Ecological Assessment





Riding Mead Farm, Chipping Sodbury 18th February 2022

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Summary

- S.1. This report has been prepared by Tyler Grange Group Ltd on behalf of Jane Morris. It sets out the findings of an Ecological Assessment at Riding Mead Farm, Chipping Sodbury, hereafter referred to as 'the site'. The site is centred on National Grid Reference ST 73835 83845 to the northeast of Chipping Sodbury. It is surrounded by open countryside including pastoral and arable farmland to the north, south and east, with the town of Yate present to the west.
- S.2. A planning application is to be submitted to South Gloucestershire Council for the construction of a manège, stable block, and hay barn.
- S.3. The site comprises an area of improved grassland, bounded by hedgerows to the west and south. A small area of hardcore is present on site, which had been colonised by ruderal vegetation, and a small area of scattered trees is present at the southwestern extent of the site.
- S.4. Due to the absence of any European statutory sites within 10 km of the proposed development, national statutory sites within 2 km, and the small-scale proposals, no direct or indirect impacts to any statutory sites are anticipated.
- S.5. Due to the nature of the proposals, and the small development footprint, with all construction and operational activity confined to the redline boundary, no direct or indirect impacts to Sodbury Common SNCI, or other SNCIs are expected as part of the proposed works.
- S.6. The habitats on the site that will be lost to facilitate the construction of the manége, stables and hay barn are of negligible ecological importance and therefore require no specific mitigation or compensation for their loss. Nevertheless the loss of these habitats will be compensated for by the inclusion of native species or species with a known wildlife benefit within any proposed landscaping. The hedgerows onsite are of local ecological importance and will be retained as part of the proposals and protected during works.
- S.7. Mitigation and enhancement measures regarding protected species with potential to be present onsite have been provided within Section 4 of this report, which include:
 - a precautionary method of works statement (PMWS) to be adhered to in relation to amphibians and reptiles;
 - the retention, protection and sensitive management of boundary hedgerows;
 - the installation of bird and bat boxes post construction to deliver net gains for biodiversity; and
 - a sensitive working methodology in relation to hedgehogs and badgers.
- S.8. Owing to the nature of terrestrial habitats present and to be affected, even if present in the nearby offsite pond 200 m to the north, great crested newts (GCN) are considered likely absent from the site and therefore will not be impacted by the proposals. As a precaution, however and in line with the approach approved in a similar neighbouring scheme [Planning Ref: P21/04792/F] a precautionary method of works statement (PMWS) in relation to GCN is provided in Appendix 2. Implementation of reasonable avoidance measures (RAMs) described in this appendix will avoid



harm to GCN. In the unlikely event GCN are found during works, works will cease to allow consultation with Natural England.

S.9. Subject to the implementation of the recommended mitigation and enhancement measures, which can be secure through appropriately worded planning conditions, it is considered that the proposed development of the site could accord with relevant legislation and planning policy.



Section 1: Introduction, Site Context and Purpose

Introduction

- **1.1.** This report has been prepared by Tyler Grange Group Ltd on behalf of Jane Morris. It sets out the findings of an Ecological Assessment at Riding Mead Farm, Chipping Sodbury, hereafter referred to as 'the site'.
- **1.2.** A planning application is to be submitted to South Gloucestershire Council for the construction of a manège, stable block, and hay barn.

Context

1.3. The site is centred on National Grid Reference ST 73835 83845 to the northeast of Chipping Sodbury. It is surrounded by open countryside including pastoral and arable farmland to the north, south and east, with the town of Yate present to the west. The redline boundary is shown on Figure 1, below. Surrounding land within the applicant's ownership is shown by the blueline boundary.



Figure 1: Site context, red line, and blue line boundary (Google, 2022.)

1.4. A previous permitted development permission (reference P20/05110/PNGR) was granted May 2020 for the change of use of the agricultural building, immediately to the south of the redline boundary, to a residential dwelling. This application was updated and re-granted on 16th December 2021 (reference P21-06689/PNGR). A protected species survey report (Richard Green, 2020) and update (Richard Green, 2021) were submitted with the application. These confirmed the likely absence of roosting bats from the barn. Ecological enhancements described within the reports, including installation of bat and bird boxes on the converted barn, are to be agreed within the blueline boundary, in order to discharge condition 4 of the permission.



Purpose

- 1.5. This report:
 - Uses available background data and results of an initial field survey to describe and evaluate the ecological features present within the likely zone of influence (ZoI¹) of the proposed development;
 - Describes the actual or potentially significant ecological effects as a result of the proposed development; and
 - Where appropriate, describes mitigation, compensation, and enhancement measures, together with planning controls, to ensure conformity with legislation and policy provided in detail at **Appendix 1**.
 - **1.6.** This assessment and the terminology used are consistent with the 'Guidelines for Ecological Impact Assessment in the UK and Ireland' (CIEEM, 2018).

¹ Defined as the area over which ecological features may be affected by biophysical changes as a result of the proposed project and associated activities. This is likely to extend beyond the project site, for example where there are ecological or hydrological links beyond the site boundaries (CIEEM, 2018).



Section 2: Methodology

Scoping

- 2.1. The site is defined by the application red-line boundary, see Habitat Features **Plan 14625/P01** for detail.
- 2.2. The scope of the assessment was determined based on available online data, and an extended Phase I habitat survey.
- 2.3. Consideration of the potential ZoI for different ecological features as a result of the proposed development informed the search areas for the data search, described below.

Legislation and Planning Policy

2.4. The relevant legislation and planning policies regarding ecological features are summarised below. Full details of planning policy can be found in **Appendix 1**.

Legislation

- The Wildlife and Countryside Act (WCA) 1981 (as amended);
- The Conservation of Habitats and Species Regulations 2018;
- The Countryside and Rights of Way (CRoW) Act 2000;
- The Natural Environment and Rural Communities Act (NERC) 2006;
- The Hedgerows Regulations 1997; and
- The Protection of Badgers Act 1992.

National Planning Policy

- National Planning Policy Framework (NPPF), July 2021
- Office of the Deputy Prime Minister (ODPM) Circular 06/2005: Biodiversity and Geological Conservation Statutory Obligations and their Impact within the Planning System



Local Planning Policy

- South Gloucestershire Council New Local Plan Issues and Priorities: Issue 4 – Connecting and enhancing wildlife habitats. Issue 5 – Green infrastructure strategies. Issue 7 – Tree loss and provision. Priority 2 -Protect and enhance our environment.
- South Gloucestershire Council Local Plan Core Strategy Policies: Policy CS 1- High Quality Design.
 Policy CS2 - Green Infrastructure.
- South Gloucestershire Council Policies, Site, and Places Plan Policies: Policy PSP3 – Trees and Woodland Policy PSP18 - Statutory Wildlife Sites: European Sites and Sites of Special Scientific Interest (SSSIs) Policy PSP19 – Wider Biodiversity
- South Gloucestershire Supplementary Planning Guidance "Biodiversity and the Planning Process"

Data Search

- 2.5. Owing to the extent of the proposed development and nature of the habitats to be affected a full data search was not undertaken, as the results would be considered unlikely to impact the necessary mitigation and enhancement measures. However, an online search for statutorily designated sites was undertaken, extended to a 2 km radius for nationally designated sites and 10 km for European statutorily designated sites. Available information on European protected species licencing and records were also searched within 4 km for bats, and 2 km for other European protected species. Available information of South Gloucestershire Council Local Policies Map was searched for any non-statutory sites adjacent to the site.
- 2.6. The data search was conducted in February 2022 and the following organisations and resources were contacted and consulted. Information supplied by these organisations has, where relevant, been incorporated into the following assessment, with due acknowledgement.
 - Multi-Agency Geographic Information for the countryside (MAGIC) website²;
 - Joint Nature Conservation Committee (JNCC) website³;
 - Natural England (NE) designated sites website⁴;
 - Ordnance Survey mapping;
 - South Gloucestershire Council Planning website, and; ⁵

⁵https://www.southglos.gov.uk/documents/Biodiversity-Action-Plan-2016-26.pdf



² https://magic.defra.gov.uk

³ https://jncc.gov.uk/our-work/uk-protected-areas/

⁴ https://designatedsites.naturalengland.org.uk/

• Google Maps, including aerial photography.

Extended Phase 1 Habitat Survey

- 2.7. A site walkover survey was conducted on the 28th of January 2022 by Aaron McFarland, MSc, BSc (Hons), a suitably experienced ecologist.
- 2.8. The methods used during the walkover survey broadly followed methods used in an 'extended' Phase I habitat survey (JNCC, 2010). This technique provides an inventory of the habitat types present and dominant plant species. Note was taken of the more conspicuous fauna and any evidence of, or the potential for, the presence of protected or notable flora and fauna. The survey focussed on habitats present within the redline boundary, but consideration of broad habitat types was also made within the blue line boundary. Adjacent habitats to the red and blueline boundaries were also considered, where access was available.
- 2.9. Weather conditions during the survey were dry, with a temperature of 6.5 °C, cloud cover at 7/8 Oktas, and wind intensity at Beaufort Scale 2.



Preliminary Bat Roost Assessment (PBRA)

- 2.10. A PBRA was undertaken on all trees on or adjacent to the site boundary to record potential roost features (PRFs) and determine the level of potential of each tree to be used by roosting bats. The assessment was undertaken on 28th January 2021 by Aaron McFarland.
- 2.11. The location of trees with PRFs are illustrated on Habitat Features Plan 14625/P01. All trees were inspected from the ground aided by the use of binoculars and a high-powered torch.
- 2.12. Features recorded may include woodpecker holes, frost cracks, deadwood, knot holes and limb wounds. The potential of the trees to support roosting bats was assessed using the criteria shown in **Table 2.1** below.

Suitability	Description of Roosting Habitats
Negligible	Negligible habitat features on site likely to be used by roosting bats.
Low	A tree of sufficient size and age to contain Potential Roost Features (PRFs) but with none seen from the ground or features seen with only very limited potential.
Moderate	A structure or tree with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions and surrounding habitat but unlikely to support a roost of high conservation status (with respect to roost type only).
High	A structure or tree with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time.

Table 2.1: Assessment criteria - adapted from BCT Good Practice Guidelines (Collins, 2016)

Habitat Suitability Index Assessment Survey

- 2.13. A habitat suitability index (HSI) assessment of an offsite pond was conducted on 28th January by Aaron McFarland. The survey followed the methodology set out in current survey guidelines (Oldham, Keeble, Swan, & Jeffcote, 2000) and comprised assessing different pond parameters from the pond edge. The location of the pond subject to survey are illustrated on Habitat Features Plan 14625/P01
- 2.14. The Amphibian and Reptile Groups (ARG) Advice Note 5 (ARG UK, 2010) regarding HSI guidance was used whereby a number of factors including pond location, water quality, macrophyte cover and shading were assessed. A score is given to each waterbody between 0 and 1, with scores closer to 0 having lower probability of GCN (*Triturus cristatus*) occurrence.



The HSI scores are provided below:

- <0.5 Poor;
- 0.5 0.59 Below average;
- 0.6 0.69 Average;
- 0.7 0.79 Good; and
- >0.8 Excellent.
- 2.15. The purpose of the HSI assessment is to provide a measurement of the habitat suitability to support amphibians and does not confirm the presence or likely absence of GCN within the site. However, in general, ponds with a higher habitat suitability assessment score are more likely to support GCN than one with a lower score. This assessment does not replace the need for further GCN surveys.

Evaluation

- 2.16. The evaluation of habitats and species is defined in accordance with published guidance (CIEEM, 2018). The scale of importance of specific ecological features is assigned using a geographic frame of reference, with international being most important, then national, regional, county, district, and local. Below this, a feature is considered to be of negligible ecological importance.
- 2.17. Evaluation is based on various characteristics that can be used to identify ecological features likely to be important in terms of biodiversity. These include site designations (such as Sites of Species Scientific Interest (SSSIs), or for undesignated features, the size, conservation status (locally, nationally, or internationally), and the quality of the ecological feature. In terms of the latter, quality can refer to habitats (for instance if they are particularly diverse, or a good example of a specific habitat type), other features (such as wildlife corridors or mosaics of habitats) or species populations or assemblages.
- 2.18. Consideration will also be given to legally protected or controlled species which are 'important features' in the context of this assessment, for which mitigation measures are required to ensure legal compliance, regardless of their geographic scale of importance. Thus, it is possible for a feature of negligible ecological importance to be legally protected and hence require mitigation.

Impact Assessment

- 2.19. The assessment of impacts identifies and characterises impacts and their effects as a result of the proposed development on important ecological features. This includes consideration of impacts at all relevant stages of the development, including construction and operation/occupation [include decommissioning and restoration, if relevant it won't be for most projects].
- 2.20. Characterisation of impacts has been undertaken based on CIEEM guidance (2018) with reference to where they are considered to be positive or negative, their extent, magnitude duration, reversibility, timing and frequency, as appropriate.



Limitations

- 2.21. The site habitat survey was undertaken outside the optimal season for flora, however due to the nature of the habitats present and the use and management on the site, it is not considered likely to affect the conclusions of the assessment.
- 2.22. Data sourced using on-line databases is historical information, and datasets may be incomplete, inaccurate, potentially unreliable or missing entirely. It is therefore important to note that even where data is held, a lack of records for a defined geographical area does not necessarily indicate that a given species is absent from that area; the area may simply be under-recorded.
- 2.23. Ground level assessments are conducted to identify potential roost features and the level of potential of a tree to be used by roosting bats. It is possible small potential roost features, or potential roosting features at height may be missed, as the entirety of a tree cannot be inspected from the ground.
- 2.24. Ground level visibility of the onsite hedgerows was restricted by dense colonising plants. Consequently, it is possible that evidence of previous bird nesting, such as vacant nests may be situated in concealed locations which may not be visible to the surveyor.

Quality Assurance

2.25. This report has been prepared by Aaron McFarland, a suitably experienced ecological consultant and has been subject to a formal review by a full member of CIEEM as part of the Tyler Grange quality assurance process. CIEEM members are bound to abide by the Institute's Code of Professional Conduct.



Section 3: Ecological Features and Evaluation

3.1 Ecological features within the site and wider study area (see Section 2, paragraph 2.8 for definition) are described below, together with an assessment of their importance using a geographical frame of reference advocated by CIEEM (CIEEM, 2018).

Designated Sites

- 3.2 The site is not on, or directly adjacent to any statutorily designated sites, nor are there any statutorily designated sites within the study area.
- 3.3 According to Defra's MAGIC website, the site lies within the identified 'Impact Risk Zone' (IRZ) of the Lower Woods SSSI, which lies c. 2.9 km to the north. Lower Woods SSSI forms the most extensive ancient woodlands in the Avon area and extends to cover areas of grassland containing both neutral and wet ground species. This site supports large populations of passerine birds and has a rich invertebrate fauna.
- 3.4 Consultation responses provided for the adjacent permitted development for charge of use of the barn, to the south of the redline boundary (reference P21/06689/PNGR) confirm that Sodbury Common Site of Nature Conservation Interest (SNCI), which is designated as a nonstatutorily designated site for neutral and marshy grassland is present adjacent to the site. SNCIs are designated within Gloucestershire, so are considered to be of **county ecological importance**.
- 3.5 According to information available on South Gloucestershire Council Local Policies Map, a second SNCI is present at Horton Bushes, approximately 1 km north east of the site, also considered to be of **county ecological importance**.

Habitats and Flora

3.6 The habitats present within the site are shown on Habitat Features **Plan 14625/P01** and are described in **Table 3.1** below including, where appropriate, composition of main species present and their ecological importance. Photographs of the habitats described below have been provided in **Appendix 3**.



Table 3.1 Habitat descriptions.

Habitat	Description	Ecological Importance
Tall ruderal	A small area of hardcore is present at the southern extent of the site, which had been colonised by ruderal species (Photograph 1). Species recorded within this area included bristly oxtongue <i>Helminthotheca echioides</i> , common nettle <i>Urtica</i> dioica, bramble <i>Rubus fruticosus</i> agg., hogweed <i>Heracleum sphondylium</i> , herb robert <i>Geranium</i> <i>robertianum</i> , teasels <i>Dipsacus</i> sp., broad leaved dock <i>Rumex obtusifolius</i> , and cock's-foot <i>Dactylis glomerata</i> . Several building materials were present within this area including wooden beams, pallets and bricks.	This habitat is limited in extent, species poor, and consists of common and widespread species. It is of negligible ecolog- ical importance.
Improved grassland	The dominant habitat on site is formed by improved grassland, which has previously been grazed by sheep and alpacas (Photograph 2). The sward is dominated by cock's-foot, perennial rye- grass <i>Lolium perenne</i> , and Yorkshire fog <i>Holcus lanatus</i> , with crested dog's tail <i>Cynosurus cristatus</i> , and meadow foxtail <i>Alopecurus pratensis</i> present rarely. The grassland is short overall, with an average sward height of approximately 9 - 10 cm with occasional tussocky areas. Creeping buttercup <i>Ranunculus repens</i> , clover <i>Trifolium</i> spp., spear thistle <i>Cirsium vulgare</i> , and broadleaved dock were common throughout the entirety of the grassland.	This habitat is species poor and con- sists of species that are common and wide- spread throughout the surrounding area. In addition, the sward height low, and therefore this habitat offers sub-optimal foraging, commuting, and shelter- ing habitat for wildlife. Consequently, this area was assessed as negligible ecological importance.
Species Poor Intact Hedgerow	 Two hedgerows were present to the south, and west of the site. No signs of recent hedgerow management were noted in either hedgerow; the hedge forming species were overgrown and had begun to take on the growth form of standard trees but remained connected as a linear feature. Hedgerow 1 (H1 - see Habitat Features Plan 14625/P01) is an unmanaged hedgerow measuring approximately 90 m in length, which is associated with an off-site drainage ditch (Photograph 3). Hedge forming species included ash <i>Fraxinus excelsior</i>, blackthorn <i>Prunus spinosa</i>, common hawthorn <i>Crataegus monogyna</i>, and field maple <i>Acer campestre</i>. 	Both H1, and H2 measure over 20 m long, less than 5 m wide and consist of 80% or more coverage of one or more native UK woody species. Consequently, both of these features qualify as a habitat of principal importance (HoPI) under section 41 of the NERC Act 2006. These features were assessed as local ecological importance.



Habitat	Description	Ecological Importance		
	This hedgerow is extensively colonised by mature dog rose <i>Rosa canina</i> , ivy <i>Hedera helix</i> , and bramble. The ground layer of this hedge is formed by a similar composition of species to that described above in improved grassland, with cleavers <i>Gallium aparine</i> also present.			
	Hedgerow 2 (H2 - see Habitat Features Plan 14625/P01) is an unmanaged hedgerow. The section of H2 within the redline boundary measured approximately 100 m long, and H2 continued a further 100 m into the blueline boundary. H2 is also associated with an offsite drainage ditch (Photograph 4).			
	Hedge forming species included field maple, common hawthorn, blackthorn, elder <i>Sambucus nigra</i> , and European spindle <i>Euonymus europaeus</i> . The ground layer of this hedge is of similar composition to that of H1 above, with ground ivy <i>Glechoma hederacea</i> , also present.			
Scattered trees	A small area of scattered mature apple <i>Malus domestica</i> , and cherry <i>Prunus spp. trees</i> are present at the southwestern extent of the site, illustrated by target note (TN1) on Habitat Features Plan 14625/P01 . (Photograph 5). The ground layer of this habitat is formed by the grasses recorded within the improved grassland habitat onsite, however this area is less managed, with scattered small tussocks, and rank areas of grass present toward the base of trees.	This habitat is limited in its overall extent and species poor. The species forming this habitat are common and widespread within the wider landscape, and across the UK. Consequently, this habitat was considered to be negligible ecological importance.		
Buildings and Hardstanding	Two small alpaca sheds are present at the north-eastern and northern extent of the site. These sheds were open and constructed from timber, with mono-pitched corrugated metal roofing (Photograph 6). An area of loose gravel hardstanding is present at the north-eastern extent of the site, forming the site access.	Buildings and hardstanding are of no inherent ecological value as they are of constructed of artificial material and/or sealed surface land.		
J	Buildings and hardstanding are of no inherent ecological value. Although there potential to support protected and priority species is considered separately in the fauna section below.	These features were considered to be negligible ecological importance.		
Offsite habita	Offsite habitats (blueline boundary)			
Hardstand- ing/ Buildings	Further hardstanding, a barn, and wooden cabin build- ing are present to the northeast of the site, near the site access. The barn is brick based, with corrugated sheet	As above, these features are of no inherent ecological value and are therefore		



rows, which was wet at the time of survey (Photograph 9).



Invasive Species

3.7 Invasive species are those listed under Schedule 9 of the WCA 1981. It is an offence to plant or otherwise cause to grow in the wild any plant which is included in Part II of Schedule 9. During the Phase I habitat survey no invasive species, or evidence of invasive species was recorded.

Fauna

- 3.8 Details of the potential fauna within the site have been described alphabetically, below. Species not included within the below have been screened out of this assessment due to an absence of suitable habitat to support such species and will therefore not be discussed further within this report.
- 3.9 **Table 3.2** details the European protected Species licences that, according to Multi-Agency Geographic Information for the Countryside (MAGIC) website, have been granted within 4km of the survey boundary for bats and 2km for other species.

Bats

3.10 Table 3.2 below details the European protected Species licences that, according to Multi-Agency Geographic Information for the Countryside (MAGIC) website, have been granted within 4 km of the site boundary for bats.

Distance and Direction	Details
c. 500 m southwest	REF: 2016-26886-EPS-MIT Allows for the destruction of a resting place of brown long- eared <i>Plecotus auritus,</i> common pipistrelle <i>Pipistrellus</i> <i>pipistrellus</i> , greater horseshoe <i>Rhinolophus ferrumequinum</i> , and lesser horseshoe <i>Rhinolophus hipposideros</i> .
c. 1.5 km southeast	REF: 2016-26484-EPS-MIT Allows for the destruction of a resting place for common pipistrelle and Daubenton's bat <i>Myotis daubentonii</i> .
c. 1.7 km northwest	REF: 2016-24274-EPS-AD2 Allows for the destruction of a breeding site and resting place of brown long eared, common pipistrelle, greater horseshoe, and lesser horseshoe.
c. 1.9 km southeast	REF: 2019-43576-EPS-MIT Allows for the destruction of a resting place of brown long eared, common pipistrelle, greater horseshoe, lesser horseshoe, and serotine <i>Eptesicus serotinus</i> .
c. 1.9 km southwest	REF: EPSM2013-5610 Allows for the destruction of a resting place for common pipistrelle, lesser horseshoe, and soprano pipistrelle <i>Pipistrellus pygmaeus</i> .

3.11 **Table 3.2** Granted European protected species (EPS) licences for bats within 4 km of the site.



Distance and Direction	Details
c. 2.1 km southeast	REF: 2020-44969-EPS-MIT Allows for the damage of a breeding site and resting place of common pipistrelle, soprano pipistrelle, and serotine.
c. 2.2 km southeast	REF: 2018-34150-EPS-MIT Allows for the damage of a breeding site of common pipistrelle.
c. 2.5 km southwest	REF: 2015-7314-EPS-MIT Allows for the damage of a breeding site of common pipistrelle and brown long-eared.
c. 2.7 km northeast	REF: EPSM2010-1879 Allows for the destruction of a resting place of common pipistrelle, soprano pipistrelle, brown long -eared, serotine, Brandt's bat <i>Myotis brandtii</i> , whiskere d bat <i>Myotis mystacinus</i> , and Natterer's bat <i>Myotis nattereri</i> .
c. 2.8 km northwest	REF: 2019-39676-EPS-MIT Allows for the destruction of a resting place of common pipistrelle.
c. 3.4 km south	REF: 2019-44116-EPS-MIT Allows for the destruction of a breeding site and resting place of common pipistrelle, lesser horseshoe, Natterer's bat, serotine, brown long-eared, and whiskered bats.
3.6 km northeast	REF: EPSM2010-1786 Allows for the destruction of a resting place of brown long- eared bats.
3.8 km northeast	REF: 2015-11055-EPS-MIT Allows for the destruction of a breeding site and resting place of common pipistrelle, lesser horseshoe, whiskered, and Daubenton's bats.

- 3.12 The site is considered to offer commuting and foraging habitat for bats given the presence of open improved grassland, and continuous linear features in the form of hedgerows, which are adjacent to offsite drainage ditches. The presence of standing water within these ditches further increases the suitability of the onsite hedgerows for foraging bats, due to the increase abundance of invertebrates associated with standing water.
- 3.13 The onsite trees and buildings were assessed to have negligible potential for roosting bats due to the absence of any potential roosting features. A large mature oak, and a mature ash tree present within offsite hedgerows, were assessed to have low potential for roosting bats.
- 3.14 Given the habitat composition of the site, and the bat species present in the surrounding area according to Table 3.2, it is considered there is potential for the following species to use the site for foraging and commuting: lesser horseshoe, greater horseshoe, Natterer's bat, whiskered bat, common pipistrelle, soprano pipistrelle, and Brandt's bat. It is considered the assemblage of bats that could use the site for foraging and commuting is likely to be of at least **local importance**.



Breeding Birds

- 3.15 The hedgerows present offer the most suitable onsite habitat for a range of nesting and foraging birds. No vacant nests were observed within the hedgerows. Birds recorded within the hedgerows during the Phase 1 habitat survey included blackbird *Turdus merula*, robin *Erithacus rubecula*, wood pigeon *Columba palumbus*, and wren *Troglodytes troglodytes*. Wren and wood pigeon are both BoCC Amber listed⁶ birds (Eaton et al. 2021).
- 3.16 The scattered trees present onsite offer further suitable habitat for nesting birds; however, no vacant nests were observed within these trees.
- 3.17 The grassland habitats onsite were not considered to offer any suitable habitat for ground nesting bird species.
- 3.18 The buildings onsite were not considered to offer suitable habitat for nesting hirundines *Hirundinidae* commonly associated with buildings such as swallows *Hirundo rustica*.
- 3.19 Further suitable habitat for nesting and foraging birds is present in the immediate surrounding area in the form of further hedgerows within the blueline boundary, and further scattered trees and hedgerows within surrounding arable fields.
- 3.20 The site is considered to offer suitable habitat for a range of common passerine birds due to the presence on the hedgerows and scattered trees. It is considered the assemblage of birds that may use the site for foraging and nesting could be of **local importance.**

Eurasian Badgers Meles meles

- 3.21 No evidence of badgers i.e., snuffle holes, tracks, setts, or latrines was recorded on the site, or within the blueline boundary.
- 3.22 The site formed sub-optimal sett creation habitat for badgers, as it was dominated by open improved grassland, with a lack of any banked areas for digging. A small, banked area was present offsite to the south of the H1; however, this was immediately adjacent to a wet drainage ditch and is not considered to form suitable sett creation habitat. Notwithstanding this, this area falls outside the redline boundary, and as such will not be impacted by the proposed development.
- 3.23 The site offers suitable foraging habitat for badgers due to the presence of open grassland and continuous linear features. The site is suitably connected to the wider area through further arable land and hedgerows, that badgers could use the site for foraging if present.
- 3.24 Given the lack of evidence recorded on site, it is considered that the site and blueline boundary do not form a significant area of foraging habitat for badgers.

⁶ Amber listed bird species are selected based on several criteria including historical decline, trends in population and range, rarity, localised distribution and international importance. Wood Pigeon and Wren are Amber listed for criterion "BI", meaning the UK holds >20% of their breeding populations, and is therefore of international importance for these birds. (Eaton, et al., 2021)



3.25 Badger is protected for welfare rather than conservation reasons, principally to protect them from persecution. They are a common and widespread species, as such, a population, if present, would be of **negligible ecological importance**.

Great Crested Newts (GCN) Triturus cristatus

- 3.26 Table 3.3 below details the European protected Species licences that, according to Multi-Agency Geographic Information for the Countryside (MAGIC) website, have been granted within 2 km of the survey boundary for GCN.
- 3.27 **Table 3.3** Granted European protected species (EPS) licences for GCN within 2 km of the site.

Distance and Direction	Details
c. 1.1 km southwest	REF: 2019-40516-EPS-MIT-2 Allows for the damage and destruction of a resting place.
c. 1.1 km northwest	REF: 2014-4468-EPS-MIT Allows for the damage and destruction of a resting place.

- 3.28 The hedgerows within the red and blueline boundaries offer the highest value terrestrial habitat for GCN, if present.
- 3.29 The offsite drainage ditches were wet at the time of survey, and approximately 30 cm deep. Given their function as a drainage feature, their water levels are likely to fluctuate, with potential flow during periods of heavy rain fall. No emergent macrophytes were noted within the drainage ditches, which reduces the areas of suitable egg laying habitat for GCN. Due to these factors, the drainage ditches were considered unlikely to form suitable breeding habitat for GCN, however form suitable connective terrestrial habitat, as they are adjacent to hedgerows.
- 3.30 One pond is present within the blueline boundary approximately 200 m northeast of the site. This pond was awarded a Habitat Suitability Index (HSI) score of 0.62, meaning the pond is considered to have 'Average' Suitability for GCN. The site is connected to this pond via the hedgerows, and it is therefore considered there is a low risk of GCN presence within the redline boundary.
- 3.31 Given the lack of suitable breeding habitat on the site, and the sub-optimal habitat composition of the majority of the site, it is considered unlikely GCN would be present on the site. More favourable terrestrial habitat in the form of further hedgerows is present adjacent to the offsite ponds. Even if present within this pond for breeding GCN would not be expected to travel to the site, when favourable terrestrial habitat is in close proximity to the pond. GCN are a priority species within South Gloucestershire Biodiversity Action Plan, and any population present in the wider area would be of **local ecological importance.**



Reptiles

- 3.32 The habitat on site was considered to be sub-optimal for reptiles due to the limited areas of transitional habitats UK reptile species require to thrive, needing suitable areas for foraging, basking, and sheltering. There are limited areas of suitable habitat for reptiles on site within the tall ruderal vegetation, base of the retained hedgerows, and within the taller tussocks at the base of the scattered trees.
- 3.33 Given the prevalence of open improved grassland onsite, and in the wider surrounding area, it is considered unlikely reptiles are present on site.. Any population present in the wider area would be of **local ecological importance**.

West European Hedgehog Erinaceus europaeus

3.34 The site offers suitable habitat for hedgehogs due to the presence of linear features i.e., continuous hedgerows along which hedgehogs could commute, and forage. Hedgehog is a species of principal importance with a declining population in the UK (Wilson and Wembridge, 2018). As a result, if present, a population of hedgehog utilising the site would be considered of **local ecological importance**.



Section 4: Impacts, Mitigation and Enhancement Strategy

Proposals

- 4.1 The proposed development is for the construction of a manège, stable block, and hay barn.
- 4.2 The Proposed Site Plan (Drawing No. RMF/0005/TM) shows that the development footprint will only occupy an area of previous hardcore and improved grassland, and will not occupy the entirety of the redline boundary

Designated Sites

- 4.3 Due to the absence of any European statutory sites within 10 km of the proposed development, and the small-scale proposals, no direct or indirect impacts to any European statutory sites are anticipated.
- 4.4 The proposed development falls outside the scope of planning applications with likely impacts on SSSIs, and therefore no consultation with Natural England via the Local Planning Authority is required.
- 4.5 As above, no direct or indirect impacts to non-statutorily designated sites are anticipated as a result of the proposed development. As such, no mitigation measured for designated sites are required.
- 4.6 Due to the nature of the proposals, and the small development footprint, with all construction and operational activity confined to the redline boundary, no direct or indirect impacts to Sodbury Common SNCI, or other SNCIs are expected as part of the proposed works. Consequently, no mitigation measures for non-statutory sites are required.

Habitats and Flora

- 4.7 The habitats on the site that will be lost to facilitate the construction of the manége, stables and hay barn are of negligible ecological importance and therefore require no specific mitigation or compensation for their loss. Although, in line with the National Planning Policy Framework (NPPF) 2021 and local planning policies (as described at Appendix 1), enhancement measures to provide net gains for biodiversity have been included within the proposals.
- 4.8 Features of local ecological importance i.e., boundary hedgerows will be retained. In order to ensure protection of this feature, to avoid accidental damage which could result from construction machinery and/or storage of materials impacting root protection areas, tree protection fencing will be installed, in line with BS5837:2012.
- 4.9 Hedgerows will be managed to maintain their favourable ecological condition, with management of hedgerows undertaken on a two or three year rotation between October and February (ideally



in January or February) to allow bushy growth and the production of autumn and winter berries to maximise their biodiversity value.

4.10 Any landscape design within the proposed development should include the planting of native species or species with a known wildlife benefit to facilitate a small-scale enhancement of biodiversity.

Fauna

Bats

- 4.11 Due to the absence of any potential roosting habitat within the redline boundary, no impacts to roosting bats are anticipated as a result of the proposed development.
- **4.12** The adjacent suitable foraging and commuting habitats i.e., hedgerows will be retained and remain unlit during the construction and operational phases to avoid potential indirect disturbance of any bats which may be using these features.
- **4.13** To provide an ecological enhancement for bats, a Schwegler 1FF bat box (or similar, suitable for crevice dwelling bats) will be installed on the proposed hay barn. The box will be located facing between south-west and south-east approximately 2-4m above the ground.
- **4.14** If installation of a bat box on the new hay barn is not feasible, a bat box should be installed on a suitably mature tree within the redline or blueline boundary, following the same installation guidance above.

Breeding Birds

- 4.15 No areas of suitable nesting bird habitat are set to be lost to development, as the hedgerows and scattered trees on site are being retained, which will continue to provide opportunities for nesting birds within the proposed development.
- 4.16 All birds, their nests and eggs, are protected by law and as such it as offence to intentionally kill, injure, or take any wild bird; intentionally take, damage, or destroy the nest of any wild bird while it is in use or being built; and intentionally take or destroy the egg of any wild bird.
- 4.17 To avoid tiggering the legislation affecting nesting birds, any hedgerow management in the operational phase of the development will take place outside of the recognised core breeding bird season understood to be 1st March to 30th September, inclusive, to avoid the damage or destruction of any nests that may be present within the hedgerow.
- 4.18 To provide an enhancement for nesting birds, a nest cup will be installed onto the proposed stable block, if feasible. All nest cups should be placed at a minimum two metre height from the ground and should have a minimum of 6 cm free space above the nest cup to ensure access is possible.
- 4.19 If installation of a nest cup on the new stable block is not feasible, a bird box should be installed on a suitably mature tree within the redline or blueline boundary. The nest box should be positioned between north and east and installed between 2 – 4 m high.



Eurasian Badgers

- 4.20 No evidence of badger was recorded on the site, although habitat on the site could be used by foraging badger, if present. Retained hedgerows and areas of grassland on the site will continue to provide opportunities for badger on the site following the proposed development.
- 4.21 To avoid any badgers that may be using the site becoming trapped, any new excavations would be covered overnight, if feasible. If this is not feasible, a suitable means of escape would be provided in the form of a ramp with a maximum angle of 45 °.

Great Crested Newts

- 4.22 As no waterbodies are present on the site, the proposed development will not result in the loss of potential GCN breeding habitat. Potentially suitable terrestrial habitat, comprising boundary site hedgerows are proposed to be retained, although there is limited potential for GCN to cross improved grassland and tall ruderal vegetation on the site, proposed to be lost, if present.
- 4.23 The closest pond is located approximately 200 m northeast of the site.
- 4.24 Two further waterbodies known to be present within 500 m of the site, located 350 m to the northeast, and 360 m to the southeast of the site. There is limited connectivity from these ponds to the site and the closest offsite pond, as the habitats between them are dominated by improved grassland, which offers sub-optimal dispersal habitat. GCN are known to disperse up to 1.3 km from breeding sites, but "suitable habitat within 250 m of a breeding pond is likely to be used more frequently" with habitat within 50 m of a breeding pond considered to comprise 'core habitat' (English Nature, 2001).
- 4.25 The site offers sub-optimal habitat for GCN, as it is dominated by a short sward improved grassland, which limits GCN's ability to safely forage, shelter, or commute when in their terrestrial phase.
- 4.26 The hedgerows within the red and blueline boundaries offer the highest value terrestrial habitat for GCN, if present. These features will be retained as part of the proposed development.
- 4.27 The pond within the blueline boundary was awarded a Habitat Suitability Index (HSI) score of 0.62, meaning the pond is considered 'Average' Suitability for GCN. The proposed development site is connected to this pond via the hedgerows, and it is therefore considered there is a low risk of GCN presence within the redline boundary.
- 4.28 Given the lack of any waterbodies onsite, its suboptimal habitat composition, and its distance from the pond, it is considered unlikely GCN are utilising the site. Consultation of the GCN rapid risk assessment calculator within the GCN method statement document⁷, returns an amber result of 'offence likely' when it is assumed that no individual great crested newts would be harmed and based on loss or damage to the developed site area (see **Figure 4.1** below).

⁷https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/879595/ gcn-method-statement.xlsm



Figure 4.1 -	Rapid R	isk Assessr	nent Calcu	lator results.
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Component	Likely effect (select one for each component; select the most harmful option if more than one is likely; lists are in order of harm, top to bottom)	Notional offence probability score
Great crested newt breeding pond(s)	No effect	0
Land within 100m of any breeding pond(s)	No effect	0
Land 100-250m from any breeding pond(s)	0.5 - 1 ha lost or damaged	0.3
Land >250m from any breeding pond(s)	No effect	0
Individual great crested newts	No effect	0
	Maximum:	0.3
Rapid risk assessment result:	AMBER: OFFENCE LIKELY	

- 4.29 The GCN risk assessment calculator tool is a high-level tool, and it is stated within the limitations section that "it is not a substitute for a site-specific risk assessment informed by survey". Consequently, it is still considered that the risk of GCN presence on site is sufficiently low that it can be managed through the adoption of reasonable avoidance measures (RAMS). The PMWS detailed in Appendix 2 sets out the appropriate RAMS to be adhered to throughout the construction phase
- 4.30 The proposals are small scale, and the onsite habitat to be lost to development offers sub-optimal terrestrial habitat for GCN. In addition, the highest value terrestrial features i.e., hedgerows, will be retained as part of the proposals. Consequently, no compensation for the loss of the onsite habitat is considered necessary. Even if present within the offsite pond, the local status of the GCN population would not be impacted by the proposals.
- 4.31 Great Crested Newts are considered likely absent from the site due to the habitat composition of the site and immediate surrounding area, and the distance from the pond within the blueline boundary. Due to the connectivity offered from the pond to the site by retained hedgerows, the PMWS detailed in Appendix 2 should be adhered to during the construction phase of the development.

Reptiles

4.32 Reptiles are considered likely absent from site, and therefore no specific mitigation measures for reptiles are required. However, the construction phase of the development will adhere to a PMWS in relation to GCN. The methods followed within would also extend protection to reptiles onsite, in the unlikely event they are present within the limited areas of suitable habitat to be lost to development.

West European Hedgehog

- 4.33 Hedgehogs are a listed as a Species of Principal Importance (SoPI) within Section 41 of the NERC Act 2006. Consequently, they are a material consideration within the planning process, as Section 40 of the NERC Act 2006 places a duty on all public authorities in England and Wales to have regard, in the exercise of their functions, to the purpose of conserving biodiversity.
- 4.34 To avoid the injury or death of any hedgehogs onsite, any new excavations would be covered overnight. If this is not feasible, a suitable means of escape would be provided in the form of a ramp with a maximum angle of 45 °.



4.35 Any hedgehogs encountered onsite would be allowed to move of their own accord. If this is not feasible, they should be carefully moved to a safe location within retained habitats on site, by gloved hands.



Section 5: Conclusions

- 5.1 With the implementation of the mitigation and enhancement measures described in Section 4, it is considered the proposed development could conform with relevant planning policy and legislation (see **Appendix 1**).
- 5.2 The mitigation and enhancement strategy could be controlled by appropriately worded planning conditions devised to ensure the implementation of this report on site, including:
 - Protection measures and precautionary methods of working to ensure the protection of boundary hedgerows and ditches and avoidance of harm or disturbance, as appropriate to foraging and commuting bats, nesting birds, GCN, hedgehogs and reptiles, with potential to be present on the site; and
 - Installation of one bat box and one nest cup/bird box on the proposed buildings or suitable retained trees, to provide ecological enhancement for these species groups on the site.
- 5.3 The following measures for the species mentioned in Section 4 should be adhered to during the construction or operational phase of the development:

Bats: Installation of bat boxes on the new building, or a suitably mature tree within the applicant's land ownership.

Badgers: The sensitive working methodologies outlined in Section 5 should be adopted during the construction phase of the proposals.

Birds: Works to manage hedgerows during the operational phase should be conducted outside of the core nesting bird season (March-September inclusive).

To provide an enhancement of nesting bird habitat onsite, bird boxes or nest cups will be incorporated into the new development.

Great Crested Newts: The PMWS detailed in Appendix 2 will be adhered to during the construction phase of the development.

Hedgehogs: The sensitive working methodologies outlined in **Section 4** should be adopted during the construction phase of the proposals.

Reptiles: While reptiles are considered likely absent from site, the PMWS followed for GCN will also afford protection to any reptiles encountered onsite.



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Appendix 1: Legislation and Planning Policy

Legislation

- A1.1 Specific habitats and species receive legal protection in the UK under various pieces of legislation, including:
 - The Wildlife and Countryside Act (WCA) 1981 (as amended);
 - The Conservation of Habitats and Species Regulations 2018;
 - The Countryside and Rights of Way (CRoW) Act 2000;
 - The Natural Environment and Rural Communities Act (NERC) 2006;
 - The Hedgerows Regulations 1997; and The Protection of Badgers Act 1992.
- A1.2 The European Council Directive on the Conservation of Natural Habitats and of Wild Flora and Fauna, 1992, often referred to as the 'Habitats Directive', provides for the protection of key habitats and species considered of European importance. Annexes II and IV of the Directive list all species considered of community interest. The legal framework to protect the species covered by the Habitats Directive has been enacted under UK law through The Conservation of Habitats and Species Regulations 2018 (as amended).
 - 1 In Britain, the WCA 1981 (as amended) is the primary legislation protecting habitats and species. SSSIs, representing the best examples of our natural heritage, are notified under the WCA 1981 (as amended) by reason of their flora, fauna, geology or other features. All breeding birds, their nests, eggs and young are protected under the Act, which makes it illegal to knowingly destroy or disturb the nest site during nesting season. Schedules 1, 5 and 8 afford protection to individual birds, other animals and plant.
 - 2 The CRoW Act 2000 strengthens the species enforcement provisions of the WCA 1981 (as amended) and makes it an offence to 'recklessly' disturb a protected animal whilst it is using a place of rest or shelter or breeding/nest site.

National Planning Policy Framework (NPPF), July 2021

A1.3 The National Planning Policy Framework (NPPF) was updated in July 2021 and sets out the Government's planning policies for England and how these should be applied. It replaces the National Planning Policy Framework published in July 2019.

Paragraph 11 states that:

" Plans and decisions should apply a presumption in favour of sustainable development."

3 Section 15 of the NPPF (paragraphs 174 to 182) considers the conservation and enhancement of the natural environment including habitats and biodiversity (paragraphs 179-182).



- A1.4 Paragraph 174 states that planning and decisions should contribute to and enhance the natural and local environment by:
 - "protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory status or identi-fied quality in the development plan);
 - recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services – including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland; and
 - minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures".
- A1.5 Paragraph 175 states that plans should distinguish between the hierarchy of international, national, and locally designated sites; allocate land with the least environmental or amenity value; take a strategic approach to maintaining and enhancing networks of habitats and green infrastructure; and plan for the enhancement of natural capital at a catchment or landscape scale across local authority boundaries.
- A1.6 Paragraph 179 states that in order to protect and enhance biodiversity and geodiversity, plans should:
 - "Identify, map and safeguard components of local wildlife-rich habitats and wider ecological networks, including the hierarchy of international, national and locally designated sites of importance for biodiversity; wildlife corridors and steppingstones that connect them; and areas identified by national and local partnerships for habitat management, enhancement, restoration or creation; and
 - promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species; and identify and pursue opportunities for securing measurable net gains for biodiversity.
- A1.7 When determining planning applications, Paragraph 180 states that local planning authorities should aim to conserve and enhance biodiversity by applying the following principles:
 - "if significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused;



- Development on land within or outside a Site of Special Scientific Interest, and which is likely to have an adverse effect on it (either individually or in combination with other developments), should not normally be permitted. The only exception is where the benefits of the development in the location proposed clearly outweigh both its likely impact on the features of the site that make it of special scientific interest, and any broader impacts on the national network of Sites of Special Scientific Interest;
- Development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons and a suitable compensation strategy exists; and
- development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to incorporate biodiversity improvements in and around developments should be encouraged, especially where this can secure measurable net gains for biodiversity."
- A1.8 As stated in paragraph 181 the following should be given the same protection as habitats sites:
 - "Potential Special Protection Areas and possible Special Areas of Conservation;
 - Listed or proposed Ramsar sites; and
 - Sites identified, or required, as compensatory measures for adverse effects on habitats sites, potential Special Protection Areas, possible Special Areas of Conservation, and listed or proposed Ramsar sites."
- A1.9 Paragraph 182 states that the presumption in favour of sustainable development does not apply where the planned project is likely to have a significant effect on a habitat site (alone or in combination) unless an appropriate assessment concluded the plan or project will not adversely affect the integrity of the habitats site.

Office of the Deputy Prime Minister (ODPM) Circular 06/2005: Biodiversity and Geological Conservation - Statutory Obligations and their Impact within the Planning System

A1.10 ODPM Circular 06/05 was prepared to accompany PPS9, however continues to be valid, and material in the consideration of planning applications since PPS9's replacement by the NPPF.



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- A1.11 ODPM Circular 06/05 provides guidance on applying legislation in relation to nature conservation and planning in England. Part I considers the legal protection and conservation of internationally designated sites (namely candidate Special Areas of Conservation (cSACs), SACs, potential Special Protection Areas (pSPAs), SPAs and Ramsar sites) and Part II considers the legal protection and conservation of nationally designated sites of Special Scientific Interest (SSSIs)
- A1.12 Part III considers the protection of habitats and species outside of designated areas (particularly UK Biodiversity Action Plan species and habitats), which it states are capable of being a material consideration in the preparation of local development documents and the making of planning decisions.
- A1.13 Part IV considers species protected by law and states that the presence of a protected species is a material consideration in the consideration of a development proposal that, if carried out, would be likely to result in harm to the species or its habitat and that it is essential that the presence or otherwise of protected species, and the extent that they may be affected by the proposed development, is established before the planning permission is granted.

Local Planning Policy

South Gloucestershire's New Local Plan

- A1.14 The South Gloucestershire Council New Local Plan 2020 is currently in Phase 2 (Public Consultation). The Phase 1 Issues and Approaches document, published November 2020, outlines key issues and potential priorities to be included in the new local plan.
- A1.15 Issue 4 Connecting and enhancing wildlife habitats states;
 - "There is a need to protect and improve the connectivity and function of our wider ecological assets, like key woodland, wetland and grassland habitats. Connectivity needs to be re-established to reverse the fragmentation of these environments and to provide better links to and from our communities. This will play an important role in improving ecological resilience in our changing climate and accelerate the recovery of nature, while providing economic, health, equalities, and other social benefits for local communities.
 - National planning policy and emerging legislation will require our plan and its policies to provide for Nature Recovery Networks and biodiversity net gain when land is developed. The Nature Recovery Networks will need to identify opportunities and priorities for enhancing biodiversity, focusing on habitat creation or improvement in those areas where it will achieve the most benefit.
 - Biodiversity Net Gain offsets will be directed to this local network. Strategic networks for broadleaved woodland, grassland and wetland habitat have been mapped by the West of England Nature Partnership and will form the baseline for South Gloucestershire's Green Infrastructure Strategy and the Nature Recovery Network.



 A new scheme to conserve Great Crested Newts known as 'District Level Licensing' was launched in South Gloucestershire in March 2020. While the species is its main driver, the scheme's aim is the reinstatement and creation of a significant number of ponds across the region, benefiting a wide array of wildlife. Other mechanisms to support investment in habitat preservation, restoration and creation will also be explored.

A1.16 Issue 5 - Green infrastructure strategies states;

• The West of England and South Gloucestershire green infrastructure strategies will set out priorities, projects and areas for enhancing and protecting connectivity of ecological, landscape, access and recreational assets. This will include making connections between urban and rural areas, for people and for nature, and enhancing water quality, ecosystems and functions of our 'blue infrastructure' such as the River Frome

A1.17 Issue 7 - Tree loss and provision states;

• Trees, woodland and hedgerows can provide important habitats for wildlife, and create connectivity corridors to assist ecological resilience and adaption to climate change. Access to, and views of, vegetation are also important for human wellbeing. The council has an ambitious target of doubling tree canopy cover by 2030. This is in addition to the need to respond to the impact of Ash Dieback, which is projected to lead to the loss of 20% of all trees in South Gloucestershire. Planning policies may need to increase the requirement to provide trees on a site and strategic scale and also mitigate the loss of valuable trees

A1.18 Potential priority 2 – Protect and enhance our environment states;

- Establish, maintain and enhance the function and connectivity of green infrastructure and Nature Recovery Networks, and;
- Apply the mitigation hierarchy and achieve biodiversity net gain in new developments.

South Gloucestershire Local Plan: Core Strategy

- A1.19 Until adoption of the South Gloucestershire New Local Plan, a number of policies within the South Gloucestershire Local Plan: Core Strategy (adopted on 11th December 2013) are saved. Those of relevance to ecology and nature conservation include:
- A1.20 Policy CS1 High Quality Design which states;
 - Development proposals should inter alia safeguard and enhance features of nature conservation value and ensure soft landscape proposals prioritise biodiversity objectives:



A1.21 Policy C-2 - Green Infrastructure which states;

• South Gloucestershire Council and its partners will ensure that existing and new Green Infrastructure (GI) is planned, delivered and managed, considering a number of GI objectives including protection and enhancement of species and habitats, and creation of new habitats and wildlife linkages between them. It also states that the integrity, multi-functionality, quality and connectivity of the Strategic Green Infrastructure Network will be protected and enhanced.

South Gloucestershire Policy Sites and Places Plan

A1.22 The South Gloucestershire Council Policy Sites and Places Plan (adopted November 2017) sits within the Local Plan and seeks to support the delivery of its core objectives.

A1.23 Policy PSP18 - Statutory Wildlife Sites: European Sites and Sites of Special Scientific Interest (SSSIs) states;

- Development proposals likely to have a significant and/or adverse effect on the European features of interest of the Severn Estuary Special Protection Area (SPA), Special Area of Conservation (SAC) or Ramsar (European Site), either directly, indirectly, on their own or in combination with other plans and projects, will be subject to the tests set out under Article 6(3)/6(4) of the Habitats Directive 1992.
- Development will not be acceptable where any adverse effects on the European features of interest arise, unless the effects:
- 1. are avoided or;
- 2. where an adverse impact cannot be avoided, the impact will be adequately mitigated; or 3. have imperative reasons of overriding public interest. Where development proposals cannot satisfactorily demonstrate that it would not adversely affect the European features of the Severn Estuary SPA/SAC/Ramsar, the precautionary principle will apply, and proposals will not be acceptable.

A1.24 Policy PSP19 -Wider Biodiversity states;

- Development Proposals resulting in the loss or deterioration of irreplaceable habitats, including unimproved grassland (lowland hay meadows), ancient woodland, and ancient trees will be refused unless the need for, and benefits of, the development in that location clearly outweigh the loss. Where appropriate, biodiversity gain will be sought from development proposals. The gain will be proportionate to the size of the scheme and be secured through an appropriate planning condition or legal undertaking.
- This will include sites of low nature conservation interest (for example, intensive agricultural land) where new semi-natural habitat (green infrastructure) would provide opportunities and gains for local wildlife. Development proposals, where they would result in significant harm to sites of value for local biodiversity, which cannot be avoided by locating it on an alternative site with less harmful impacts, adequately mitigated or, as a last resort, compensated for, will be refused



A1.25 Policy PSP3 - Trees and Woodland states;

 Development proposals should minimise the loss of existing vegetation on a site that is of importance in terms of ecological, recreational, historical or landscape value. Development proposals which would result in the loss of, or damage (directly or indirectly) to, existing mature or ancient woodland, veteran trees, ancient or species-rich hedgerows will only be acceptable where the need for, and benefits of, the development in that location clearly outweigh the loss or damage

Supplementary Planning Guidance

A1.26 South Gloucestershire Council has adopted Supplementary Planning Guidance (SPG) in relation to nature conservation and development, namely "Biodiversity and the Planning Process" (published October 2005). This document outlines how wildlife should be protected within planning design and development sites and due consideration to this document has been made in this report.



Appendix 2: GCN Precautionary Method of Working

A2.1 This appendix has been prepared to set out the legislative and policy protection afforded to GCN, their conservation status and a considers the potential for presence of the species in the vicinity of the site. In addition, it details a precautionary method of works statement (PMWS) and Reasonable avoidance measures (RAMS) to be implemented during the construction phase of the proposed development to avoid any risks of triggering the legislation afforded to GCN.

Great Crested Newt Protection, Conservation Status and Status on Site

- A2.2 GCN are afforded protection under the Conservation of Habitats and Species Regulations 2017 (as amended) and the Wildlife and Countryside Act 1981 (as amended). Together these make it an offence to:
 - capture, kill, disturb or injure GCN deliberately;
 - damage or destroy a breeding or resting place;
 - obstruct access to their resting or sheltering places (deliberately or recklessly);
 - possess, sell, control or transport live or dead newts, or parts of them; and
 - take GCN eggs.
- A2.3 GCN are also a 'Priority Species' or SoPI, being named on Section 41 of the NERC Act 2006. Section 40 of the NERC Act puts a duty on local authorities (including when considering planning applications) to have regard for the conservation of SoPI.
- A2.4 GCN are also a local priority species, being listed on the South Gloucestershire Biodiversity Action Plan (South Gloucestershire Council, 2016)⁻ Local targets for the species include "Increase knowledge of the location and population of great crested newt sites in South Gloucestershire", "Halt the loss of all great crested newt sites", "Enhance, restore and create new great crested newt habitat, in water and on land", and "Involve local communities in understanding and caring for great crested newts".
- A2.5 GCN are likely to occur throughout South Gloucestershire and the largest known population is at an active limestone aggregate quarry at Tytherington^{8.} The great crested newt population in Britain is one of the largest in Europe but it is declining, with an estimated 2% of colonies being lost every five years. In Europe the loss is even greater. Probably due to its greater pond density, South Gloucestershire has a higher newt population than the other ex-Avon unitary authorities.
- As indicated in the above report, MAGIC Interactive Maps indicate that two Natural England (NE) EPS licences were issued for damage and destruction of a GCN resting place approximately
 1.1km to the northwest of the site in 2014, and southwest of the site in 2019.

⁸ https://www.southglos.gov.uk/documents/pte080091.pdf



Reasonable Avoidance Measures

- 2.26. The measures to be implemented below will be supervised/overseen by a suitably qualified NE licensed GCN ecologist acting as an Ecological Clerk of Works (ECoW), where appropriate.
- 2.27. In order to avoid the risk of killing or injury of GCN, the following staged measures will be implemented prior to any construction work.
- 2.28. Prior to the commencement of works, all contractors will be given a toolbox talk by the ECoW, to ensure they are familiar with safe working methods, can recognise a GCN if found during construction and know what to do in the unlikely event of a GCN being discovered. Contractors will also be informed of the areas of higher risk of encountering GCN that sit outside of the construction work area, namely the adjacent hedgerows, and the need to ensure their protection during construction activities.
- 2.29. Where necessary and as advised by the ECoW, retained habitats (namely hedgerows) will be marked using orange barrier fencing to dissuade the storage of materials or proximity of vehicles within these areas and thereby avoiding risk of harm to GCN.
- 2.30. Following the toolbox talk, a cut of the improved grassland vegetation to a minimum height of approximately 15 cm will be undertaken. A second cut to ground level will occur within 24 hours of this cut, under suitable weather conditions, to ensure habitats onsite are unsuitable for GCN prior to construction activities. Arisings will be raked off and removed from the site.
- 2.31. After the grassland cut, the ECoW will check the works area to ensure that no GCN is present in areas affected by construction activities. The short grass will be checked for any potential GCN refuges. Removal of any materials currently present on the site and any refuges found within the cut grass will be subject to a fingertip search by the ECOW prior to the refuge being dismantled by hand.
- 2.32. Assuming no GCN are found by the ECoW during the pre-works checks, the development of the site can then commence without ECoW presence. However, if GCN are found either by the ECoW or by the contractors at any time, all work will stop and will not recommence until the ECoW has advised whether an offence is likely to be committed in the absence of a mitigation licence from NE. Consultation with NE may need to be undertaken before any further course of action which could affect GCN is agreed upon.
- 2.33. Additional RAMs and precautions to be implemented (and discussed by the ECoW during the toolbox talk) are as follows:
 - During the construction phase, all materials which could offer cover for GCN will be kept on pallets off the ground;
 - Any pipes will be capped overnight; and
 - Any excavations left overnight will be covered where possible or an escape plank provided. Excavations will be checked by contractors for GCN before work on them continues the following day.



Conclusions

- 2.34. Provided that the development proceeds in accordance with the measures described within this PMWS, it is considered that injury or harm to GCN can be avoided, if present, and the relevant legislation should not be triggered.
- 2.35. Accordingly, the development activities at the site could be undertaken without the need for a NE EPS mitigation licence, providing no GCN are discovered during the works.
- 2.36. Implementation of this strategy can be controlled via a suitably worded planning condition on the consent.



Appendix 3: Site Photographs

Photograph 1. Hardcore colonised by ruderal and ephemeral species.



Photograph 2. Improved grassland onsite.





Riding Mead Farm, Chipping Sodbury 14625_R01_18th February 2022_AM_TW

Photograph 3. Hedgerow H1, looking northeast



Photograph 4. Hedgerow H2, looking northwest





Riding Mead Farm, Chipping Sodbury 14625_R01_18th February 2022_AM_TW

Photograph 5. Scattered trees present at the southwestern extent of the site.



Photograph 6. Alpaca shed to be removed.





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Photograph 7. Example image of surrounding improved grassland and boundary hedgerows (blueline boundary).



Photograph 8. Offsite pond.





Photograph 9. Section of offsite drainage ditch.



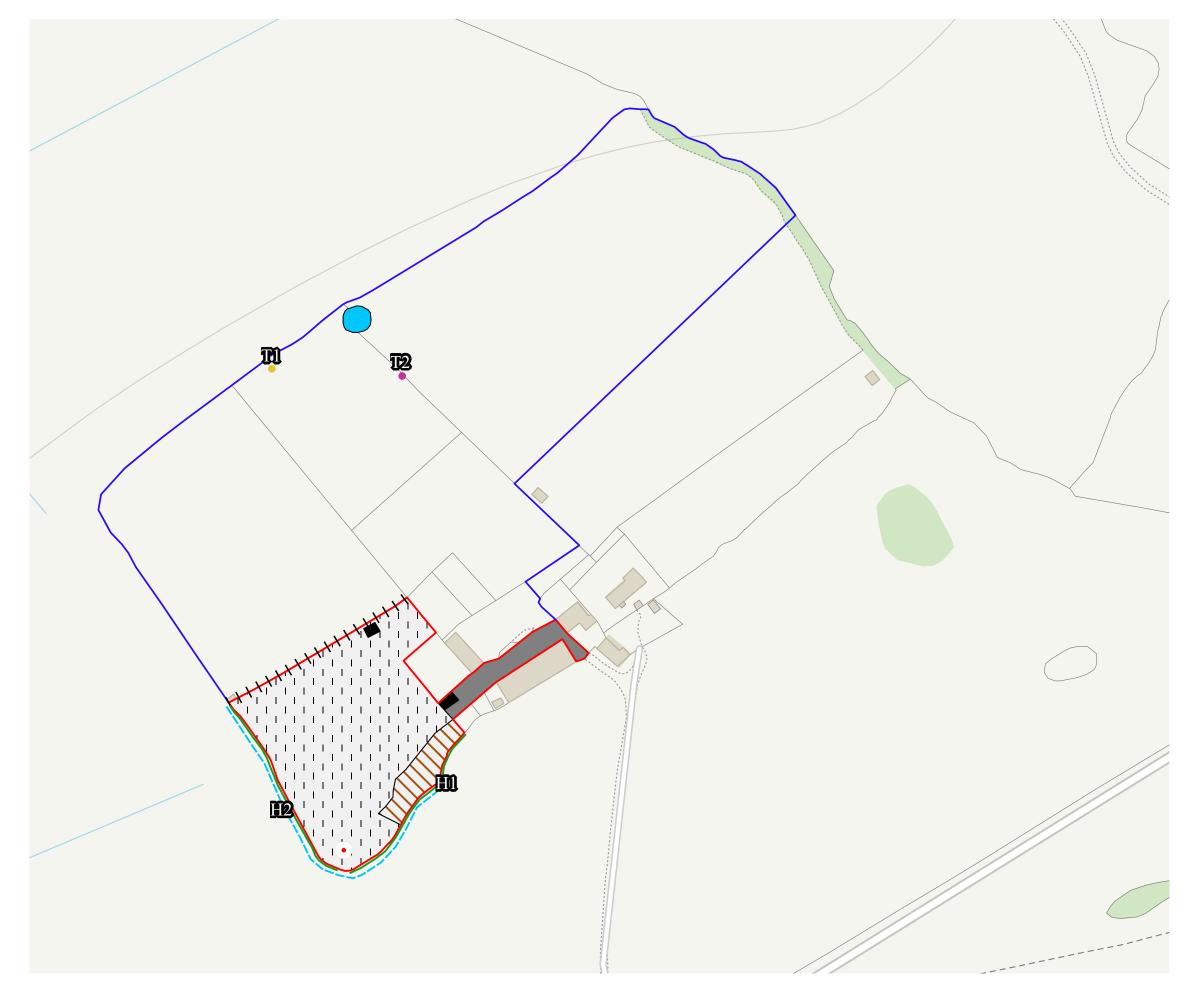


Riding Mead Farm, Chipping Sodbury 14625_R01_18th February 2022_AM_TW

Plan:

Habitat Features Plan 14625/P01







- Target Note: TN1 Scattered Mature Apple Trees
- Mature oak with low bat roost potential
- Mature ash with low bat roost potential

Buildings

Hardstanding

- Other Tall Herb and Fern Ruderal
- Improved Grassland
 - Offsite Pond

Project Drawing Title Scale Drawing No. Date Checked

N

Riding Mead Farm Habitat Features Plan Not to scale

14625_P01

February 2022

AM/KB





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