

Method statement and scheme for enhancing biodiversity

Application No.: 22/01613/REM

Address: (land at the front of) The Beeches, Steeple Aston

Submitted on:

1. Introduction

Mr. John Henry has submitted a planning application for the development of a single residential unit located to the south of the village of Steeple Aston centred at grid reference N51.924, W1.307, hereafter referred to as the 'site'. The application received outline approval in January 2022 and reserved matters were approved in July 2022.

This document addresses the following planning condition:

9. Prior to the commencement of the development hereby approved including any demolition, and any works of site clearance, and as part of any reserved matters for layout and landscaping, a method statement and scheme for enhancing biodiversity on site such that an overall net gain for biodiversity is achieved, to include details of enhancement features and habitats both within green spaces and integrated within the built environment, shall be submitted to and approved in writing by the Local Planning Authority. This shall also include a timetable for provision. The biodiversity enhancement measures shall be carried out in accordance with that timescale or prior to the first occupation of the development in any case where a timescale is not specifically set out and shall be retained as such thereafter.

Reason: To ensure the development provides a net gain in biodiversity in accordance with Policy ESD10 of the Cherwell Local Plan 2011-2031 Part 1 and Government guidance contained within the National Planning Policy Framework.

2. Existing site habitats and ecological impact assessment (Pre-development)

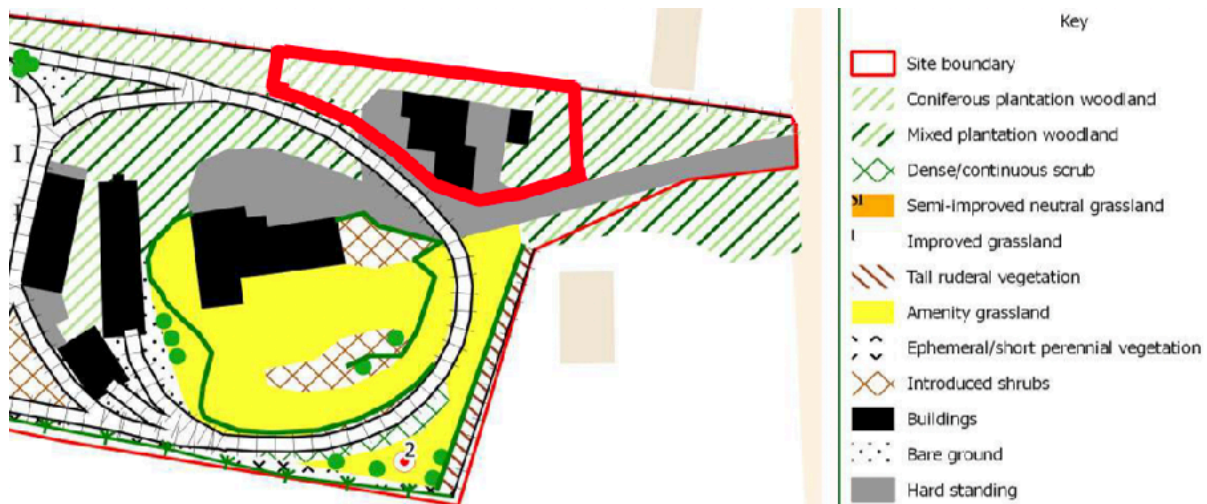
The site is a small area of a larger site, the larger site having potential to support a number of protected species including badgers, bats and nesting birds. The development comprises replacing the existing garages and hard standing with a single dwelling with no loss of habitat.

The site is an area of land approximately 0.1 hectares in size and was formerly associated with a single residential dwelling, managed to facilitate a private narrow-gauge railway. Although some structured understory vegetation is present, particularly adjacent to the access road, this is sparser where foot traffic appears to be high and the presence of pine and beech has restricted the growth of ground flora.

The garage building (to be demolished) is of brick construction with a clay tiled pitched roof and includes a first-floor level converted into an office, as well as multiple rooms and workshops at ground level.

The site is to the north of the main residential dwelling and access road as shown in Figure 1. The main habitat can be described as coniferous plantation woodland to the north and west and mixed plantation woodland on the east of the site. Species present included beech (*Fagus sylvatica*), scots pine (*Pinus sylvestris*) and larch (*Larix* sp.) with an understory including yew (*Taxus baccata*) and occasional rhododendron (*Rhododendron* sp.).

Figure 1.



A biodiversity impact assessment of the site (including the wider site around The Beeches) was undertaken in March 2020 by Aspect Ecology with the following key findings:

- The mixed plantation woodland comprises a limited range of species that are common and widespread in the local area. Additionally, the mixed plantation woodland has a sparse understory and limited ground flora. This woodland has been categorised as of 'fairly poor' condition for the purposes of a BIA calculation.
- Coniferous plantation woodland is present on the west of the site. This comprises a limited range of species that are common and widespread in the local area and the national context and is not considered to form an important ecological feature. For the purposes of a BIA calculation, it can be attributed a condition of 'poor' as it is species-poor and dense laurel is present in the understory.

An Impact Assessment Survey on 9 January 2019 by Ecolocation (Appendix 1) found that the habitat connectivity of the site for protected and priority species is considered to be poor and that the development would not harm any existing habitats.

The proposal consists of demolishing the existing garage building and the construction of a single dwelling over this and the associated hard standing area. All other habitats on site were either considered to have negligible value to ecology or were not due to be impacted by the proposed development.

The existing building and hard standing on the site is to be removed. The red line on Figure 2 indicates the planning application area. The building to be demolished is shown in the photograph and indicated blue on the plan.

Figure 2.



Figure 3 below shows the site with the proposed new dwelling outlined in yellow.

Figure 3.



3. Method statement and scheme

The National Planning Policy Framework paragraph 174 states that "To protect and enhance biodiversity and geodiversity, planning policies should: ...promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species populations". In order to ensure no net loss of biodiversity in accordance with NPPF & Circular 06/2005 the following mitigation will take place:

3.1 Mitigation (During development)

Tree removal (one) will be carried out outside of the nesting bird season (March to September inclusive). If nesting birds are found to be present during works, a 5m buffer of no disturbance will be maintained around the nest(s) until all of the young have naturally fledged.

Lighting during works and permanent lighting once the development has been completed will be cowed to direct light towards the ground and away from all areas of woodland, linear trees and the associated buffer zone in order to preserve the condition of the habitat for foraging and commuting bats, badgers, notable mammals, amphibians and reptiles.

Excavations and foundation trenches which must be left open overnight will have sloping boards installed to ensure that any animals that fall in are able to escape. Should non-protected animals such as hedgehog, frog, smooth newt or toad be found during works these will be moved carefully by hand to an area to be left undisturbed by works.

Should evidence of protected species, such as nesting birds or great crested newts, be discovered during works, works will temporarily stop while Natural England are contacted for advice on the best way to proceed.

3.2 Enhancement (Post-development)

Nest boxes will be provided on site to maintain and enhance the existing breeding possibilities, sited away from prevailing wind and rain. A small number of bat boxes will be erected on retained trees to provide additional opportunities for roosting bats. Boxes will be placed in a south-facing direction between 4 and 5m high. This work will be completed within 1 year of occupation.

The west of the site will be enhanced within 2-3 years of occupation by removing areas of hard standing (approximately 60-70% of the site) to provide a turfed garden with vegetable patches, compost heap and native and meadow planting to attract invertebrates and pollen seeking insects. New landscaping or planting will make use of native species, such as lavender, clematis and hydrangea, which are of higher value to local wildlife. The planting of native species which are appropriate to the landscape character may improve local species diversity as well as increase the potential for use of the site by wildlife. This will complement the coniferous woodland area (current condition 'poor'), which will be sensitively managed and tended over 10 years to increase condition to 'fairly poor' and encourage further biodiversity.

The east of the site (current condition 'fairly poor') will be improved by sensitively clearing away ground rubble and bracken so that the mixed plantation woodland can develop in a positive way. At the far corner of the site, where the woodland meets Heyford Road, the site is covered in approximately 1.5m x 4m of soil spoil placed there following excavation

work to the next-door neighbour's driveway. This spoil will be removed (within 2-3 years of occupation) to return the land to its original level and even out this area of the site.

Sensitive management of this area will ensure that over time (15 years) the existing condition of the mixed plantation woodland will be raised from 'fairly poor' to 'moderate'. This timeline is deemed realistic based on the nature of the existing woodland and its likely ability to respond favourably to positive management.

The northern boundary will be improved by replacing the wire fence with post and rail fencing and low-level hedgerow species common to the area (within 1-2 years of occupation). Existing trees will be preserved with the exception of one tree on the north of the site that fell onto the existing building in a storm earlier in 2022 (Figure 4).

Figure 4.

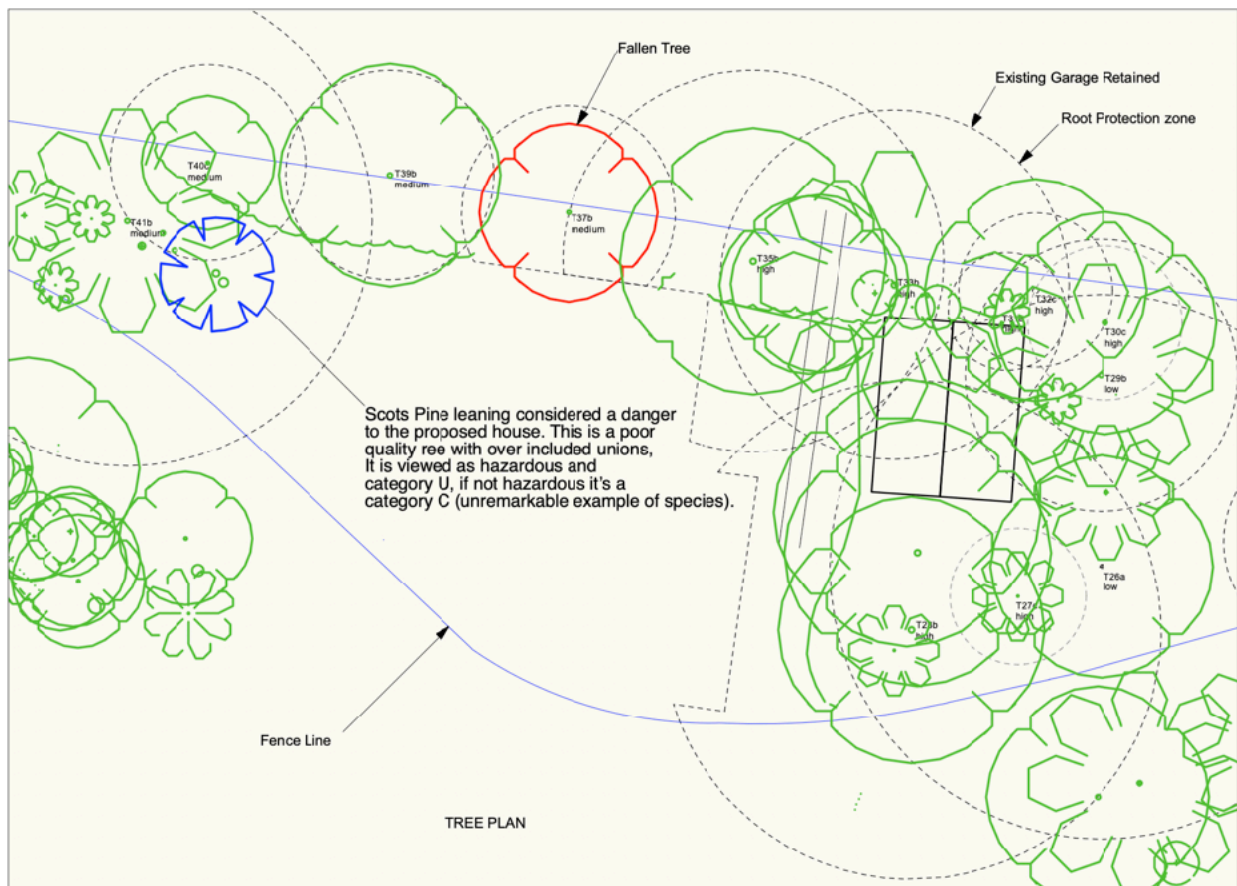


An additional tree on the west side (Figure 5) is considered a hazard due to a heavy lean and proximity to both an electricity pylon and the proposed dwelling and will be removed prior to the build commencing. This tree is category C (an unremarkable example of species). Figure 6 shows a plan of these trees in relation to the proposed dwelling.

Figure 5.



Figure 6.



4. Conclusion

The site being developed is currently 60-70% hard standing (tarmac) or buildings and 30-40% shrub and woodland of poor or fairly poor quality. Given this, and that the proposed development will sit on the same footprint of current buildings, the site was considered too small to accurately assess biodiversity metrics.

However, recent surveys into both the ecology and wildlife of the site (referenced in section 2 and in Appendix 1) point to the site having current low levels of biodiversity and ecological importance. We therefore consider that by transforming hard standing areas with gardens and planting and by introducing the mitigation and enhancement measures

outlined above, the development will be able to achieve a net gain in biodiversity within 1-5 years.

5. Sources

- Biodiversity Impact Assessment, 27 March 2020 by Aspect Ecology
- Ecological Impact Assessment of Land at The Beeches, Steeple Aston, 9 January 2019 by Ecolocation.

Appendix 1

Ecological Impact Assessment Survey, 9 January 2019 by Ecolocation (extracts)

Assessment of the potential for protected and priority species to be present on the Site:

Badger – the Site was searched for areas that might be used for foraging and sett building. Incidental foraging signs, tree scratching, paths, latrines and setts were recorded if found (Harris et al., 1989). The Site itself and land immediately adjacent to the Site and visible from the Site boundaries were included within the survey.

Bats – the Site was searched for suitable trees and natural features for roosting and an assessment was made of potential foraging value. All trees found were assessed from the ground to determine the suitability for roosting bats (BCT, 2016).

Notable mammals – the Site was searched for evidence and suitable habitat for BAP/ Priority Species mammals (Cresswell et al., 2012).

Nesting birds – the Site was searched for areas of habitat/structures that could be used for constructing a nest or for foraging and any evidence of current or historic nesting.

Amphibians – water bodies within a 250m radius of the Site were scored for their suitability for use by breeding great crested newts using the Habitat Suitability Index (ARG UK, 2010). Terrestrial habitat on the Site was assessed for suitability to support amphibians. A large pond 250m was identified south of the site, shallow and slowly flowing into a culvert at the eastern end that travels under the road towards the River Cherwell. The pond appeared to have formed naturally at the bottom of a deep depression within the plantation and was completely shaded by surrounding trees. The pond had indistinct banks and supported limited aquatic vegetation, with a sandy bed. Although the location of the pond within the woodland was considered to offer excellent terrestrial opportunities for great crested newts, the shallow and flowing nature of the waterbody reduced the overall suitability to support breeding great crested newts. Furthermore, the waterbody had limited connectivity to other ponds, with only two others some 200m to the south. The HSI assessment of this pond identified 'below average' suitability for great crested newts.

Reptiles – the Site was searched for areas that could be used for insolation, shelter, foraging and breeding (Froglife, 1999). It is considered unlikely that the Site represented important habitat for local populations. Similarly, as with amphibians, the presence of unsuitable habitat to the south and west reduced the likelihood of dispersal via the Site.

Invertebrates – the Site was searched for areas of habitat that may be used for shelter, and include food plants and species suitable for egg-laying. A number of plants were identified near the site that represented good sources of pollen and nectar for invertebrates such as butterflies, moths and bees; particularly within the grassland and hedgerows (of the wider site). However, due to the small size of the habitats on Site it was considered unlikely that notable invertebrates would be present in significant numbers.

Invasive species – the Site was searched for evidence of species listed under Schedule 9 of the Wildlife and Countryside Act 1981 (as amended). There were no signs of any invasive species found during the survey.

All other protected and notable species were scoped out of the survey work due to an absence of records and lack of suitable habitat within the surrounding area.

Results

Designated Sites: the Site had no statutory or non-statutory designation for nature conservation within or directly adjacent to its boundary. The Site lay within the impact risk zones of two Sites of Special Scientific Interest (SSSI), namely Horsehay Quarries, some 2.8km to the north-west and Middle Barton Fens some 3.4km to the west. Horsehay Quarries was designated for its geology and was therefore unlikely to be impacted by the proposed development.

The Middle Barton Fen was designated for its calcareous fen-meadows, supporting a diverse range of habitats, flora and invertebrates of county level importance; however recent reports describe the condition of the designation as unfavourable to declining. Due to the significant distance from the Site and lack of similar habitats within the survey boundary it was considered highly unlikely that the proposed development would have an impact on local statutory designations.

A single non-statutory designation was identified within a 1km radius of the Site boundary, a target area associated with the River Cherwell some 250m to the south-east of the Site. This included the river and associated meadowlands which were noted as potentially supporting otters, water voles and a number of BAP birds species including curlew (*Numenius arquata*) and lapwing (*Vanellus vanellus*). Due to the lack of similar habitats on Site and small scale of the development, the proposed was considered unlikely to impact this designation.

The habitat connectivity of the Site was considered to be poor, as summarised. The Site was situated within a rural setting, surrounded by a field bounded by a chain link fence and situated within close proximity of parkland, woodland and existing buildings and driveway.

Badger: a total of two records of badgers were returned from within a 1km radius of the Site. One was described as a road casualty some 900m to the west of the Site and the other was described as a sett with no location information provided but not on the site. No signs of setts, latrines, dung piles or foraging were noted on Site.

Bats: a single bat record of common pipistrelle (*Pipistrellus pipistrellus*) was returned from within a 1km radius of the Site. This was from 1997 and associated with the village of Steeple Aston. The lack of historical records was not considered likely to indicate a lack of presence base on the local habitats and was attributed to under recording. No trees were

identified on Site that possessed suitable rot holes, cracks or peeling bark that may facilitate roosting bats.

Birds: a large number of records of notable bird species were found within a 1km radius of the Site. Many of these were birds associated with water and likely associated with the River Cherwell. Also included were six records of barn owl (*Tyto alba*), with one record detailing nesting within the local parkland. Other species included 25 instances of swift (*Apus apus*), 3 records of lesser spotted woodpecker (*Dendrocopus minor*) and 11 records of yellowhammer (*Emberiza citrinella*). A number of these records were associated with Dean Plantation.

The majority of the trees (around the wider) Site were considered to have suitable structure to support nesting birds and a number of old nests were noted. Incidental sightings of birds during the site visit in January included pigeon (*Columba palumbus*), crow (*Corvus corone*), blue tit (*Cyanistes caeruleus*), robin (*Erithacus rubecula*), magpie (*Pica pica*) and blackbird (*Turdus merula*).

Reptiles: a single record of a grass snake was returned from within a 1km radius of the Site from 2012. This was located some 700m south of the Site and appeared to be associated with the wet meadows adjacent to the River Cherwell.

Invertebrates: seven invertebrate records were returned from within a 1km radius of the Site including five butterflies and two molluscs. The butterfly species included wall (*Lasiommata megera*), small heath (*Coenonympha pamphilus*), small pearl-bordered fritillary (*Boloria selene*) and large tortoiseshell (*Nymphalis polychloros*). All the butterfly records were dated from between 1990 and 1994. The two species of molluscs were the large black slug (*Arion ater*) and fine-lined pea mussel (*Pisidium tenuilineatum*), the latter of which was associated with the River Cherwell.

Invasive Species: a total of six invasive species records were returned from within a 1km radius of the Site, four of which were of invasive crustaceans associated with the River Cherwell. The remaining invasive species records included Russian-vine (*Fallopia baldschuanica*) dated 2017.

Notable Mammals: brown hare are typically associated with farmland and due to the presence of suitable habitat surrounding the Site it was likely that this species was present within the locality. However, due to the small size of the habitats on Site it was considered unlikely that it represented a valuable stronghold for this species.

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