ROBERT HITCHINS

ECOLOGYSOLUTIONS

Part of the ES Group

LAND AT OAKLEY FARM,
BATTLEDOWN,
CHELTENHAM

Construction Environmental Management Plan

March 2021
7807.CEMP.vf

ecology solutions for planners and developers

CONTENTS

1.	INTRODUCTION	1
2.	ECOLOGICAL BASELINE AND EVALUATION	2
3.	AIMS AND OBJECTIVES	5
4.	CONSTRUCTION MEASURES	6

PLANS

PLAN ECO1	Ecological Features
PLAN ECO2	Construction Environmental Management Plan

1. INTRODUCTION

1.1 Ecology Solutions has been appointed by Robert Hitchins to prepare the working method statement for ecological mitigation for the Land at Oakley Farm, Battledown, Cheltenham, hereafter referred to as the 'site'. This has been set out in the form of a Construction Environmental Management Plan (CEMP) which sets out the protection of features of ecological interest and management of those due to be retained and created within the development site.

1.2 This CEMP has been written in accordance with the recommendations set out in Chapter 7 (by Ecology Solutions) within the Environmental Statement dated January 2020.

1.3 Ecology Solutions or another appropriately qualified ecologist should be appointed at commencement of development to advise and ensure that ecological mitigation works are carried out as detailed within the CEMP.

1.4 This CEMP provides a template for safeguarding wildlife during construction and has been written with reference to published guidance from the Chartered Institute of Ecology and Environmental Management (CIEEM) and with regard to Natural England guidelines for protected species.

1.5 The document is set out as follows:

- Ecological baseline and evaluation of important features within the development site; and
- Aims and objectives of the CEMP in order to safeguard retained habitats and wildlife during construction.

1.6 A copy of this report and the Landscape and Ecology Management Plan (LEMP) (by Ecology Solutions) dated February 2021 should be provided to all interested parties as necessary to ensure compliance with its prescriptions and the protection and enhancement of the biodiversity interest.

2. ECOLOGICAL BASELINE AND EVALUATION

2.1 Habitat surveys were based upon an extended Phase 1 survey technique. The habitats and dominant plant species were recorded, together with conspicuous faunal activity and evidence of the presence, or potential presence, of protected species. Results from these habitat and faunal surveys are summarised below and further detail can be seen in Chapter 7 of the Environmental Statement (dated January 2020).

2.2 During the surveys undertaken, all obvious faunal activity such as birds or mammals observed visually or by call, was also recorded. Specific attention was paid to any potential use of the site by protected species, Priority Species, or other notable species.

2.3 In addition, specific surveys were carried out for the presence of bats, Badgers *Meles meles*, Breeding Birds and Reptiles.

Designated Sites

Statutory designated sites

2.4 There are no statutory designations of nature conservation value within or immediately adjacent to the site. The nearest statutory designated site is Cleeve Common Site of Special Scientific Interest (SSSI) that lies approximately 2.7km north-east of the site and is designated, as it is one of the most extensive areas of limestone grassland in the Cotswolds. It is of importance both for its grassland, and for its geological and physiographical features. This statutory designated site is separated from the site by residential development and extensive areas of open countryside and agricultural land.

2.5 The nearest European designation is Dixton Wood Special Area of Conservation (SAC), also notified as a SSSI, that lies around 8.6km to the north of the site. This SAC/SSSI is one of only three known locations in the UK for the Violet Click Beetle (*Limoniscus violaceus*) and is an area of broad-leaved woodland surrounded by permanent pasture.

2.6 Cotswold Beechwoods SAC (also designated as Cotswold Commons and Beechwoods National Nature Reserve [NNR] and SSSI) lies a similar distance (8.7km) to the south-west of the site. This SAC qualifies for the presence of the Annex I habitat *Asperulo-Fagetum* beech forest, being the most westerly extensive block of this habitat in the UK. The woodland is identified as supporting a number of rare plants and includes the Annex I habitat 'Semi-natural dry grasslands and scrubland facies on calcareous substrates (*Festuco-Brometalia*)' present as a qualifying feature, but not a primary reason for selection. Lesser Horseshoe *Rhinolophus hipposideros* and Greater Horseshoe *Rhinolophus ferrumequinum* bats are also present within this SAC. The Cotswold Commons and Beechwoods SSSI and NNR are also designated for the presence of ancient Beech woodland and unimproved grassland, with the woodlands being among the most species-rich and diverse of their habitat type.

Non-statutory designated sites

2.7 There are no non-statutory designated sites of nature conservation interest located within or immediately adjacent to the site. The nearest non-statutory site is Glenfall Wood Key Wildlife Site (KWS) located approximately 0.8km southeast of the site and is designated for its ancient and semi-natural broad-leaved Ash *Fraxinus excelsior* Ash - Wych Elm *Ulmus glabra* woodland and diverse ground flora including Wood-sorrel Oxalis acetosella and Sanicle *Sanicula europaea*. This KWS is separated from the site by roads and agricultural land.

Ecological Features

2.8 The following main habitat / vegetation types were identified within the site:

- Amenity Grassland and Amenity Planting;
- Semi-Improved Grassland;
- Hedgerows and Trees;
- Dry Depression, Ruderal Vegetation and Ruderal-dominated Grassland;
- Scattered Scrub, Bramble Scrub and Cleared Bramble Scrub;
- Buildings and Hardstanding; and
- Cleared Ground.

2.9 Full descriptions of these habitats can be seen in Chapter 7 of the Environmental Statement (ES) (dated January 2020).

Wildlife Use of the Site

2.10 General observations were made during the surveys of any faunal use of the site, with specific attention paid to the potential presence of any protected or notable species. Specific surveys were undertaken with regard to bats, Badgers, Breeding Birds and Reptiles.

2.11 A summary of the findings are set out below, and full details of the results can be seen within Chapter 7 of the Environmental Statement (dated January 2020). The existing ecological features within the site can be seen on Plan ECO1.

Bats

2.12 Overall, the vast majority of bat activity was recorded from Common Pipistrelle, with less activity recorded from *Myotis* sp., Lesser Horseshoe *Rhinolophus hipposideros* bats, Soprano Pipistrelle *Pipistrellus pygmaeus*, *Nyctalus* sp., Brown Long-eared *Plecotus auritus*, Nathusius' Pipistrelle *Pipistrellus nathusii* and Barbastelle *Barbastella barbastellus*. Only occasional and low levels of activity was recorded from Serotine *Eptesicus serotinus*.

2.13 In general, bats use most of the hedgerows within the site to varying degrees throughout the year with areas of greater registrations at the crossing point of hedgerows H3 and H1 along hedgerows and trees associated with the demolished farm building B1, along H7-H11, along the northern section of H9 (just before crossing point of H9 and H12), at the crossing point of H2 and H2a. Lower numbers of bat registrations were recorded along H1, H2a, H5, H6 and along the north-western (H2a and H3), north-eastern and eastern boundary of the site (see Plan ECO1 and Figures 7.4-7.11 within the ES dated January 2020).

2.14 In addition, there is one mature Oak tree with an occasionally used summer day roost used by a single Noctule *Nyctalus noctula* bat in the north of the site (see Figure 7.3 within the ES dated 2020).

Badgers

2.15 During the surveys undertaken, no evidence of Badgers was recorded within the site, although it is considered the habitats present offer some suitable opportunities for foraging Badgers.

Breeding Birds

2.16 It is considered that the site supports an unremarkable ornithological assemblage, with low numbers of notable breeding bird species, including House Sparrow *Passer domesticus*, Willow Tit *Poecile montanus,* Dunnock *Prunella modularis* and Bullfinch *Pyrrhula pyrrhula*.

Reptiles

2.17 During the surveys undertaken, no reptiles were recorded within the site. It is considered that the regular cutting management of the grassland fields may not lend itself to the presence of reptiles.

Invertebrates

2.18 Given the habitats present it is likely an assemblage of common invertebrate species would be present within the site.

Other Species

2.19 It is considered the Application Site offers potentially suitable habitats / opportunities for the Priority Species Hedgehog *Erinaceus europaeus*.

3. AIMS AND OBJECTIVES

3.1 The aims and objectives of the CEMP are to maintain and avoid any harm / damage to features of ecological interest during construction, in addition to safeguarding populations of protected species on site.

3.2 The aims and objectives of the CEMP are also to maintain and protect features of ecological interest retained within the development, in addition to maintaining populations of protected species on site.

4. CONSTRUCTION MEASURES

4.1 Pilling works are not required on site and therefore no precautions or practical measures are required, in relation to pilling.

Risk Assessment and Biodiversity Protection Zones

4.2 The hedgerows within the site are of greatest ecological value in the context of the site and the vast majority are to be retained during construction and as part of the proposed development. As detailed below, all retained hedgerows will be fenced and these are the biodiversity protection zones within the site. With the fencing protecting the hedgerows, it is considered that a risk assessment is not required, given the risk has been mitigated to the biodiversity within the site has been mitigated.

4.3 The site manager will be responsible for ensuring that all works are in line with the CEMP and ensuring where necessary works are undertaken or overseen by Ecology Solutions or another appropriately qualified ecologist. Ecology Solutions/the ecologist will be responsible for ensuring that an ecological clerk of works (ECoW) is present for those activities where an ecologist is necessary, as detailed below.

Protective Measures for Habitats – Practical Measures

4.4 Construction measures for activities undertaken during site preparation, earthworks and construction phase are described below.

4.5 The retained hedgerows within the site are to be fenced according to current British Standards before construction work commences in order to protect roots from compaction. Fences will remain in place until construction work is complete within the vicinity of the hedgerow. In addition, no activity, storage of materials, liquids of any sort or source will be permitted within the protective fencing at any time.

4.6 Retained trees will be protected from the development prior to the commencement of works. Appropriate measures will be undertaken to prevent any harm to these trees from construction activities. These measures include identifying root protection zones and implementing fencing and signage around these zones to avoid tracking of heavy machinery compacting the soils.

4.7 Any potentially detrimental effects on the retained trees through dust contamination will be mitigated through standard industry best practice measures. In any event, the residual effect of the construction of the proposed development will be short term, with construction dust only infrequently affecting sensitive receptors

4.8 Standard engineering practice in respect of pollution control, as part of the development proposals will negate any potential effects and any potentially detrimental effects through dust contamination during construction will be mitigated through standard industry best practice measures. Where mitigation measures rely on water, it is expected that only sufficient water will be applied to damp down the material. There should not be any excess to potentially contaminate local watercourses.

4.9 Avoidance of potentially dust-generating activities during periods when wind direction may carry dust into sensitive areas will be undertaken. The storage of any loose materials that may be susceptible to wind will also be covered or screened and located away from the sensitive habitats if possible.

4.10 Works will be carried out in accordance with British Standard BS5837:2012 which relates to the protection of retained trees during development.

4.11 In the event that any arboriculture tree works (including felling) are required prior to or during construction, these will be undertaken by an appropriately qualified tree surgeon and with regard to roosting bats and nesting birds. In addition, any clearance works should utilise cuttings as log piles, to be created along the retained boundary hedgerows.

4.12 The removal of hedgerows will be searched immediately prior to their removal by a suitably qualified ecologist to check for Hedgehogs. Should it be considered by the ecologist that Hedgehogs could be present, the physical removal of the hedgerow will be overseen and the hedgerow will be cut down with hand tool and the root ball will be removed slowly with an excavator.

4.13 Prior to the removal of any refugia or habitat piles, these will be hand-searched by a suitably qualified ecologist for the presence of Hedgehogs. Any dense and thick refugia or habitat piles will also be slowly dismantled by hand to ensure no Hedgehogs or other wildlife is present.

Protective Measures for Species

Bats

4.14 **Legislation.** All bats are protected under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) and included on Schedule 2 of the Conservation of Habitats and Species Regulations 2017 ("the Habitats Regulations"). These include provisions making it an offence to:

- Deliberately kill, injure or take (capture) bats;
- Deliberately disturb bats in such a way as to be likely to significantly affect: -
  (i) the ability of any significant group of bats to survive, breed or rear or nurture their young; or to hibernate; or
  (ii) to affect significantly the local distribution or abundance of the species concerned;
- Damage or destroy any breeding or resting place used by bats;
- Intentionally or recklessly obstruct access to any place used by bats for shelter or protection (even if bats are not in residence).

4.15 While the legislation is deemed to apply even when bats are not in residence, Natural England guidance suggests that certain activities such

as re-roofing can be completed outside sensitive periods when bats are not in residence provided these do not damage or destroy the roost.

4.16 The words deliberately and intentionally include actions where a court can infer that the defendant knew that the action taken would almost inevitably result in an offence, even if that was not the primary purpose of the act.

4.17 The offence of damaging (making it worse for the bat) or destroying a breeding site or resting place is an absolute offence. Such actions do not have to be deliberate for an offence to be committed.

4.18 Licences can be granted for development purposes by an 'appropriate authority' under Regulation 55 (e) of the Habitats Regulations. In England, the 'appropriate authority' is Natural England (the government's statutory advisors on nature conservation). European Protected Species licences permit activities that would otherwise be considered an offence.

4.19 In accordance with the Habitats Regulations the licensing authority (Natural England) must apply the three derogation tests as part of the process of considering a licence application. These tests are that:

1. the activity to be licensed must be for imperative reasons of overriding public interest or for public health and safety;
2. there must be no satisfactory alternative; and
3. the favourable conservation status of the species concerned must be maintained.

4.20 Licences can usually only be granted if the development is in receipt of full planning permission (and relevant conditions, if any, discharged).

4.21 Seven species of bat are Priority Species, these are Barbastelle, Bechstein's *Myotis bechsteinii*, Noctule, Soprano Pipistrelle, Brown Long-eared, Greater Horseshoe *Rhinolophus ferrumequinum*, and Lesser Horseshoe.

4.22 **Protective Measures**. Normal construction activities during the months of April and October will be limited to daytime hours to reduce light pollution generated by construction activities on bats foraging within the area during the night. This is not applicable during winter months (November to March inclusive) when days are shorter, and bats are in hibernation.

4.23 As mentioned above, construction activities will generally be limited to the daytime, and as such lighting will not likely be required. However, if lighting is necessary during construction, any potential light spillage will be reduced by directing light below the horizontal plane, preferably at an angle less than 70 degrees away from features that offer suitable foraging opportunities for bats, e.g. hedgerows and trees.

4.24 Checks for bats will be undertaken by an appropriately qualified ecologist should any trees that have been identified as having potential features to support roosting bats are to be removed (currently it is proposed that all trees with potential features to support roosting bats are to be retained).

In the event any roost was identified prior to felling then an appropriate mitigation strategy and licence from Natural England would be required.

Badgers

4.25 **Legislation.** The Protection of Badgers Act 1992 consolidates the previous Badgers Acts of 1973 and 1991. The legislation aims to protect the species from persecution, rather than being a response to an unfavourable conservation status, as the species is in fact common over most of Britain, with particularly high populations in the southwest.

4.26 As well as protecting the animal itself, the 1992 Act also makes the intentional or reckless destruction, damage or obstruction of a Badger sett an offence. A sett is defined as "any structure or place which displays signs indicating current use by a Badger". 'Current use' of a Badger sett is defined by Natural England as "how long it takes the signs to disappear, or more precisely, to appear so old as to not indicate "current use".[1]

4.27 In addition, the intentional elimination of sufficient foraging area to support a known social group of Badgers may, in certain circumstances, be construed as an offence by constituting 'cruel ill treatment' of a Badger.

4.28 Work that disturbs Badgers is illegal without a licence. Natural England has developed guidelines on the types of the activity it considers should be licensed within certain distances of sett entrances. For example, using heavy machinery within 30m of any entrance to an active sett, and lighter machinery within 20m, or light work such as hand digging within 10m, all may require a licence.

4.29 'Interim guidance' issued by Natural England in September 2007 specifically states "it is not illegal, and therefore a licence is not required, to carry out disturbing activities in the vicinity of a sett if no badger is disturbed and the sett is not damaged or obstructed."

4.30 However, more recent guidance produced by Natural England in 2009 states that Badgers are relatively tolerant of moderate levels of disturbance and that low levels of disturbance at or near to Badger setts do not necessarily disturb the Badgers occupying those setts. However, Natural England's guidance continues by stating that any activity that will, or is, likely to cause one of the interferences defined in Section 3 (such as damaging a sett tunnel or chamber or obstructing access to a sett entrance) will continue to be licensed.

4.31 In addition, this guidance no longer makes reference to any 30m/20m/10m radius as a threshold for whether a licence would be required. Nonetheless, it is stated that tunnels may extend for 20m so care needs to be taken when implementing excavating operations within the vicinity of a sett and to take appropriate precautions with vibrations and noise, etc. Fires / chemicals within 20m of a sett should specifically be avoided.

4.32 This interim guidance allows greater professional judgement as to whether an offence is likely to be committed by a particular development

[1] http://www.naturalengland.org.uk/Images/WMLG17_tcm6-11815.pd

activity and therefore whether a licence is required or not. For example, if a sett clearly orientates southwards into an embankment it may be somewhat redundant to have a 30m-exclusion zone to the north.

4.33 It should be noted that a licence cannot be issued until the site is in receipt of a full and valid planning permission and that generally licences are not granted between December and June inclusive to avoid disruption to the Badger breeding cycle.

4.34 Local authorities are therefore obliged to consult Natural England over any work which is considered likely to adversely affect Badgers.

4.35 **Protective Measures**. As a precaution, a pre-commencement check for any evidence of Badgers will be conducted within the site, that will also pay attention to the adjacent off-site habitats. Should any active setts be discovered within the site that would be impacted by the development, then an appropriate strategy for mitigation will be devised and a licence secured from Natural England (disturbance/sett closure) if necessary, and if the sett to be lost comprises a main sett, a new artificial sett will be created within an area of open space in the site. Should any Badger setts need to be removed, this will be carried out under a licence from Natural England between the 1st July and the 30th November.

4.36 To ensure that no impacts occur to Badgers during any construction activities all contractors working on the site will be briefed regarding the potential presence of Badgers.

4.37 Any trenches or deep pits within the site that are to be left open overnight will be covered or provided with a means of escape should a Badger enter. This could simply be in the form of a roughened plank of wood placed in the trench as a ramp to the surface.

4.38 Any trenches or pits will be inspected each morning to ensure no Badgers have become trapped overnight. Should a Badger become trapped in a trench it will likely attempt to dig itself into the side of the trench, forming a temporary sett. Should a trapped Badger be encountered Ecology Solutions will be contacted immediately for further advice.

4.39 The storage of topsoil or other ‘soft’ building materials on site should be given careful consideration. Badgers could adopt such mounds as setts,

which would then be afforded the same protection as established setts. Such mounds should be regularly inspected to check for use by Badgers.

Birds

4.40 **Legislation.** Section 1 of the Wildlife and Countryside Act 1981 (as amended) is concerned with the protection of wild birds, whilst Schedule 1 lists species that are protected by special penalties. All species of birds receive general protection whilst nesting.

4.41 **Protective Measures.** Any vegetation clearance will be undertaken with due consideration for potential use by birds. Cutting of vegetation, particularly those features that provide important nesting habitats (including hedgerows and trees) will be undertaken outside of the bird breeding season (March to August inclusive). Should the above timing constraints conflict with any timetabled works, works will commence only after a suitably qualified ecologist has undertaken checks to ensure no nesting birds are present as part of the clerk of works. If nesting birds are found to be present during checks then clearance will be delayed until young have fledged.

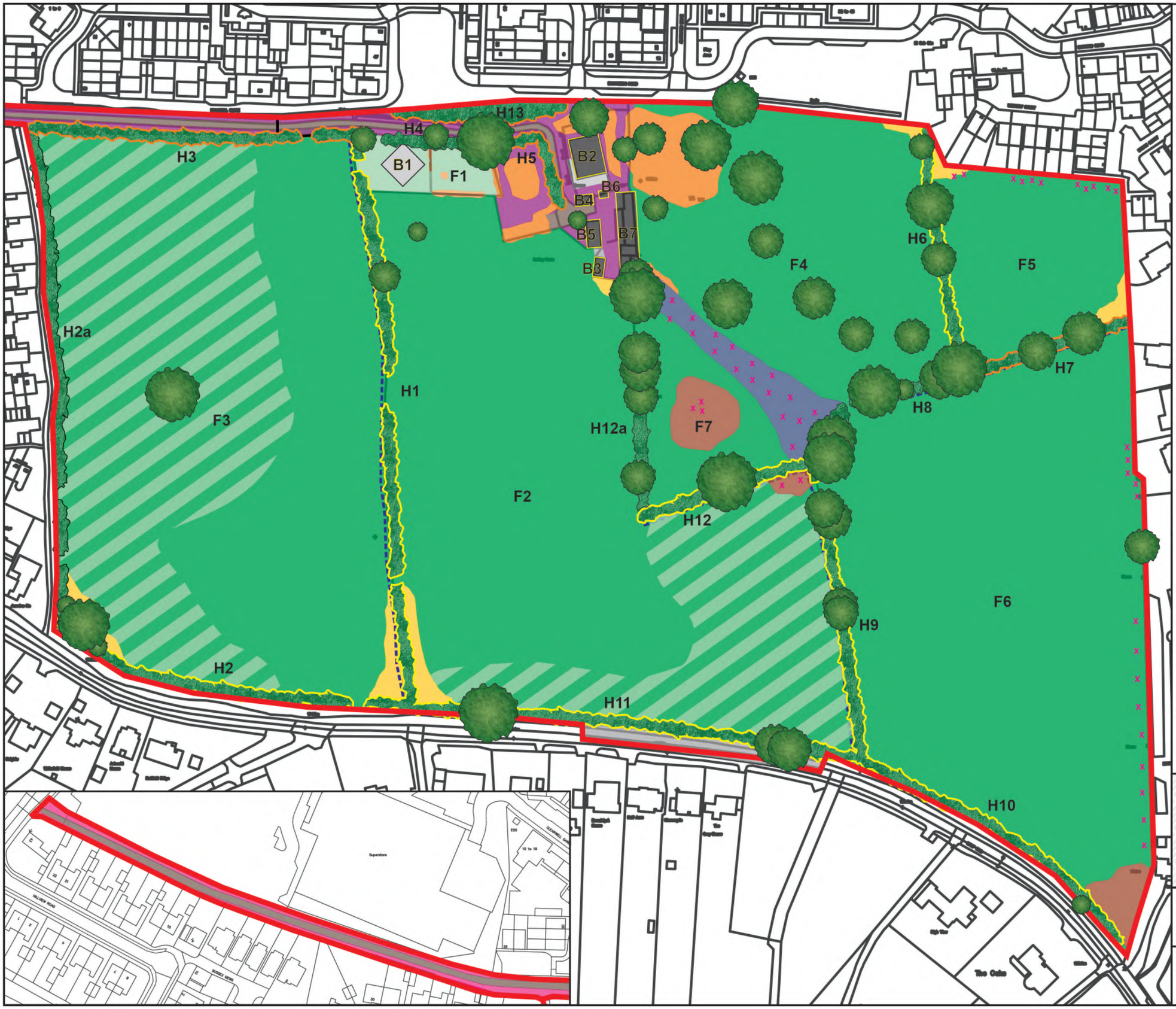
Other Species

4.42 As detailed within the protective measures for habitat section above, additional precaution will be undertaken for the presence of Hedgehogs, amphibians, and other wildlife.

PLANS

PLAN ECO1

Ecological Features



KEY:

- SITE BOUNDARY
- SEMI-IMPROVED GRASSLAND
- AMENITY GRASSLAND
- RUDERAL-DOMINATED GRASSLAND
- RUDERAL VEGETATION
- DRY DEPRESSION
- BRAMBLE SCRUB
- CLEARED BRAMBLE SCRUB
- SCATTERED SCRUB
- HEDGEROW POTENTIALLY QUALIFYING AS 'IMPORTANT'
- SPECIES-RICH HEDGEROW
- SPECIES-POOR HEDGEROW
- TREE
- OAK WITH OCCASIONAL SUMMER DAY ROOST USED BY NOCTULE BAT
- TREE WITH FEATURES SUITABLE TO SUPPORT ROOSTING BATS
- AREA OF HIGHER SPECIES DIVERSITY - WITH HIGHER DENSITY OF INDICATOR SPECIES FOR PRIORITY HABITAT G06
- DRY DITCH
- BUILDING
- DEMOLISHED BULDING / CLEARED GROUND
- DIRT TRACK
- HARDSTANDING
- GATE

N

ECOLOGYSOLUTIONS
Part of the ES Group

Farncombe House
Farncombe Estate | Broadway
Worcestershire | WR12 7LJ

+44(0)1451 870767
info@ecologysolutions.co.uk
ecologysolutions.co.uk

7807: LAND AT OAKLEY FARM, BATTLEDOWN, CHELTENHAM

PLAN ECO1:
ECOLOGICAL FEATURES

Rev: A
Feb 21

PLAN ECO2

Construction Environmental Management Plan

Normal construction activities to be limited to daylight hours outside winter, with limited activites outside these hours in winter.

If lighting is necessary during construction, any potential light spillage will be reduced by directing light below the horizontal plane.

Any vegetation clearance works will utilise cuttings as log piles, to be created along the retained boundary hedgerows.

Best practice methods in regard to effective engineering solutions and standard engineering practices will be implemented to mitigate possible impacts from run-off and dust deposition.

Prior to construction root protection zones will be identified and fencing of these areas and other retained habitats will be carried out in line with BS5837:2012. Signage will be included on this fencing and it will remain in place for the duration of construction works.

Any arboricultural management to be undertaken outside the breeding bird season (March to August inclusive) or only after a suitably qualified ecologist has undertaken checks to ensure no nesting birds are present. Regard should also be had to the health of retained trees and the potential to support roosting bats.

Open Space/Play Area

Open Space/Play Area

Open Space

HARP HILL

KEY:

SITE BOUNDARY

N

ECOLOGYSOLUTIONS
Part of the ES Group

Farncombe House
Farncombe Estate | Broadway
Worcestershire | WR12 7LJ

+44(0)1451 870767
info@ecologysolutions.co.uk
ecologysolutions.co.uk

7807: LAND AT OAKLEY FARM, BATTLEDOWN, CHELTENHAM

PLAN ECO2: CONSTRUCTION ECOLOGICAL MANAGEMENTPLAN

Rev: A

Feb 21

ECOLOGYSOLUTIONS

Part of the ES Group

Ecology Solutions Limited | Farncombe House | Farncombe Estate | Broadway | Worcestershire | WR12 7LJ

01451 870767 | info@ecologysolutions.co.uk | www.ecologysolutions.co.uk