

LONG GARDEN COTTAGE, SOUTHAMPTON

Preliminary Ecological Appraisal Report

October 2022



Report Control Sheet

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EXECUTIVE SUMMARY

Site Address	Long Garden Cottage, Southampton, SO32 2BX
Grid Reference	SU 50335 15303
Approximate Site Area	0.16ha
Current Site Use	The site comprised of semi-improved grassland habitat, with associated scrub understory existing beneath scattered trees and the treeline on the eastern boundary. Residential housing and associated amenity gardens and hardstanding are located on the site. With agricultural land to the west of the site.
Designated Sites within Zone of Influence	Moorgreen Meadows SSSI is located within the zone of influence of the site. Recommendations regarding best working practises have been detailed within this report.
Notable Habitat Features	Notable features included the: Tree line and hedgerows, providing linear commuting features for bat species as well as potential nesting habitat for bird species.
Notable Species Applicable to the Assessment	• Breeding birds • Bat (commuting and foraging) • Common amphibians • Badger • Hedgehog • Reptiles
Mitigation Recommendations	• Nesting bird check if vegetation is to be removed within nesting bird season (March – August inclusive) • Mitigation relating to nearby designating sites • General mitigation measures during the construction phase for; amphibians, reptiles, badger, hedgehog, birds and bats.
Recommended Further Surveys and Assessment	No further surveys are deemed necessary for the development to proceed.
Recommended Ecological Enhancements	The National Planning Policy Framework (2021) highlights the requirement for planning policies and decisions to conserve and enhance the natural environment. The proposed development provides the opportunity to enhance the site and ecological enhancements have been recommended

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1 INTRODUCTION

1.1. SCOPE & PURPOSE

- 1.1.1. Collington Winter Environmental Ltd was commissioned by Mahvash Pibworth to undertake a Preliminary Ecological Appraisal (PEA) at Long Garden Cottage, Southampton, SO32 2BX. This report has been prepared to inform the proposed development on the site, which includes the residential development of two dwellings with associating amenity gardens and parking, whilst also retaining the majority of the woodland screening on the eastern site boundary.
- 1.1.2. The author of this report is Andrew Bridge BSc, Graduate Ecologist at Collington Winter Environmental Ltd. Andrew is experienced managing schemes and has produced many ecological reports to inform planning management plans.

1.2. LOCATION

- 1.2.1. The site is located within the Botley area of Southampton, approximately 7km east of Southampton city centre., residential units are located directly east of the site, with agricultural land on the western boundary. Please refer to Figure 1.1 for the approximate site location.

Figure 1.1 Site Location



1.3. OBJECTIVES

- 1.3.1. The objectives of the Preliminary Ecological Appraisal are as follows:
- Identify the major habitats present
 - Ascertain the presence or potential presence of any legally protected or notable species or habitats
 - Identify any mitigation or further survey required and opportunities for strategic wildlife enhancements and long-term management.

2 METHODOLOGY

2.1. DESK STUDY

- 2.1.1. An initial desk-based assessment of the site was undertaken to collate baseline data. The desk study included:
- Review of Magic.gov.uk website for details of any designated sites, notable habitats and presence of European Protected Species Licences.
 - Review of aerial and OS maps for habitat information, as well as determining locations of potential waterbodies to be considered in the assessment.
 - Review of potential habitat links on and off site, to determine the potential zone of influence of the proposed development.
 - On site consultation with the landowner which provided valuable information regarding historic land use and known species and habitats present within the site.
- 2.1.2. Please note, a lack of records for a species does not confirm absence. Instead, local surveys may not have been undertaken or records not submitted.

2.2. VEGETATION AND HABITAT ASSESSMENT

- 2.2.1. An Ecological Appraisal of the site was undertaken by Andrew Bridge. The survey was undertaken on the 15th August 2022. The weather on site for the aforementioned date was clear and sunny (5/8 oktas), with no wind (0 Beaufort), and approximately 26°C.
- 2.2.2. The walkover survey was undertaken broadly in line with standard methodology as detailed in “JNCC Handbook for Phase 1 Habitat Survey” (2010). The assessment is undertaken with consideration of methodology as per “Preliminary Ecological Appraisal” (CIEEM, 2018).
- 2.2.3. A Phase 1 Habitat Plan has been produced and is presented in the Appendix of this report. The mapping is based on the “JNCC Handbook for Phase 1 Habitat Survey” (2010), though adjustments have been made based on judgement to demonstrate habitats in a clearer manner, or where standard guidance does not fit the conditions found on site.

2.3. FAUNA ASSESSMENT

- 2.3.1. A search for signs of protected and notable species of fauna was undertaken during the site walkover. This included both field signs of species, as well as potential for species to be present based on habitat availability.
- 2.3.2. The searches broadly included the following:
- Assessment of waterbodies on site and within 250m of the site boundary, and terrestrial habitats for suitability to support notable amphibians.
 - Searches for field signs of, and habitat suitability for bats.
 - Suitability of habitats to support reptiles, and searches for incidental field signs.
 - Searches for field signs of badger (*Meles meles*), including setts, mammal paths, snuffle holes, badger hair and latrines to indicate activity.
 - Searches of watercourses for signs of water vole (*Arvicola amphibius*), white-clawed crayfish (*Austropotamobius pallipes*) and otter (*Lutra lutra*), and assessment of habitat availability for the species.
 - Assessment of the suitability of habitats to support notable birds and recording any field sightings of birds during the walkover.
 - Assessment of the sites ability to support notable invertebrates and flora.
 - Searches for non-native invasive species.

2.4. PRELIMINARY ROOST ASSESSMENT

- 2.4.1. A Preliminary Roost Assessment (PRA) of the site was undertaken by Andrew Bridge, BSc under the guidance

of Katie Bird who holds a Class 2 Bat Survey Licence from Natural England (Reference 2020-48950-CLS-CLS).

2.4.2. The survey was undertaken following guidance set out in Collins (2016). This includes undertaking a detailed internal and external inspection of any features to compile information on potential and actual bat entry/ exit points, roosting locations and evidence of bats.

2.4.3. The trees were assessed as per categories listed in Table 4.1 Collins (2016) and reproduced in Table 2.1.

Table 2.1 Assessment Criteria for Bat Roosting Potential

Bat Roosting Potential	Description
Negligible	Negligible features on site likely to be used by roosting bats.
Low	A structure with one or more potential roost sites that could be used by individual bats opportunistically. However, these potential roost sites do not provide enough space, shelter, protection, appropriate conditions and/ or suitable surrounding habitats to be used on a regular basis by larger numbers of bats.
Moderate	A structure or tree with one or more potential roost sites that could be used by bats, but unlikely to support a roost of high conservation status.
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 for longer periods of time.

2.5. BAT ACTIVITY ASSESSMENT

2.5.1. The commuting and foraging assessment methodology is based on information contained within the Bat Conservation Trust guidelines 3rd edition (Collins, 2016). The categorisation within this report is based on that set out in Table 5, which is used as a basis for determining the requirement for further surveys and/or mitigation.

Table 2.2 Assessment Criteria for Bat Activity Value

Suitability	Description
Negligible	No features on site suitable for use by commuting and foraging bats.
Low	Habitat that could be used by small number of commuting bats such as; defunct hedgerow, isolated features not well connected to surrounding habitat or Isolated habitat that could be used by a small number of foraging bats such as a lone tree or patch of scrub.
Moderate	Continuous habitat connected to the wider landscape that could be used by commuting bats such as lines of trees, scrub or linked back gardens. Habitat connected to wider landscape that could be used for bats for foraging such as; trees, scrub, grassland or water.
High	Continuous high-quality habitat that is well connected to the wider landscape that is likely to be used regularly by commuting or foraging bats such as; river valleys, streams, hedgerows, lines of trees or woodland edge. Site is close to or connected to known roosts.

2.6. SURVEY LIMITATIONS

2.6.1. This survey does not constitute a full botanical survey. Key species for each habitat type have been identified to give a broad representation of habitats present within the site.

2.6.2. It should be noted that whilst every effort has been made to provide a comprehensive description of the site, no investigation can ensure the complete characterisation of the natural environment. This survey does not constitute a full botanical survey. Plant species may have been under-recorded, unidentifiable or not visible due to a number of factors including the time of year the survey was carried out.

2.6.3. The protected species assessment provides a preliminary view of the likelihood of protected species occurring on the site. This is based on the suitability of the habitat, known distribution of the species in the local area (provided by data searches) and any direct evidence within the survey area.

2.6.4. The findings of this report represent the professional opinion of qualified ecologists and do not constitute professional legal advice. The client may wish to seek professional legal interpretation of the relevant wildlife legislation cited within this document.

3 SURVEY RESULTS

3.1. SITE CONTEXT

3.1.1. The site is located within a predominately rural area east of Southampton. Residential units and Boorley Green are located to the south and east of the site with agricultural land located adjacent to the western boundary of the site. More extensive areas of agricultural land are present in the wider habitat to west and south of the site, with connectivity existing via hedgerows and tree lines. It is anticipated these features will provide suitable conditions for a range of local fauna and flora.

3.2. DESIGNATED SITES

3.2.1. Moorgreen Meadows Site of Special Scientific Interest (SSSI) is located approximately 1.7km west of the site, designated for its importance to a population of marsh orchid (*Dactylorhiza praetermissa*), as well as a geographically isolated population of northern marsh orchid (*Dactylorhiza purpurella*).

3.2.2. Upper Hambles Estuary and Woods SSSI located approximately 1.7km west of the site, designated for its 12 types of ancient broadleaved woodlands comprising one of the most ecologically diverse woodlands in central southern England. As well as its saltmarsh habitats supporting the rare marshland beetle (*Mecinus collaris* and the moth (*Bactra robustana*).

3.2.3. Solent Maritime Special Area of Conservation (SAC) designated due to its major estuarine system, in addition containing the second-largest aggregation of Atlantic salt meadows in south and south-west England. Solent Maritime is the only site for smooth cord-grass (*Spartina anglica*) located within the UK.

3.2.4. River Itchen SSSI and SAC, designated for its classic chalk stream and river, fen meadows, flood pasture and swamp habitats. Significant populations of the nationally rare southern damselfly (*Coenagrion mercurial*) in addition to significant populations of otter, water vole as well as its importance to breeding birds and freshwater fish, located approximately 3.7km north-west of the site.

3.2.5. No other statutory sites are located within 5 km of the site boundary.

3.3. HABITATS

3.3.1. Please refer to Drawing 20-518 – 001 for the Phase 1 Habitat Map for the site. Photographs of the site are presented in the Appendix.

POOR SEMI-IMPROVED GRASSLAND

3.3.2. The majority of the site was comprised of poor semi-improved grassland. It was dominated by perennial rye grass (*Lolium perenne*) with abundant cock's foot (*Dactylis glomerata*), creeping bent (*Agrostis stolonifera*) and false oat grass (*Arrhenatherum elatius*), with frequent curled dock (*Rumex crispus*) in the eastern portions. The site's grassland was of poor condition, demonstrating signs of significant drought.

SCATTERED SCRUB

3.3.3. Scattered scrub was sporadic throughout the site, forming the typical associated understory of the tree line and scattered trees. Species throughout were bramble (*Rubus fruticosus*), curled dock, ragwort (*Senecio jacobaea* L.) and rare field bind weed (*Calystegia sepium*). Common ivy (*Hedera Helix*) ground cover and understory was also present along the eastern tree line.

LINE OF TREES

3.3.4. Lines of trees were present on the eastern and northern boundaries of the site, providing screening of neighbouring residential units and the road. Trees on the eastern boundary consisted of mature ash (*Fraxinus excelsior*) and British oak (*Quercus robur*).

SCATTERED TREES

3.3.5. Scattered trees were present throughout the site with ash, cypress (*Cypressus* sp.), silver birch (*Betula pendula*), apple (*Malus domestica*), pine (*Pinus* sp.) and two unidentifiable ornamental tree species present on the northern and western aspects of the site.

HEDGEROW

3.3.6. Hedgerow was present on the western boundary of the site, dominated by hawthorn with occasional bramble and rare dog rose (*Canina rosa*) and self-seeded ash present throughout the hedgerow.

3.4. SPECIES

FLORA

3.4.1. The data search returned 341 records of notable plants species within the 2km area. Including but not exclusive to corn chamomile (*Anthemis arvensis*), rye brome (*Bromus secalinus*), oak-leaved goosefoot (*Chenopodium glaucum*), maple-leaved goosefoot (*Chenopodium hybridum*), rough hawk's-beard (*Crepis biennis*), upright spurge (*Euphorbia serrulata*) and Dyer's greenweed (*Genista tinctoria*).

3.4.2. The majority of the site comprised of grassland and scattered scrub habitat with limited floristic diversity. It is anticipated that the habitats are unlikely to support any notable plant species.

INVERTEBRATES

3.4.3. However, limited flowering species were observed across the site extent with no waterbodies present within the site boundary, limiting the sites suitability to support notable invertebrate species.

AMPHIBIANS

3.4.4. The data search returned one record relating to amphibians within 2km of the site, relating to common toad (*Bufo bufo*), relating to 'Eastleigh Gardens'.

3.4.5. The following EPSL licences were returned within 5km of the site boundary:

- EPSM2009-903 allowed for the destruction of a resting place for great crested newt, located approximately 2.8km north-west of the site.
- 2020-44604-EPS-MIT-1 allowed for the damage and destruction of a resting place for great crested newt, located approximately 2.9km north-west of the site.
- 2015-14283-EPS-MIT allowed for the destruction of a resting place for great crested newt, located approximately 3.3km north-west of the site
- 2018-36727-EPS-MIT allowed for the damaged and destruction of a resting place for great crested newt, located approximately 4.2km south-east of the site.
- 2016-21707-EPS-MIT-1 allowed for the damage and destruction of a resting place for great crested newt, located approximately 4.3km north-east of the site.

3.4.6. No ponds were located onsite or within 250 m of the site boundary. As great crested newts' upper dispersal limit is generally considered to be up to 250 m from a waterbody (though occurrence of greater distances does exist), great crested newts are not anticipated to be present on site (English Nature, 2001).

3.4.7. The site's unmanaged scrub habitats which may provide suitable foraging resources and cover for common amphibians such as common toads. Ornamental water bodies may be located within nearby residential gardens which may provide suitable conditions for breeding common amphibians.

3.4.8. The presence of great crested newts within the site is reasonably discounted, though common amphibians are expected to occur on site.

REPTILES

- 3.4.9. The data search returned twelve records of reptiles within 2km of the site, including slow-worm (*Anguis fragilis*), grass snake (*Natrix Helvetica*), adder (*Vipera berus*) and common lizard (*Zootoca vivipara*) all of which were located 1.5km to 2km away from the site.
- 3.4.10. Due to the unmanaged nature of the site, it is possible reptiles could be present. Due to the size of the site and its location, it is not considered to be of significant value of the species group.

BIRDS

- 3.4.11. The data search returned 232 records of notable birds within 2km of the site, including but not exclusive to peregrine (*Falco peregrinus*), red kite (*Milvus milvus*), grey wagtail (*Motacilla cinerea*), song thrush (*Turdus philomelos*), barn owl (*Tyto alba*), lapwing (*Vanellus vanellus*) and firecrest (*Regulus ignicapilla*).
- 3.4.12. The site provides scattered trees, treelines and scrub habitats. During the survey blackbird (*Turdus merula*) were observed utilising the tree line habitats on site. The habitats onsite appear to be common within the local area, whilst due to the size of the site, it is not considered to be of significant value.
- 3.4.13. Ground nesting birds are not anticipated to be on site with more valuable and suitable habitat available on adjacent agricultural land.

BATS

- 3.4.14. The data search returned 221 records of bats within 2km of the site, species included serotine (*Eptesicus serotinus*), Daubenton's bat (*Myotis daubentonii*), whiskered bat (*Myotis mystacinus*) unidentified myotis species (*Myotis* sp.), noctule (*Nyctalus noctula*), Nathusius's pipistrelle (*Pipistrellus nathusii*), common pipistrelle (*Pipistrellus pipistrellus*), soprano pipistrelle (*Pipistrellus pygmaeus*) and brown long-eared bats (*Plecotus auritus*).
- 3.4.15. The following EPSL Licences were located within 5km of the site boundary.
- 2016-23119-EPS-MIT allowed for the destruction of a resting place for common pipistrelle, located approximately 900m south-east of the site.
 - 2018-36779-EPS-MIT allowed for the destruction of a resting place for common pipistrelle, located approximately 1.3km north of the site.
 - 2020-49807-EPS-MIT allowed for the damage of a resting place for brown long-eared bat and common pipistrelle, located approximately 1.6km north-east of the site.
 - EPSM2010-2222 allowed for the destruction of a breeding site for common pipistrelle, located approximately 2.1km east of the site.
 - 2019-39527-EPS-MIT allowed for the destruction of a breeding site and resting place for brown long-eared bat, common pipistrelle and Natterer's bat, located approximately 2.2km north-west of the site.
 - 2014-1914-EPS-MIT allowed for the destruction of a resting place for common pipistrelle and soprano pipistrelle, located approximately 2.4km north of the site.
 - 2016-22386-EPS-MIT allowed for the destruction of a resting place for brown long-eared bat, common pipistrelle and soprano pipistrelle, located approximately 2.5km west of the site
 - EPSM2012-5125 allowed for the destruction of a resting place for common pipistrelle, located approximately 2.6km south-east of the site.
 - EPSM2013-5805 allowed for the destruction of a resting place for common pipistrelle, located approximately 2.6km south-west of the site.
 - 2015-16140-EPS-MIT allowed for the destruction of a resting place for common and soprano pipistrelle, located approximately 2.8km east of the site.
 - 2016-21961-EPS-MIT-1 allowed for the destruction of a resting place for brown long-eared bat and common pipistrelle, located approximately 2.9km north-east of the site.
 - 2016-22944-EPS-MIT allowed for the damage and destruction of a resting place for brown long-eared

bat and common pipistrelle, located approximately 2.9km west of the site.

- 2019-39954-EPS-MIT allowed for the destruction of a resting place for common and soprano pipistrelle, located approximately 3km north-west of the site.
- 2019-42509-EPS-MIT allowed for the destruction of a resting place for common pipistrelle and serotine, located approximately 3.2km west of the site.
- 2020-48450-EPS-MIT allowed for the destruction of a breeding site for soprano pipistrelle, located approximately 3.2km north-west of the site.
- 2015-16719-EPS-MIT allowed for the destruction of a resting place for common pipistrelle, located approximately 3.3km north-west of the site.
- 2015-9288-EPS-MIT allowed for the destruction of resting place for common pipistrelle, located approximately 3.7km south-west of the site.
- 2017-31423-EPS-MIT allowed for the destruction of a resting place for common pipistrelle and soprano pipistrelle, located approximately 4.1km south-east of the site.
- 2019-40805-EPS-MIT allowed for the destruction of a resting place and breeding site for brown long-eared bat, common pipistrelle and soprano pipistrelle, located approximately 4.2km south-west of the site.
- 2016-21755-EPS-MIT allowed for the destruction of a resting place for common pipistrelle, located approximately 4.3km north-east of the site.
- 2019-40238-EPS-MIT allowed for the destruction of a resting place for brown long-eared bat and common pipistrelle, located approximately 4.4km east of the site.

3.4.16. Scattered trees on site were subject to a preliminary roost assessment, however the majority trees on site were juvenile to semi-mature in age and provided negligible features to support roosting bats, with the more mature trees on site also having negligible features. All scattered trees surveyed within the site boundary were assessed as having negligible bat roosting potential.

3.4.17. The habitats on site are anticipated to provide value for foraging bats due to the connectivity to wider habitat. The tree line on site provides value for commuting and foraging value. However due to the size and habitats of potentially higher value within the local area, the site itself is not anticipated to be of significant value.

BADGER

3.4.18. A total of ten records of Eurasian badger (*Meles meles*) were returned within the 2km data search.

3.4.19. No field signs of badgers were observed onsite or within 30m of its boundary. Suitable sett building habitat is present, whilst there are potential foraging resources relating to the site boundaries. As such, badgers are anticipated to be within the local area.

HAZEL DORMOUSE

3.4.20. The 2km data search returned two records of hazel dormouse (*Muscardinus avellanarius*), relating to areas of Durley approximately a 1km – 1.6km distance from the site.

3.4.21. Hazel dormouse mainly occur in southern counties, especially in Devon, Somerset, Sussex and Kent. The following EPSL were returned during the desk study within 5km of the site boundary.

- 2014-6322-EPS-MIT-1, allowed for the damage and destruction of a resting place for hazel or common dormouse, located approximately 600m south-east of the site.
- EPSM2012-4209, allowed for the damage and destruction of a breeding site and resting place for 'dormouse', located approximately 2.9km south-west of the site.
- 2019-41258-EPS-MIT allowed for the damage and destruction of a breeding site and resting place for hazel or common dormouse, located approximately 4.2km south-east of the site.
- 2018-36694-EPS-MIT allowed for the damage and destruction of a breeding site and resting place for hazel or common dormouse, located approximately 4.4km south-east of the site.
- 2018-36688-EPS-MIT allowed for the damage and destruction of a breeding site and resting place for

hazel or common dormouse, located approximately 5km south-east of the site

- 3.4.22. Due to the habitats present onsite largely being dominated by poor semi-improved grassland, the absence of valuable habitats to the species such as hazel scrub areas it is unlikely that the site provides suitable value to hazel dormouse comparatively to the wider agricultural and arable land. As such hazel dormouse are not anticipated to be on site

OTHER TERRESTRIAL MAMMALS

- 3.4.23. A total of 70 records of other terrestrial mammals were returned within the 2km data search including species such as yellow-necked mouse (*Apodemus flavicollis*), European water vole (*Arvicola amphibius*), west European hedgehog (*Erinaceus europaeus*), brown hare (*Lepus europaeus*), Eurasian otter (*Lutra lutra*) and harvest mouse (*Micromys minutus*)

- 3.4.24. Given the habitats present within the site including scattered and dense scrub, it is anticipated that hedgehog is present within the site.

- 3.4.25. The site is anticipated to have limited value for the species due to its small size and makeup of grassland and scattered scrub, with wider habitats of grassland as well as arable and agricultural land providing higher value habitat for brown hare.

NON-NATIVE INVASIVE SPECIES

- 3.4.26. The 2km data search returned 164 records of non-native invasive species. There included but were not exclusive to wall cotoneaster (*Cotoneaster horizontalis*), Japanese knotweed (*Fallopia japonica*), giant hogweed (*Heracleum mantegazzianum*), himalayan balsam (*Impatiens glandulifera*), yellow archangel (*Lamium galeobdolon argentatum*) and rhododendron (*Rhododendron ponticum*).

- 3.4.27. No non-native invasive species were present on site on the date of the survey.

4 MITIGATION RECOMMENDATIONS

4.1. DESIGNATED SITES

- 4.1.1. The site is located within the impact risk zone for multiple designated sites, including Moorgreen Meadows SSSI. It is anticipated that the designated sites are a sufficient distance away and are separated by anthropogenic barriers such as the residential areas of Hedge End. This coupled with the small nature of the site anticipated no impacts as a result of proposed development. In addition, the habitats on site aren't suitable to support the qualifying features of the designated sites, thus not supporting the same species and habitats. AS such a Habitat Regulation Assessment (HRA) would not be required to proceed with the proposed works.
- 4.1.2. There may be small increase of visitors to the nearby sites as an impact of the development. However, based on the size of the scheme being limited to the construction of two residential dwellings it is anticipated the potential impacts will not be of significance.

4.2. HABITATS

SCATTERED TREES

- 4.2.1. Generally, the protection measures of retained trees will be through used of temporary protective demarcation fencing to protect the trees and shrubs. The fencing must extend outside the canopy of the retained trees and must remain in position until all plots have been developed to ensure protection is provided throughout the construction phase.
- 4.2.2. The fencing will be in accordance with BS 5837:2012 Trees in Relation to Design, Demolition and Construction: Recommendations.
- 4.2.3. It is recommended that replacement tree planting at a 1:3 ratio is required to compensate for loss of any trees. It is recommended that the planting comprises native species and species known to be of value for the attraction of wildlife. This will include fruiting and flowering species.

4.3. SPECIES

AMPHIBIANS

- 4.3.1. Great crested newts were deemed unlikely to be present on site and no further consideration for the species is required. However, there is a possibility that common amphibians such as common toad may be present on site.
- 4.3.2. It is recommended that consideration of amphibian presence during vegetation is completed. Any debris is to be cleared by hand, and any common amphibians located moved carefully, by hand, to outside of the impacted area.

REPTILES

- 4.3.3. Reptiles may be present onsite, where suitable habitats will require removal to facilitate development. Due to the size of the site, it is deemed appropriate that Reasonable Avoidance Measures are to be followed during vegetation clearance, to minimise potential impacts on the species:
- An experienced Ecological Clerk of Works (ECoW) shall be appointed to ensure RAM's are enforced;
 - A copy of this method statement must be kept on site (we suggest having a laminated copy in the site office/ compound);
 - A walkover of the area should be undertaken by the ECoW to determine any change in status of the habitats/structures on site prior to the initiation of any works;
 - A toolbox talk by the appointed ECoW will be given to the site manager and all contractors working on site with respect to the surrounding habitats and potential for protected/notable species. A copy of species factsheets relating to reptiles and breeding birds will be provided for display within the site office.
 - Suitable vegetation is to be strimmed under ECoW to approximately 15cm in a northern to southern

direction. It is to be checked by the ECoW following strimming to identify individuals. If discovered, they will be removed from the working area and covered. Once the areas are deemed reptile free, they are to be strimmed to ground level and maintained at this length for the remaining works.

- Any excavations will be back-filled on the same day as excavation, or checked by the ECoW immediately prior to backfilling. If not possible, a ramp, will be provided in all excavations that cannot be backfilled on the same day or alternatively, all excavations should be well-covered with plywood;
- No piles of loose construction materials are to be created during works – all material will be kept on hardstanding, stored on pallets, removed immediately from the site or checked by an ECoW prior to being removed;
- In the event reptiles are discovered, works will halt immediately and the ECoW will be contacted for advice. Contractors are not to handle reptiles unless informed to do so by the ECoW.

4.3.4. The precautionary destructive search work will be undertaken during the summer at a time of year when reptiles are active. The ecologist will be present during the strimming works. Any reptiles found during the destructive search will be relocated to the retained grassland to the south of the site.

4.3.5. During the construction period, the development zone will be maintained clear of vegetation in order to remove the likelihood of any reptiles re-colonising the site.

BREEDING BIRDS

4.3.6. Nesting birds are anticipated to utilise the scattered trees, lines of trees and also the hedgerow habitats on the site.

4.3.7. Any vegetation removal should be undertaken outside of the breeding bird season (March to September, inclusive). If this is not possible, a suitably qualified ecologist should undertake a nesting bird check no more than 48 hours prior to removal. If nesting activity is observed, the nest(s) should be left in situ until the young have fledged. A suitable buffer will be maintained and determined by the ecologist.

4.3.8. It should be noted that not undertaking necessary vegetation clearance outside of the bird nesting season and subsequently relying on a nesting bird check during the bird nesting season frequently leads to delays in schedule. It is therefore strongly recommended to undertake vegetation clearance outside of bird nesting season to avoid such delays.

BATS

4.3.9. No buildings are present on site. Scattered trees that were surveyed on site were assessed as having negligible bat roosting potential. The habitats of highest potential value for commuting and foraging bats include the treeline on the eastern boundary and are to be retained as part of the proposed development. As such, it is not anticipated to be of significant impact to the local bat population.

4.3.10. Slow-flying species such as brown long-eared, which are known to be in the local area, are sensitive to lighting and may be impacted by the proposed development, should no mitigation for lighting be considered.

4.3.11. Any proposed lighting/existing lighting should follow the guidance outlined in the Institute for Lighting Engineers document "Guidance for the Reduction of Obtrusive Lighting" (2005) and BCT's "Bats and Artificial Lighting in the UK" (2018).

4.3.12. An External Lighting Scheme had not been produced on the writing of this report. As such, the following recommendations are to be considered within the scheme during its condition, to minimise impacts of lighting. The recommendations are as follows:

- Keep site lighting to minimum levels.
- Luminaries should lack UV elements and preferably LED lighting with a warm white light should be used over cool white light (ideally <2700Kelvin).
- Lighting should feature peak wavelengths greater than 550nm.
- Light placement should be downward facing to prevent excess horizontal or vertical light spill.
- The use of integrated fittings such as cowls, shields, louvres and hoods, that effectively contain light spill

from unintended areas.

- The use of hard landscaping features to block light and create dark corridors.
- Avoid illuminating habitats of value.
- Use of timed security lights should be set on motion-sensors and using short, 1-minute timers, to minimise light use.
- Column heights of lighting can be considered to minimise light spill.

BADGERS

4.3.13. The following Precautionary Working Methods will be adhered to during construction phase to ensure that no badgers are impacted by the proposed development:

- All site operatives will be inducted to the potential presence of the species and the species legal protection.
- All site operatives will be inducted as to identifying potential badger setts and should be vigilant if they suspect they locate a new sett during works and inform the site manager immediately. A minimum 20m buffer will be maintained from the potential sett until an ecologist has been to site.
- All excavations will be battened at a 45 degree angle or ramps to be positioned to allow escape should animals become trapped.
- All site machinery and materials will be appropriately stored to avoid harm to the species, notably between July and November each year when extra care is needed to avoid potential impacts on pregnant females.

TERRESTRIAL MAMMALS

4.3.14. European Hedgehog are anticipated to be present within the site and are a Species of Principal Importance. During habitat management, any areas of dense vegetation should first be carefully hand searched to check for the species. If identified during management, should be relocated carefully by hand to a location away from the working area. If any injured species are located, they should be taken to a local vets.

5 FURTHER SURVEYS AND CONCLUSION

5.1. FURTHER SURVEYS

5.1.1. No further surveys are deemed necessary to inform the proposed planning application.

5.2. CONCLUSION

5.2.1. The site was found to predominantly improved grassland habitats bound by tree and hedge lines. The habitats are anticipated to provide a range of habitats for local flora and fauna. The site was found to provide value for nesting birds.

5.2.2. Specific enhancement recommendations for the site include the following:

- Bat and bird boxes could be placed on the new buildings / retained trees. A plan to show the locations of these boxes and the specifications should be produced by a suitably qualified ecologist once the layout is finalised.
- Planting of linear features such as hedgerows and trees between garden plots where possible, to add commuting features withing the site.
- The inclusion of 'hedgehog highways' to facilitate movement across the site. This includes holes of 13 x 13cm at the bases of fence panels, leaving a sufficient gap beneath gates and/or leaving brick spaces at the bases of brick walls.

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Feature	Photograph	
Eastern boundary: treeline and understory, with central grassland habitat and small areas of scrub.		
Eastern Boundary: Tree line		
Areas of scattered scrub and scattered trees, along with stumps of previously felled trees.		

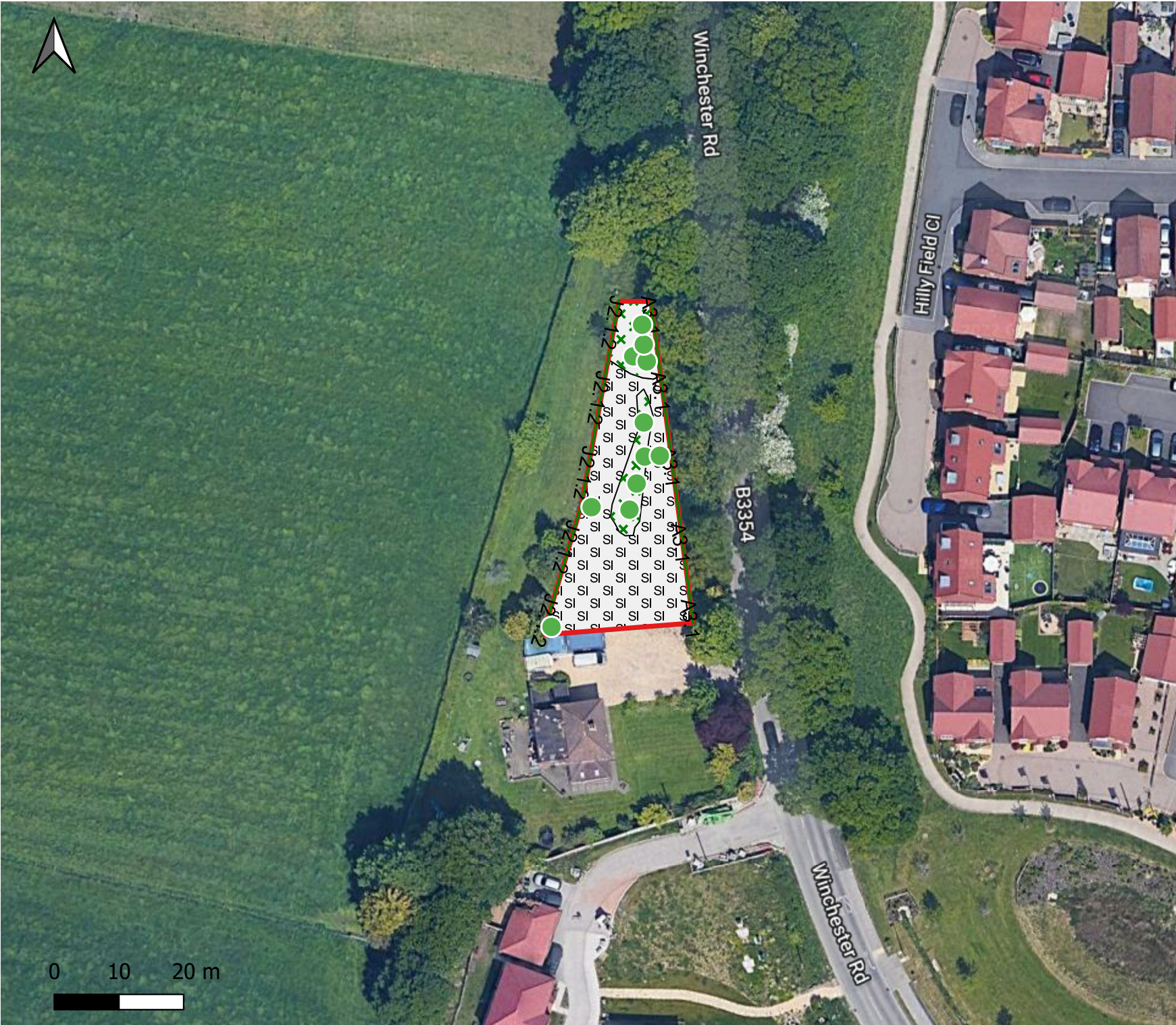
Unidentified Conifer, alongside western hedgerow boundary.



Eastern and Western Boundary meeting on northern aspect of the stie.



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Drawing Title: CW20-518-HM01
Date: 25/08/2022

- Red line boundary
- Poor Semi-Improved Grassland
- Scattered Scrub
- Hedgerow
- Broadleaved Treeline
- Scattered Tree

Scale: 1:25000
Drawn By: AB
Checked By: KB
Approved By: OC



Client: Marvash Pibworth
Site: Long Garden Cottage, Southampton
Project Number: 20-518 | Rev: 1.0
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