

Ecology response 18 10 24 for F/24/97312 Land adjoining 4 Brookfield, Providence Hill, Bursledon

Construction of Residential Care Community, comprising a 73-bed care home (Use Class C2) and 5 x 2-bedroom close care cottages (Use Class C3 age restricted), with associated access, internal access road, parking, landscaping and infrastructure.

Rebecca Altman

18/10/24

Ecology

I have reviewed the updated BNG monitoring and management plan (rev D October 2024) and the updated Statutory Metric and the applicant response (by Savills) to the landscape consultant (9/10/24), the amended landscape general arrangement plan (1 and 2) and site sections (sheet 1).

The following sections of the BNG monitoring and management plan have been updated.

1.3 – Proposals – no ecology issues

3.0 – Existing Habitats and Development Proposals – changes to include foundations of demolished buildings as developed land sealed surface rather than buildings.

4.1 – On-Site Proposals – this section refers to the Post-Development Layout (Rev D) in the appendix. The shape of the building has changed which affects the inner courtyard and plantings in that area. Comparing the two layouts I can see pond P3 in the April layout is missing in the October layout (rev D), only two ornamental ponds will now be created. The grassland on the southern boundary (ONG 1 and ONG2) has been replaced by mixed scrub (MS5 and MS6). A ground level planter has been introduced on the northern end of the car park, and the ONG4 designation has been changed to ONG2.

The clipped hedges along the paths have been removed from the proposal but added to the rear gardens of the cottages. Yew has been added to the mixed scrub list, but it is not clear why. I have no objection to yew in this location if it is acceptable to the landscape officer.

4.2 – Metric Calculation – has been updated, net changes above 10% in area and hedgerow habitats. Trading rules satisfied.

5.2.3 – General Management -includes recommendations for scalloped edges as requested

5.7 – Ground Based Green Wall- species are appropriate with habitat enhancements for invertebrates and birds

5.9 – Compliance Check- appropriate years listed

Surface water drainage

I have compared the Proposed drainage strategy layouts P02 and P03. My previous comment was *The management and maintenance strategy covers all SuDS components. Exceedance flows have been shown in Appendix F, Proposed Drainage Strategy Layout (P02, March 2024),*

however the arrows show that in some cases water would flow towards the buildings rather than around them, which could cause flooding.

I note that the exceedance arrows pointing towards the houses have been removed, however I don't see any alternative flow paths or other changes which would affect exceedance in this area. A clearer explanation of the exceedance flows for surface water drainage in this area is required.

Lisa Malter

Ecologist

8/8/24

I have reviewed the amended documents submitted on 24/7/24 and 25/7/24.

Amended proposed site plan by WLA (Rev K)

Response to 11/6/24 Ecology Comments by Ecosupport (July 2024)- I accept that NS1, NS2 and NS6 will need to be cut annually to avoid any conflict with the care home and achieve moderate condition as listed on the BNG Assessment, Management and Monitoring Plan.

Amended versions of the ecology input for the Construction Environmental Management Plan as well as the Ecological Impact Assessment and BNG Assessment, Management and Monitoring Report

Agreed that H2 and H6 are on the northern boundary.

Updated CEMP letter by Ecosupport (July 2024)- The updates to the CEMP as listed in this document are satisfactory.

Proposed Drainage Strategy Layout by Paul Basham Associates (July 2024, P 03), no objections. Most exceedance flows are directed away from the buildings.

PRF Inspection letter by Ecosupport (May 2024) T22 Yew, a precautionary working method statement as outlined in the letter will be used during any works to this tree.

Updated Ecological Impact Assessment by Ecosupport (July 2024)

The updated sections are now satisfactory. These are:

4.12.2.4 – Cotoneaster

7.5.7 – Funding and Safeguard

7.11 – Invasive Species

7.12.1 – Integrated Bricks

7.12.6 – Hedgehog Highways

7.12.7 – Invertebrates

Amended Landscape Strategy (Rev 07, July 2024) and **Amended Landscape General Arrangement (1 and 2)** (Rev P05, July 2024) **by Terrafirma**- no issues. Climbing plants for the green wall have not been identified in these documents, but this can be conditioned.

Landscape First and Second Floor Terraces by Terrafirma (P03 July 2024)- I question the use of artificial grass on B-Second Floor Terrace (or anywhere).

Lisa Malter

Ecologist

11/6/24

Ecology

I have reviewed the following documents:

Ecological Impact Assessment by Ecosupport (April 2024), with findings considered valid for 18 months.

Statutory Biodiversity Metric by Ecosupport (April 24)

BNG Monitoring and Management Plan by Ecosupport (April 2024)

Habitats

In Section 5.2.3 of the BNG Monitoring and Management Plan it states that *a well-developed edge will also be encouraged* for the scrub withing the woodland understorey and scrub in ecological buffer zones. A scalloped edge to the scrub should be created to provide a variety of shade and temperature conditions for invertebrates and reptiles.

Mixed scrub habitat is proposed to be created with native shrub planting around the main care home (NS1, NS2 and NS6 in the metric).I think it will be problematic to maintain this habitat for the benefit of biodiversity (such as cutting on a 3-year cycle as stated in section 5.9.2 Hedgerow Management) due to their locations next to the care home and car park, therefore their biodiversity value may be reduced.

The description of a habitat to be created, H6, is native hedgerow with trees adding to enhanced H2 northern boundary. According to the Post Development Layout (BNG) H2 and H6 are on the eastern boundary not the northern boundary.

Monitoring reports will be required in years 2, 3, 5,10,15,20,25 and 30 rather than annually for the first 5 years and then every 5 years until year 30 as stated in the Compliance Check (section 5.10). In case of any problems identified, additional reports may be requested.

Condition

The recommendations specified in the BNG Monitoring and Management Plan by Ecosupport (April 2024) must be followed. Any amendments must be submitted and approved in writing by the LPA. Monitoring and management of habitats is required for 30

years, with monitoring reports required to be submitted in years 2,3,5,10,15,20,25 and 30. – to be dealt with in the s106 agreement.

Reason: To ensure delivery of at least 10% biodiversity net gain as required by the Environment Act (2021).

Protected species

Recommended conditions

The precautionary working methods and species-specific mitigation recommended in the Ecological Impact Assessment report are included in Appendix A of the CEMP (Environment and Ecology Input by Ecosupport, April 2024). This must also be included in a plan for the timing of works which can be conditioned. The plan must provide a list in chronological order of what must be done and when to ensure that survey timings are properly considered before the start of any work on site.

Reason: To avoid delays and to ensure that mitigation is done at the correct times

The protected species mitigation and precautionary working methods outlined in the Ecological Impact Assessment (April 2024) are appropriate and shall be implemented.

Reason: To avoid harm to protected species.

Any exterior lighting must conform to the guidelines set out in Guidance Note 08/23 Bats and Artificial Lighting at night (ILP / BCT, 2023) or any relevant updates). A lighting strategy can be conditioned.

Reason: To avoid the impacts of additional lighting on bats.

Prior to start of work on or near tree T22, a PRF inspection survey will be conducted. If bats are present, further surveys and a European protected species license with a specific mitigation strategy for this tree will be required.

Reason: To ensure protection of bats and bat roosts.

Any vegetation clearance or works must take place outside of the bird nesting season. This is usually from March through August. If this is not possible a nesting bird survey by a Suitably Qualified Ecologist (SQE) must be done immediately before the start of works. Any active nests must be protected from disturbance by a 5 m buffer until the young have fledged and left the nest.

Reason: To ensure protection of nesting birds and their young.

If a dormouse or associated field signs (nests, gnawed nuts etc) are found during the works, all works must cease, and the advice of a suitably qualified dormouse ecologist sought. A license from Natural England may be required before the works can continue.

Reason: To ensure protection of protected species.

Amendments needed

This information must be added to the CEMP: During construction, any excavations and pipes must either be covered at night or fitted with a slanted rough board as a small animal escape ramp.

Protected species and habitat mitigation training (ie. Toolbox talks and informational signs) for all site operatives must be provided at the appropriate times in the construction process. The species identified for this application are slow worms/common reptiles, breeding birds, foraging and commuting bats (T22 may have potential bat roost features), foraging and commuting badgers, and hedgehogs. Great crested newts and dormice are considered likely absent from the site but must be included in the toolbox talks as a precautionary measure.

Section 7.5.7 of the Ecological Impact Assessment (April 2024) states that management and ongoing monitoring of the reptile site will be funded for five years, this habitat must be maintained and monitored for at least 30 years.

Ecological enhancements for species

Condition

A biodiversity enhancement plan will be required before the start of works. It must show the specific locations of the recommended enhancements.

The EclA report recommends:

Integrated swift bricks - One swift brick per cottage (5 altogether), with a further 6 to be erected on the main care home building.

Integrated bat bricks - One bat brick will be erected within 3 of the new cottages, with a further 3 erected within the care home building.

Integrated bee bricks - Bee bricks will be included within 3 of the new cottages, with a further 3 erected within the care home building.

Bat boxes on trees: 2 along the northern boundary of the site.

Bird boxes on trees: 4 along the northern boundary of the site.

Log piles: vertical for invertebrates, in buffer along northern boundary of the site.

Hedgehog homes: number and location not specified, can be incorporated into the wider landscaping in sheltered areas, possibly in buffer along northern site boundary.

Hedgehog highways: any closed board fences must contain holes in the baseboards (2 per garden). The holes should be at least 13 x 13 cm (not 10 x 10 cm as written), with the locations marked on a plan.

Invasive species

Japanese knotweed, bamboo and rhododendron have been recorded on site. A programme of eradication of Japanese knotweed by a suitably qualified specialist and accredited contractor should be started as soon as possible so it does not spread. This is a long process

which can take years to complete. Updates should be submitted to the LPA whenever available.

Rhododendron and bamboo also need to be prevented from spreading into the wild and should be removed from the site. If not fully eradicated, bamboo can also penetrate through paving.

Cotoneaster is mentioned in the condition assessment notes for mixed scrub (in the western part of the site) in Table 1 of the BNG Assessment, Management and Monitoring Report by Ecosupport (April 2024) but not in the Ecological Impact Assessment report. Since some species of cotoneaster are invasive and it is difficult to identify to species, it should be marked on the plan and included in the invasive species eradication recommendations.

Condition

The recommendations for eradication of invasive species as described in section 7.11 of the Ecological Impact Assessment (April 2024) are appropriate and must be implemented.

Biodiversity net gain

Documents reviewed: Statutory Biodiversity Metric by Ecosupport (April 24) and BNG Monitoring and Management Plan by Ecosupport (April 2024)

B1 and B2 have been demolished. If the areas where the buildings stood no longer fit the definition of developed land sealed surface, the metric should be adjusted to reflect these changes.

Condition

If any changes in the planting and management of the site need to be made before the start of works, they must be reviewed and approved by the ecological consultant and the LPA ecologist to determine whether they are in line with the Biodiversity Gain Assessment.

Buffer zone

The EclA proposes a buffer of approximately 30 m from Windmill Fields Wood SINC and this is shown on the Landscape Strategy Plan. EBC have requested a minimum of 20 m so this requirement would be satisfied. Scrub and grassland enhancements for reptiles have been proposed. The detailed planting plan can be conditioned.

Retaining wall

The proposed retaining wall would be enhanced with climbing plants covering the wall and a hedge along the top and would be a good vertical green infrastructure feature. It would be surrounded by planted beds containing ornamental shrubs, neutral grassland, and trees. The detailed planting plan can be conditioned but should include a mixture of plants which would flower over a long season. Additional features for invertebrates, nesting birds and reptiles could be added to the wall.

Planting

Species rich mixed scrub within the ecological buffer and retained enhanced habitat on the western end of the site: Field Maple (*Acer campestre*), Hazel (*Corylus avellana*), Elder (*Sambucus nigra*), Hornbeam (*Carpinus betulus*), Holly (*Ilex aquifolium*), Hawthorn (*Crataegus monogyna*), Dogwood (*Cornus sanguinea*), Dog Rose (*Rosa canina*), Blackthorn (*Prunus spinosa*). The detailed planting plan can be conditioned.

Surface water drainage

The stream to the north of the site (Badnam Creek, also described as a ditch) flows along the southern boundary of Windmill Fields Wood SINCS and is a tributary of the River Hamble.

EBC Local Plan Policy DM 6 states that Wherever feasible, naturalised filtration should be included within the treatment train as follows: a. On sites of 1 hectare or more, or within 100m of the River Itchen SAC or Solent Maritime SAC, SuDS schemes should include at least three forms of naturalised filtration.

I have reviewed the Flood Risk Assessment and Drainage Strategy by Paul Basham Associates (rev 2, April 2024). The report lists plot size as approximately 1.08 ha.

Three forms of filtration are proposed as required for water quality. These are permeable paving on parking areas, a vortex separator, a swale and a bio-retention filter strip. Pollution mitigation has been shown to be sufficient using the UKSuDS water quality toolkit.

Surface water is proposed to be collected in attenuation crates under the parking spaces with the largest crate in the northeastern corner. Attenuation crates are proposed upstream of the HydroBrake flood control device. Discharge at a rate of 2l/s is proposed into the existing watercourse running along the northern site boundary. This is lower than the estimated greenfield runoff rate of 2.36 l/s.

The management and maintenance strategy covers all SuDS components. Exceedance flows have been shown in Appendix F, Proposed Drainage Strategy Layout (P02, March 2024), however the arrows show that in some cases water would flow towards the buildings rather than around them, which could cause flooding.

It would be more sustainable to combine rainwater harvesting and attenuation capacity, collecting surface water drainage from the roofs for use in watering the plants on site. The planting areas could be built as rain gardens and a drip watering system using the stored rainwater could be integrated into the landscape plan. Any excess water could then be discharged as proposed. The use of rain garden plantings around the site would also help minimise exceedance flows.

Lisa Malter

Ecologist