

**Whitcher Wildlife Ltd.  
Ecological Consultants.**



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**PARKWOOD ROAD, GOLCAR**

**OS REF: SE 1031 1681**

**ECOLOGICAL IMPACT ASSESSMENT**

**Ref No: 250423 / EcIA**

**Date: 1<sup>st</sup> December 2025**

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# 1. INTRODUCTION.

1.1. Planning permission is being sought for the development of approximately twenty-seven new dwellings with associated gardens and parking off Parkwood Road, Golcar.

1.2. Whitcher Wildlife Ltd was commissioned to carry out a Preliminary Ecological Appraisal (PEA) of the site to establish whether there are any ecological issues that may affect the proposed development and determine the baseline biodiversity value of the site.

1.3. That survey was carried out on 16<sup>th</sup> April 2025 and a PEA report was issued to the client. Based on the recommendations provided in the report, the site proposals were modified, and discussions were had, to ensure that a sensitive scheme is delivered and with suitable mitigation in place that avoids any detrimental ecological impacts long term.

1.4. Three nighttime bat walkover surveys (NBW) were also carried out, in line with the recommendations of the initial PEA. These were carried out on 23<sup>rd</sup> April, 27<sup>th</sup> August and 6<sup>th</sup> October 2025. Along with these NBW surveys, automated bat surveys were carried out for a minimum of five consecutive days between April and October inclusive. The findings of these surveys are included in this report.

1.5. The PEA has now been upgraded to an Ecological Impact Assessment which outlines the findings of the baseline surveys, includes details of any mitigation measures that will be put in place and a final impact assessment with those measures in place. This report also includes a full Biodiversity Net Gain (BNG) assessment for the development.

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

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## 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: -

- \* 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 (4<sup>th</sup> 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. A suitable route for the nighttime bat walkover surveys, approximately 3-5km in length, was identified with stop points identified along the route providing a snapshot of activity in various separate habitats.

2.10. The route was walked on several occasions throughout the season in line with the Bat Conservation Trust Good Practice Guidelines 4<sup>th</sup> Edition (2023), based on the value of the habitats present.

2.11. During each nighttime bat walkover survey, static Anabat recording units were erected at multiple points throughout the site. These static units remained in place for a period of at least five consecutive days.

2.12. 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.

2.13. 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.

2.14. 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*.

2.15. 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.

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

2.17. 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.

2.18. This report is prepared in line with the Natural Environment and Rural Communities (NERC) Act that came into force on 1st Oct 2006. Section 41 (S41) of the Act requires the Secretary of State to publish a list of habitats and species which are of principal importance for the conservation of biodiversity in England.

2.19. The site survey was undertaken by ecologist Xanthe Walker and assistant ecologist Lauren Roy.

2.20. 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 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 (BNG) 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) and has achieved Field Identification Skills Certificate (FISC) level 3.

2.21. 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, nocturnal bird surveys and wintering bird surveys. She has also undertaken training on plant identification including non-native invasive species and specific species including hazel dormouse 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.

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### **3. SURVEY RESULTS.**

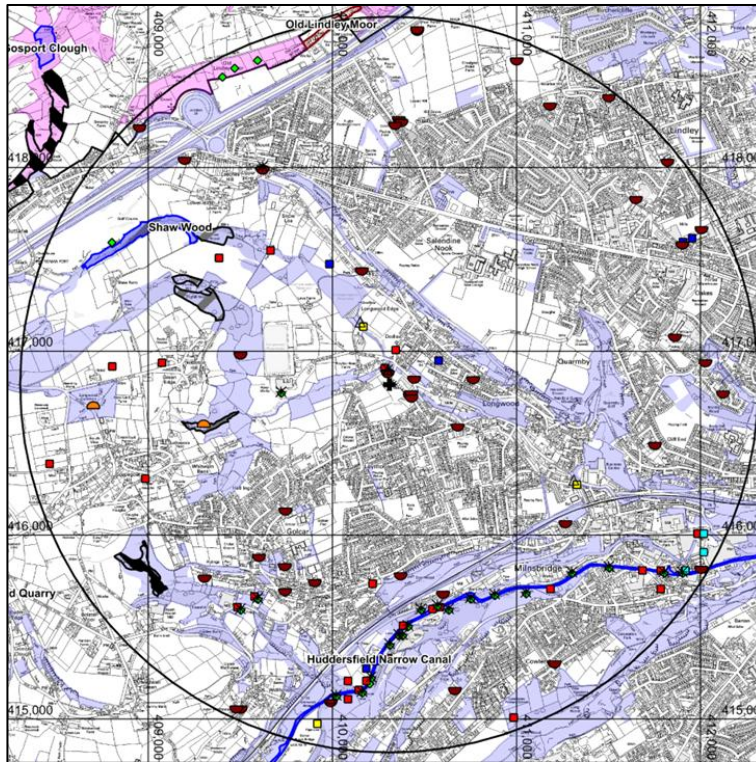
#### **3.1. Data Search Results.**

3.1.1. A data search has been requested from West Yorkshire Ecology Service (WYES) detailing all records of protected species along with all non-statutory sites within a 2km radius of the survey area. These results are summarised below.

3.1.2. WYES returned records of adder, badger and multiple bat species. The records that are relevant to this site are as follows:

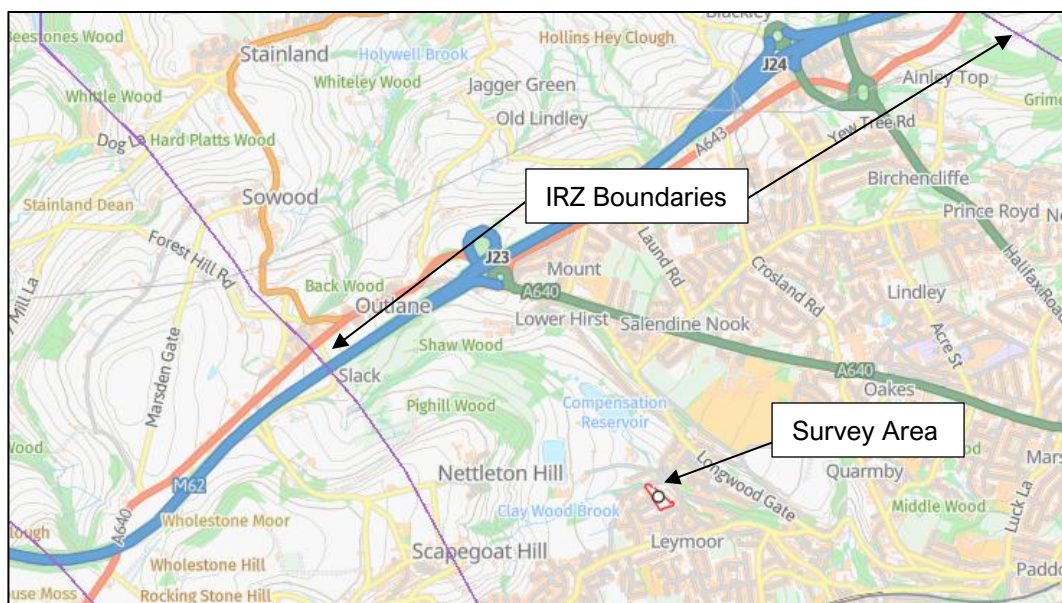
- Badger – There is one record of badger approximately 50m to the north of the survey area on Grove Street. This record is from 2018 and details a badger path or tracks.
- Bats – There are five records of common pipistrelle roosts within buildings surrounding the survey area, all from 2018. Three of the records are within the derelict mill building, just outside the southeastern boundary of the survey area and detail four bat roosts. The other two are within buildings approximately 30m to the east of the survey area and each building has a record of one bat roosting.
- All other records are considered not relevant to this site due to date and/or distance.

3.1.3. WYES returned a map displaying two non-statutory sites within 2km of the survey area. The closest of these sites is Huddersfield Narrow Canal Local Wildlife Site (LWS) which is situated approximately 1.3km to the south of the survey area. The non-statutory sites are outlined in blue on the map below.



3.1.4. A search of DEFRA’s MAGIC Map showed there to be no statutory sites within 2km of the survey area. However, the site does lie within the ninth Impact Risk Zone (IRZ) of South Pennine Moors Site of Special Scientific Interest (SSSI) which is situated approximately 6.25km to the southwest. The site does not fall under the IRZ criteria in which Natural England would need to be notified of the works.

3.1.5. The MAGIC map below shows the survey area and the IRZ boundaries.

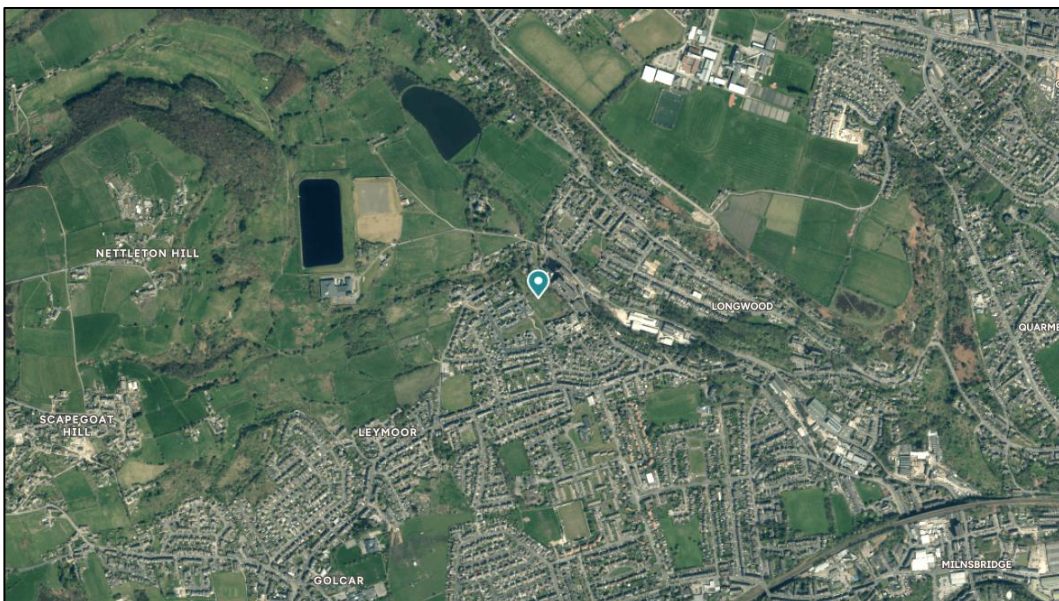


### 3.2. The Survey Area.

3.2.1. The survey area lies to the south of Parkwood Road in Golcar and the approximate red line boundary is indicated by the red outline below.



3.2.2. The survey area is situated in the village of Golcar, Huddersfield. The wider surroundings comprise a combination of residential housing and open parkland to the south, with areas of woodland, grassland, farmland and reservoirs to the north. The aerial image below shows the survey area in the wider surroundings.



### **3.3. Survey Limitations.**

The initial survey was carried out just before the optimal time for flora identification. Therefore, the flora species lists may not be comprehensive, however, this species list has since been updated during subsequent site visits carried out during a more optimal time of year.

### **3.4. Description of Habitats.**

3.4.1. Appendix V of this report contains an annotated map 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: -

- h3h – Mixed scrub.
- h3d – Bramble scrub.
- g3 – Neutral grassland.
- g3c – Other neutral grassland.
- g4 – Modified grassland.
- w1g – Other broadleaved woodland.
- h2a – Native hedgerow.

#### **3.4.2. h3h – Mixed scrub.**

**Secondary codes: 32 scattered trees.**

3.4.2.1. There are three parcels of scrub within the survey area, labelled A to C.

3.4.2.2. Scrub parcel A is situated towards the southeastern corner of the site and comprises an area of dense vegetation with multiple trees and saplings throughout. The habitat is dominated by cherry (*Prunus avium*) saplings and bramble (*Rubus fruticosus*) and also features cleavers (*Galium aparine*), bush vetch (*Vicia sepium*), meadow foxtail (*Alopecurus pratensis*), rosebay willowherb (*Chamaenerion angustifolium*), dandelion (*Taraxacum* sp.), silver birch (*Betula pendula*) saplings and raspberry (*Rubus idaeus*). There are five trees within this parcel including three small and one medium cherry (*Prunus avium*) as well as one large goat willow (*Salix caprea*).



3.4.2.3. Scrub parcel B is situated directly adjacent to A and extends along the eastern boundary of the site. This habitat is dominated by raspberry (*Rubus idaeus*) with other species including sycamore (*Acer pseudoplatanus*) saplings, male fern (*Dryopteris filix-mas*), cock's foot (*Dactylis glomerata*), cleavers (*Galium aparine*), wood avens (*Geum urbanum*) and hogweed (*Heracleum sphondylium*). There are three small sycamore (*Acer pseudoplatanus*) and one small goat willow (*Salix caprea*) trees within this parcel.



3.4.2.4. Scrub parcel C extends along the eastern boundary of the site, towards the northern boundary and dissects the site towards the centre. The parcel is dominated by bramble (*Rubus fruticosus*) with other species including bush vetch (*Vicia sepium*), cleavers (*Galium aparine*), oak (*Quercus* sp.) saplings, creeping buttercup (*Ranunculus repens*), rosebay willowherb (*Chamaenerion* sp.), cow parsley (*Anthriscus sylvestris*), cock's foot (*Dactylis glomerata*) and bitter dock (*Rumex obtusifolius*). There are nine trees within this habitat parcel, all on the eastern boundary of the site. These include, one small and one medium goat willow (*Salix caprea*), two small lilac (*Syringa vulgaris*) and three small, one medium and one large sycamore (*Acer pseudoplatanus*).



### **3.4.3. h3d – Bramble scrub.**

**Secondary codes: 32 scattered trees.**

There are two parcels of bramble scrub, however, these have extremely similar compositions. Bramble (*Rubus fruticosus*) is the dominant species and nettle (*Urtica dioica*), raspberry (*Rubus idaeus*) and cleavers (*Galium aparine*) were also identified. There is a small ash (*Fraxinus excelsior*) tree within this parcel.



### **3.4.4. g3 – Neutral grassland.**

**Secondary codes: 16 tall forbs, 32 scattered trees.**

This parcel of neutral grassland is situated in the northwestern corner of the survey area and is dominated by cleavers (*Galium aparine*). The other species identified include nettle (*Urtica dioica*), honeysuckle (*Lonicera periclymenum*), mugwort (*Artemisia vulgaris*), bitter dock (*Rubus obtusifolius*), bush vetch (*Vicia sepium*), bramble (*Rubus*

*fruticosus*) and hedgerow cranesbill (*Geranium pyrenaicum*). There is one small sycamore (*Acer pseudoplatanus*) tree on the northwestern boundary of this habitat.



#### **3.4.5. g3c – Other neutral grassland.**

**Secondary codes: 32 scattered trees.**

3.4.5.1. There are two parcels of neutral grassland habitat labelled A and B.

3.4.5.2. Parcel A is situated on the southern half of the site and makes up the majority of this area. The dominant grass species is meadow foxtail (*Alopecurus pratensis*) with other graminoid species including cock's foot (*Dactylis glomerata*), perennial rye grass (*Lolium perenne*), Yorkshire fog (*Holcus lanatus*), red fescue (*Festuca rubra*), annual meadowgrass (*Poa annua*), smooth meadowgrass (*Poa pratensis*), false oat grass (*Arrhenatherum elatius*) and creeping soft grass (*Holcus mollis*). This parcel also included ragwort (*Jacobaea vulgaris*), nettle (*Urtica dioica*), creeping buttercup (*Ranunculus repens*), cleavers (*Galium aparine*), willowherbs (*Epilobium* sp.), daisy (*Bellis perennis*), bitter dock (*Rumex obtusifolius*), wood avens (*Geum urbanum*), dandelion (*Taraxacum* sp.), cow parsley (*Anthriscus sylvestris*), rosebay willowherb (*Chamaenerion angustifolium*), common vetch (*Vicia sativa*) and bush vetch (*Vicia sepium*). There are two small goat willow (*Salix caprea*) trees within this parcel.



3.4.5.3. Parcel B is of similar species composition to A, with the inclusion of meadow buttercup (*Ranunculus acris*) and ivy-leaved speedwell (*Veronica hederifolia*). There are five trees within this parcel including two small goat willow (*Salix caprea*), one small oak (*Quercus* sp.), one small silver birch (*Betula pendula*) and one medium sycamore (*Acer pseudoplatanus*).



#### **3.4.6. g4 – Modified grassland.**

There is modified grassland situated on the western boundary of the survey area, just to the north of the woodland habitat. The species identified within this parcel include cock's foot (*Dactylis glomerata*), annual meadowgrass (*Poa annua*), red fescue (*Festuca rubra*), horsetail (*Equisetum* sp.), hogweed (*Heracleum sphondylium*), dog rose (*Rosa canina*), ribwort plantain (*Plantago lanceolata*), ragwort (*Jacobaea vulgaris*), dandelion (*Taraxacum* sp.), bramble (*Rubus fruticosus*), nettle (*Urtica dioica*) and red clover (*Trifolium pratense*).



#### **3.4.7. w1g – Other broadleaved woodland.**

Towards the centre of the site, on the western boundary, there is a small pocket of young woodland. Cherry (*Prunus avium*) is dominant, with scattered ash (*Fraxinus excelsior*) and sycamore (*Acer pseudoplatanus*) trees also. The understory comprises bare ground with some grassland and scrub species including wood avens (*Geum urbanum*), cow parsley (*Anthriscus sylvestris*), cleavers (*Galium aparine*), cock's foot (*Dactylis glomerata*), meadow foxtail (*Alopecurus pratensis*), hogweed (*Heracleum sphondylium*), rosebay willowherb (*Chamaenerion angustifolium*) and hawthorn (*Crataegus monogyna*).



#### **3.4.8. h2a – Native hedgerow.**

Extending from the northern end of the site, down the western boundary, there is a native hedgerow comprising beech (*Fagus sylvatica*), holly (*Ilex aquifolium*) and elder (*Sambucus nigra*).



### **3.5. Description of Fauna.**

3.5.1. There is a record of a badger path to the northeast of the site, therefore, it is possible that badger will occasionally use the site for commuting and foraging purposes. However, there was no evidence of this during the survey as no badger setts or other field signs were identified within the survey area.

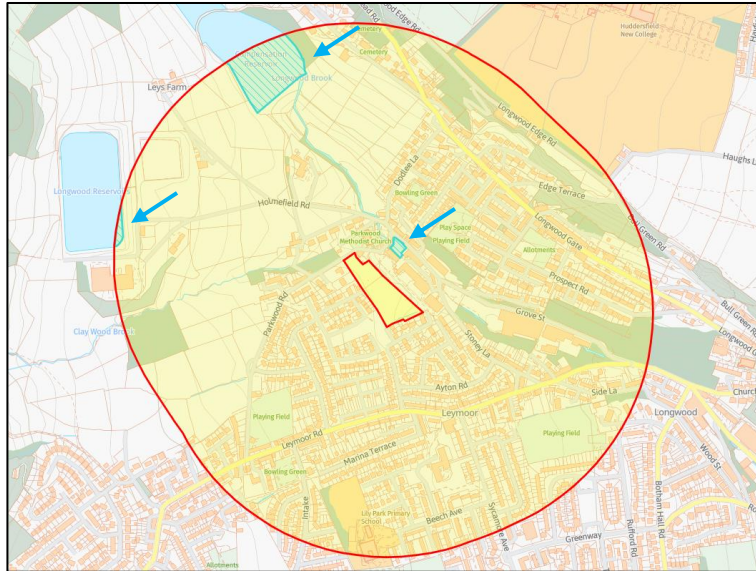
3.5.2. There is a watercourse just outside the southern boundary of the survey area. However, this watercourse is extremely shallow, narrow and is culverted at either end with no access through for otter. As the watercourse is suboptimal for this species, it is assessed as highly unlikely that otter will be present.

3.5.3. No water vole burrows or other field signs were identified within the survey area or surrounding the adjacent watercourse. Whilst it does provide some limited suitability for this species, there are no records of water vole within 2km of the survey area, making their presence highly unlikely.

3.4.4. The watercourse adjacent to the survey area could not be surveyed for white-clawed crayfish. However, the watercourse features a silt bed and is small and culverted, providing little connectivity to more substantial habitat. Therefore, it is assessed as suboptimal for this species. Furthermore, there are no records of white-clawed crayfish within 2km of the survey area.

3.5.5. *Great crested newt (GCN)*.

3.5.5.1. There is one pond and two reservoirs shown on maps within 500m of the survey area. These are indicated on the map below.



3.5.5.2. The pond is situated approximately 50m to the northeast of the survey area. It is a mill pond which is connected to the northern reservoir by a channel. The pond is surrounded by stone walls with no banks or emergent vegetation. It is therefore assessed as unsuitable for GCN.



3.5.5.3. Reservoirs are usually stocked with fish and due to their large size, tend to be unsuitable for GCN. It is unlikely that this species will be present within these reservoirs, and therefore unlikely that they will be present within the survey area.

### 3.5.6. *Bats.*

3.5.6.1. There are no buildings within the survey area to provide potential for roosting bats.

3.5.6.2. There are multiple trees within the survey area, however, no suitable roosting features for bats were identified within any of these trees.

3.5.6.3. The survey area provides moderate value foraging and commuting habitat for bats. The lines of scrub and hedgerow as well as the trees on the boundaries of the site create a corridor between woodland to the southeast and the woodland and reservoirs to the northwest, particularly along the northeastern edge of the site.

3.5.6.4. The aerial map below shows the habitat corridors throughout the surroundings and how this relates to the survey area. The marker indicates the approximate location of recorded bat roosts within the buildings adjacent to the site. There is potential for bats roosting within these to use the habitat on site for foraging or as a corridor to more extensive foraging habitat.



3.5.7. The trees, grassland, scrub and hedgerow habitats within the survey area all provide suitability for nesting birds during the nesting season, which extends from March to August each year. During this survey, one active magpie nest was identified on the site at approximate OS reference SE 10393 16783. One inactive nest was identified also at approximate OS reference SE 10273 16867. Furthermore, peregrine falcons have been observed frequently emerging from and returning to the large chimney structure immediately to the east of the survey area, during each site visit. Therefore, it is highly likely that there is a peregrine falcon nest within this structure. The photographs below show where the peregrines have been seen frequenting the structure.



3.5.8. The survey area provides some suitable habitat for common reptiles due to the combination of scrub and grassland. The dry-stone wall that extends along much of the western site boundary also provides some refugia and basking spots. As the majority of the site is open grassland, the suitability is mostly limited to the boundaries.

3.5.9. The survey area lies outside the natural known range of the red squirrel and hazel dormouse. Therefore, these species are considered absent.

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

3.5.11. The survey area does provide suitable habitat for hedgehogs and other small mammals due to the combination of sheltered and open areas for foraging.

### **3.6. Bat Activity Survey Results.**

3.6.1. As the site was assessed as having potential to support foraging and commuting bats with the scale of the development having the potential to cause the loss of connective or foraging habitats throughout the site, bat activity surveys were recommended and subsequently carried out.

3.6.2. Seven surveys were carried out throughout the months of April 2025 to October 2025 to help obtain a picture of how bats were using the site. This comprises a mixture of automated static detector surveys (carried out monthly) and manual walked transect surveys (carried out seasonally). The results of these surveys are shown below.

3.6.3. All surveys were carried out in accordance with the Bat Conservation Trust Good Practice Guidelines 4<sup>th</sup> Edition (2023).

### 3.7. Manual Transect Surveys.

3.7.1. 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.

3.7.2. 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 4<sup>th</sup> Edition. This was done at the shown start point, with one surveyor looking east and the other south, to provide a good view of commuting routes along the eastern boundary of the site.

3.7.3. Each of the NBWs commenced directly at sunset, given the knowledge that the site is most likely to be used by pipistrelles and noctules which regularly emerge at sunset. The Bat Conservation Trust Good Practice Guidelines 4<sup>th</sup> Edition recommend considering delaying the start time, but this was not considered suitable on this site.

3.7.4. The route followed during the NBW has is shown below. Each NBW has been summarised with notes from the surveyor and a map showing any notable foraging activity. The starting point is indicated by the marker.



### **3.8.1. Spring NBW – 23<sup>rd</sup> April 2025.**

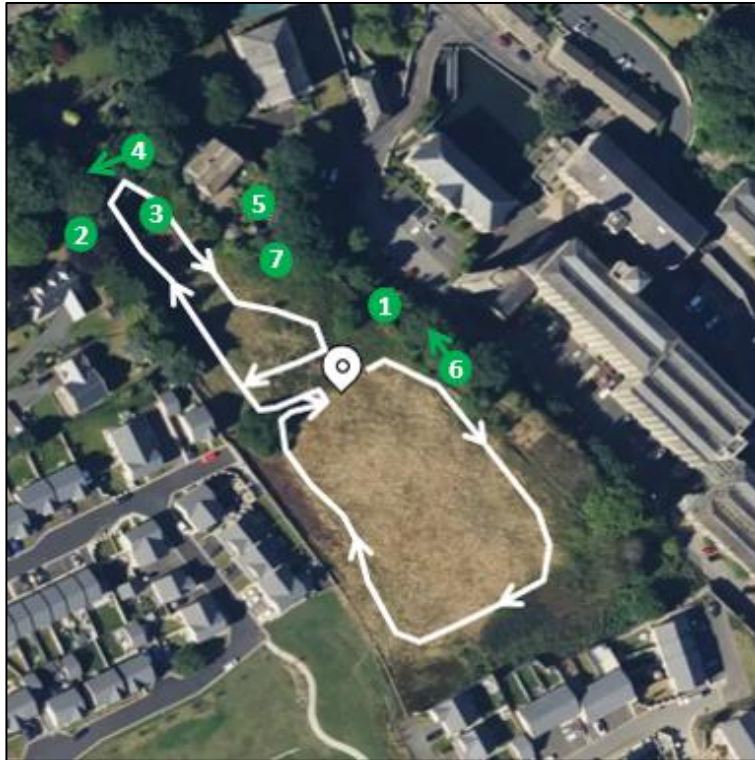
3.8.1.1. The initial NBW was undertaken on 23<sup>rd</sup> April 2024. Weather conditions on the night were fine and dry with a temperature of 10°C at sunset, which was at 20:24. There was a slight breeze, registering 1 on the Beaufort Wind Scale (BWS).

3.8.1.2. Within the first thirty minutes of the survey, prior to commencement of walking the designated route, activity was found to be limited. One surveyor (S1) remained stationary whilst the other surveyor (S2) searched for areas of higher activity. Neither surveyor found much activity, with only S1 recording four common pipistrelles commuting along the eastern boundary of the site, from south to north.

3.8.1.3. Fifty minutes were spent at the start point before the route walk commenced. The night remained relatively quiet, with foraging off-site increasing as the night went on. The below activity being observed.

- One common pipistrelle heard foraging off-site to the east. (1)
- One common pipistrelle foraging in the gardens to the northwest of the site. (2)
- One common pipistrelle foraging at the northern end of the site. (3)
- One common pipistrelle commuting west across the northern end of the site. (4)
- Two common pipistrelle foraging within the gardens to the east of the site. (5)
- One common pipistrelle commuting along the eastern boundary of the site, from south to north (6)
- One common pipistrelle foraging in the gardens to the east of the site. (7)

3.8.1.4. Thirty common pipistrelle calls were recorded during the survey and the notable foraging and commuting routes are shown on the map below.



### 3.8.2. Summer NBW – 27<sup>th</sup> August 2025.

3.8.2.1. The second NBW was undertaken on 27<sup>th</sup> August 2025. Weather conditions on the night were cool and dry, although there had been rainfall during the day. Sunset was at 20:09 and the temperature measured 15°C. There was a moderate breeze, registering 3 on the BWS.

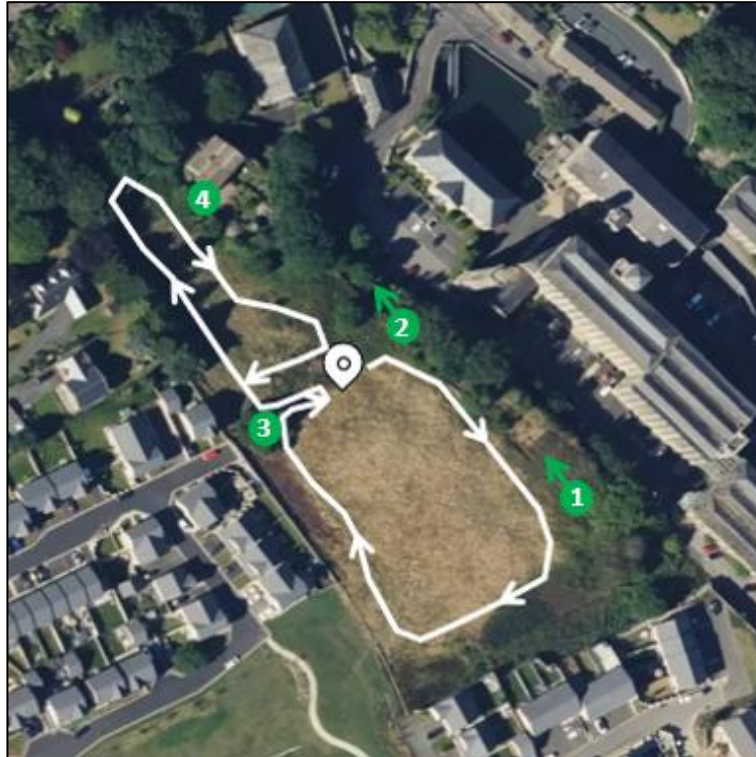
3.8.2.2. No bat activity was recorded within the first forty-five minutes of the survey or prior to the commencement of walking the designated route. One surveyor (S1) remained stationary whilst the other surveyor (S2) searched for areas of higher activity but none was found.

3.8.2.3. Due to the low activity levels, only thirty minutes were spent at the start point before the route walk commenced. Activity remained low throughout the entirety of the survey, with the below observations.

- One common pipistrelle was identified commuting along the eastern boundary of the site, beginning in the southeastern corner and heading northwest. (1)
- Three common pipistrelles were identified commuting along the eastern boundary of the site, beginning towards the middle of the site and heading northwest. (2)

- One common pipistrelle was identified foraging on the western boundary of the site towards the woodland habitat. (3)
- One common pipistrelle was identified foraging on the eastern boundary of the site, towards the northern end. (4)

3.8.2.4. Sixteen common pipistrelle and two soprano pipistrelle calls were recorded during the survey and the notable foraging and commuting routes are shown on the map below.



### 3.8.3. Autumn NBW – 6<sup>th</sup> October 2025.

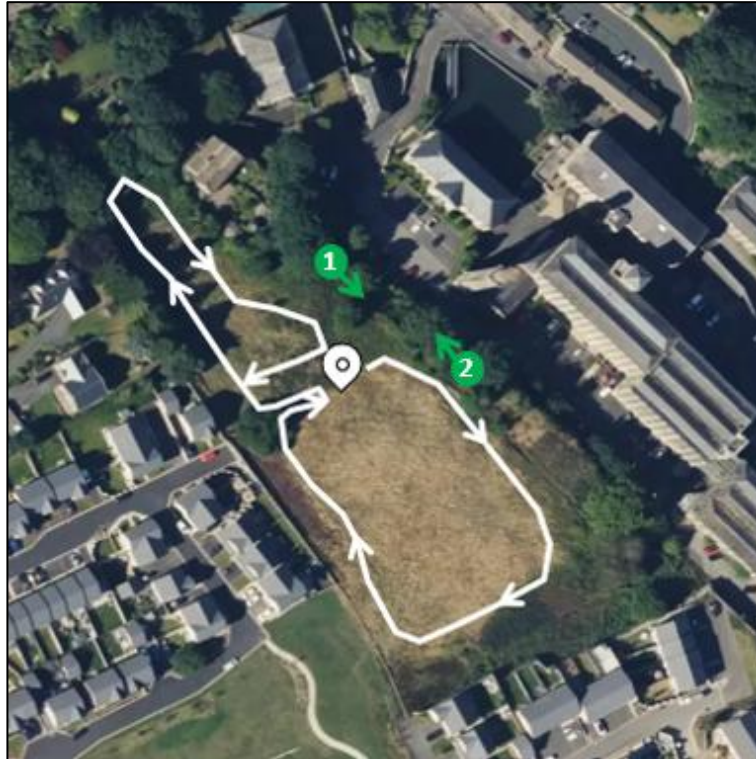
3.8.3.1. The third and final NBW was undertaken on 6<sup>th</sup> October 2025. Weather conditions on the night were clear and dry, with a temperature of 12°C at sunset, which was at 18:30. There was a very light breeze, registering at 1 on the BWS.

3.8.3.2. Only two bats were identified during this survey, both within the first thirty minutes and prior to the commencement of walking the designated route. One surveyor (S1) remained stationary whilst the other surveyor (S2) searched for areas of higher activity but none was found. Both bats were identified by S1. With activity extremely low, the following activity was observed.

- One common pipistrelle was observed foraging along the eastern boundary of the site from north to south. (1)

- One common pipistrelle was observed foraging along the eastern boundary of the site, from south to north. (2)

3.8.3.3. Twenty-four common pipistrelle calls were recorded during the survey and the notable foraging and commuting routes are shown on the map below.



### **3.9. Automated Activity Surveys.**

3.9.1. Automated activity surveys were carried out to help form the main understanding of how bats are using the site, to confirm whether there are any areas of particular importance which need safeguarding during the development.

3.9.2. These surveys were carried out monthly between April and October inclusive 2025, with each deployment consisting of two Anabat recorders positioned in locations deemed most likely to help determine the pattern of activity across the site.

3.9.3. All monthly surveys lasted a minimum of five days, although these were often left for much longer when possible, to gain additional information. This means that some surveys span from one month into the next. The weather for these time periods is shown beneath the survey data, split into months.

3.9.4. The data gathered is extensive and it is not possible to include all extrapolated information into this report. Anything deemed relevant to the development is included.

3.9.5. Every effort has been made to assign calls to species level, however, many calls recorded were faint or of poor quality. Therefore, on occasion, bats have been marked to their family level only where reasonable degrees of confidence could not be achieved.

3.9.6. The location of these Anabat detectors, along with their marked number is shown below. Each Anabat detector was kept in the same location throughout the surveys to allow for consistency. Ideally a third detector would have been positioned further to the southeast of Anabat 1, however, there was no suitable location due to the nature of the vegetation.



3.9.7. An average number of calls per night has been calculated by dividing the total number of calls by the number of nights.

### 3.9.8. Static Anabat Data – 17<sup>th</sup> to 28<sup>th</sup> April 2025.

April 2025		
Species	AB1 (R12)	AB2 (R10)
<b>Common pipistrelle</b> <i>Pipistrellus pipistrellus</i>	5722	221
<b>Soprano pipistrelle</b> <i>Pipistrellus pygmaeus</i>	5	0
<b>Daubenton's</b> <i>Myotis daubentonii</i>	2	2
<b>Natterer's</b> <i>Myotis nattereri</i>	0	1
<b>Noctule</b> <i>Nyctalus noctula</i>	10	9
<b><i>Myotis</i> spp.</b>	2	0
<b>Total calls recorded</b>	<b>5741</b>	<b>233</b>
<b>Average Calls Per Night</b>	<b>522</b>	<b>21</b>

### 3.9.9. Static Anabat Data – 13<sup>th</sup> to 19<sup>th</sup> May 2025.

May 2025		
Species	AB1 (R12)	AB2 (R10)
<b>Common pipistrelle</b> <i>Pipistrellus pipistrellus</i>	437	109
<b>Brown long-eared</b> <i>Plecotus auritus</i>	0	1
<b>Noctule</b> <i>Nyctalus noctula</i>	0	2
<b>Total calls recorded</b>	<b>437</b>	<b>112</b>
<b>Average Calls Per Night</b>	<b>73</b>	<b>19</b>

### 3.9.10. Static Anabat Data – 8<sup>th</sup> to 17<sup>th</sup> June 2025.

June 2025		
Species	AB1 (R11)	AB2 (R5)
<b>Common pipistrelle</b> <i>Pipistrellus pipistrellus</i>	3603	191
<b>Soprano pipistrelle</b> <i>Pipistrellus pygmaeus</i>	24	0
<b>Nathusius' pipistrelle</b> <i>Pipistrellus nathusii</i>	2	0
<b>Daubenton's</b> <i>Myotis daubentonii</i>	6	1
<b>Natterer's</b> <i>Myotis nattereri</i>	0	1
<b>Noctule</b> <i>Nyctalus noctula</i>	2	11
<b>Leisler's</b> <i>Nyctalus leisleri</i>	3	0
<i>Nyctalus spp.</i>	5	0
<i>Myotis spp.</i>	4	0
<b>Total calls recorded</b>	<b>3649</b>	<b>204</b>
<b>Average Calls Per Night</b>	<b>405</b>	<b>23</b>

### 3.9.11. Static Anabat Data – 15<sup>th</sup> to 21<sup>st</sup> July 2025.

July 2025		
Species	AB1 (AB14)	AB2 (AB15)
<b>Common pipistrelle</b> <i>Pipistrellus pipistrellus</i>	1263	144
<b>Soprano pipistrelle</b> <i>Pipistrellus pygmaeus</i>	4	1

<b>Nathusius' pipistrelle</b> <i>Pipistrellus nathusii</i>	1	0
<b>Daubenton's</b> <i>Myotis daubentonii</i>	0	2
<b>Leisler's</b> <i>Nyctalus leisleri</i>	0	1
<i>Nyctalus</i> spp.	1	3
<i>Myotis</i> spp.	3	0
<b>Total calls recorded</b>	<b>1272</b>	<b>151</b>
<b>Average Calls Per Night</b>	<b>212</b>	<b>25</b>

### 3.9.12. Static Anabat Data – 11<sup>th</sup> to 18<sup>th</sup> August 2025.

August 2025		
Species	AB1 (AB14)	AB2 (AB15)
<b>Common pipistrelle</b> <i>Pipistrellus pipistrellus</i>	647	207
<b>Soprano pipistrelle</b> <i>Pipistrellus pygmaeus</i>	9	4
<b>Daubenton's</b> <i>Myotis daubentonii</i>	4	0
<b>Noctule</b> <i>Nyctalus noctula</i>	0	5
<b>Leisler's</b> <i>Nyctalus leisleri</i>	0	1
<i>Nyctalus</i> spp.	1	6
<i>Myotis</i> spp.	15	7
<b>Total calls recorded</b>	<b>676</b>	<b>230</b>
<b>Average Calls Per Night</b>	<b>97</b>	<b>33</b>

**3.9.13. Static Anabat Data – 8<sup>th</sup> to 15<sup>th</sup> September 2025.**

September 2025		
Species	AB1 (AB13)	AB2 (AB17)
<b>Common pipistrelle</b> <i>Pipistrellus pipistrellus</i>	279	46
<b>Soprano pipistrelle</b> <i>Pipistrellus pygmaeus</i>	2	0
<i>Nyctalus</i> spp.	0	2
<i>Myotis</i> spp.	2	0
<b>Total calls recorded</b>	<b>283</b>	<b>48</b>
<b>Average Calls Per Night</b>	<b>40</b>	<b>7</b>

**3.9.14. Static Anabat Data – 6<sup>th</sup> to 13<sup>th</sup> October 2025.**

October 2025		
Species	AB1 (AB21)	AB2 (AB15)
<b>Common pipistrelle</b> <i>Pipistrellus pipistrellus</i>	124	0
<b>Soprano pipistrelle</b> <i>Pipistrellus pygmaeus</i>	1	0
<i>Myotis</i> spp.	4	0
<b>Total calls recorded</b>	<b>129</b>	<b>0</b>
<b>Average Calls Per Night</b>	<b>18</b>	<b>0</b>

### 3.10. Weather data.

The weather conditions for the duration each month of deployment is shown in the table below.

Weather conditions			
Month	Average Max Temperature	Average Min Temperature	Days with rain
April	12°C	6°C	3
May	15°C	8°C	0
June	18°C	11°C	4
July	18°C	15°C	5
Aug	23°C	15°C	0
Sept	15°C	10°C	3
Oct	14°C	10°C	1

### 3.11. Interpretation of results.

3.11.1. The following statistics have been extrapolated using the above data.

3.11.1.1. *Use of the site by Anabat Location.*

3.11.1.1.1. This shows that by a significant margin, location 1 is the most used, with over 90% of the calls being recorded here. This would be expected due to the trees and scrub providing connectivity along the eastern boundary of the site and all known bat roosts in the area being to the east of the site.

3.11.1.1.2. Location 2 is significantly least used, likely due to the more open nature and residential houses that back onto the site.

	AB1	AB2
<b>Total calls</b>	12188	978
<b>% of total calls</b>	92.6%	7.4%
<b>Usage rank</b>	<b>1</b>	<b>2</b>

### 3.11.1.2. Use of the site by species.

3.11.1.2.1. This shows that over 98% of the bat species using the site are common pipistrelle. This is to be expected given the location of the site.

3.11.1.2.2. The remainder of the calls are made up by infrequent passes from other species with the next most frequent bat species being soprano pipistrelle, however, these only make up 0.38% of the total calls at the site.

3.11.1.2.3. Rather unexpected is the identification of Nathusius' pipistrelle at the site, however, this is an extremely infrequent passer-by with only three calls throughout the seven months of static recording. This species tends to prefer watercourse corridors and more extensive woodland. The recordings were likely taken as bats commuted between woodland and watercourse habitats to the southeast of the site and more extensive woodland and reservoirs to the northwest.

Species	Total calls	% of total calls
<b>Common pipistrelle</b> <i>Pipistrellus pipistrellus</i>	12993	98.69
<b>Soprano pipistrelle</b> <i>Pipistrellus pygmaeus</i>	50	0.38

<b>Nathusius' pipistrelle</b> <i>Pipistrellus nathusii</i>	3	0.02
<b>Noctule</b> <i>Nyctalus noctula</i>	39	0.29
<b>Leisler's</b> <i>Nyctalus leisleri</i>	5	0.04
<b>Natterer's</b> <i>Myotis nattereri</i>	2	0.02
<b>Daubenton's</b> <i>Myotis daubentonii</i>	17	0.13
<b>Brown long-eared</b> <i>Plecotus auritus</i>	1	0.01
<b>Myotis</b> <i>Myotis spp.</i>	37	0.28
<b>Nyctalus</b> <i>Nyctalus spp.</i>	18	0.14
<b>Total</b>	13165	-

### 3.11.1.3. Use of the site by month.

3.11.1.3.1. The usage per month is not as easy to calculate as total calls are distorted based on number of nights. Instead, the average calls per night over all months has been calculated (214) and then each month compared to that figure to get an understanding of whether usage is above or below the average for the site.

3.11.1.3.2. Using the figures below, it is clear that the most significant months of usage for the site are April and June. Both months showed high numbers of common pipistrelle with low numbers of noctule and a few other species.

3.11.1.3.3. The month of May saw a vast drop in number of bats using the site in both areas 1 and 2. The lack of rain for an extended period could have contributed to this, however, the temperatures remained mild and not unusual for that time of year.

Month	Average calls per night	+/- % of average calls
April	543	+153.74
May	92	-57.01
June	428	+100
July	237	+10.75
Aug	130	-39.25
Sept	47	-78.04
Oct	18	-91.59

3.11.1.4. *Additional data.*

3.11.1.4.1. Additional data can be extracted using the above tables such as usage per location per species, but that has not been included within this report as it is difficult to display. Should additional tables showing such data be required then please feel free to request them from Whitcher Wildlife Ltd.

3.11.1.4.2. From the above results, it is clear that moderate numbers of bats, particularly common pipistrelle are foraging and commuting along the eastern boundary of the site, using the connectivity of scrub and trees along the site. As there are records of roosts to the southeast and east in the immediate surroundings, it is not surprising that bats are using the eastern boundary as a commuting corridor.

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## 4. BIODIVERSITY NET GAIN (BNG) ASSESSMENT.

### 4.1. Baseline Calculations.

4.1.1. The below tables demonstrate the baseline units for the site, using the Statutory Metric, which is the most appropriate metric for this site at the time of this report. A copy of the metric and condition assessments will be provided alongside this report.

#### 4.1.2. Area habitats.

Habitat Type	Extent (Ha)	Distinctiveness	Condition	Biodiversity Units (BU)
g3 – Neutral grassland	0.0174	Medium	Poor	0.07
g3c – Other neutral grassland (A)	0.5337	Medium	Moderate	4.27
g3c – Other neutral grassland (B)	0.1719	Medium	Moderate	1.38
g4 – Modified grassland	0.0501	Low	Poor	0.10
h3d – Bramble scrub	0.0124	Medium	Condition Assessment N/A	0.05
h3h – Mixed scrub (A)	0.0754	Medium	Moderate	0.60
h3h – Mixed scrub (B)	0.0268	Medium	Poor	0.11
h3h – Mixed scrub (C)	0.1212	Medium	Poor	0.48
w1g – Other broadleaved woodland	0.0199	Medium	Poor	0.08
Individual trees	0.1425	Medium	Moderate	1.14
Individual trees	0.0692	Medium	Good	0.83
<b>Total</b>	<b>1.24</b>	<b>-</b>	<b>-</b>	<b>9.11</b>
<b>Total without tree areas</b>	<b>1.03</b>	<b>-</b>	<b>-</b>	<b>-</b>

4.1.3. The total baseline score of the site areas is 9.11 BU. The table shows areas for individual trees generated by the metric in order to calculate a biodiversity score. These are not included in the total area of the site.

#### 4.1.4. Hedgerow habitats.

Habitat Type	Extent (Km)	Distinctiveness	Condition	Biodiversity Units (BU)
h2a – Native hedgerow	0.0429	Low	Good	0.26
<b>Total</b>	<b>0.0429</b>	-	-	<b>0.26</b>

4.1.5. The total baseline score of the site hedgerows is 0.26 BU.

4.1.6. The red line boundary has been adjusted to exclude watercourse habitats and is 10m from the watercourse itself.

## 4.2. Post Development Calculations.

4.2.1. The habitats to be retained include small areas of scrub and grassland in the southeastern corner of the site. One sycamore tree on the northwestern corner of the site is also to be retained.

4.2.2. The dominant habitat to be created is vegetated garden which score low in the metric. Other created habitats include an area of modified grassland on the southeastern boundary of the development which will be maintained to a good condition with a variety of native species and at least 6-8 vascular species per m<sup>2</sup>. Five small native trees including two rowan (*Sorbus aucuparia*) and three field maple (*Acer campestre*) will be planted and achieve a moderate condition by avoiding a strict pruning regime and being situated oversailing vegetation below. Some areas of ornamental hedgerow will also be created and whilst these are beech (*Fagus sylvatica*) which is a native tree species, as a single species hedgerow, this is classed as ornamental.

4.2.3. It should be noted that any habitats including hedgerows and trees within gardens cannot be counted towards post-works habitats. This is due to the commitment to maintain the habitat for thirty years, which cannot be guaranteed within private gardens.

4.2.4. Post development calculations have been carried out based on the development plans provided.

4.2.5. *Area habitats.*

The post development area habitat calculations show that the proposals will deliver 1.52 BU as rounded by the metric and shown in the tables below.

Habitat Type	Extent (Ha)	Distinctiveness	Condition	Biodiversity Units (BU)
<b><i>Retained</i></b>				
Other neutral grassland (A)	0.0063	Medium	Moderate	0.05
Mixed scrub (A)	0.0446	Medium	Moderate	0.36
Mixed scrub (B)	0.0024	Medium	Poor	0.01
Mixed scrub (C)	0.0394	Medium	Poor	0.16
Rural trees	0.0041	Medium	Moderate	0.03
<b>Total</b>	<b>0.10</b>	<b>-</b>	<b>-</b>	<b>0.61</b>
<b><i>Created</i></b>				
Modified grassland (Meadow area)	0.0615	Low	Good	0.29
Modified grassland	0.0483	Low	Poor	0.09
Vegetated garden (Grassland areas tied to properties)	0.0237	Low	N/A	0.05
Introduced shrub	0.0292	Low	N/A	0.06
Vegetated garden (Private gardens)	0.1899	Low	N/A	0.37
Developed land, sealed surface	0.4055	V.Low	N/A	0.00
Developed land, sealed surface (Buildings)	0.1705	V.Low	N/A	0.00
Urban trees	0.0204	Medium	Moderate	0.06
<b>Total</b>	<b>0.95</b>	<b>-</b>	<b>-</b>	<b>0.91</b>
<b>Total without tree areas</b>	<b>0.93</b>			

#### 4.2.6. Hedgerow habitats.

The post development hedgerow calculations show that the proposals will deliver 0.12 BU as rounded by the metric and shown in the tables below. This is through the creation of some small ornamental hedgerows. The loss of the native hedgerow along the western boundary of the site results in a loss of 0.14 BU (-52.46%).

Hedgerow Type	Extent (Km)	Distinctiveness	Condition	Biodiversity Units (BU)
<b><i>Created</i></b>				
Non-native, ornamental hedgerow	0.0225	V.Low	Poor	0.02
Non-native, ornamental hedgerow	0.0285	V.Low	Poor	0.03
Non-native, ornamental hedgerow	0.0103	V.Low	Poor	0.01
Non-native, ornamental hedgerow	0.0655	V.Low	Poor	0.06
<b>Total</b>	<b>0.13</b>	<b>-</b>	<b>-</b>	<b>0.12</b>

#### 4.2.7. BNG Summary.

4.2.7.1. The calculations based on the landscaping plan indicate that there will be a loss of 7.59 habitat units (-83.33%) and a loss of 0.14 hedgerow units (-52.46%). In addition to this, the trading rules of the metric have not been satisfied. The following has been extracted from the Statutory Metric tool which summarises the BNG outcome.

FINAL RESULTS		
<b>Total net unit change</b> <small>(Including all on-site &amp; off-site habitat retention, creation &amp; enhancement)</small>	<i>Habitat units</i>	-7.59
	<i>Hedgerow units</i>	-0.14
	<i>Watercourse units</i>	0.00
<b>Total net % change</b> <small>(Including all on-site &amp; off-site habitat retention, creation &amp; enhancement)</small>	<i>Habitat units</i>	-83.33%
	<i>Hedgerow units</i>	-52.46%
	<i>Watercourse units</i>	0.00%
<b>Trading rules satisfied?</b>	<b>No - Check Trading Summaries ▲</b>	

4.2.7.2. The table below specifies how many units are outstanding. 10.02 BU would be required in order to achieve a 10% net gain in area habitats, which is an additional 8.50 BU to what is already being provided. 0.28 BU would be required to achieve a 10% net gain in hedgerow habitats, which is an additional 0.16 BU to what is being provided.

Unit Type	Target	Baseline Units	Units Required	Unit Deficit
<i>Habitat units</i>	10.00%	9.11	10.02	8.50
<i>Hedgerow units</i>	10.00%	0.26	0.28	0.16
<i>Watercourse units</i>	10.00%	0.00	0.00	0.00

4.2.7.3. With the proposed development, it is not feasible to provide the necessary area units on site. Therefore, these will be purchased from a habitat bank or offset off-site.

4.2.7.4. It is feasible to achieve a net gain in hedgerow habitats by changing the proposed planted hedgerows from single species beech hedgerows that will be classed as ornamental, to native species hedgerows which can include multi-species hedgerows, for example beech (*Fagus sylvatica*), holly (*Ilex aquifolium*) and elder (*Sambucus nigra*) as is currently present on the site or using a different species such as hawthorn (*Crataegus monogyna*) or hazel (*Corylus avellana*). If these hedgerows are maintained to a moderate condition by allowing growth to 1.5m in height, avoiding a strict pruning regime, ensuring vegetation below is left undamaged and preventing significant gaps throughout the hedgerow, a 64.89% gain in hedgerow habitats will be achieved and the trading rules will be satisfied.

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## **5. ASSESSMENT, MITIGATION AND RESIDUAL EFFECTS.**

### **5.1. Designated Sites.**

#### ***5.1.1. Assessment.***

5.1.1.1. The survey area lies approximately 1.3km from the nearest non-statutory site, Huddersfield Narrow Canal LWS. As the proposed development now excludes the watercourse to the southeastern boundary and will not exceed the red line boundary, there will be no impacts on non-statutory sites.

5.1.1.2. There are no statutory sites within 2km of the survey area, however, the site does lie within the ninth IRZ of the South Pennine Moors SSSI which is situated approximately 6.25km to the southwest. The proposed development does not fall within the criteria that require Natural England to be notified of the works and there will be no impact on the SSSI.

#### ***5.1.2. Mitigation.***

No mitigation measures are required to compensate for or prevent any impacts on statutory or non-statutory sites.

#### ***5.1.3. Residual Effect.***

It is assessed that the development will have no residual effect on statutory or non-statutory sites.

### **5.2. Species – Bats.**

#### ***5.2.1. Assessment.***

5.2.1.1. There are no structures within the survey area to provide suitability for roosting bats. There are records of small roosts in the buildings surrounding the site and therefore, these bats may use the site for commuting and foraging purposes. Whilst there will be no direct impact on roosting bats, impacts to foraging and commuting bats are addressed below.

5.2.1.2. None of the trees within the survey area possess features to provide suitable roosting opportunity for bats. Therefore, the proposed works will have no impact on roosting bats within trees.

5.2.1.3. Bat activity survey results show that bat activity is mainly concentrated along the eastern side of the site and around location 1, where there is a corridor of scrub and trees creating connectivity throughout the surrounding areas. The eastern boundary appears to be mainly of importance for common pipistrelles, especially during the spring, when they will have moved to their summer roosts and potentially be rearing young. Due to the presence of connective habitat in the surrounding areas, this is only of importance at a site level. Location 2 was used significantly less than location 1 with only a few bats using this boundary as a corridor for foraging and commuting.

### ***5.2.2. Mitigation.***

5.2.2.1. It has been made a priority to ensure the eastern boundary of the development, including the scrub and mature tree line, is protected and left undisturbed where possible, during both construction and for the long term to ensure that bat species can continue to utilise the site to a similar degree.

5.2.2.2. As the southern half of the northeastern boundary of the site will remain intact, this will maintain a connective corridor, which will continue into the gardens and wooded areas to the north of the site.

5.2.2.3. To ensure that this is protected both during and after works are complete, a sensitive lighting scheme will be drawn up to ensure that the habitat is clearly marked and no lighting is directed towards this habitat during works and all lighting in place post-works, is southwest facing away from this habitat corridor.

### ***5.2.3. Residual Effects.***

Through the above mitigation measures, there will be no negative residual effects on roosting or foraging and commuting bats at a site level.

## **5.3. Species – Nesting Birds.**

### ***5.3.1. Assessment.***

5.3.1.1. The trees, scrub, and grassland habitats within the survey area all provide suitable opportunity for nesting birds between March and August each year. Furthermore, one active magpie nest was identified on site, within a tree towards the southeastern corner. Development of the site will have a direct impact on any nests present on site if done between March and August inclusive.

5.3.1.2. It is assessed as highly likely that peregrine falcons are nesting in the large chimney structure, just outside the eastern boundary of the site. The peregrines, Schedule 1 birds that are protected from disturbance whilst nesting, have been observed frequently emerging from and returning to the ledges around the chimney top on multiple occasions and have also been observed using the survey area to hunt. There is extensive open habitat to the north of the survey area and as peregrines are known to predominantly hunt other birds in the air, development of the site will not result in a significant loss of hunting habitat. However, there could be a high impact on the nesting peregrines if disturbance is caused by works commencing during the nesting season.

### ***5.3.2. Mitigation.***

5.3.2.1. The nesting bird season extends from March to August each year. In order to prevent any impact to birds nesting on site or peregrines nesting in the chimney adjacent to the site, the proposed works will not commence until September or October in any given year to take advantage of the longest time period when nesting birds will not be present. The works will be preceded by a nesting bird survey as a precaution, as some birds can continue to occupy nests into September. If any nests are identified, an exclusion zone shall be marked up and maintained until the nest is no longer occupied.

5.3.2.2. As peregrine falcons are listed on Schedule 1 of the Wildlife and Countryside Act 1981, meaning that they are afforded additional protections as follows.

If listed on Schedule 1, it is an offence to **disturb**:

- any bird while it is building a nest
- any bird while is in, on, or near a nest containing eggs or young
- any bird while lekking
- the dependent young of any bird

5.3.2.3. In order to prevent disturbance, as much work as possible will be done between September and February inclusive to avoid the nesting season. If works continue beyond February into the nesting season, on the provision that work levels on site stay

consistent, it should not cause any additional disturbance if peregrines begin nesting whilst works are underway.

### **5.3.3. Residual Effect.**

With the above mitigation in place there will be no negative impact on nesting birds at a site level.

## **5.4. Species – Reptiles and Small Mammals.**

### **5.4.1. Assessment.**

There are multiple edge habitats on the site, created by the combination of dense vegetation and more open and bare areas. In addition, the wall along the western boundary provides refugia and basking areas for reptiles. Whilst the site is suitable, it only provides habitat for low numbers of common reptile species and as there is a wide range of habitats throughout the surrounding areas and grassland and scrub on the southeastern boundary of the site will be retained, the development of the site will not result in a significant loss of habitats for reptiles or small mammal species.

### **5.4.2. Mitigation.**

5.4.2.1. A Construction Environmental Management Plan (CEMP) will be drawn up that will include suitable avoidance measures for amphibians, reptiles, hedgehogs and other small mammals. As a minimum this will include toolbox talk briefings, two stage vegetation clearance, demolition of the wall on the western boundary by hand and what actions to take if any such species are found.

5.4.2.2. Gaps, a minimum dimension of 13cm x 13cm will be created in boundary fences to retain connectivity for hedgehogs across the site.

### **5.4.3. Residual Effects.**

Through implementation of all measures of the CEMP, there will be no negative residual effects on reptiles or other small mammals on the site.

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## 6. BIODIVERSITY ENHANCEMENT MEASURES.

6.1. In line with the National Planning Policy Framework, the following biodiversity enhancements for fauna species will be provided on the site:

- Integrated bat boxes or pairs of integrated swift boxes will be expected in 50% of the new properties on the site.
- Bee bricks will also be incorporated into at least 50% of the new buildings.

6.2. The area of retained scrub and grassland on the southeastern boundary of the survey area should be left undisturbed and fenced off where possible to allow hedgehogs to use this habitat. Signposts may also be put in place with information about the importance of the habitat for fauna species. Along with this, homeowners will be provided with information packets regarding hedgehogs and other small mammals and how to provide suitable habitat for them within gardens and avoid causing harm.

\*\*\*\*\*

Prepared by:	
Xanthe Walker BA (Hons).	Date: 1 <sup>st</sup> December 2025

Checked by:	
Ruth Georgiou BSc MCIEEM	Date: 4 <sup>th</sup> December 2025

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## **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.

All 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 0.9km<sup>2</sup> 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.

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# APPENDIX V. BASELINE MAP OF THE SURVEY AREA.



Site: Parkwood Road, Golcar

Reference: 250423

Date: 17.11.2025

Produced by: Xanthe

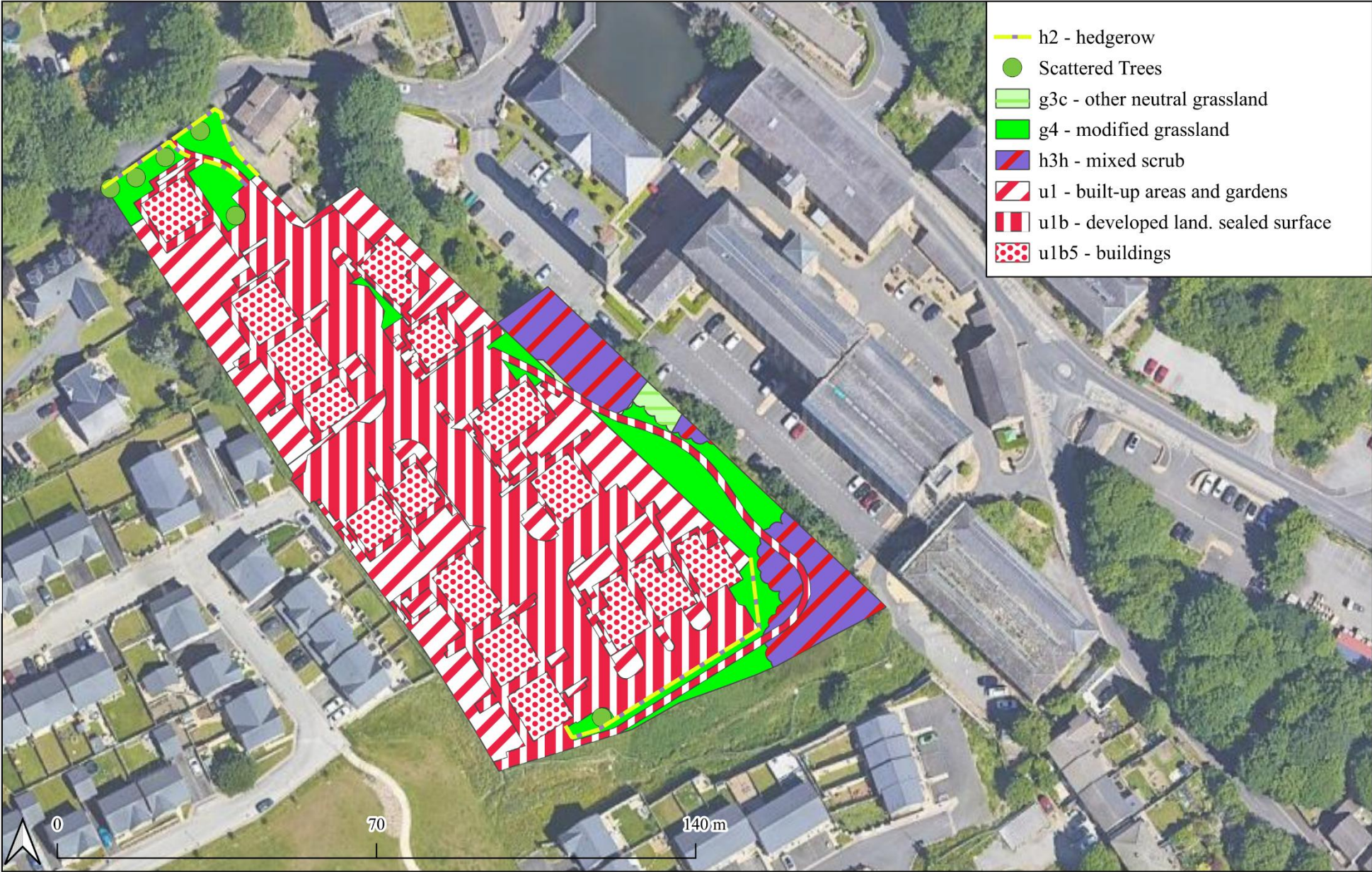


## **Appendix VI. TARGET NOTES.**

T1 – Approximate location on magpie nest.

T2 – Location of peregrine nest in chimney.

**APPENDIX VII. POST WORKS MAP OF THE SURVEY AREA.**



Site: Parkwood Road, Golcar

Date: 01.12.2025

Reference: 250423

Produced by: Xanthe Walker



# APPENDIX VIII. LANDSCAPING PLAN.



# APPENDIX IX. TOOLBOX TALKS.

## Toolbox Talk: Reptiles

Whitcher Wildlife Ltd

Ecological Consultants



### Identification: Grass Snakes.

The grass snake can be up to 120cm long. It is generally dark green in colour but may occasionally appear grey with vertical black bars and spots that run along its sides. There is usually a yellow marking around the neck.



### Other Reptiles.

In addition to the reptiles outlined on this document, there are also two other reptile species in Great Britain, the smooth snakes and the sand lizard. These reptiles are a lot less common than the four species covered with the smooth snake being predominantly found on heathland in southern England and the sand lizard found throughout Great Britain in coastal dune areas.

These species are also afforded a higher level of protection because they are European Protected Species.

### Identification: Adders.

The adder is the only native species that is venomous, but it is rarely harmful to humans. Adult adders are generally up to 66cm long. Back ground colouration is a light shade of grey or brown with a black zigzag marking along the length of the back. As with all reptiles, colouration varies and becomes duller as sloughing (skin shedding) approaches.



### Habitat.

Maintaining the right body temperature is vital to reptiles' survival. In the morning they find a warm basking site to heat up their bodies and then later they may move back into the shade so as not to overheat. Hence, reptiles require a habitat that provides a range of suitable refugia for shelter such as dense vegetation, rubble or log piles, or crevices and open areas for basking such as bare ground, rocks or railway ballast shoulders. During hot summers reptiles may be found in damper, cooler sites. Reptiles hibernate, spending the winter in burrows or under logs protected from the cold and predators.

### Identification: Slow Worms.

Slow worms grow to around 45cm in length. The males and females display a marked difference in colour when fully grown. In general, the species displays colouring that varies from light brown, dark brown, grey, bronze or brick red with the females often displaying a dark vertebral stripe and both males and females displaying occasional markings on the flanks.



When disturbed in their natural habitat reptiles will usually move away quickly.

### Identification: Common Lizards.

Common lizards grow to around 16cm. They are grey brown to dark brown, often with a darker streak that may run the entire length of the spine. A continuous dark band bordered by light yellow or white spots is often seen on either side of the body. The underside of the males is egg yolk yellow to orange spotted with black. Females are yellowish grey.



### Legislation.

Reptiles are protected under Schedule 5 of the Wildlife and Countryside Act 1981. They received greater protection following reviews of the schedules published in 1988 and 1991. This means they are protected against intentional or recklessly killing and injuring and against sale or transporting for sale.

**If reptiles are identified during works, stop all works and contact Whitcher Wildlife Ltd directly on 01226 753271 or at [info@whitcher-wildlife.co.uk](mailto:info@whitcher-wildlife.co.uk)**

## Toolbox Talk: Hedgehog

Whitcher Wildlife Ltd

Ecological Consultants



The hedgehog was a common species once widespread throughout the country but suffered a major decline in the 20th Century due to loss of habitat. They are now found distributed across the UK, but the population increases to the south and east. Hedgehogs are therefore rare in Scotland, Wales and Northern Ireland.

### Identification: Hedgehog

The hedgehog is a small, spiny mammal around 20cm long with a long snout. The hedgehog's back and sides are covered in 25 mm (1") long spines. These are absent from the face, chest, belly, throat and legs which are covered with a coarse, grey-brown fur. Hedgehogs roam the countryside at night and can walk one to two miles while foraging.



### Habitat

The hedgehog got its name because of its peculiar foraging habits. They root through hedges and other undergrowth in search of their favourite food – small creatures such as insects, worms, centipedes, snails, mice, frogs, and snakes. As it moves through the hedges it emits pig-like grunts — thus, the name hedgehog.



### 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 on schedule 6 of the Act which makes it illegal to kill 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 is meant to confer 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.

### Hedgehog Hibernation.

Hedgehogs hibernate from October/November through to March/April although exact timings are dependent on the weather. However, hedgehogs will still move from one place to another during hibernation and therefore can be seen out and about during the winter. Hedgehogs hibernate under dense dead leaves and vegetation and this can cause another threat to them, the results of disturbance to their hibernacula. Many will seek shelter beneath piles of garden debris and are killed when such piles are set fire to.

### Hedgehog Help.

We can help hedgehogs by:

- Leaving wild corners in our gardens.
- Leaving access gaps under garden fences.
- Leaving water bowls out during dry periods.
- Leaving cat food or dog food out at night
- Being careful when starting fires to ensure no hedgehogs are sleeping

If hedgehogs are identified during works, stop all works and contact Whitcher Wildlife Ltd directly on 01226 753271 or at [info@whitcher-wildlife.co.uk](mailto:info@whitcher-wildlife.co.uk)