



Reptile Method Statement



Land East of Sugar Street,
Rushton Spencer, Staffordshire.
SK11 0SG

April 2024

Notice to readers

This report has been prepared by Charnia Ecology with all reasonable skill, care and diligence, within the terms of the contract with the client. The actions of the surveyor on site and during the production of the report were undertaken in accordance with the Code of Professional Conduct for the Chartered Institute of Ecology and Environmental Management (www.ieem.org.uk). No part of this document may be reproduced without the prior written approval of Charnia Ecology.

Client:
Mr. Alex Rider
Application area:
Land East of Sugar Street, Rushton Spencer, Staffordshire. SK11 0SG
Issue No:
Final Issue (1)
Date Issued:
April 2024
Author:
Mark Weston BSc (Hons), MRSB Principal Ecologist

Ecological assessment and report preparation have been undertaken by a qualified ecologist who holds a First-Class Honours degree in Conservation Biology. He has over thirteen years' experience of working within the ecological consultancy sector undertaking protected species surveys, mitigation and biodiversity impact assessments with regard to planning and the Law. The Principle Ecologist holds Natural England Class surveyor licenses for bats [Class License CL18 (Level 2) Reg. No. 2015-10722-CLS-CLS]; Schedule 1 listed Barn Owl [CL29/00586] and Great crested Newt [Class License Reg. No. Number: 2015-18995-CLS-CLS]. He is also an associate university lecturer in ecology and environmental sciences at the University of Derby in Ecology and a higher member of the Royal Society of Biology (MRSB). The actions of the surveyor on site and during the production of written reports are undertaken in accordance with the Code of Professional Conduct for the Chartered Institute of Ecology and Environmental Management (CIEEM).





CONTENTS

1. Introduction

2. Background

3. Legislation

4. Method statement

- Site management and monitoring plan
- Remedial works
- Groundworks
- Timing of works
- Capture & Exclusion
- Habitat enhancement and Creation plan
- Additional site safeguard measures

5. References

11. Appendices

12. Conditions & Disclaimers



1. Introduction

1. Further to the request of the Staffordshire Moorlands District Council, Charnia Ecology was commissioned to provide a method statement for reptiles and general amphibians to support condition 10. of a permitted development on Land East of Sugar Street (White Lodge Field) [Ref: SMDC/2022/0532].

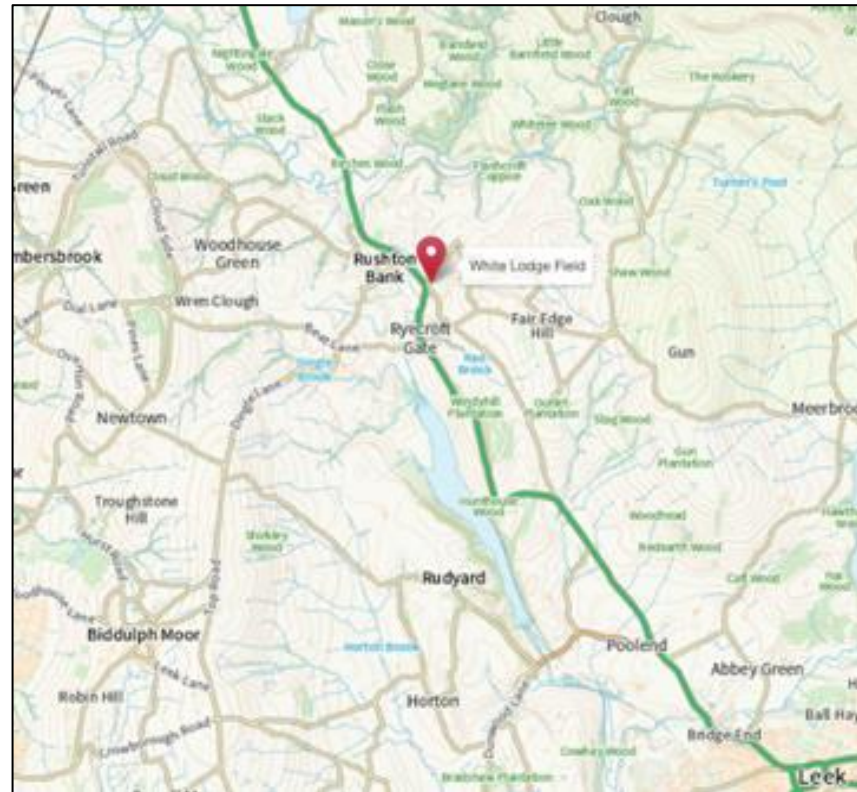


Figure 1. Location of proposed development area (arrow) in context to the wider landscape (source:OS Maps).

2. Background

2. The intended development is located in the semi-rural village of Rushton Spencer [NGR: SJ940623], ca. 4 miles (6.4 km) north of Leek and 7 miles (11 km) south of Macclesfield, and can be accessed immediately from Sugar Street on the western boundary. The site currently comprises of semi-improved, rough, modified grassland approximately 0.2467ha in coverage, with scattered trees and species-poor hedgerows composed predominantly of Hawthorn around selected boundaries. The grassland region qualifies as a broad UK BAP habitat, albeit of relatively low distinctiveness and in fairly poor condition, with injurious weeds dominating much of the sward as result of fertilizers. An existing field gate entrance on the western boundary off from Sugar street will be used for access onto site.
3. The proposed development considers four new residential dwellings with associated hard standing and landscaped gardens which will result in land uptake of ca. 0.165ha of existing grassland area (Fig.2).



Figure 2. Proposed development area (red) in context to gross-land-holding area (blue).

4. Although no adverse impact to any key registered reptile sites is considered under the proposed scheme, the habitats on and around site (including a south facing rough grassland embankment) provide potential for individual basking reptiles, with key consideration being given to highly mobile Grass snake. Subsequently, there is a moderate risk that a low number of reptiles could be disturbed or harmed by site clearance and construction activities.
5. The likelihood of encountering reptiles is however reduced somewhat by arterial roads flanking the south and western boundaries, which create potential dispersal barriers and sinks for terrestrial based species onto site, although good connectivity onto site is present along north and eastern boundaries. The grassland embankment fades from east to west providing suitable south facing exposures and potential basking areas for ectothermic species, whilst hedgerows and scrub filed margins providing good refugia for hibernating reptiles.

3. Legislation

6. Common Lizard, slow worm and grass snake are all afforded partial protection under the Wildlife and Countryside Act 1981 (as amended). Under this legislation it is an offence to intentionally or recklessly kill or injure these species. As such it is necessary for developers to demonstrate that reasonable measures have been taken to avoid such an eventuality. In addition, all three species have been listed as Priority species in the UK Biodiversity Action Plan (BAP), however species action plans are yet to be prepared.
7. Subsequently all work activities should comply to the following reptile method statement being subject to approval by the Local Planning Authority before any works proceed. This working document also includes additional site safeguard measures for general amphibians, nesting birds and small mammals.



4. Method statement

• Site management and monitoring plan

Activity	Jan	Feb	March	April	May	June	July	Aug.	Sept	Oct	Nov	Dec
Remedial works	Maintain grassland at low sward to make less favourable for reptiles											
Artificial refugia mats pre-placed down in non-working areas	Artificial refugia in non-working areas to be retained onsite indefinitely throughout pre and mid construction phases (see capture & exclusion).											
Site induction + Ground works preparation of working areas [grassland / scrub clearance and vegetation removal]	Controlled destructive search under ECoW supervision Systematically excavate the top layers of soil and searching for reptiles as the work progresses until ECoW is satisfied no notable species are present		<u>Bird nesting season</u> Should any ground clearance works be conducted during this period, then an inspection for nesting birds should be carried out by ECoW within 24hours prior to any work commencing						Controlled destructive search under ECoW supervision Systematically excavate the top layers of soil and searching for reptiles as the work progresses until ECoW is satisfied no notable species are present			
Capture & Exclusion Inspection of artificial refugia by ECoW until he/she is satisfied no reptiles are present within the Zone of Impact	Brumation period			Reptiles most active		Less active			Reptiles active		Brumation period	
Trenchwork / Building materials	- Any trenches created during the proposed development area will be excavated and closed in the same day to prevent any wildlife becoming trapped. Any trenches that have to remain open overnight will be sealed-off with a close-fitting plywood cover; or provided with either sloping earth ramps, sloped boards or planks to provide as a means of escape. - All building materials, rubble, bricks and soil should be stored only within existing areas of hard-standing and should be raised above ground level using either pallets, skips, or other suitable containers in order to prevent amphibians and/or reptiles from seeking refuge underneath them. Waste materials should be removed from site immediately or contained within skips. - Care should be taken that all plant machinery remains within the proposed development boundary avoiding encroachment into the adjacent field compartment and margins.											

	Optimal period to carry out activity
--	--------------------------------------



- **Remedial works**

8. The site should be made and maintained to be less desirable for reptiles. This can be achieved by cutting the vegetation in stages down to ground level whilst working towards an adjoining area of suitable reptile habitat. Provided that vegetation is kept short, any reptiles should not return.
9. The grassland should be cut to a height of ca. 100 - 150 mm within the working areas to make less favourable for any reptiles migrating onto these regions. It is understood that the field region is subject to periodic grazing by sheep, and a low sward should be maintained at all times until commencement of the construction works begin, in-order to discourage any colonization of Herpetofauna and small mammals over space and time.
10. Any habitat regions that are considered as being favourable hibernacula hotspots for reptiles (i.e. scrub / hedgerow field margins) should be cut no lower than 200mm. Arisings should be removed off-site or distributed around non-working areas.

- **Site induction**

11. All contractors on site will be made aware of the potential presence of reptiles and amphibians and their legislative status and protection by the acting ECoW. A copy of this working Method statement including Illustrations of protected Herpetofauna should be displayed in the site office at all times for immediate reference (see Appendix). All contractors will be made aware that it is an offence to handle Great crested newts.

- **Ground works**

12. All ground vegetation and any debris clearance onsite will be carried out under the direct supervision of suitably qualified and licenced ecologist. Any clearance of ground vegetation, rubble, logs, bricks, other loose materials should encompass a finger-tip search by the Ecological Clerk of Works (ECoW), ahead of any machinery. Inspection of any potential refugia should be undertaken in a careful and controlled manner, with constant vigilance for any sheltering reptiles, amphibians and small mammals.
13. Incremental soil stripping will be carried out in a systematic fashion from the west boundary moving east onsite, in-order that any herpetofauna can be ushered out towards more favourable terrestrial habitat in the wider landscape. Once soil strip has been conducted, areas of bare earth will be maintained to minimise the likelihood of any fauna re-colonizing across site.
14. Through controlled and systematic ground clearance it is intended that any individual reptiles are allowed to move out from the Zone of Impact of their own accord. Initial ground works involve the following:
 - Development of bell mouth at site entrance access from Sugar street
 - Development of rear driveway
 - Levelling of intended build area footprint.



- **Timing of works**

15. In this instance, ground works is best carried out between September to February, whilst also negating the bird breeding season. Should any vegetation removal be undertaken during the bird breeding season (March to August inclusive), then an inspection for nesting birds should be carried out by ECoW within 24hours prior to any work commencing. A work exclusion zone of 5m should be adopted if nesting birds are encountered, in-order to minimize disturbance until all offspring have fully fledged.

- **Capture and exclusion**

16. No reptile exclusion fencing is proposed in this instance. Artificial refugia will however be placed around site, in non-working areas of the grassland around upper field scrub margins with south facing elevations. Daily checks of the refugia will be made by the acting ECoW until he/she is satisfied the area is clear of reptiles. Should any reptiles be encountered during works, then capture and removal to a suitable receptor site should be made (Suitable habitat around Rushton shallows of Rudyard Lake ca. has been allocated as a receptor site should any translocation of reptiles be required - Fig.3).

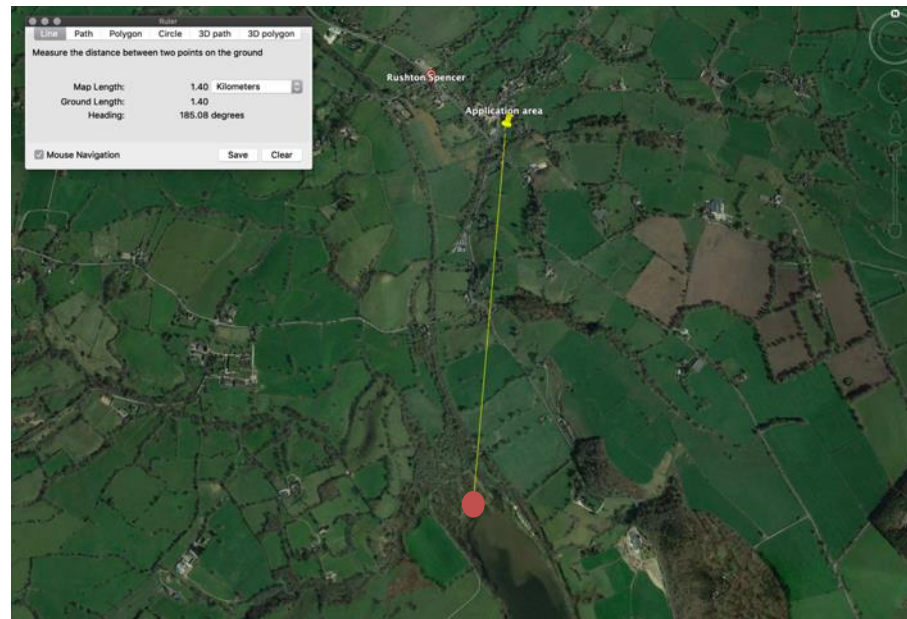


Figure 3. Proposed receptor site location (red).

- **Habitat enhancement and Creation plan**



Figure 4. Proposed habitat enhancement and creation map for reptiles.

Activity	Jan	Feb	March	April	May	June	July	Aug.	Sept	Oct	Nov	Dec
Habit Creation & Enhancements	Can be undertaken throughout the year – see Fig. 4 and corresponding information below											
Scrub mosaic	- Management of existing scrub habitat on site, and inclusion of additional scrub through seral succession over space and time should be encouraged around margins of retained grassland areas, to increase transitional habitats for wildlife assemblages on site [X]. The illustration depicts a landscape with a mix of scrub, grassland, and a tree. Red lines point from text labels to specific features in the landscape: - Scrub is a development stage between open ground and woodland, helping to buffer the wood from sprays - Let scrub develop in unproductive field corners - Scattered scrub naturally regenerated from a hedgerow tree - Occasional patches of bramble are valuable - Create a scalloped edge between long and short vegetation - Cut flower-rich grass margins each year after flowering - Periodically clear individual bushes to prevent overcrowding and closing of canopy - Leave areas of long grass with wild flowers to provide nectar and shelter Figure 5. Illustration of transitional scrub habitat profiling (source: Natural England, 2001)											



Localized reprofiling of retained grassland and retained hedgerows	- Retained grassland embankment regions will be permitted to grow to a long sward, whilst creating rides and glades through the area following an intended tree planting scheme. - Proposed parallel planting and pleaching of new native hedgerow against retained hedgerows, will increase hedgerow density and create a scalloped 'shelter belt' around selected boundaries, thus increasing localized microclimate zones for wildlife assemblages.
Reprofiling and creation of bunds	- Any excavated soil will be redistributed around the proposed development boundary (where possible) in-order to create additional scalloped areas and bunds [O] in the retained grassland embankment regions, to increase habitats for ectothermic species. - A minimum of Five (5no.) small, south facing bunds will be created and positioned so that they receive maximum southern exposure. Each bund will be approximately 5-8m in length, 1m in height and 2-3m in width, and constructed using soil re-profiled from within the site. - Bunds, where possible will comprise of largely unconsolidated material (i.e. avoiding excessive compression of the materials) in order to maximise the potential value for reptiles. Where additional material is required a combination of wood and inert rubble can be utilised but should be covered with a layer of topsoil. A preliminary location of bunds is shown in the map below. However, prior to construction of the bunds the acting ECoW will re-evaluate and confirm exact locations based on the most optimal areas of exposure. - With exception to the bunds themselves, all other areas of ground disturbed during the creation of the bunds will be sown with a suitable native wildflower mix
Dead organic matter	Dead wood habitats /log piles [X] should be integrated around the perimeter ecotone where possible to provide additional refugia for wildlife assemblages and ectothermic species (e.g. reptiles, invertebrates).
Creation of artificial hibernacula	To increase the availability of suitable reptile brumation habitat within retained areas of the grassland, two reptile hibernacula will be created [O]. The ECoW will mark out the exact areas to be used for hibernacula prior to works commencing. However, to reduce the chance of becoming flooded/water-logged in severe weather conditions hibernacula will be located on the higher ground located in the upper sections along the eastern boundary:



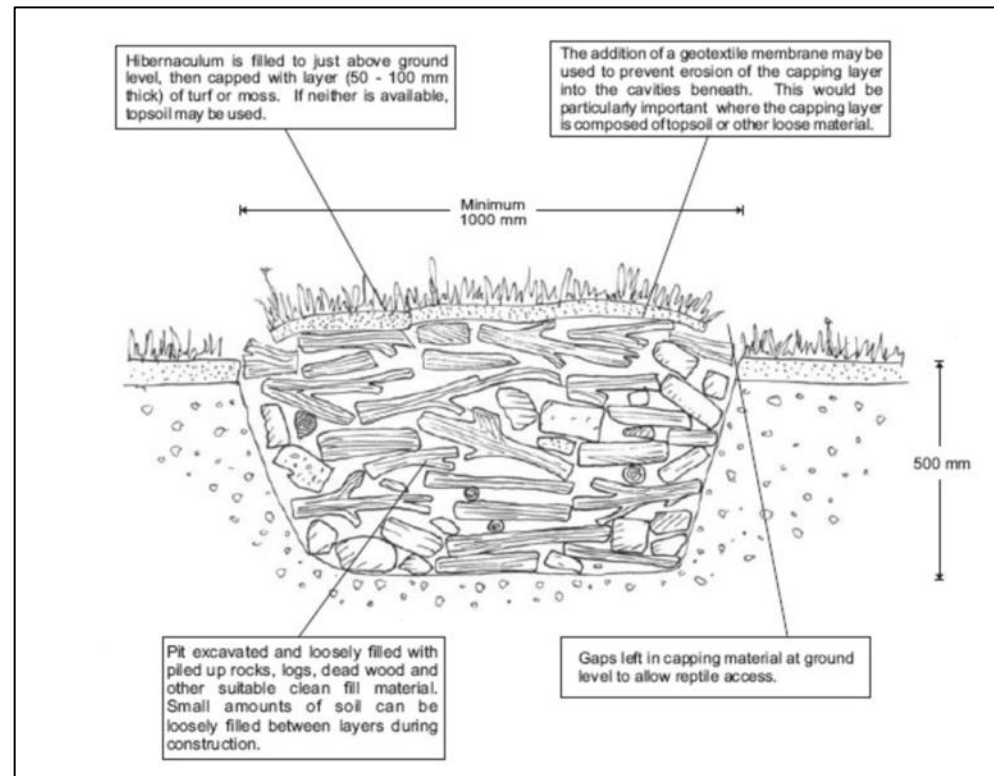


Figure 6. General design for reptile hibernacula

(source: Highways Agency (2005) *Design Manual for Roads and Bridges: Volume 10 Section 4 Part 7 - Nature Conservation Advice in Relation to Roads and Reptiles*)

- Each of the three hibernaculum will be approximately 4-5 m in length 1-2m in width and 0.5m in depth (below ground);
- Construction should ensure that access points are retained around the margins by allowing timber or rubble to protrude around the margins at surface level creating crevices that allow reptiles to access.
- Using woody material during selected tree removal (i.e. Individual Hawthorn tree, any material of more than 150mm in diameter may be retained for use within the construction of these hibernacula.



- **Additional site safeguard measures**

In the unlikely event that Great Crested Newt is identified during any of the above operations, then all works must cease immediately and advice sought from the ECoW of works onsite. Should Great crested newt be identified, then it may be necessary to apply for an EPS development licence from Natural England before any further works can proceed in a legal manner.

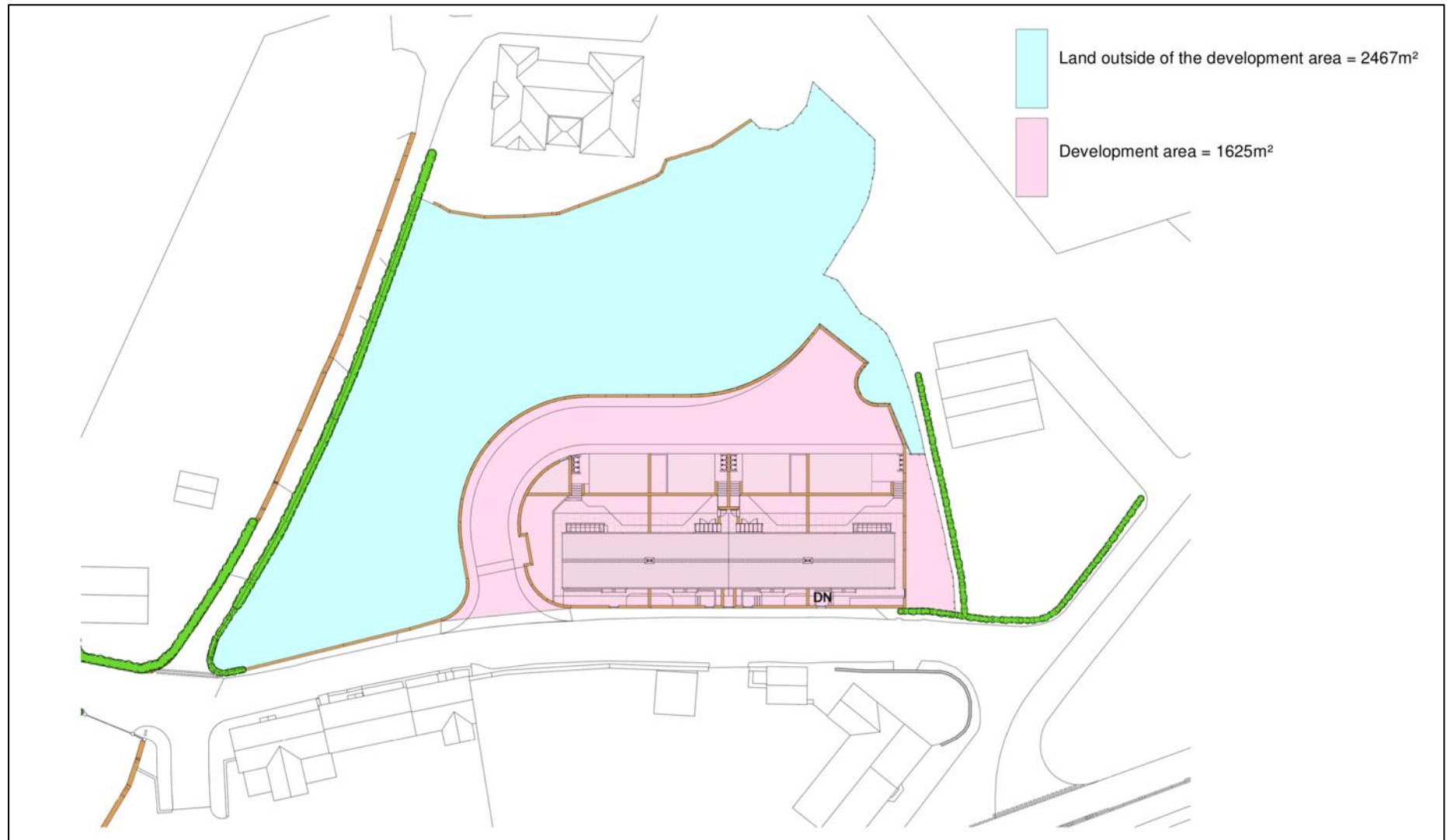
17. Data records provide evidence of hedgehog (*Erinaceus europaeus*), Brown hare (*Lepus europaeus*), and polecat (*Mustela putorius*) within 2km of the site boundary. Hedgehogs are listed as a UK 'Priority Species' under S41 of the NERC Act (2006) whilst also receiving protection under Schedule 6 of the Wildlife and Countryside Act (1981) as amended, meaning they may not be caught or trapped without a licence.
18. All hedgerows and any post development fencing on site should be made permeable for hedgehogs, and other small mammals around all perimeters; whilst additional scrub creation and deadwood / log piles recommended as part of this working method statement will increase foraging potential and habitat shelter for this species.

5. References

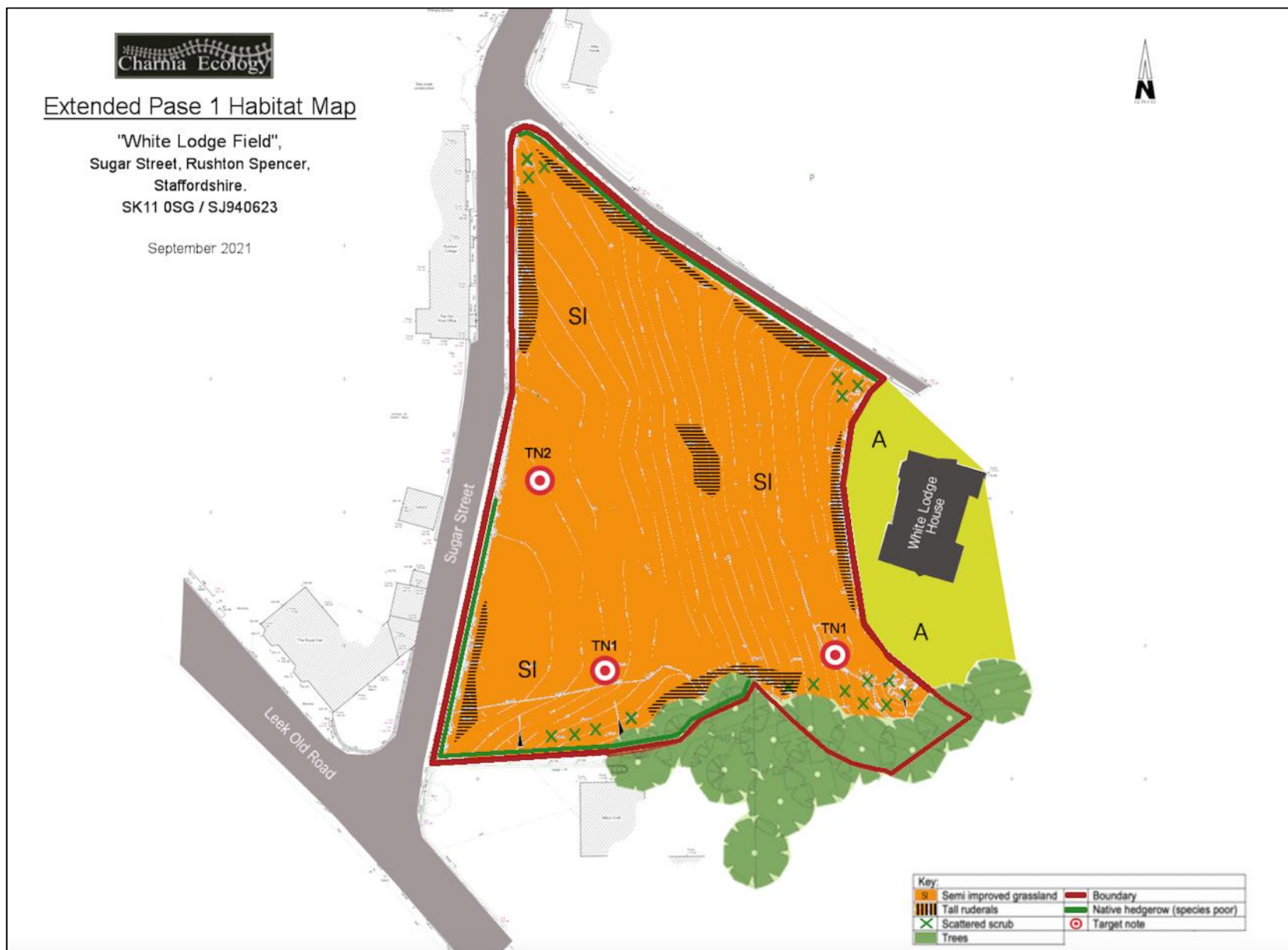
- Anderson, P. & Gilbert O L., (1998), Habitat Creation and Repair, Oxford University Press.
- Ash, D., Burton, D., Smith, L., Toynton, P., (2001) Getting down to scrub management, ENACT 9 (4), pp15-18, English Nature .
- Charnia Ecology (2021) Preliminary Ecological Appraisal report.
- Charnia Ecology (2022) Biodiversity Impact Assessment report.
- Day J., Symes N.C., Robertson P.A. & Bacon J. (Ed) (2003) The Scrub Management Handbook. FACT. [Online]. Available at: www.english-nature.org.uk/pubs/handbooks English Nature (2004)
- English Nature (2004) *Reptiles: guidelines for developers*. Peterborough, UK.2
- Edgar, P., Foster, J. and Baker, J. (2010). Reptile Habitat Management Handbook. Amphibian and Reptile Conservation, Bournemouth.
- Froglife (1999) *Reptile Survey: An introduction to planning, conducting and interpreting surveys for snake and lizard conservation*. Froglife Advice Sheet 10. Froglife, Halesworth.
- Institute of Ecology and Environmental Management (2007). Guidelines for Ecological Impact Assessment in the United Kingdom. [Online]. Available at: <http://www.ieem.net/ecia/>
- Institute for Lighting Engineers. (2005) Guidance for the Reduction of Obtrusive Lighting. ILE: London.
- Joint Nature Conservation Committee (2007) Handbook for Phase I Habitat Survey – a Technique for Environmental Audit. JNCC: London.
- Langton, T., Beckett, C. & Foster, J. (2001). Great Crested Newt Conservation Handbook . Froglife. Halesworth, UK.
- Multi-Agency Geographical Information for the Countryside (2010). MAGIC. [Online].
- Natural Environment and Rural Communities Act 2006 (c.16), London: HMSO.
- Natural England. (2001) Great Crested Newts Mitigation Guidelines. Natural England.
- Office of the Deputy Prime Minister. (2005) Planning Policy Statement 9: Biodiversity and Geological Conservation. The Stationery Office, Norwich.
- Oldham, R.S., Keeble, J., Swan, M.J., & Jeffcote, M. (2000), Evaluating the suitability of habitat for the great crested newt (*Triturus cristatus*). Herpetological Journal 10 (4) 143-155.
- The Conservation (Natural Habitats, &c.) (Amendment) Regulations 2007, SI 2007/1843, London: HMSO.
- The Conservation of Habitats and Species Regulations 2010, SI 2010/490.
- Toynton, P., Cox, M., (1994), Scrub management, ENACT 2 (1), pp10-11, English Nature.
- Ward, L. K., (1990): Management of grassland and scrub mosaics, pp134-139. In: Hillier, S.H., Walton.
- UK BAP (2008) Priority Habitat Descriptions [Online]. Available at: <http://www.ukbap.org.uk/library/UKBAPPriorityHabitatDescriptionsfinalAllhabitats20081022.pdf>
- Wildlife and Countryside Act 1981 (and amendments) (c.69), London: HMSO.



6. Appendix







- Plates:



REPTILE IDENTIFICATION SHEET

Grass snake (*Natrix helvetica*)



Smooth snake (*Coronella austriaca*)



Adder (*Vipera berus*)



Common lizard (*Zootoca vivipara*)



Sand lizard (*Lacerta agilis*)



Slow worm (*Anguis fragilis*)



GREAT CRESTED NEWT IDENTIFICATION SHEET



AMPHIBIAN IDENTIFICATION SEET

Smooth newt (*Lissotriton vulgaris*)



Common toad (*Bufo bufo*)



Palmate newt (*Lissotriton helveticus*)



Common frog (*Rana temporaria*)



Natterjack toad (*Epidalea calamita*)



Pool frog (*Pelophylax lessonae*)



12. Conditions & disclaimers



"Foxglove Cottage", Boundary,
Nr. Cheadle, Staffordshire. ST10 2NU.

Tel: 01538 750514

Email: mc.weston@hotmail.co.uk

Services

This statement has been prepared with all reasonable skill, care and diligence, within the terms of the contract with the client. The actions of the surveyor on site and during the production of the report were undertaken in accordance with the Code of Professional Conduct of the Chartered Institute of Ecology and Environmental Management (www.cieem.org.uk). No part of this document may be reproduced without the prior written approval of:

- ✓ Should any part of this report be lost, or altered without the written consent of the author, then the entire report becomes invalid.
- ✓ The general format of reports is a certified product and cannot be shown, copied or distributed to third parties without the permission of the author. No liability is accepted for the contents of the report, other than to that of the client(s).
- ✓ The report will purport not to express any opinion or comment as to the condition or structural integrity of any building; and no reliance should be made on any such comments other than description regarding suitability of species.
- ✓ Every attempt has been made to provide an accurate ecological assessment under the current wildlife legislations at the time of surveying. The author cannot be made accountable for stochastic events over space and time.
- ✓ The author remains impartial to any decision making and attempts only to make recommendations in the interests of conserving protected species and biodiversity, whilst acknowledging sustainable developments.

