumex crispus</i>	Curled dock
<i>Potentilla reptans</i>	Creeping Cinquefoil
<i>Juncus inflexus</i>	Hard rush
<i>Populus alba</i>	White poplar
<i>Barbarea vulgaris</i>	Wintercress
<i>Urtica dioica</i>	Common nettle
<i>Geranium robertianum</i>	Herb Robert

Sparsely Vegetated Land	
Scientific Name	Vernacular
<i>Dactylis glomerata</i>	Cock's Foot
<i>Arrhenatherum elatius</i>	False Oat Grass
<i>Impatiens glandulifera</i>	Himalayan balsam
<i>Cirsium arvense</i>	Creeping thistle
<i>Cirsium vulgare</i>	Spear thistle
<i>Taraxacum officinale</i> agg.	Dandelion
<i>Galium aparine</i>	Cleavers
<i>Melilotus albus</i>	White Sweetclover
<i>Centranthus ruber</i>	Red Valerian
<i>Trifolium repens</i>	White clover

<i>Erigeron</i> sp.	Fleabane
<i>Lolium perenne</i>	Perennial ryegrass
<i>Chamaenerion angustifolium</i>	Rosebay willowherb
<i>Centaurea nigra</i>	Common knapweed
<i>Betula pendula</i>	Silver birch
<i>Rubus fruticosus</i>	Bramble
<i>Lotus corniculatus</i>	Birds-foot trefoil
<i>Plantago lanceolata</i>	Ribwort plantain
<i>Plantago major</i>	greater plantain
<i>Rumex crispus</i>	Curled dock
<i>Potentilla reptans</i>	Creeping cinquefoil
<i>Artemisia vulgaris</i>	Mugwort
<i>Populus alba</i>	White poplar
<i>Barbarea vulgaris</i>	Wintercress
<i>Urtica dioica</i>	Common nettle
<i>Geranium robertianum</i>	Herb Robert
<i>Helminthotheca echioides</i>	Bristly oxtongue
<i>Reseda luteola</i>	Weld
<i>Tanacetum vulgare</i>	Tansy
<i>Lamium album</i>	White dead nettle
<i>Dipsacus fullonum</i>	Teasel

**** Many of the species within the g3c – Other Neutral Grassland were also present within this habitat, as shown above. However, these species were far more scattered as the habitat is in the early stages of colonisation.