Whitcher Wildlife Ltd.
Ecological Consultants.

HOLME GRANGE SCHOOL, WOKINGHAM.

OS REF: SU 82687 67180.

PRELIMINARY ECOLOGICAL APPRAISAL.

Ref No: 250161.

Date: 12th February 2025.

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1. INTRODUCTION.

1.1. Plans are being prepared for the development of a Multi-Use Games Area (MUGA) within the boundary of Holme Grange School, Wokingham.

1.2. Whitcher Wildlife Ltd has been 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 site survey was carried out on 6th February 2025. This report outlines the findings of those surveys and makes appropriate recommendations.

1.4. Appendix I to IV of this report provide additional information on specific species and are designed to assist the reader to understand 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 (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. All surveys were carried out in line with the Chartered Institute of Ecological and Environmental Management (CIEEM) survey standards and advice.

2.14. 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.

2.15. 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.

2.16. This survey was carried out 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).

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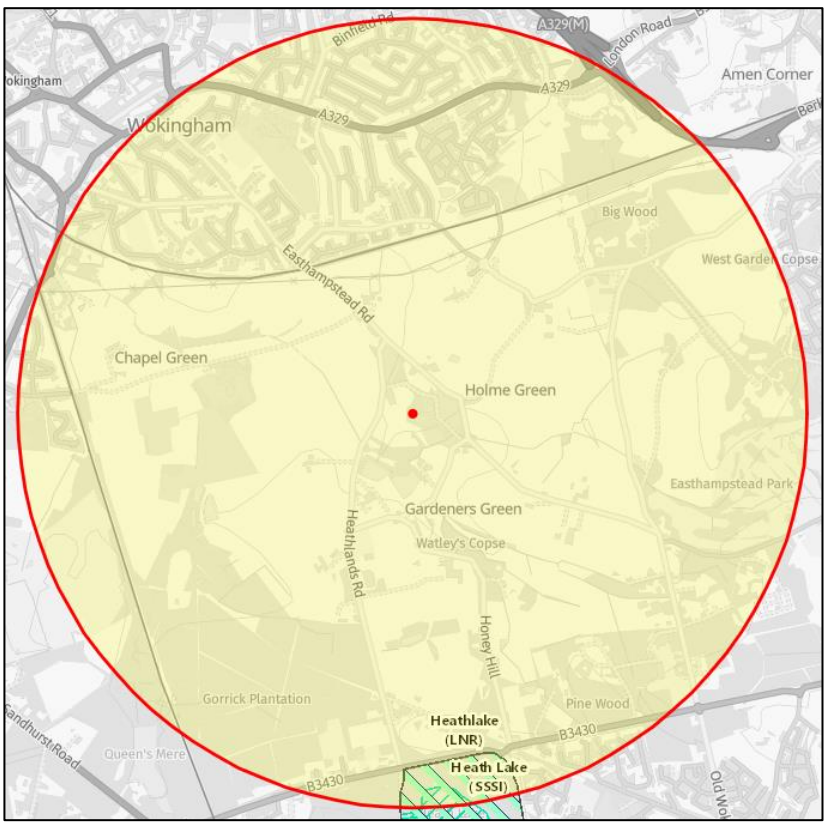
3. SURVEY RESULTS.

3.1. Data Search Results.

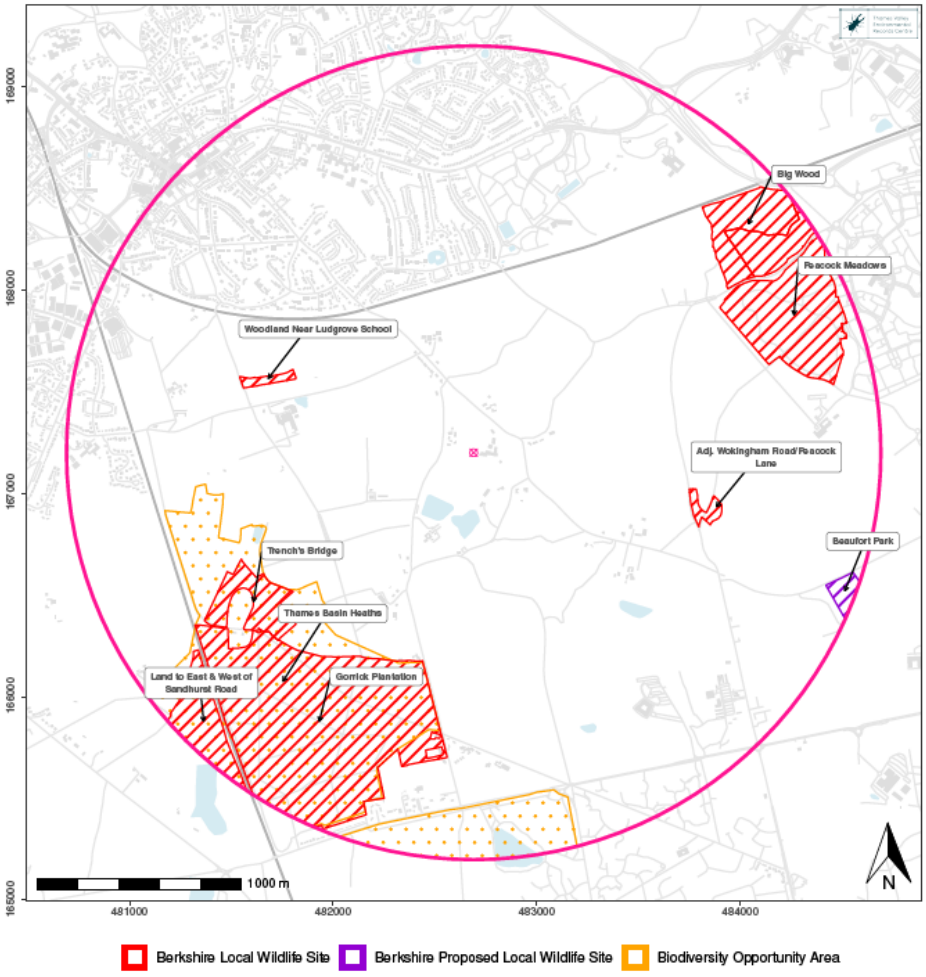
3.1.1. Desktop data search results of existing records have been provided by Thames Valley Environmental Records Centre for protected species and designated sites within 2km of the survey area.

3.1.2. The data search provided the locations of two statutory designated sites within 2km of the survey area. Heath Lake Site of Special Scientific Interest (SSSI) and Local Nature Reserve (LNR) lies approximately 1.6km to the south of the survey area and is shown on the map below.



3.1.3. The survey area also lies within a risk zone for an SSSI, but this risk zone does not apply to this residential development.

3.1.4. In addition, there are seven Local Wildlife Sites (LWS), one Biodiversity Opportunity Area, and one proposed Local Wildlife Site within 2km of the survey area.



3.1.5. The data search returned records of [redacted] common bat species, hazel dormouse, great crested newts, reptiles and stag beetles.

[redacted]

3.1.7. There are vague 1km records of common pipistrelle, soprano pipistrelle, and brown long-eared bat, which all overlap the survey area. All are sighting/survey records and not roost records. The closest confirmed roost record is approximately 1km from the survey area.

3.1.8. There are two hazel dormouse records within 2km of the survey area. One is a historical record. The most recent record is from 2017 and is located approximately 1km from the survey area.

3.1.9. The closest great crested newt record is approximately 300m from the survey area.

3.1.10. There are records of adder, common lizard and slow-worm within 2km of the survey area. The closest record is a record of grass snake approximately 360m from the survey area.

3.1.11. There are over one hundred and eighty records of stag beetle within 2km of the survey area, the closest of which is approximately 100m from the survey area. Another record approximately 140m from the survey area is within the grounds of the school.

3.2. The Surveyed Area.

The survey area comprised an existing tennis court, outdoor swimming pool, and an area of amenity grassland with raised planters and a polytunnel. The survey area is surrounded by school buildings to the north and east and is bordered by woodland to the south and west. The woodland is surrounded by agricultural fields.

3.3. Survey Limitations

The survey was carried out during the winter months when some plant species may be more difficult to identify. However, this is not thought to be a constraint to the survey due to the survey area primarily consisting of artificial habitats, with tree species which can be identified within the winter months.

3.4. Description of Habitats.

Appendix V of this report contains an annotated map marked up with the varying habitats. The primary habitats on and adjacent to the site are: -

- g4 – Modified grassland
- w1f – Lowland mixed deciduous woodland
- u1 – Built-up areas and gardens
- u1b – Developed land; sealed surface
- h2b – Other hedgerow
- u1e – Built linear feature

3.4.1. g4 – Modified grassland

Strips of grassland were present within the survey area, comprising well-maintained lawns, which appear to be regularly mown and maintained. Due to the short sward, individual species within the lawn could not be identified.

3.4.2. w1f – Lowland mixed deciduous woodland

3.4.2.1. An area of woodland, currently used as an “adventure playground” area, was present in the south of the survey area. The woodland was dominated by oak (*Quercus robur*), with scattered holly (*Ilex aquifolium*) and conifer species. Wood chippings covered the woodland floor to provide a safe surface for the adventure playground, and therefore no ground flora was present.

3.4.2.2. A woodland was present in another area of the school grounds, which has been proposed for habitat enhancements for the purposes of biodiversity net gain. This woodland was previously dominated by ash (*Fraxinus excelsior*), but a large number of ash trees in this woodland have previously been felled due to the presence of ash dieback disease. Remaining species at the time of this survey included silver birch (*Betula pendula*), oak (*Quercus robur*), cherry laurel (*Prunus laurocerasus*), holly (*Ilex aquifolium*), bramble (*Rubus fruticosus*), ivy (*Hedera helix*), broadleaf dock (*Rumex obtusifolius*), and tufted hair-grass (*Deschampsia cespitosa*).

3.4.3. u1 – Built-up areas and gardens

Secondary codes: 845 Ground-level planters; 616 Allotments

An allotment area was present in the northern half of the survey area. The allotment area comprised amenity grassland, which was regularly mown with ground-level vegetable planters, a polytunnel, a compost heap, and a wooden shed. Eight recently

planted immature apple (*Malus domestica*) trees were present along the boundary between the allotment area and the tennis court.

3.4.4. u1b – Developed land; sealed surface

Secondary codes: 821 Artificial sports pitches

A swimming pool present in the survey area has been mapped as "u1b - developed land; sealed surface" due to there being no other suitable alternative in the UKHAB classification. The swimming pool is chemically maintained and regularly used, with paved surfaces surrounding the pool and no vegetation is present. Therefore, this habitat type was chosen to reflect the lack of biodiversity value provided. Additionally, a tennis court was present in the northern half of the survey area. The tennis court had an artificial surface and was surrounded by a mesh fence.

3.4.5. h2b – Other hedgerow

A mature Leyland cypress (*Cupressus* x *leylandii*) hedgerow was present on the boundary between the woodland/adventure playground area and the swimming pool.

3.5. Description of Fauna.

3.5.1. No badger setts or field evidence was identified within the survey area.

3.5.2. No watercourses were present within the survey area, and therefore no suitable habitats were present for otter, water vole, or white-clawed crayfish.

3.5.3. Bats

3.5.3.1. Three non-permanent built structures were present including a greenhouse made from a timber frame and plastic bottles, a flat-roofed wooden shed and a polytunnel. All of these buildings were constructed from unsuitable materials for bats

and no potential roost features were identified. The structures were assessed as having negligible potential for roosting bats.

3.5.3.2. One oak (*Quercus robur*) tree, identified by tag number 4738, was identified as providing potential roost features for multiple bats (PRF-M) due to the presence of a large opening in the centre of the trunk leading to a hollow cavity, as well as smaller woodpecker holes.


3.5.3.3. The woodland within the survey area provides potentially suitable foraging habitat for bats and potential commuting routes between other areas of suitable habitats in the surrounding area, as well as any potential roosts within the school. Overall, the survey area is assessed as having high potential for foraging and commuting bats.

3.5.4. The site survey and a search of Ordnance Survey maps found ten ponds or waterbodies within 500m of the survey area, shown on the map below. The ponds shown in yellow are separated from the survey area by ecological barriers to the movement of great crested newts, including roads and rivers. However, the ponds shown in orange have good habitat connectivity to the survey area through woodland and lines of trees. The closest of these ponds is approximately 50m from the survey area. Furthermore, suitable terrestrial habitats for great crested newts are present within the woodland in the survey area. Therefore, the presence of great crested newts within the survey area cannot be ruled out.

3.5.5. The vegetation within the survey area is suitable for nesting birds during the nesting bird season, which extends from March to August each year.

3.5.6. The woodland habitats within the survey area provide some suitable habitat for reptiles and provide connectivity through the wider area. However, the other artificial habitats are regularly disturbed and do not provide suitable basking or refugia opportunities for reptiles. Therefore, it is likely that suitability of the site is limited to low numbers of common reptile species.

3.5.7. The survey area lies within the known UK distribution for hazel dormice, and there are recent records approximately 1km from the survey area. There is limited ecological connectivity between the survey area and the woodland where dormice have been recorded. Furthermore, the woodland on site lacks the well-developed understorey, which is preferred by hazel dormice and therefore has low suitability for this species.

3.5.8. The survey area lies outside of the known distribution for red squirrel, and there are no records of this species within 2km of the survey area.

3.5.9. The survey area provides suitable commuting routes for hedgehogs through the site and neighbouring habitats.

3.5.10. No invasive species listed on Schedule 9 of the Wildlife and Countryside Act 1981 were identified in the survey area.

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4. BIODIVERSITY NET GAIN (BNG) BASELINE.

4.1. Baseline biodiversity calculations have been carried out using the Statutory Metric tool, the current metric at the time of writing this report. The calculations have been completed for habitat and hedgerow units only. There are no watercourse features on the site. Condition assessments have been calculated on the separate spreadsheet provided.

4.2. Habitat Units.

4.2.1. The area habitat calculations include all habitats that lie within the red line boundary of the site. The habitats baseline on the site was calculated at 0.91 units as demonstrated in the table below.

Habitat Type	Extent (ha)	Distinctiveness	Condition Assessment	Biodiversity units
Lowland mixed deciduous woodland	0.1113	High	Poor	0.67
Modified grassland	0.0088	Low	Poor	0.02
Developed land; sealed surface	0.0717	V.Low	N/A - Other	0.00
Allotments	0.0234	Low	Moderate	0.09
Rural tree	0.0326	Medium	Poor	0.13
Total	**0.22**			**0.91**

4.3. Hedgerow Units.

4.2.1. The hedgerow calculations include all hedgerows that lie within the red line boundary of the site. The habitats baseline on the site was calculated at 0.01 units as demonstrated in the table below.

Hedgerow Type	Length (km)	Distinctiveness	Condition Assessment	Biodiversity units
Non-native and ornamental hedgerow	0.012	V.Low	Poor	0.01
Total	**0.012**			**0.01**

5. EVALUATION OF FINDINGS.

5.1. The survey area lies far enough away from any statutory or non-statutory designated sites to avoid any impacts.

5.2. No badger setts or field evidence was identified within the survey area. Therefore, there will be no impact on badgers as a result of the proposed development.

5.3. No watercourses were present within the survey area, and therefore no suitable habitats were present for otters, water voles or white-clawed crayfish. Therefore, there will be no impact on these species as a result of the proposed development.

5.4. One tree was assessed as having roosting potential for multiple bats (PRF-M), and therefore the removal of this tree may have a high impact on bats if present.

5.5. The survey area was assessed as providing high potential for foraging and/or commuting bats. The proposed development includes the felling of a small percentage of the woodland, and a woodland corridor will remain intact. However, the proposed development includes the installation of new floodlighting, which is likely to illuminate the remaining woodland habitat, which would be immediately adjacent to the lighting. The proposed development may therefore have a high impact on foraging and/or commuting bats.

5.6. The site survey and a search of Ordnance Survey maps found ten ponds or waterbodies within 500m of the survey area, three of which have good ecological connectivity with the survey area. Furthermore, the woodland within the survey area provides good terrestrial habitat for great crested newts. Therefore, the proposed development may have an impact on great crested newts if present.

5.7. The vegetation within the survey area is suitable for nesting birds during the nesting bird season, which extends from March to August each year. Any vegetation clearance works within the nesting bird season will have an impact on nesting birds.

5.8. The woodland habitats within the survey area provide some suitable habitat for reptiles and provide connectivity through the wider area. However, the other artificial habitats such as the tennis court and allotments are regularly disturbed and do not provide suitable basking or refugia opportunities for reptiles. Therefore, it is likely that

suitability of the site is limited to low numbers of common reptile species. Precautionary measures will ensure that there is no impact on reptiles as a result of the development.

5.10. The survey area lies outside of the known UK distribution for red squirrel, and there are no records of the species within 2km of the survey area. Therefore, there will be no impact on red squirrel as a result of the proposed works.

5.11. The survey area lies within the known UK distribution for hazel dormice, and there are recent records approximately 1km from the survey area. There is limited ecological connectivity between the survey area and the woodland where dormice have been recorded. Furthermore, the woodland on site lacks the well-developed understorey, which is preferred by hazel dormice and therefore has low suitability for this species. Therefore, it is unlikely that hazel dormice will be present within the survey area. The proposed works will therefore have no impact on hazel dormice.

5.11. Hedgehogs may be present within and around the survey area. However, provided due care is taken during the works and precautions are in place, any impacts on small mammals can be avoided.

5.12. No invasive species listed on Schedule 9 of the Wildlife and Countryside Act 1981 were identified in the survey area. Therefore, the proposed works will not allow the spread of such species.

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6. RECOMMENDATIONS.

6.1. This Preliminary Ecological Appraisal (PEA) report is designed to advise the client of the initial survey results so that any potential ecological constraints identified can be considered within the site development plan. It also advises of any additional surveys or works that are required to allow full impact assessments to be undertaken.

6.2. Once all recommendations of the PEA have been considered, any necessary further surveys have been completed and the development plans have been finalised, there is a requirement for the report to be converted into an Ecological Impact Assessment (EcIA) where details of all survey results, mitigation and ecological enhancements are included, to arrive at an assessment of the residual impact of the proposed development.

6.3. One tree is assessed as having roosting potential for multiple bats (PRF-M) according to the Bat Conservation Trust's 'Good Practice Guidelines'. Therefore, it is recommended that three dusk emergence surveys are carried out during the active bat season, which extends from May to August inclusive, to determine whether bats are using the tree to roost. The surveys must be carried out at least three weeks apart.

6.4. If during the surveys, bats are found to be using the tree to roost, then a mitigation strategy will be required, which will need to be submitted with the planning application. A Natural England European Protected Species licence will also be required to cover the felling works, which can only be applied for once planning consent has been issued. If no bats are found during the surveys, then no licencing will be required.

6.5. Due to the woodland providing high potential for commuting and/or foraging bats, it is recommended that further bat activity surveys are carried out to determine how bats use the site, so that an assessment can be made on the impact of the development on them. This should comprise a mixture of automatic and manual surveys, including five nights of static detector deployment each month, from April to October, and one walked manual survey per season (spring – April/May, summer – June/July/August, and autumn – September/October).

6.6. It is recommended that any vegetation or site clearance works are carried out outside the nesting bird season. If this is not possible, it is recommended that the clearance works are immediately preceded by a nesting bird survey, carried out by a competent ecologist. Any active nests found plus a suitable buffer around them, must be left undisturbed until the young have fledged.

6.7. It is recommended that an eDNA survey be carried out on each of the three ponds highlighted in orange in paragraph 3.5.4. to confirm the presence or absence of great crested newts within them. This survey can only be carried out between mid-April and the end of June.

6.8. If the eDNA survey returns a negative result, then no further surveys or licensing will be necessary. If the eDNA survey returns a positive result, then there will be two potential options to proceed with the development.

6.9. The first of which is register the scheme under the Natural England District Level Licencing scheme. This route means there is no need for further surveys or mitigation, and in their place, a conservation fee is paid to Natural England. Natural England will make an assessment of the proposed level of impact on the development to determine the size of the fee. This route can also be followed without doing the eDNA surveys but this may result in unnecessary costs should great crested newts be absent.

6.10. The second option is to follow the traditional survey route, which is necessary to determine the population size. Six surveys will be necessary and these surveys usually involve the setting of traps, torching, netting and egg-searching but given the nature of the ponds and health and safety implications that would be associated with entering them, other options may need to be explored.

6.11. Upon completion of these surveys, the works will need to be carried out under a licence obtained from Natural England. There will be a requirement for amphibian fencing and pitfall traps to be erected around the works area to ensure the site is free from great crested newts prior to works commencing. The traps will have to be checked daily for between thirty and ninety days, depending on the size of the population found.

6.12. As a precaution, it is recommended that measures are put in place to ensure no harm is caused to any reptiles or hedgehogs. This should include the following measures:

- It is recommended that all onsite personnel are briefed on the identification of reptiles. A toolbox talk has been provided to aid with identification.
- In the unlikely event that multiple reptiles or any hibernating reptiles are discovered, works should stop immediately, and Whitcher Wildlife should be contacted for further advice.

- Any stored materials moved from the ground must be carefully lifted and not dragged along the ground to prevent harm to any fauna species that may be sheltering beneath.
- Prior to site clearance, all vegetation should be cut to a minimum of 200mm above ground level and the arisings should be carefully removed from site. This will encourage any amphibians, reptiles or hedgehogs at ground level to vacate the area and will deter them from returning.

6.13. Biodiversity Net Gain (BNG)

6.13.1. There is a requirement to provide an overall biodiversity net gain on the site. There will be a statutory requirement to deliver a net gain of at least 10% biodiversity units. There will also be a requirement to meet the trading rules of the Statutory Metric.

6.13.2. The development of the site will result in the loss of woodland habitat with high distinctiveness. Therefore, the woodland must be replaced with the same woodland habitat type. However, it is recommended in the first instance that as much woodland habitat as possible are retained to avoid significant losses in biodiversity, as the loss of woodland habitat can be particularly difficult and/or costly to offset.

6.13.3. It is recommended that a copy of the draft landscaping proposals for the site is provided once they are drawn up so that the biodiversity calculations can be completed.

6.13.4. As the proposed development consists of a new multi-use games area, it will not be possible to achieve an overall net gain in biodiversity due to the loss of the woodland. It is therefore recommended that as much area as possible within the wider school boundary is dedicated to woodland planting to mitigate for the on-site loss.

6.13.5. If the proposals still do not meet the required 10% net gain, further offsite compensation will then need to be considered to deliver any shortfalls.

6.14. Biodiversity Enhancements.

There will be an expectation to provide some biodiversity enhancements for fauna species on the site. This can be achieved by providing tree-mounted bat boxes and bird boxes in the remaining woodland. Additional enhancements can be recommended once the site layout has been agreed.

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Prepared by:	
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Checked by:	
Derek Whitcher, BSc, MCIEEM, MCMI	Date: 18th February 2025

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Appendix I. 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 II. 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 III. GREAT CRESTED NEWT INFORMATION.

Ecology

Great Crested Newts breed in ponds and other water bodies. They can begin to migrate to their breeding ponds as early as the first frost-free days in late January with the majority reaching their breeding ponds by mid-March. Timing will be influenced by several factors, primarily evening temperatures above 5^{o}C and rainfall.

The peak egg-laying period is from mid-March to mid-May. The newts will lay their eggs individually, mainly on the leaves of submerged plants. The larva hatch after three weeks and then take another 2-3 months to complete larval development. Adult newts generally leave their breeding ponds from late May onwards.

Once the larvae have completed metamorphosis (the transition from aquatic larvae, efts, to land-adapted juveniles), they emerge from the pond. This emergence begins in late August and generally continues until late October. It takes 2-4 years to reach sexual maturity, during which time the newts will be land based.

Adults and immature newts spend the winter in places that afford protection from frost and flooding. This will generally be underground amongst tree roots, in mammal burrows, or under suitable refuges above ground like deadwood or rubble piles. Hibernation may last from October to February.

Whilst on land, outside the hibernation period, great crested newts will forage at night, taking a wide range of invertebrate prey.

Great Crested Newts therefore spend the majority of their time on land and only visit the ponds for breeding purposes.

Great Crested Newts will travel large distances between ponds and terrestrial refuges. It is recommended that anywhere within 500m of a pond should be treated as potential Great Crested Newt habitat.

Surveys

Walkover surveys will identify the suitability of any ponds within the area for Great Crested Newts by using a HSI assessment. The terrestrial habitat and their links will also be assessed.

Aquatic surveys of newts can be carried out through the trapping of ponds in suitable weather conditions during the breeding season, although these surveys do not provide accurate population estimates.

Terrestrial surveys and exclusions can be conducted between March and September when newts are moving out of breeding ponds.

An experienced surveyor must carry out the surveys and must be in possession of an appropriate Natural England Great Crested Newt survey licence.

It is essential that Great Crested Newt surveys are planned well in advance of any development and ideally before Planning Consent is sought. Surveys can only be carried out at the appropriate time of year and repeat surveys are essential.

Legislation

Great Crested Newts are protected under Appendix II of the BERN Convention (1982), Schedule 5 of the Wildlife and Countryside Act (1981), Annex II and IV of the Habitats Directive, Annex II of the Conservation and Wildlife Regulations (2010) and are 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 kill, injure or take any Great Crested Newt, to interfere with any place used for shelter or protection, or to intentionally disturb any animal occupying such a place.

If Great Crested Newts are to be affected by any development, a thorough assessment of the population is essential followed by the design of a comprehensive mitigation package. Only when this has been done can a licence application be submitted to Natural England for approval. It takes 30 working days for a licence application to be determined and the period that mitigation measures take can be measured in months. It is therefore essential to plan well in advance of development commencing.

Appendix IV. BAT INFORMATION.

Ecology

There are currently 18 species of bat residing in Britain, 17 of which 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

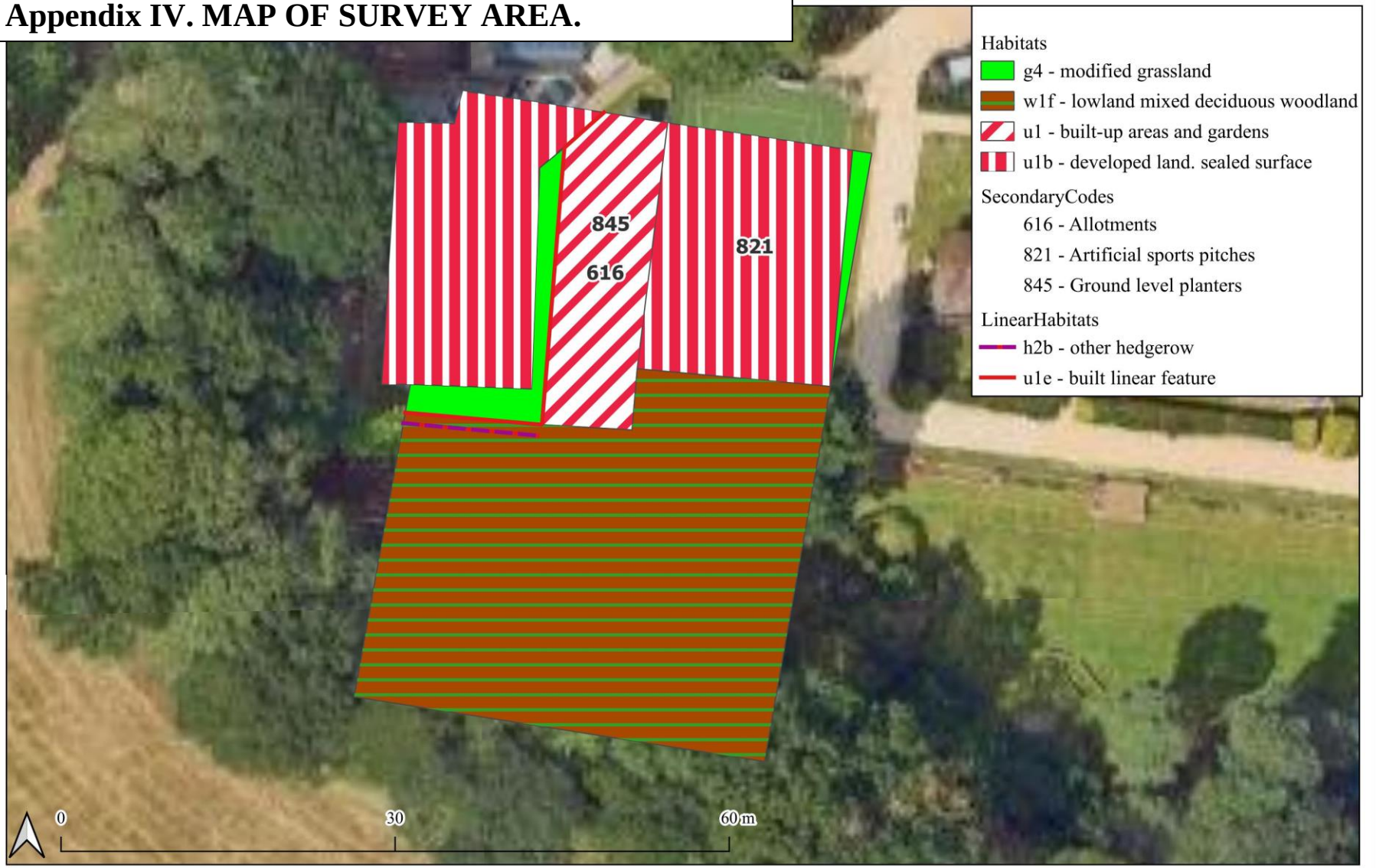
under section 41 of the Natural Environment and Rural Communities Act (2006) making them species of principal importance.

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 IV. MAP OF SURVEY AREA.



Site: Holme Grange School

Reference: 250161

Date: 12.02.2025

Produced by: Jess

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.

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.

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.

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.

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.

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.

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

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