

On behalf of Gladman Developments Ltd.

Land at the Hill, Littlebourne, CA/23/00484

Technical Note: 10th November 2023 Consultee Response from KCC Ecologist. FPCR Response.



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20th November 2023

9538/PJP/DJC

1.0 INTRODUCTION

1.1 This document provides further information to guide the planning officer in response to the comments from the Kent County Council (KCC) Ecologist, in their formal consultee response to the Ecological Impact Assessment submitted to support the planning application for land at the Hill, Littlebourne (application ref: **CA/23/00484**). This response specifically deals with Ecology planning matters, most of which have since been addressed through the completion of protected species survey work conducted between 2021 and 2023 by ecologists from FPCR, and accompanying reporting.

1.2 The KCC Ecologist made specific comments in reference to the following in their response, concerning the impact of the development proposals on water voles and revisions to the BNG assessment.

"Protected Species:

...The submitted information previously detailed that to avoid an impact on water vole the development proposals include provision for a 20-30m greenspace buffer between this section of the stream and the residential development area. However, the information has been updated to say that the buffer will only be 10-15m.

Additional information has been submitted to address our previous query on the reduction in the area and the applicant has detailed the following: Subsequently any burrows in the ditch are unlikely to extend beyond the region of 3-5m from the bank of the ditch. Therefore the 10-15m protective buffer provides above and beyond the required distance of 5m from the bank top, to ensure no water vole habitat is damaged as a result of works.

We understand the logic of the above however there will be high recreational pressure within the site and therefore the reduction in the green space buffer may mean that banks of the ditch do not provide optimum habitat to provide optimum habitat to support the water vole populations. If the intention is to reduce the buffer area there is a need to ensure that measures are implemented to ensure that residents cannot access the habitat adjacent to the ditch to ensure that the habitat can be maintained as optimal. It would be preferable for the buffer to be retained as the size originally proposed...

... Enhancing the site for biodiversity

The ecological appraisal has set out what measures can be implemented to enhance the site through habitat creation and to support this assessment an updated BNG metric has been submitted and details that an anticipated BNG of 23% for habitats and 32% for hedgerows is proposed which is an increase of 20% for habitat and 32% for hedgerows. We have compared the submitted framework plans and there does not appear to be any significant differences in the plans that would justify the increase in the predicted BNG in habitats and hedgerows.

We advise that information must be provided clarifying what changes have been made that result in the increase. We suggest the proposed habitat plans for both versions of the BNG metric are submitted..."

- 1.3 This response aims to address any concerns regarding the possible impact of the development proposals on water voles and provide further detail on the proposed mitigation; and provide clarity regarding the highlighted differences in the BNG scores between the various iterations of the assessment.

2.0 RESPONSE DISCUSSION

Background

On-site Baseline Water Vole Activity

- 2.1 During initial phase 1 habitat survey of the site in January 2021, several holes were identified along the banks of the east-west section of the stream, which bisects the arable field that comprises the site. While these were indicative of water vole, in the absence of other evidence, water vole presence was considered inconclusive. Given the suitability of the habitat and presence of water vole in the wider area, further surveys were recommended, following guidance in the Water Vole Mitigation Handbook¹.
- 2.2 Two surveys were undertaken in 2021; one in June, the other in September, during which evidence of water vole activity was identified. Foraging signs and scattered droppings were found sporadically along the east-west section of the stream, though no further evidence of burrows were located, suggesting occasional use as a foraging resource.
- 2.3 An update survey was conducted recently in October 2023 to determine the current status of the species on-site. Three disused, partially collapsed burrows were found, and scattered evidence of feeding, indicating similarly occasional use by water vole, though the species does not appear to be resident on-site presently.

On-site Mitigation Measures and Residual Effects of Development

- 2.4 The proposals concern a planning application for a development of up to 300 residential dwellings and associated landscaping and infrastructure. Proposals include green infrastructure comprised of allotments, community orchard, species-rich grassland and scrub buffers, SuDS attenuation, and public amenity space.
- 2.5 Prior to works commencing a further update survey will be conducted to identify the location of water vole burrows in relation to proposed crossings over the east-west section of the stream. If any burrows are found within the working areas, and which would therefore be impacted by the groundworks through damage or disturbance, a Natural England displacement licence will be applied for to facilitate works.

¹ Dean, M., Strachan, R., Gow, D., and Andrews, R. (2016) The Water Vole Mitigation Handbook (Mammal Society Mitigation Guidance Series). Eds Fiona Matthews and Paul Chanin. The Mammal Society, London

- 2.6 Relocation by displacement is considered to be the most appropriate action in this instance, given the small number of voles likely to be affected, and the narrow stretch of water course to be impacted by the engineering works associated with the crossings.
- 2.7 Displacement necessitates the removal of up to 50m of bankside vegetation either side of a watercourse, in early spring (February to April), to make the habitat unsuitable and force voles to relocate away from the working area¹. However, as clarified in the revised Ecological Appraisal (Rev. D, FPCR, 10th October 2023), the width of ditch to be affected by the works to build the road/path crossings measures approximately 25m, much less than maximum 50m width allowed by the Water Vole mitigation guidance.
- 2.8 Mitigation has been designed into the development proposals, including 'wide fringes' of natural habitat, as recommended in the Water Vole Mitigation Handbook¹, that form at least 10-15m wide buffers of greenspace between the development and the stream. As noted in the revised Ecological Appraisal, these buffers were previously 20-30m. However, we argue that no habitat suitable for burrowing lies beyond the edge of the ditch bank, with the adjoining field in current use as arable land. Any burrows in the ditch are therefore unlikely to extend beyond the region of 3-5m from the bank of the ditch. Therefore the 10-15m protective buffer provides above and beyond the required distance of 5m from the bank top, to ensure no water vole habitat is damaged as a result of works. These buffer distances are in accordance with accepted guidance in the Water Vole Mitigation Handbook.
- 2.9 The Development Framework Plan (09538-FPCR-XX-XX-DR-L-0001 issue P14) includes dashed lines demarcating 5m and 20m offsets for the ditch. The greenspace buffer does in fact extend to 20m from the ditch bottom along much of the length of the ditch, on both the north-south and east-west sections, only reducing where the developable area extends nearer (to 10m from the stream) at one point near the middle of the north-south section. These buffers are indicated more clearly on the accompanying *Figure 1: Water Vole Mitigation Plan*. A new hedgerow is to be planted along the edge of the north-south section of ditch, passing from the northern boundary southwards, extending 20m beyond the southern edge of the developable area. The hedgerow will form a barrier to public access, separating the development from the ditch. Similarly, new hedgerow planting and extensive scrub planting is proposed along the east-west section, further limiting public access.

On-site Enhancement Measures for Water Voles

- 2.10 Enhancement of the site to support water vole will also be implemented, including additional native species marginal and aquatic planting along both the fringes of the stream and in/around new SuDS basins, offering a new foraging resource and cover for water voles. This may be achieved by seeding the banks with a tussock forming grassland sward and plug planting marginal species within the watercourse to cover at least 20% of the surface area of the wetted channel. Further habitat enhancement measures for water voles should be implemented on-site, including ensuring that the stream supports a slow, stable flow year-round, and prescribing a management regime whereby cutting is limited to once every 2-years and alternated between either side of the bank. These areas of marginal, wetland habitat, which offer optimal suitable water vole habitat, are unlikely to be desirable for public recreational use, offering a further deterrent to activities likely to disturb the bank. Several play areas and circular walks are included in the plans, which will offer more attractive areas for recreational use.

Conclusion – Residual Effects of Development

- 2.11 Data collected by FPCR indicates that small numbers of water voles are likely to be present in the stream that passes along the eastern edge of the site and bisects it passing east to west. Development in close proximity to the stream could therefore impact upon water voles, where their burrows lie within disturbance distance from the developable area.
- 2.12 A Water Vole Mitigation Strategy will be conditioned at reserved matters that will include recommendation for further survey in advance of ground works commencing. Should water vole burrows be identified within working areas, a water vole displacement licence will be applied for from Natural England.
- 2.13 Greenspace buffers of at least 20m will be incorporated along much of the length of the stream, with only a few areas where this is reduced to accommodate the development; where this is the case, these do not encroach on the recommended 5m separation zone from the bank top, as outlined in the accepted Water Vole Mitigation guidance. Hedgerow planting and structural landscape planting along the stream, particularly parallel with areas where the development falls within the 20m buffer zone, will screen the ditch, providing a barrier to public access.
- 2.14 In view of the mitigation afforded by the provision of greenspace buffers built into the scheme and the inclusion of enhancement measures via appropriate wetland and marginal planting along the ditch edges and SuDS basin, the immediate impact of the development to water voles is anticipated to be minimal.

Biodiversity net gain

- 2.15 The BNG assessment has been an iterative process, undergoing revision in accordance with each amendment to the Development Framework Plan. The calculated scores are as follows:

Table 1: BNG Habitat Differences between Schemes

Date	Habitat score	Hedgerow score
Jul 2023	+ 20.90%	+ 66.61%
Sep 2023	+ 23.57% (2.67 difference, increase of 12.78% from July)	+ 32.37% (34.24 difference, reduction of 51.4% from July)
Nov 2023	+ 11.50% (12.07 difference, reduction of 51.21% from Sept)	+ 30.41% (1.96 difference, reduction of 6.05% from Sept)

- 2.16 The difference in the BNG scores between the July 2023 and September 2023 iterations of the proposals result from differences in the habitat provision between them. For habitat areas, the primary change was an increase in the number of 'urban trees' included, with a greater number, and thus greater canopy area, of urban trees provided in the September proposals when compared to the July scheme. These were also considered to be of medium size in the September version of the metric, rather than small (as in the July metric).
- 2.17 For linear habitats, the length of tree lines and hedgerows provided in the September version of the scheme reduced by 0.34km and 0.126km, respectively, when compared with July, with the hedgerows also revised to a more realistic 'native species' type, rather than 'native species rich'. Given the reduction in linear habitat provision of 0.466km, and lower value of the new hedgerows, it is unsurprising that the score reduced.

- 2.18 As of November 2023, the proposals have undergone further revision to accommodate a change to the layout of the site access from the northern boundary, necessitating a small additional loss of hedgerow, accounting for the slight reduction of ~6%.
- 2.19 For habitats, FPCR have reviewed their approach with regards to urban trees. Given the difficulty of providing trees of a size that could be considered 'medium', particularly in an urban setting, requiring transplanting of semi-mature, established trees, all urban trees on-site were changed back to 'small'. Consequently, as the area these trees provide is based on canopy cover, small trees provide far less habitat than medium ones (*Table 2*), accounting for the large reduction in the percentage gain achievable in November, when compared to the previous version of the scheme from September.
- 2.20 The drainage strategy was also amended to include a Water Recycling Centre in place of one of the attenuation basins. This could no longer be considered as SuDS type habitat and was changed to 'developed land – sealed surfaces' in the November revision of the Metric reducing the score achievable from SuDS provision from 1.31 units to 0.75.

Table 2: Urban Tree Differences

Date	Tree Canopy Area	Tree BNG Habitat Units
Sept 2023 – 44x med. Trees	1.6123	4.95
Nov 2023 – 44x small trees	0.1791	0.55
	Reduced by 1.4332	Reduced by 4.40

- 2.21 Biodiversity Net Gain calculations based on the most recent iteration of the development proposals (November 2023) demonstrate that the application site, despite several revisions and associated changes to the metric, still has the capacity to deliver a measurable 10% net gain for both habitats and hedgerows, in line with the advice from Kent County Council, and continues to exceed the 10% threshold that will be legally mandated from January 2023.



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Key

- Site Boundary
- Linear Habitat**
- Retained hedgerow
- Urban tree line
- New hedgerow
- Ditch
- Created Habitat**
- SuDS
- Wildflower grassland
- 20m ditch buffer



Green Infrastructure Type	Local Plan Requirement	Provision
Semi natural & natural space	4.0 per 1000 population = 2.88ha	4.0
Parks & gardens	0.8ha per 1000 population = 0.57ha	0.57
Amenity green space & green corridors	2.25ha per 1000 population = 1.52ha	1.52
LEAPs & LAPs facilities	0.25ha per 1000 population = 0.18ha	0.18
Allotments / Growing Area	0.375ha per 1000 population = 0.27ha	0.27