

Ecology response 21 11 24 for F/24/97945 LAND ADJACENT TO OAK COTTAGE, WINCHESTER ROAD, BOORLEY GREEN, SO32 2DH

Erection of 52 retirement living apartments with associated communal facilities and car parking; the erection of a pair of detached dwellings; improved vehicular access and new pedestrian access to Winchester Road.

Liz Harrison

21/11/24

Re: additional/amended ecological information rec/d 30.10.24 and 7.11.24

Biodiversity Net Gain

I have reviewed the email from Somerset Wildlife Trust Consultancy (24/10/24, appended at the end of the letter/email from The Planning Bureau Limited, 30/10/2024).

With regard to the strategic significance of the Traditional Orchard habitat, the Hampshire LNRS is in development but has not been finalised yet. Eastleigh Borough Council is not preparing our own LNRS as it is being done at county level. Until the LNRS is approved, we will accept the conclusion of low strategic significance for this orchard, on this occasion, for this application.

A landscape condition will be required for maintenance of the Traditional Orchard habitat created on site for 30 years, including replacement of fruit trees and any other habitat features.

In this instance, since the application has already been validated, we will accept a Habitat Management and Monitoring Plan (HMMP) to be delivered as part of the Biodiversity Gain Condition discharge following planning consent. For future applications, the Local List (February 2024) requirements must be met before the application can be validated.

The submitted Statutory Metric Calculation Tool V3 shows a unit deficit of 5.07 habitat units, which we agree in this case and in this instance can be offset by the purchase of units from a habitat bank following planning consent as requested in the Somerset Wildlife Trust Consultancy response of 24 October 2024.

Protected Species

I have reviewed the updated Ecological Impact Assessment (EclA) report by Ecosupport (October 2024).

Bats

Bats were recorded with moderate foraging and commuting activity along the northern boundaries and along the line of fruit trees, but none were seen emerging from the buildings.

Reptiles

A low population of slow worms and grass snakes were recorded on site, mostly along the northeastern boundary, but there was also a grass snake found along the southwestern boundary.

Badgers

A badger was seen commuting along the western site boundary during a bat survey in June 2024, confirming presence of commuting and foraging badgers within the site, but their setts were not within or adjacent to the site.

Breeding Birds

The site is assessed to have moderate potential for nesting and breeding birds.

Great crested newts

Although the southern and western parts of the site are in the amber impact risk zone, due to isolation from nearby ponds by two major roads the potential for great crested newts is negligible.

Dormice

There is suitable habitat and some connectivity, but negative records from surveys on adjacent sites leading to an assessment of low potential for dormice.

Invertebrates

The site has been assessed as supporting common invertebrates but not likely to support rare species. The invertebrate population is important as food sources for bats, birds and reptiles, so it is important to maintain these populations by providing shelter and food sources.

The mitigation recommendations for protected species in sections 6.2 to 6.7 of the report are appropriate and must be followed.

Lighting

In addition to the information requested previously, the lighting plan must include *a dark corridor of at least 5m from the northern treeline should be implemented into the lighting plan with a maximum of 0.5 lux at 4m height above the ground (the lowest level bats were noted at this location during the activity surveys)*. Wildlife sensitive lighting is also required on the western boundary to avoid disturbing bats and badgers.

Biodiversity Enhancements for Protected Species

The recommendations are shown in Appendix II-Habitat Enhancement Plan.

This includes 8 built-in bat bricks, 6 bat boxes on suitable trees along the northern boundary, 10 built-in swift bricks, two dormouse boxes, a reptile hibernaculum and two log piles. I am concerned that the swift bricks and the bat boxes are shown quite close to each other and only on the western elevations of the building. I can appreciate that this would be the quietest and darkest side of the site at night, but bats and swifts have different requirements

(see advice below). A variety of elevations will allow bats and birds to choose the roost site with the most ideal conditions for them at any particular time.

The Bat Conservation Trust recommends installing a bat brick/box at least 4 m above the ground, away from artificial light sources, sheltered from strong winds and **exposed to the sun for part of the day**, facing south, south-east or south-west. (<https://www.bats.org.uk/our-work/putting-up-your-box>)

Swift nest boxes are best positioned under the eaves or on walls facing north, northeast or north-west **out of direct sunlight**, five metres above the ground, with clear adjacent airspace so swifts can access them in a high-speed direct flight. (<https://www.swiftconservation.org/Nestboxes%26Attraction.htm>)

If possible, the re-use of wood from the fruit trees from the traditional orchard area and some of the soil around their roots for the hibernaculum and log piles would allow some of the associated fungi living in the wood to remain on site.

Invasive species

Japanese knotweed is reported likely absent from the site now. All site operatives must be oriented to signs of young shoots of Japanese knotweed and remain vigilant. If suspected, work in that area must stop and any suspected Japanese knotweed must be reported to the ecological consultants to be checked immediately.

Surface Water Drainage

Gian Bendinelli (letter by email from The Planning Bureau Limited, 30 October 2024) has responded that *The matters relating to drainage will be addressed in relation to the comments made by the LLFA.*

To clarify, the Eastleigh Borough Council Ecology team is responsible for the water quality aspects of surface water drainage as required by Local Plan Policy DM6, which is separate from the water quantity / flooding aspects dealt with by the LLFA. I have reviewed the LLFA response (16 September 2024) and note that there are several water quality questions which overlap, and we do work together, but the LLFA does not assess whether the system meets the requirements of our Local Plan Policy DM6.

The LLFA response states *Further information is required to explain how the surface water quality mitigation indices are to be achieved. The drainage statement suggests that 3 all surface water from the access will drain to the permeable paving, but the drainage Strategy Layout shows gullies connected to the pipe network.*

Section 2.4 of the Drainage and Flood Risk Statement addresses surface water quality by showing tables 26.2 and 26.3 from the CIRIA SuDS Manual (753) and states that the development falls within the low hazard level. Calculations are required to demonstrate that the specific pollution hazards from each of the two catchments (access road and parking

area and impermeable roof area) are mitigated by the specific SuDS components using the simple index approach.

To be more specific, it is not clear whether all the surface water drainage from the access road and parking area (Area 1) is proposed to be filtered by the graded stone sub-base under the access road and parking area. The drainage plan must show the flow of water using arrows to demonstrate that all the water passes through permeable pavement if this is the only form of treatment for this area.

It is not clear whether water quality treatment is proposed for all of the water draining from Area 2, impermeable roof area. Section 2.4 states *Roof drainage is collected via catchpits prior to attenuation tanks or within open graded crushed angular stone in the access road sub-base*. This implies that some of the water from the roof may be treated this way, but it is not clear enough. Although Table 26.2 shows that the pollution hazard level is very low, the pollution hazard levels are still 0.2 (TSS), 0.2 (Metals) and 0.05 (Hydrocarbons) and need to be mitigated.

Section 6.9.6 of the Ecological Impact Assessment (EclA) report by Ecosupport (October 2024) states that small animal escape ramps will be added to all trapped gullies on site. These must be checked during routine gully maintenance and repositioned or replaced when necessary. A SuDS maintenance plan can be conditioned which will include checking these escape ramps.

Lisa Malter

Ecologist

17/9/24

Protected Species

The Interim Ecological Impact Assessment (EclA) report by Ecosupport (July 2024) states that additional survey information (recommended in the PEA by First Ecology (V2, April 2024)) for bats and reptiles is still outstanding. The final report based on this information will be provided in late October 2024 when these surveys have been completed and the recommended mitigation may need to be amended at that time.

Based on the survey data available so far, precautionary working method statements and retention of habitat features have been recommended and can be conditioned for bats, nesting birds, great crested newts, dormice, and commuting and foraging badgers.

Badgers and signs of badgers have been observed on site. An updating site walkover for badgers will be required within 30 days prior to the start of construction. This can be conditioned.

Bat emergence surveys were conducted on the buildings with potential roost features according to best practice guidelines. No bats were seen emerging from the buildings although there was some activity in the area.

Bat transect surveys and static bat detector monitoring will continue until October 2024 to determine how bats are using the rest of the site, so additional information may result in additional mitigation being required.

Reptile surveys will be done in September 2024. A minimum recommendation of precautionary passive dispersal and a destructive search were recommended, but additional information may result in additional mitigation, such as a larger reptile receptor site, being required.

Biodiversity enhancements for protected species have been recommended in the EclA report. This includes 8 bat bricks built into the buildings, 6 bat boxes on mature retained trees, 10 swift bricks built into the main building and 2 log piles with locations shown in the Habitat Enhancement plan in Appendix II. Two dormouse boxes are shown on the plan but not listed in the text of the report.

As the presence of protected species is a material consideration the remaining ecology survey information must be provided before determination. Please re-consult the Ecology team when this information has been submitted. Additional mitigation or enhancements may be required based on the survey information.

Lighting

The Lighting Strategy and Assessment by Stantec (Rev 02, July 2024) has identified bat activity along the north and northwest site boundaries as a biodiversity receptor as shown in figure 6.1. This may need to be updated when the additional bat survey information is available in late October. Any areas with badger activity and the locations of the recommended biodiversity enhancements such as bat boxes, hedgerows, and trees shown in the Habitat Enhancement Plan will also need to be considered as receptors for the purposes of the lighting plan. The locations of bat boxes on the buildings and trees must be compared with the position of any outdoor lighting and potential light spill from windows to determine whether these areas will be dark enough for bats. A lighting diagram showing modelled lux values and the positions of exterior lighting together with the positions of vegetation and proposed bat boxes will be required.

The site compound, office and welfare facilities should not be located near any of the biodiversity receptors to avoid illumination of these habitats above 1 lux during the construction phase. This must be specified in the CEMP.

Biodiversity Net Gain

The Biodiversity Gain Assessment by the Somerset Wildlife Trust Consultancy (V3, August 2024) states that the proposed design achieves an on-site net loss of 4.43 habitat units and a gain of 0.41 hedgerow units (69.30% habitat net loss and 25.23% hedgerow net gain). An off-site solution is proposed to be secured post-consent to achieve 10% biodiversity net gain, however no specific details have been submitted.

Habitats of medium or higher distinctiveness are defined as significant habitat by the government guidance. The distinctiveness of habitats must be considered in addition to the %net gain.

Analysis of the statutory metric provides the following trading rule errors which have not been specifically addressed:

There is a net loss of grassland-traditional orchards area habitat which is high distinctiveness totalling -0.95 biodiversity units (BU). There is a total of 1.22 BU of traditional orchard in moderate condition on site pre-intervention and only 0.26 BU of traditional orchard in moderate condition on site post-intervention. The Biodiversity Net Gain trading rules do not permit any loss of high distinctiveness habitats.

The Biodiversity Gain Assessment section 3.1.6 states that traditional orchards have been given low strategic significance but they should be of high strategic significance.

There are net losses of individual trees-rural tree area habitats which are medium distinctiveness totalling -0.22 BU and no other gain of higher distinctiveness area habitat to offset these losses.

There are too many net losses of low distinctiveness area habitats (-0.71 BU) and too few gains at higher distinctiveness categories to offset these losses.

There are too many net losses of medium distinctiveness hedgerows habitat (-0.053 BU) and too few gains at higher distinctiveness categories to offset these losses.

The significant habitats delivered on site and off site will need to be monitored for 30 years, with a monitoring fee secured by an S106 agreement. Separate Habitat Maintenance and Monitoring Plans (HMMP) must be provided for the on-site and any bespoke off-site habitats.

Surface water drainage

The Drainage and Flood Risk Statement by Scott, White and Hookins (Rev 03, July 2024) and the Drainage strategy layout by Scott, White and Hookins (P06, July 2024) show the drainage divided into two areas. Area 1 is the road and parking areas (0.249 ha) and Area 2 is the impermeable roof area of the main building and the two separate houses (0.217 ha).

Infiltration through swales and basins has been deemed not feasible on this site due to high ground water levels.

Area 1 is proposed to be drained by gullies in the impermeable tarmac access road and through the porous block paving in the parking spaces. A lined open graded stone sub-base under the access road would have a perforated carrier drainpipe in a trench underneath the subbase. This would carry the water to an attenuation tank, with a hydrobrake controlling the flow before being discharged into the existing ditch.

Area 2 is proposed to be drained via rainwater downpipes into a lined cellular crated attenuation tank under the access road on the north side of the building. A hydrobrake would be used to control the flow before it is discharged into the existing ditch.

The ditch is located between Winchester Road and Goldcrest Road but the path of the water exiting from the ditch is not obvious. It is not marked as a waterway on the map. With no exit for the water and a high water table preventing infiltration, this ditch could flood and cause flooding on the roads.

The site area is 0.90 ha. Local Plan policy DM6 states that on *sites of between 0.5 hectares and 1 hectare, SuDS schemes should include at least two forms of naturalised filtration* before being discharged off site. From the description of the proposed surface water drainage strategy, the only form of filtration would be the permeable paving on the parking areas and the stone subbase under the access road. Effectively this would provide only one form of filtration for each part of Area 1. No filtration is included in the treatment train for Area 2, only attenuation. The proposal does not accord with the requirements of DM6 to have at least two forms of naturalised filtration for all of the surface water drainage.

Rain gardens or rain garden planters incorporated into the landscape plan might be appropriate in this situation. For Area 1 the water would be filtered by the rain garden first and could then be diverted through the permeable paving for the second stage of filtration. For Area 2, which consists of the buildings, green roofs could be used as the first form of filtration and rain gardens as the second form. Alternatively, Area 2 could also use rain garden planters, and the water could then be diverted through the permeable paving in Area 1 as a second form of filtration. Attenuation tanks and a flow control device can still be used to control the discharge rate.

All trapped gullies must be provided with small animal escape ramps to allow any small animal (such as frogs or toads) to escape if they fall in.

Lisa Malter

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