

Ecology drainage response for F/23/95574 237 Chamberlayne Road and 5b Derby Road, Eastleigh, SO50 5HX

Construction of 12no. dwellings comprising of 9no. apartments and 3no. houses, with associated landscaping, parking, and access from Derby Road.

Maple Place, former Crockery and Samson's Gym

Rebecca Altman

31/8/23

I have reviewed the Exceedance Flow Paths diagram by Reuby & Stagg Ltd (August 2023). The boundaries along Derby Road and Chamberlayne Road are labelled as low walls with railing, but the exceedance arrows point towards those walls. Please could you provide details of how these walls will be permeable to surface water exceedance flows? If they are not permeable, then the gardens of the apartments would become flooded, particularly next to the northern private patio, north-eastern corner private patio and the southeastern private patio. The houses look as if they will have gates which should be permeable to water.

Lisa Malter

Ecologist

22/8/23

I have reviewed the amended comments in the Soft Landscape Management and Maintenance Plan by ACD (Rev B, August 2023). Section 6.2 has been amended to Pruning should be done in late winter so that berries can remain available for wildlife. This is satisfactory.

After a review of the amended Biodiversity Net Gain Assessment report (Rev 1, August 2023) and the email response from Ecosa the following condition is recommended.

Condition: Lighting and biodiversity enhancements

A detailed lighting plan is required. This must follow the latest Bats and Artificial Lighting at Night 08/2023 guidance note which is available at <https://theilp.org.uk/publication/guidance-note-8-bats-and-artificial-lighting/>

The specific locations of the bat and bird boxes must be determined by the ecological consultant based on the lighting plan and must be submitted for approval on the same drawing. The location of the hedgehog gaps must also be shown on this plan.

Lisa Malter

Ecologist

31/7/23

Ecology

I have reviewed the Ecological Impact Assessment report by Ecosa (June 2023). This site is currently a vacant lot, the previous buildings have already been demolished (PN/20/89301, January 2022). The assessment found low suitability for foraging and commuting bats, with a sensitive lighting scheme recommended. It states that integrated bat boxes and nest boxes for birds will be provided as biodiversity enhancements.

The site photos show hardstanding with occasional patches of ruderal vegetation, surrounded by a closed board fence. As there are records of hedgehogs in the area, hedgehog holes (13x13 cm minimum) must be included in the baseboards of any closed board fencing to allow free passage of small mammals through the site.

The Biodiversity Net Gain Assessment Report by Ecosa (June 2023) states that *the pre-development biodiversity value of the site is based on the current state of the habitats on site as recorded on site during a condition assessment field survey undertaken by Helen Butt, Senior Ecologist of ECOSA, on 10th May 2022*. However, the biodiversity value of the two buildings which were previously on site (Application no. PN/20/89301 demolished in January 2022 to prepare for this application) must also be taken into account.

A Preliminary Ecological Assessment of the original buildings by Johns Associates (October 2020) assessed them to have low bat roost suitability (three potential bat roost sites on the two buildings), and one emergence survey was done. There was a very high level of bat activity recorded during the survey, with both foraging and commuting bats, but no bats were observed emerging from the buildings at that time. There are numerous records of bats and swifts in this area, and this was also recorded in the ecology response for PN/20/89301.

The Ecological Impact Assessment report recommended integrated bat boxes and bird nest boxes, but this has not been included in the biodiversity net gain assessment report, nor are they shown anywhere on other plans or diagrams. Bat bricks and swift bricks will be required for this development. Ecological advice will be required to determine the maximum number of each that can be accommodated on site and suitable positions to ensure the correct elevation and access for bats and swifts.

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>)

The positions of these biodiversity enhancements must be coordinated with the exterior lighting plan (if required) and can be shown on a separate biodiversity enhancement plan or as an amendment to the already submitted Biodiversity Net Gain Assessment report.

The assessment states that *A total of 0.1 hectares of developed land; sealed surface will be lost as part of the proposals. ... and that The anticipated post-development habitats within the development red-line boundary comprise developed land; sealed surface, vegetated garden, and introduced shrub.*

The Landscape Proposal by ACD (Rev D, June 2023) is satisfactory with a variety of flowering plants which will attract pollinators. The Soft Landscape Management and Maintenance Plan by ACD (Rev A, June 2023) contains appropriate precautions to protect nesting birds (5.4), however it needs to be amended to include a pruning schedule to ensure that flowers, fruit and seeds will remain available for wildlife.

Surface Water Drainage

I have reviewed the Flood Risk Assessment and Drainage Strategy by Reuby and Stagg Ltd (June 2023). Infiltration test results showed that the infiltration rate was too slow for soakaways to be used. The car park is proposed to use permeable paving for one form of filtration and attenuation in sub-surface storage. A 50 mm diameter flow control orifice with a downstream defender is proposed to be used to restrict flow rates to greenfield rates but without blockages which would be caused by a smaller orifice.

The FRA mentions exceedance flows but I didn't see any exceedance flows noted on these plans. An exceedance flow plan is required.

Lisa Malter

Ecologist