

# South Gloucestershire Council

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**Memorandum to:** Cat Loveday  
**From:** Dave Willis  
**cc:**  
**Date:** 12<sup>th</sup> February 2019  
**Your Reference:** PT18/6450/O  
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## **PT18/6450/O – WEST OF PARK FARM, BUTT LANE, THORNBURY**

### **Description of Proposal**

The application is for Outline permission for erection of up to 630 dwellings (Class C3); up to 700sqm for Retail (Classes A1, A2, A3) and Community Hub (Class D1), network of open spaces, new roads, a sustainable travel link, parking areas, accesses and paths; and installation of services and drainage infrastructure with all other matters reserved.

### **Description of Site**

The site consists of a series of intensive agricultural land (grazed pasture) and associated hedgerows to the immediate west of the existing Park Farm development on the north-west settlement boundary to the town of Thornbury.

The site itself is not covered by any statutory or non-statutory nature conservation designations. However, Park Mill Covert lies to the immediate west of the application site and is designated as a Site of Nature Conservation Interest (SNCI) for its ancient semi-natural woodland.

### **Ecological Issues**

- Semi-natural habitat
- Great crested newt
- Reptiles
- Birds
- Bats
- Dormouse
- Otter
- Water vole
- White-clawed crayfish
- Badger
- Hedgehog
- Invertebrates
- Severn Estuary SPA/Ramsar
- Design

### **Local Plan Policy Context**

- Section 15, Para 170-183, National Planning Policy Framework
- Para 116, ODPM Circular 06/05
- Policy PSP19 – emerging Policies, Sites & Places Development Plan Document (PSP DPD)

### **Analysis**

The application includes an Environmental Statement (ES) dated December 2018 Chapter 12 of which relates to ecology.

### **Semi-natural Habitat**

The extended Phase 1 survey identified that the majority of the site consists of intensive agricultural fields (improved pasture) of only low value for nature conservation.

The fields are bordered by a network of hedgerows and ditches with dense scrub sometimes present at field boundaries. The ditches were mostly dry at the time of survey (March 2018) with only a few containing shallow water. Six of the hedges surveyed – H3, H4 and H14 in the western half of the site; H12, H17 and H28 on the northern and eastern site boundaries – were considered to be species-rich and to qualify as ‘important’ under the Hedgerow Regulations 1997 (although all hedges are nonetheless a Habitat of Principal Importance for Biological Diversity under Section 41 of the Natural Environment & Rural Communities (NERC) Act 2006).

Table 12.7 in Section 7 of Chapter 12 gives figures (ha) for the habitat lost and gained.

The illustrative (landscape) masterplan within the ES suggests that hedge H4 will be lost in its entirety as well as part of H14 whilst incorporating the other ‘important’ boundary hedges within the scheme. However, Paragraphs 12.5.2 and 12.5.3 refer to the Green Infrastructure Parameter (Context) Plan and indicates that the ‘most valuable sections of hedgerows’ will be translocated to form the new field boundaries

to the large agricultural field traversed by the Pickedmoor Brook only part of which is included within the application site. This is welcomed in that, in addition to conserving the most diverse hedges on site, it will also regenerate more quickly than newly-planted hedgerows.

A fast-flowing stream, the Pickedmoor Brook, flowed westwards through the southernmost part of the site.

Two copse of broadleaved woodland – one a more linear belt – were located in the southern half of the site. 12.4.18 of Chapter 12 noted that bluebell were found to be associated with the woodland within the application site. Both mature and semi-mature broadleaved trees were recorded throughout the site. These were a mixture of oak, ash, poplar and sycamore and were mostly associated with boundary hedges with six being classified as ‘veterans’.

Two small ponds were present within the application site with a further two recorded in the ancient woodland to the west.

No invasive alien plant species such as Japanese knotweed were recorded during the extended Phase 1 walkover of the site.

As stipulated in Paragraph 12.7.1 of the ES, the management of all new and retained semi-natural habitat, including the hedgerows and grassland (as well as a programme of monitoring) should form the basis of a Landscape and Ecological Management Plan (LEMP) drawn up and agreed under an appropriately worded planning Condition.

Paragraph 12.7.3 also undertakes to draw up a Construction Ecological Management Plan (CECoMP) to ensure that all ecological features are protected from being damaged during the construction phase of development and this should also form the basis of an appropriate planning Condition. Paragraph 12.7.20 of the ES includes a brief reference to ‘phase-specific CEMP/CECoMPs’. Any CEMP or CECoMP for the scheme should be a single, overarching document for the Outline application site and not multiple plans for individual phases. Presenting plans for each Reserved Matters application is administratively cumbersome in that it only partially discharges the relevant Condition. It, moreover, incurs additional costs for the developer in that they are paying for multiple documents to be drawn up as opposed to a single plan as well as making repeat ‘discharge of condition’ payments.

(It is noted, as an aside, the Ecology section of the ES refers to multiple documents being drawn up, including an LEMS as well as a LEMP and a CEMP as well as a CECoMP. This seems unnecessary and somewhat confusing: the LEMS should form part of the LEMP and the CECoMP could readily form a section within a wider CEMP).

### **Park Mill Covert SNCI**

Park Mill Covert is designated as an SNCI for its ancient semi-natural broadleaved woodland interest.

Ancient woodland is specifically singled out for mention within Section 15 (Paragraph 175(c) of the revised NPPF as an example of an ‘irreplaceable habitat’ which should be protected from loss or degradation. Even though outside the application site, development could nonetheless result in harm to the SNCI woodland through, for

example, accidental damage, aerial discharges such as smoke or dust, pollution incidents or light spillage affecting nocturnal wildlife.

Paragraph 12.7.4 provides details of the measures to protect the ancient woodland SNCI as these need to be transposed into, and form part, the CEMP or CEcoMP.

## **Fauna**

### **Amphibians (Great Crest Newts)**

A total of 14 ponds were identified within 250m of the application site.

Two ponds were recorded from within the site itself, with a further 12 within 250m outside the redline area.

A small breeding population of great crested newts were recorded in ponds P7 and P8 some 110m east of the application site (Figure 12.3, GCN Plan). The only ponds within the application site were P1 and P2: both scored as being 'poor' or 'below average' in a Habitat Suitability Index (HSI) assessment and both were seasonally dry during past surveys.

All other ponds returned negative results in either 2016 or 2018 although in both years access was denied to two of these (P4 and P5).

Great crested newts are protected under the Wildlife & Countryside Act 1981 (as amended), the CROW Act 2000 and the Habitats Regulations 2017, which implements European Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild (Fauna and Flora ('The Habitats Directive 1992')).

As a European Protected Species (EPS), a licence under Regulations 53/56 of the Habitat Regulations is required for development to be lawful.

Past judicial reviews have directed that, to fully engage with the Habitat Regulations, local authorities should subject planning applications to the same 'tests' under Regulations 53/56 as European Protected Species licences. Satisfying these 'tests' necessitates providing the detail of a mitigation strategy prior to determining the application.

The ES indicates that the eastern edge of the development will result in a loss of 0.95ha of a field (improved pasture) alongside Butt Lane which constitutes 'intermediate habitat' (albeit sub-optimal) for the newt colony associated with ponds P7/P8. Furthermore, Para 12.7.9 of Chapter 12 states that:-

*'Due to the potential presence of low numbers of great crested newts within terrestrial habitat within the Project Site, and associated low risk of impacts, it is considered that a Natural England GCN Mitigation Licence is not required. Site clearance in areas where GCN could be present (land within 250m of the confirmed GCN pond; refer to Figure 12.3) would be undertaken in accordance with a GCN Method Statement'.*

Improved pasture is considered to be of only low quality as terrestrial great crested newt habitat. However the development will nonetheless result in the loss of intermediate habitat that isn't obviously compensated for within the scheme in a way that is accessible to the colony in P7/P8. Whilst Paragraph 12.6.47 of Chapter 12

suggests that the provision of ponds, woodland and new meadow grassland as part of the new GI will benefit and enhance the population, this new 'green open space' appears to be outside the newts' known terrestrial range with poor to negligible connectivity of habitat. Only a narrow, circuitous strip of green infrastructure comprising hedgerow and grass margins (partly within Park Farm) exists on the Illustrative Masterplan and GI Parameter Plan linking the habitat around ponds P7 and P8 and there are no ponds to provide 'stepping stones' between this and the new GI between and about the broadleaved woodland to the south. The SUDS attenuation servicing the current Park Farm development was moreover not designed as GCN habitat so it is questionable whether this would or could be regarded as providing suitable GCN aquatic habitat unless modified. The amphibian surveys in 2016 and 2018 scored both of the on-site ponds as being sub-optimal as GCN breeding habitat and both were dry when inspected in April/May during those years: it is noted that no eDNA analysis was carried out for any of the recorded ponds within 250m of the site so it is not known whether newts would use these but in a non-breeding capacity (cf Cribbs Village, where a pond gave a positive result for GCN eDNA whilst field surveys didn't find any newts). Whilst the ES notes that additional ponds will form part of the new GI, presumably by way of off-setting this loss, it doesn't indicate their intended location or how they will connect with suitable terrestrial habitat to other ponds and the breeding population associated with ponds P7 and P8. Paragraph 12.6.13 of the ES attempts to put this loss of terrestrial habitat into some context. It calculates that development will result in the loss of 0.95ha of improved grassland and that this in turn represents only 5% of the terrestrial habitat available to the newts between 100m and 250m from ponds P7/P8. However, it does not qualify this by indicating whether the remaining 95% is all suitable as terrestrial newt habitat, or whether this figure includes optimal as well as sub-optimal. The 0.95ha of habitat being lost still nonetheless constitutes 'intermediate' great crested newt habitat between 100m and 250m from ponds P7/P8 and it is presently unclear how this can be adequately compensated for within the present layout of the scheme.

As the scheme does not appear to have been subject to Natural England's Discretionary Advice Service (DAS) it is also unclear what their position is in regard to EPS licensing and the scheme's design.

Given the above issues, there needs to be greater justification as to why the development would not necessitate an EPS licence, as well how it satisfies the three 'tests' and maintains the species' Favourable Conservation Status (FCS) under the Habitat Regulations 2017.

A variety of other amphibian species, including frog and smooth and palmate newts, were recorded during the GCN surveys (Table A12.5.6, Technical Appendix 12.5 GCN Surveys). Whilst not having statutory protection, these should be translocated to another, safeguarded pond prior to development.

## **Reptiles**

A reptile survey recorded a 'low' population of slowworm (maximum count 2) adjacent to a field margin in the centre of the application site.

Slowworm are protected under the Wildlife & Countryside Act 1981 (as amended) and CROW Act 2000 against reckless or intentional killing or injuring. In addition, grass snake, slowworm and common toad are listed as 'Species of Principal Importance for Biological Diversity' under Section 41 of the NERC Act 2006. Slowworm is furthermore included on the South Gloucestershire BAP as a species

which the Council will require developers to take particular steps to conserve and safeguard.

Paragraphs 12.7.11 and 12.7.12 of ES provides details of the proposed methodology to avoid killing/injuring the slowworm population recorded or site through habitat manipulation (as opposed to a translocation exercise) and a destructive search. However, it is unclear from the ES where the reptiles will be encouraged to move to, whether the habitat therein is suitable and whether it will ultimately connect to the new semi-natural habitat to be created in the green open space which the ES proffers to support the reptiles as described in Paragraph 12.7.12. Figure 12.4 of the ES – ‘Reptile Survey Plan’ – identifies that the animals were recorded close to the eastern boundary application site with the SUDS basin for the first phase of Park Farm but it not clear from the ES if this is capable of providing supporting habitat for the species.

Given this, it is considered that greater detail is required in regard to the reptile mitigation measures for the scheme and prior to determination as this might need to inform the design of the scheme.

## **Birds**

A bird survey recorded a total of 35 species of birds within the survey area of which 25 were considered to be confirmed as breeding or probably or possibly breeding.

Of these, 15 were on the Red List of Conservation Concern with a further 13 being Amber-listed. Three of these species – bullfinch, song thrush and barn owl – were also species included within the South Gloucestershire Biodiversity Action Plan (BAP) although barn owl was recorded within the wider survey area and not from within the application site itself, the habitat being largely unsuitable. Two song thrush territories were recorded – one from a hedge in the centre of the site and one from the woodlands to the west – as well as seven dunnock with territories on the southern (woodland) and eastern survey area boundaries (Figure A12.7.1 of Technical Appendix 12.7, Bird Survey). Two stock dove territories were recorded in the western woodland and a southern plantation.

As the hedgerows are mostly intensively managed it would seem as if the broadleaved woodland on and off the site constitutes the most important foraging and nesting habitat within the survey area. Indeed, the Breeding Bird Plan (Figure A12.7.1) shows the identified species’ territories largely skewed towards the woodland/stream corridors towards the southern part of the site.

Most of the hedgerows to be removed are species-poor and intensively managed, reducing their value to birds as nesting or feeding habitat – again, possibly the reason the majority of notable territories were towards the woodlands and streams. Given this, the remaining hedges need to be managed under an infrequent, low intensity cutting regime to build up structure and fruiting bodies for nesting and foraging to off-set the loss of this poorer vegetation for birds. These will comprise the remaining on-site and boundary hedges, as well as banks of dense scrub which should form ‘corner-habitat’ within the fields of public open space. These areas offer the opportunity to create extensive areas of species-rich grassland which will help build up invertebrate numbers for insectivorous species of birds.

The attenuation basins for the SUDS scheme present an opportunity to create new reed bed habitat for species of birds associated with this habitat.

These provisions should be addressed within the LEMP for the scheme drawn up under an appropriate planning Condition.

A scheme of house sparrow terraces on the residential dwellings adjacent to areas of public open space could provide new nesting opportunities for the birds. Higher buildings (such as offices) can also incorporate swift nesting niches and indeed Paragraph 12.7.14 proposes a scheme of bird nest boxes for a variety of species including owl boxes within the broadleaved woodland which is welcome and should either form the basis of its own planning Condition or be delivered through the LEMP for the scheme.

## **Bats**

Chapter 12 of the ES indicates that 30 trees within the survey area were considered to have moderate to high potential for roosting bats. Of these, 21 were located within the application site.

Five trees likely to be removed under the scheme were subject to dusk emergence and dawn re-entry surveys. No bats were recorded.

Eight species were recorded during the bat activity transect surveys - common and soprano pipistrelle; noctule; *Myotis* sp; *Nyctalus* sp; *Eptesicus* or *Nyctalus* sp; barbastelle; and long-eared. 75% of these passes were by common pipistrelle which was the only species recorded at every sample point and on every survey date. The rare barbastelle was recorded only twice, at sample points Q and U close to the southern boundary of the study area and application site. The transects recorded the greatest bat activity at point H in the north-west corner of the application site adjacent to Butts Lane; and the greatest diversity of species (seven) at Q along a path through woodland to the south of the application site. Both areas have been safeguarded within the illustrative masterplan, supported by new semi-natural habitat or structural woodland/scrub planting.

Eleven species were recorded by the static detectors with very low levels of activity by barbastelle, greater horseshoe and lesser horseshoe bats at various points across the site. The improved pasture on site would not constitute preferential feeding habitat for any of these species.

Whilst activity was spread across the site, most – if not all – of the hedgerows appear to have been intensively managed historically, thereby limiting their value as commuting or foraging habitat. The most valuable areas of semi-natural habitat for bats and other wildlife are likely to be the Pickedmoor Brook stream corridor and the blocks of (ancient and plantation) broadleaved woodland to the west of the site and in its southernmost section. The Masterplan/GI Plan both show these areas retained within the scheme, set within green open space consisting variously of species-rich grassland, wetland SUDS basins, scrub, ponds and a sort of replicated 'wood pasture' which together will only enhance the value of this southern part of the site as foraging for bats and other insectivorous wildlife. Paragraphs 12.6.19 – 12.6.21 recognises that some 1.3km of hedgerow (mostly species-poor) will be lost with the main impact on bats being fragmentation of habitat through loss or breakages in the network. Some connectivity is maintained through the green space running diagonally across the scheme although this is likely to be more ornamental and managed, limiting its value for biodiversity. However, the connectivity between the woodland, stream and the new meadow grassland of the semi-natural open space with the countryside to the north and south of the scheme will be maintained, thereby conserving and linking the habitat of greatest value for foraging and commuting.

A lighting plan will be required for each phase of development, most particularly those RM applications where housing abuts the new green space. Lighting should also be excluded from the new semi-natural habitat (Green Infrastructure) in the south and west of the site and where it abuts Park Mill Covert SNCI to maintain a rural 'feel' and to prevent light spill deterring use by nocturnal wildlife.

Paragraphs 12.7.15 recognises the need for precautionary follow-up tree roost surveys on trees to be removed, even though they have previously been surveyed and found not to be used by bats. 12.7.16 also proposes the installation of (*'a minimum of 100'*) bat roosting niches and nest boxes within the new residential units. Whilst putative locations were not given, it is considered that such a scheme should focus on the new build facing onto the areas of green open space in the central and western parts of the scheme. Any scheme of new bat boxes/roosting features will need to be carefully coordinated with the street lighting for these areas as light spill could conceivably deter bats from using the roosting niches or discourage them from emerging or using direct flight paths to their new feeding habitat.

An integrated plan/drawing showing the proposed location of the new bat boxes/roosting features in relation to the external street lighting at the interface between the green open space and adjoining residential units should form the basis of an appropriately worded planning Condition.

It is suggested that this could form the basis of an overall lighting strategy with which the individual plans for each phase of development would comply. The lighting strategy (and the lighting plans for the individual phases) should include the facets and features listed under Paragraphs 12.7. 36 and 37 of the ES.

### **Dormouse**

No signs of dormice were recorded during nest tube or feeding-sign surveys in 2016 and accordingly the species is considered to be absent from the application site.

### **Otter**

A single otter spraint was recorded along the Pickedmoor Brook in 2016.

A further spraint was also found on another watercourse to the south-east of the application site in 2018.

No holts or laying-up points were recorded and the ES noted that the watercourses were generally too narrow and shallow to provide optimal feeding habitat. Given this, it concluded that the species was most likely commuting along the stream corridors on an irregular basis.

Otter are protected under the Wildlife & Countryside Act 1981 (as amended), the CROW Act 2000 and the Habitats Regulations 2017, which implements European Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora ('The Habitats Directive 1992').

As a European Protected Species (EPS), a licence under Regulations 53/56 of the Habitat Regulations is required for development to be lawful.

Past judicial reviews have directed that, to fully engage with the Habitat Regulations, local authorities should subject planning applications to the same 'tests' under



Regulations 53/56 as European Protected Species licences. Satisfying these 'tests' necessitates providing the detail of a mitigation strategy prior to determining the application.

Whilst included within the development site, the Illustrative Masterplan (and Green Infrastructure Parameter Plan both show the Pickedmoor Brook being incorporated into a substantial area of green public open space (meadow grassland) with the nearest roads/residential units well removed (c.140m) from the watercourse. At such a distance, pollution incidents which might adversely influence the ecological integrity of the Brook are unlikely; and it also reduces the potential for the noise of construction displacing animals moving along the stream, although this is unlikely to be a factor as otters are predominantly nocturnal.

Accordingly, it is considered that the scheme satisfies the three 'tests' under the Habitat Regulations 2017 and will not compromise the species' Favourable Conservation Status (FCS) locally.

### **Water Vole**

No signs of water vole being present were recorded during the field survey for the species.

### **White-clawed Crayfish**

The Pickedmoor Brook was surveyed for white-clawed crayfish using a number of sample points and the species was not recorded along the watercourse.

### **Badgers**

The ES noted two well-used (likely) main setts within the application.

One (S1) is located on the margins of the ancient woodland adjacent to the western site boundary and consists of 10 holes with high badger activity.

A second (S2) is located on the north-eastern site boundary close to Butt Lane with six active entrances. Both 'main' setts exhibited other field signs such as bedding material, paw prints and hair.

There are a number of used and disused outliers located close to S1 and S2 and in hedgerows across the application site in-between the two main setts.

The ES also records numerous field signs such as mammal paths, snuffle marks from foraging and latrines across the site and the improved pastures within it provides suitable habitat for the species.

The contention that both S1 and S2 constitute main setts implies that there are two social groups whose territories together cover the application site and possibly some land beyond. Whilst the ES noted all the usual field signs redolent of 'main' or breeding setts – multiple holes, bedding material, high levels of activity – there were an unusually low level of territorial marking. Only a single latrine was recorded on site, whereas a lot more would be expected if there were two groups demarcating territories. If however there was only one social group, characteristically, there is usually only one sett displaying notably high levels of activity and signs of breeding, as opposed to two with two social groups. Moreover, if only one social group,

development would constitute the loss of a significant percentage, if not all, of the group's territory.

Allowing for two separate social groups and territories, however, Paragraphs 12.6.56 to 12.6.58 address potential impacts, particularly to relation to the two breeding setts. Whilst S1, situated on the margin of Park Mill Covert SNCI, can be readily protected during construction being situated on the edge of the ancient woodland and adjacent to open pasture, the Illustrative Masterplan shows S2 (located in the north-eastern corner of the site) hemmed in tightly by development with an internal circulatory road immediately adjoining it. Main setts are the focal point of a social group's dynamics and the centre of activity and any animals emerging or returning from S2 will ultimately either cross the internal road into residential gardens; or, if they follow the hedge westwards to access their familiar foraging habitat, inevitably have to cross the main access off Butt Lane with the associated risk of road fatalities even with speed restrictions/dampening (which would need to be informed by the social group's most likely crossing point). Paragraph 12.6.58 of the ES furthermore states that the new semi-natural habitat being created as part of the green infrastructure to the scheme would '*reduce the effect of habitat loss on badgers*'. However, this open space is distant from sett S2 on the far side of blocks of residential development and difficult for animals from that social group to access. Additionally, the management of this grassland is as a traditional lowland hay meadow which would be distinctly sub-optimal for badgers which preferentially forage on shorter swards such as grazed pastures. The areas of amenity space in and around the application site – the most sizable surrounding the NEAP in the centre – will therefore be the grassland offering the greatest foraging resource for the animals which, as indicated above, would require them to cross the main access road onto the site. It is therefore considered desirable to focus efforts to reduce road casualties on this length of road, as well as the speed-dampening measures described elsewhere within the ES.

Notwithstanding the above, the Illustrative Masterplan places a road and housing immediately adjacent to S2. Even with protective fencing, the close proximity of development is likely to put pressure on the animals, most particularly during construction through noise, vibration, vehicular movements and human activity. Social groups are extremely loyal to main setts but have been known to vacate them and enlarge setts elsewhere within their territories. It is considered that S2 should be better accommodated within the scheme by setting it within a protective zone of landscape planting using species such as bramble. Consideration could also be given to provision of an artificial sett in a more secluded location (e.g. next to the LAP alongside Butt Lane), although the levels of activity around the existing sett suggests that encouraging them to re-locate naturally might prove difficult.

Section 4.4 of the Design and Access Statement on Ecology includes the stated aim that:-

*'Development should seek to retain and incorporate existing badger setts into the green infrastructure wherever possible, and provide green links between the setts and areas of foraging habitat'*.

There is no mention of the status of the setts or the phenomenon of having two main setts affected by the application. Whilst this has been achieved within the layout of the scheme for sett S1 on the site's western boundary abutting Park Mill Covert, the Masterplan indicatively shows development (residential housing and a road) immediately adjacent to main sett S2 with a main access road impeding access to their feeding territory which seems contrary to the intentions described in the DAS.

## **Hedgehog**

No evidence of hedgehog was noted during the field surveys.

Hedgehog is a Priority Species nationally and as well as a species included on the South Gloucestershire BAP. Given this, and that development could conceivably lead to the killing or injuring of animals when clearing suitable areas of habitat (for example, hedgerows) it is considered that a mitigation strategy for the species should be drawn up and agreed with the Council. This should involve a destructive search immediately ahead of clearing any vegetation with any animals found removed to a safe, secure receptor site, which the ES undertakes in Paragraph 12.7.23.

Paragraph 12.7.24 also proposes to provide 13cm x 13cm hedgehog 'passes' in the garden fence panels to enable mammals to permeate the gardens of the new properties. Whilst could form part of the mitigation strategy under its own planning Condition, if need be it could also form part of the LEMP as suggested within the ES.

## **Invertebrates**

The site consists of intensive agricultural land (improved pastures, managed hedgerows) and lacks early succession features such as vegetating spoil mounds capable of supporting a notable assemblage of invertebrates. Consequently is considered that it is only likely to support a range of commonplace insects typical of that sort of farmland habitat.

## **Severn Estuary European Site**

The site lies some 2.8m from the Severn Estuary which is subject to a series of national and international wildlife designations.

The Estuary is notified as a Site of Special Scientific Interest (SSSI) under the Wildlife & Countryside Act 1981 (as amended) and designated as a Special Protection Area (SPA) under EC Directive 79/409 on the Conservation of Wild Birds ('the Birds Directive'). The Estuary is also a Ramsar site under the Ramsar Convention on the Conservation of Wetlands of Importance; and is designated as a Special Area of Conservation (SAC) under European Directive 92/43/EEC on the Conservation of Natural Habitats and Wild Fauna and Flora ('the Habitats Directive 1992'), implemented in Britain by the Conservation (Natural Habitats & c) Regulations 2017 ('the Habitat Regulations').

Together, SPAs and SACs form a network of internationally recognised sites referred to as European or Natura 2000 (N2K) Sites.

No qualifying species of waterfowl or birds forming part of the qualifying assemblage of the Severn Estuary SPA/Ramsar were recorded within the application site.

Whilst the Pickedmoor Brook discharges into the Estuary, the possibility of any pollution incidents reaching the SPA/SAC/Ramsar is considered highly unlikely given the distance between the site and the coast (dilution effect) and that development is some 140m to the north of the watercourse.

Paragraph 12.6.30 of the ES noted that the Habitat Regulations Assessment (HRA) for the West of England (WOE) Joint Spatial Plan (JSP) dated November 2018 had identified the potential for new residential development to have a harmful effect on

the Severn Estuary through increased recreational pressure within a (precautionary) 7km zone. Whilst the ES notes that significant adverse effects are unlikely from aerial (dust) or aqueous discharges (pollution incidents) due to the distance involved, increased recreational use of the coast could potentially result in displacement of (qualifying species and assemblage of) water birds for which the Severn Estuary is designated an SPA/Ramsar.

The scheme provides a significant quantum (17.5ha) of public open space. This is considerably more accessible to new residents for recreational activities such as dog-walking than use of the coastal footpath (Severn Way) which would require a journey by bike or car. There are moreover only a few locations allowing access on to the coastal path in the vicinity of Thornbury – at Whale Wharf, Oldbury-on-Severn Littleton and Shepperdine – and whilst they offer a limited amount of informal parking space, they are remote and not easily locatable which would tend to discourage regular and persistent use. Similarly, out of the new residences, only a limited number would be considered sufficiently keen cyclists to want to explore the villages and lanes across the wider coastal floodplain and use of the coast path will require all terrain cycles rather than road bikes meaning that development is unlikely to result in any sizable increase in cycling along the coastal path. Given this, it is considered that the application is not considered likely to result in a significant adverse effect on the features (qualifying species and assemblage) for which the Severn Estuary is designated an SPA/Ramsar.

The ES notes that only a fraction of the SAC lies within 200m of main roads (namely, the A370, A403, M48 and M4) and any increase in traffic movements along these routes arising from PT18/6450/O will be only marginal and possibly incremental. Accordingly, any further reduction in air quality from exhaust emissions is also likely to be small, with fumes near to the Estuary being quickly dispersed by winds. The application site is also separated from two other European Sites – the Wye Valley Woodlands and River Wye SACs – by the Severn Estuary SAC/SPA/Ramsar and at a distance of over 10km it is considered unlikely that PT18/6450/O would have any (significant) impact upon the conservation objectives of these sites through increased recreational use or traffic emissions.

It is therefore considered that the development will not result in a likely significant effect on the qualifying features of the Severn Estuary SAC/SPA/Ramsar or the Wye Valley Woodlands or River Wye SACs either alone or in combination.

Natural England has indicated that it agrees with the conclusions by letter dated 31<sup>st</sup> January 2019.

### **Design & Access Statement (DAS)**

Paragraph 12.5.2 of the ES states that:-

*‘A key element of the design process has been to consider the location of green infrastructure; as shown on the Green Infrastructure Parameter Plan (Figure 3.3). This retains and buffers sensitive ecological receptors from the built environment and creates a network of green infrastructure within the open space to the south of the built development, and forming corridors through the built development’.*

The scheme design positions a sizable quantity of semi-natural habitat (green infrastructure) adjacent to the ancient woodland of Park Mill Covert SNCI and the

broadleaved plantation woodland surrounding the Pickedmoor Brook corridor to the south of the development. This is welcomed in that, as well as directly benefiting the wildlife on site (birds, bats, herpetofauna) by offering supplementary habitat, it concords with Natural England guidance (*'Ancient Woodland, Ancient Trees and Veteran Trees: Protecting Them From Development'*, November 2018) and prevents development from intruding on the ecology of the woods and watercourse. The natural/semi-natural habitat of the public open space needs to predominantly consist of species-rich grassland, augmented by a few field ponds with scrub pockets in field corners. Consideration could also be given to further tree/scrub planting adjacent to the blocks of broadleaved woodland to extend that habitat.

Scrub pockets will provide additional new nesting habitat for birds to off-set the loss of hedgerows, although the ES indicates that the more diverse, species-rich hedges will be translocated to form new field boundaries for the southernmost area of public open space.

It is important that the attenuation basin (SUDS) are designed as wetlands, supporting marginal and emergent vegetation and wet grassland, as opposed to engineered concrete bowls. Not only does this provide added diversity of habitat to support wildlife such as amphibians and various aquatic invertebrates, it also maintains the setting of ancient woodland in a rural semi-natural context.

The Design evolution depicted in Section 7 of the DAS shows that the earlier versions of the (indicative) layout included a more robust belt of 'green infrastructure' on the north-east site boundary which provided better protection for the badger social group associated with the main sett on the eastern site boundary. This was retained through to the final iteration in August 2018 when it appears to be sizably reduced, bringing development into close proximity with the sett. Consequently, there are issues with the design in this part of the site which needs to clearly demonstrate how it will better safeguard S2.

## **Conclusions**

As described above, the application is not considered likely to have a significant effect on the qualifying features of the Severn Estuary SAC/SPA/Ramsar, the Wye Valley Woodlands or River Wye SACs through an increase in recreational pressure or reduction in air or water quality, either alone or in combination with other plans or projects.

Natural England has indicated that it agrees with this opinion by letter dated 31<sup>st</sup> January 2019.

There are concerns regarding the proximity of development to the eastern badger main sett (S2) and further design details are considered to be needed to avoid undue stress and pressure on the social group.

Further information is also needed in regard to the location and type of semi-natural habitat into which the (small) reptile (slowworm) colony is to be manipulated. The application/ES also needs to justify why a GCN EPS licence is not needed for a scheme resulting in loss of 0.95ha of intermediate habitat; and how the new public open space (GI) compensates for this loss given the distance from ponds P7/P8.

## **Recommendations**

That the above information is provided prior the determining the application.

**Dave Willis**  
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**South Gloucestershire Council**