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Preliminary Ecological Appraisal
for a proposed residential development
at Brook Road, Northfleet DA11 8DW

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Desk study report Kent and Medway Biological Records Centre

Kent Reptile and Amphibian Group data search

1. INTRODUCTION

The effect of any development on biodiversity is a material consideration for Local Planning Authorities deciding on planning applications. In order for the requirements for the protection of species and habitats to be met, planning authorities and developers work within the relevant parts of the National Planning Policy Framework (NPPF, revised 2018),

Section 15 of the NPPF at paragraph 174 (points a-d) states that:

“Planning policies and decisions should contribute to and enhance the natural and local environment by:

- a) protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory status or identified quality in the development plan);
- b) recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland;
- c) maintaining the character of the undeveloped coast, while improving public access to it where appropriate;
- d) minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures;

Paragraph 174 states that:

To protect and enhance biodiversity and geodiversity, plans should:

- a) Identify, map and safeguard components of local wildlife-rich habitats and wider ecological networks, including the hierarchy of international, national and locally designated sites of importance for biodiversity; wildlife corridors and stepping stones that connect them; and areas identified by national and local partnerships for habitat management, enhancement, restoration or creation; and
- b) promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species; and identify and pursue opportunities for securing measurable net gains for biodiversity.

In order to help developers work within the NPPF, The Chartered Institute of Ecologists and Environmental Managers (CIEEM) have worked with the Construction Industry Research and Information Association (CIRIA) and the Institute of Environmental Management and Assessment

(IEMA) to produce best practice guidance in producing biodiversity net gain in development projects.

Part of the function of Natural England, as the statutory body concerned with wildlife and biodiversity, is to ensure that species and habitats protected and highlighted by national and international legislation, conventions and directives are not adversely affected, including possible effects of development proposals.

In order to facilitate this, NE issued Standing Advice for local planning authorities, developers and ecological consultants. The advice incorporates legislative and policy guidance relating to protected species and the planning system, and is issued in accordance with the relevant planning regulations and national and international biodiversity legislation.

Certain species and habitats are protected from death, injury or disturbance in their natural habitat by the Wildlife and Countryside Act 1981 (including certain mammals, reptiles, all bats, all birds except pest species and game birds, and certain invertebrates and plants), Protection of Badgers Act 1992 and The Conservation (Natural Habitats &c.) Regulations 1994 (as amended). The WCA affords different levels of protection to different species, and was subsequently amended by the Countryside Rights of Way (CROW) Act (2000). Further amendments have subsequently been made including changes to species protected under the Schedules 1-9.

Some amphibians, including Great Crested Newts, their breeding sites or resting places are protected under Regulation 41 of The Conservation of Habitats and Species Regulations 2010. It is an offence for anyone to intentionally kill, injure or handle or possess them (whether live or dead), deliberately disturb a sheltering animal, or sell or offer an animal for sale without a licence. It is also an offence to damage, destroy or obstruct access to any place used by GCN for shelter.

The CROW Act strengthened species protection. Section 74 introduced a new duty on government to further biodiversity conservation for habitats and species of principal importance. It was superseded by Sections 40 & 41 of the Natural Environment and Rural Communities (NERC) Act of 2006, wherein section 40 provides that every public authority must, in exercising its functions, have regard to the purpose of conserving biodiversity.

Habitats and species listed in Section 41 of the NERC Act are those identified as requiring action under the former UK Biodiversity Action Plan and are now known as *Habitats and Species of Principal Importance* (or Priority Species or Section 41 species), under the UK Post-2010 Biodiversity Framework.

2. SURVEY AND ASSESSMENT OF FEATURES OF BIODIVERSITY INTEREST

2.1 Requirement for the survey and outline of the proposal

This Preliminary Ecological Appraisal was commissioned in connection with outline planning application for a proposed residential development on land at Brook Road, Northfleet.

2.2 Purpose of the survey

The purpose of the report is to make an initial assessment of the likely ecological impact of the proposed development, especially on sites, habitats and species with statutory or non-statutory protection or conservation concern. Also, to assess the requirement for further more targeted surveys to fully assess the impact and provide, where possible, initial recommendations for any mitigation, enhancement and beneficial management that would provide opportunities for overall biodiversity gain under the proposal.

2.3 Methodology

A walkover survey of the site and surrounding area was carried out on 7th November 2019. Notes were taken and photographs taken for reference and for the creation of a map showing phase I habitat categories within the proposal site (figure 1). A small ladder was used to obtain photographs of some aspects of the buildings. The wider field survey included a search for ponds to a distance of up to approximately 0.5 km from the site (supported by reference to the Ordnance Survey 1:25,000 map) i.e. within the radius where the guidance indicates that impacts on Great Crested Newts are possible, and for badger setts and other evidence of badgers.

Ecological data searches to a 1km radius obtained from Kent and Medway Biological Records Centre and Kent Reptile and Amphibian Group inform this report, and are appended. The search area takes into account possible effects beyond the physical footprint of the proposal site and the greater mobility of certain species.

2.4 Site location and description

The proposal site is 0.4 hectares in size. It is situated in a densely urban area, at the junction of two narrow, unlit alleyways behind rows of terraced houses.

The vegetation largely consists of dense, continuous, high (up 3-4m) scrub dominated by bramble, with elder, Sycamore and Buddleja and climbing Field Bindweed (figures 2,3). Tall ruderal vegetation is present in a small patch in the southeast corner and a patchy, very narrow fringe around the site, including Common Nettle, Goose-grass and Common Mallow.

Access was very limited. Most of the site has 2m palisade fencing and any gaps in this are filled with scrub, fly-tipped garden waste and other refuse. The southeast corner is maintained free of tall scrub in order to maintain access to the buildings.

Building 1 (figure 4) is used as a workshop. It is single storey, brick-built (single layer) with a flat roof. The felt is in good condition and no obvious gaps or cracks could be seen (figure 5). It is laid directly onto chipboard and plywood sheets supported by joists, which are open to the interior (figure 6). The felt is flush with the edge of the wall on two sides, but on the west-facing side the felt hangs over by approximately 10-12 cm (figure 7), leaving a small gap behind it, which in one corner is overgrown by bramble. It was not possible to gain close access this side of the building due to the vegetation, and in order take photographs it was necessary to place a small ladder against the palisade fencing.

Building 2. A single-layer, single storey metal shed also used as a workshop (figures 2,7).

Building 3. A single storey, sealed metal storage unit (figure XXX).

2.5 Summary of habitats and features in the vicinity of the site

The site is situated behind the gardens of terraced houses. Rough, narrow alleyways run along all three sides, continuing northeast, south and southwest, with garages and back gardens most of which are walled or fenced, often with breeze-blocks (figures 7,8). Fly-tipped refuse is present in several places and vegetation is restricted to narrow edges and patches of rough grass and ruderal vegetation. The gardens are small with few trees, but little was visible within their high walls and fencing.

The site is surrounded by dense residential housing, which extends to at least 250m in most directions. There is a small area of formalised parkland 120m to the south and a school grounds 100m north. The nearest significant urban greenspace is >250m north near a railway line. There is a busy main street 200m to the south.

2.6 Potential Great Crested Newt breeding ponds

The site has no water bodies and none were found within 250m by searching on foot or from maps or aerial images. Small garden ponds could exist in the search area, but are unlikely to support GCN.

3. IMPACTS AND CONSTRAINTS

3.1 Consultation with Natural England regarding SSSI Impact Risk Zones (IRZs)

The SSSI Impact Risk Assessment Zones report and map (appendix I) places the bulk of the proposal site in polygon 833. Pre-application consultation with Natural England is not required for a development proposal of this size and type in polygon 833.

3.2 Statutory designated conservation sites and habitats

There are no sites with statutory or non-statutory designation, BAP habitats or other habitats of importance within 500m of the proposal site.

3.3 Protected mammals

Bats – the three build structures appear to have low potential for bat roosting. They are all single storey and in regular use, with no loft or wall cavities, and there appear to be very few suitable crevices. Some external shelter is provided by the overhanging, partly overgrown felt on one side of building 1 (figure 6).

The noise, heating and disturbance from the workshop, and the densely urban situation (with superior roosting opportunities likely to be widespread in existing) are further factors reducing the likelihood of bats using the buildings. However, it was not possible to inspect the overhanging felt closely. Use by crevice-dwelling bats cannot be ruled out.

No other mammals with protected status are likely to be present. Hedgehogs (S41 species) could be present in the deep scrub.

3.4 Protected amphibians and reptiles

Great Crested Newts or other protected amphibians are unlikely to be present. The common amphibians Common Frog, Common Toad and Smooth Newt may be present in garden ponds, as indicated by the Krag data search.

The site offers potential hibernation habitat for widespread protected reptiles, most likely Slow-worm. Foraging habitat in the form of dense, more open ruderal vegetation or grassland, is rather dispersed, and nearby gardens are in many cases walled-off. Therefore, the habitat in and around the site itself represents a small area with sub-optimal habitat and poor continuity.

However, in a survey in 2017 a breeding population of Slow-worms (32 individuals recorded including 10 hatchlings) was found in the grounds of Copperfield Academy school in an area approximately 100-200m northwest of the site. This site has continuity with other areas of urban green space, whereas it is separated from the proposal site by a residential street, such that dispersal of Slow-worms between the two is unlikely. However, the presence of an established

population of Slow-worms in relatively close proximity increases the likelihood that other populations could be present within this old, well established urban matrix.

3.5 Birds

The site is unlikely to be important for bird species with a high conservation status. Breeding by common garden birds such as Blackbird, Dunnock or Robin is quite likely. However, predation rates from cats and other urban predators are likely to be high.

3.6 Protected and scarce invertebrates

There are a number of records of Stag Beetle in the desk study. However, no trees or stumps suitable for breeding by Stag Beetle are present on the site. Other protected or scarce invertebrates are unlikely to be present.

3.7 Protected and scarce plants

No protected or scarce plant species are likely to be present.

3.8 Invasive non-native species (INNS) - plants, plant pathogens and invertebrates

Introduction of INNS such as Giant Hogweed *Heracleum mantegazzianum* and Japanese Knotweed *Fallopia japonica* should be avoided.

4. RECOMMENDATIONS

4.1 The location of the site within SSSI Impact Risks Zones does not require consultation with Natural England prior to submission of a planning application.

4.2 Under the proposal, the buildings would be removed or demolished. Roosting by bats is possible, although opportunities appear to be few. A suitably qualified and licenced ecologist should inspect the buildings prior to demolition for roosting bats and signs of roosting bats, once vegetation has been cleared for access to all sides of building 1. Ideally, the site would be secured beforehand or shortly thereafter. Vegetation clearance is not desirable at present as the site is not secure and this would encourage fly-tipping. Furthermore, clearance in winter could harm hibernating animals such as reptiles and should be avoided. Hedgehogs may also use the site and measures should avoid damaging breeding sites or other harm.

4.3 Great Crested Newt is unlikely to be present and amphibian surveys are not recommended.

4.4 There is a likelihood that Slow-worms are present. However, survey either by searching for reptiles or with refugia could be problematical as the site is small, urban and not secure, so that use of refugia could put animals at risk. Therefore, the site should be inspected by a reptile surveyor who should provide an outline of what is feasible in terms of surveys and other measures necessary to safeguard any reptiles present. This information, along with the results of any survey that might be possible, should be available to accompany the planning application.

4.5 Breeding bird surveys are not recommended. Vegetation clearance on the site should be avoided during the breeding bird season March-August inclusive if possible. If clearance is necessary between March and August, it should be supervised by a suitably qualified ecologist who should check for nests as prior to the commencement of the work and as it proceeds. If active nests are found, works that would cause disturbance to the birds should be suspended until juvenile birds have fledged from the nest.

4.6 Surveys for invertebrates or plants are not recommended.

4.7 Provision for bat roosting and bird nesting should be made in the new dwellings where possible and suitable, following best practice guidance (Gunnell *et al*, 2013) and advice from a suitably qualified ecologist.

4.8 If legally protected species are found during site works (such as roosting bats, nesting birds, or reptiles) those works should be suspended this should be immediately reported to a suitably qualified ecologist to avoid an offence under wildlife legislation.

4.9 Small, undisturbed, peripheral areas of garden within the new development would encourage reptiles, hedgehogs and other wildlife.

4.10 Introduction of soil, rubble or plants (such as those imported via garden centres) potentially contaminated with invasive non-native species should be avoided. If accidental introduction occurs, INNS should be eradicated as soon as possible taking advice from specialists.

REFERENCE

Gunnell, K., Murphy, B.L. and Williams, C. 2013. *Designing for Biodiversity: A Technical Guide for New and Existing Buildings*. RIBA, London.

Figure 1. Phase I habitat map (green cross-hatching = tall, dense scrub, orange hatching = tall ruderal).



Figure 2. Southeast corner of site.



Figure 3. Northern corner of site.



Figure 4. Building 1 south side looking west.



Figure 5. Building 1. Flat roof.



Figure 5. Building 1. Interior.



Figure 6. Building 1. Western side from outside site.



Figure 7. Building 2 and alley looking north.



Figure 8. Looking towards site from further north in Davis Avenue.

