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By email only

Cherwell District Council Local Plan Partial Review Draft Development Briefs (Site PR7b: Land at Stratfield Farm, Kidlington & Site PR9: Land West of Yarnton)

BBOWT Response – 22 September 2021

Introduction

Thank you for consulting the Berkshire, Buckinghamshire and Oxfordshire Wildlife Trust (BBOWT) on the proposed content of Development Briefs for the following sites:

- PR7b Land at Stratfield Farm, Kidlington
- PR9 Land West of Yarnton

Established in 1959, BBOWT has now grown to be the largest and most influential voluntary conservation organisation in the region concerned with all aspects of nature conservation. BBOWT has over 50,000 members and 1,800 volunteers. We own or manage 87 nature reserves, totalling over 2,600 ha.

As a wildlife organisation, our comments will be restricted to matters associated with the protection and enhancement of biodiversity.

To avoid repetition and a very lengthy response we have written firstly overarching comments applicable to both Development Briefs and then site-specific comments relevant only to individual Development Briefs. In the event that the response is split up to be referred to by staff working on individual development briefs please ensure that the overarching comments are attached to each of the development brief comments.

We note that the layouts in the development briefs are indicative only and we reserve the right to comment on specific planning applications as they are brought forward. This includes reserving the right to object to future planning applications if we have concerns over impact on biodiversity, or the level of net gain in biodiversity.

Overarching comments applicable to both Development Briefs

The scale of development, with 660 homes proposed across the two sites, is such that it will inevitably have a major impact in terms of the additional number of people living in the area, and their vehicles and vehicle movements. We cover the likely impacts on wildlife and green infrastructure and make suggestions for what could be required of developers in relation to these.

Scale of development

Paragraph 175 of the National Planning Policy Framework (NPPF 2021) states that *"Plans should... take a strategic approach to maintaining and enhancing networks of habitats and green infrastructure; and plan for the enhancement of natural capital at a catchment or landscape-scale across local authority boundaries."* Paragraph 179 of NPPF 2021 states that *"To protect and enhance biodiversity, 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."*

We believe the scale of development proposed should be matched by large-scale habitat restoration and enhancement. We note and welcome that within the developments proposed for the Development Briefs there are ambitions for creation of new nature reserves, community woodland and nature conservation areas. We are nevertheless greatly concerned as to the impacts of the developments on wildlife. If the Council is nevertheless minded to proceed with the allocation of these sites for development then there are a number of aspects which will need to be required of developers to minimise the impact on wildlife.

Biodiversity Improvement and Management Plan

We welcome the requirement for a Biodiversity Impact Assessment be submitted as part of the planning application for both sites and a supporting Biodiversity Improvement and Management Plan and note that measures are to be incorporated into the development schemes to achieve a minimum of 10% biodiversity net gain.

Light pollution

We note that PR7b requires measures "to minimise light spillage and noise levels on habitats and wildlife corridors including to maintain connectivity for nocturnal species in an east-west direction and the maintenance of a dark canal corridor." and PR9 requires appropriate lighting to minimise impact on wildlife.

We are concerned that these requirements may still result in significant light pollution arising from the developments, both static lighting as well as lights from vehicles. We think that there is an opportunity to consider lighting strategically to make this area an exemplar in terms of minimising light pollution, in terms of the type of lighting used, how much is used and where it is used, as well as design of routes to avoid light pollution into wildlife-rich areas of the sites, from fixed lights as well as vehicles, particularly where there are likely to be species of wildlife affected by light at night, e.g. bats and badgers. A key principle will be to keep dark corridors where bats are using lines of trees and hedgerows as flight paths. Lighting will have to be managed carefully to ensure it is of a low spill variety, a spectrum that minimises impacts on birds, bats and insects and directed into the development. We suggest that there should be conditions or covenants to control the type, power of and direction of security and outside lighting that can be installed on homes and other buildings.

Access vs. undisturbed areas

In order to provide the substantial benefits for wildlife that will be needed to achieve a net gain in biodiversity that is focused primarily on site then there should not be public access across the entire area of the green infrastructure. Zoning, and a 'hierarchy' of access levels of the combination of all green areas should be carefully planned, including consideration of main paths/cycle routes (with an appreciation of the most obvious routes that people are likely to want to follow: 'desire lines'). There should be informal recreation along a network of paths and openly accessible spaces included within a mosaic of areas that are closed off by appropriate use of hedgerows, screens, fencing and ditches. Broad zones might help keep some larger restricted access nature conservation blocks 'quiet' rather than fragmenting areas too much. This would be simpler zoning for residents and visitors to understand and will allow wildlife to thrive and be observed from paths. The need to have some areas without direct public access is supported by a research report published by Natural England 'Is the management of Local Wildlife Sites affected by the urban fringe?' (NERR063) <http://publications.naturalengland.org.uk/publication/6134796821463040>

Green infrastructure

We note that the sites will "deliver significant areas of new publicly accessible green infrastructure (GI) and habitat which form part of strategic GI corridors".

It is important that details are provided for how Green Infrastructure will be managed in the long-term. We consider long-term should mean for ever. Once developed it can be reasonably assumed that the developed land will have buildings on forever. Therefore, the GI should be retained forever and with an endowment fund to pay for its management forever.

Proposals for wildlife management and maintenance

Our view is that the GI including habitats for wildlife should be managed in perpetuity (e.g. forever) and proposals should recognise this. Long-term management plans and effective, sensitive management (with regular reviews) will be needed for all sites - they all have green infrastructure and wildlife habitat. To ensure management lasts for as long as the built environment is built up (e.g. likely to be forever) then an endowment fund will be needed to ensure that management costs can be covered.

Ideally, there would be a funded officer-role to coordinate and oversee this. This could be alongside or sharing a role as a community engagement officer. This role could for example be delivered by an officer in an external organisation with appropriate experience (e.g. such as a member of Cherwell District Council's Biodiversity Partnership).

Integration of wildlife features into the built environment

While we welcome the wording "The scheme is to include provision of in-built bird and bat boxes, wildlife connectivity between gardens and the provision of designated green walls and roofs where viable.", we think that this should be amended to: "A scheme for the provision of exemplary biodiversity in the built environment, including street trees with large canopies, wildflower road verges, wildlife connectivity between gardens, provision of designated green walls and roofs, and bird and bat boxes integrated into buildings ." The order is important and the current order suggests that bird and bat boxes are more important than wildlife connectivity. The reality is that the provision of natural wildlife habitat, including within the built environment, is much more valuable for wildlife than bird and bat boxes.

The scale of development proposed is such that each scheme should be exemplary in terms of integrating biodiversity features. The Wildlife Trusts have published 'Homes for people and Wildlife: How to build housing in a nature-friendly way' which sets out what a good, nature-rich housing development looks like. See: https://www.wildlifetrusts.org/sites/default/files/2018-05/homes_for_people_and_wildlife_lr_-_spreads.pdf. According to this, 'All housing developments must result in:

- A measurable improvement for wild species and habitats, which means
 - Avoiding any loss or damage of wildlife sites
 - Designing in existing habitats
 - Creating new habitat
 - More than compensating for any habitat that is lost
- All residents having lasting access to nearby nature"

Research shows that green roofs can provide valuable habitats for wildlife (<https://livingroofs.org/biodiversity-and-wildlife/>). The extent of biodiversity will depend on the type of green roof installed. Sedum roofs benefit a limited range of invertebrates and provide foraging for pollinators when in flower. Ecologically designed extensive green roofs can provide good habitat for wildlife, but there are limitations in terms of replicating habitat at ground level due to shallow depth of soils and the drying effect of wind and sun. According to www.livingroofs.org, a good green roof designed for biodiversity should include a varied substrate depth planted with a wide range of wildflowers suitable for dry meadows.

Wildlife connectivity between gardens can be achieved by allowing gaps in fencing and walls for hedgehogs and other small animals to roam, e.g. hedgehog streets in Kirtlington. This can be used to raise awareness of wildlife within the community.

Additional information on appropriate enhancements within the built environment can also be found in 'Biodiversity Positive: Eco-Towns Biodiversity Worksheet, produced by Town and Country Planning Association, Communities and Local Government, and Natural England', downloadable from: <https://www.tcpa.org.uk/Handlers/Download.ashx?IDMF=2e0ffaf8-24b1-45fe-a02f-505a06d72ff2>

The table below (prepared by BBOWT) sets out features in developments to encourage biodiversity, and their associated benefits for people:

	Biodiversity benefits	Reduces urban heat island effect	Reduces air pollution	Reduces water run-off
Houses and Gardens:				
Gardens: Fruit trees in each back garden; Wildflower turf making up part of lawn in each garden; Log piles; Hedgerows making up at least one boundary; Garden walls with overwintering shelter for insects	✓	✓	✓	✓
Green roofs on garages and public buildings	✓	✓	✓	✓
Green walls	✓	✓	✓	✓
Built in bird boxes including swift bricks, swallow and house martin and garden birds.	✓			

Built in bat boxes, bricks and lofts – suitable for crevice dwellers and roof void dwellers.	✓			
<u>Street network and small green spaces:</u>				
Street trees – tree lined streets; woodland copses.	✓	✓	✓	✓
Wildflower rich road verges and green corners etc. with loggeries, hibernacula, bug hotels	✓	✓		✓
Climbing plants on fences and walls	✓	✓	✓	✓
Any shrubs chosen to maximise: berries for winter bird food; flowers for pollen and nectar.	✓			
SUDS schemes including biodiversity	✓	✓	✓	✓
<u>Green Spaces</u> (In addition to large scale habitat creation and management above):				
Wildflower edging / shrubs around sports pitches, play equipment, kick-about areas.	✓	✓		✓
Hedgerows and buffers: management for wildlife	✓	✓	✓	✓
Long grass / bare ground / rockeries / hibernacula for reptiles	✓	✓		✓
Clean-water wetlands / ponds / ditches with surrounding wildlife grass habitat for amphibians – can be part of SUDS and independent of SUDS.	✓	✓		✓
Woodland	✓	✓	✓	✓
Network of green and blue corridors without lighting	✓	✓	✓	✓
Allotments	✓	✓		✓

Protection of habitats during construction through to long term management plans being in place and active

We would expect that wildlife-rich areas will be protected within developments, during construction and afterwards, during occupation. This will require long-term monitoring, and sensitive management to a plan, with developer-funded oversight.

We welcome the requirement to retain mature trees and manage these sensitively. Best practice measures (for example, as set out in 'BS 5837:2012 Trees in relation to design, demolition and construction. Recommendations') should be required during construction, including establishing Root Protection Areas. Buffer zones should be specified for hedgerows, particularly, but not exclusively, for old, rich hedgerows, as well as for any historic ditches.

Protection of habitats and protected species

BBOWT would expect any planning applications which come forward on each site to be judged robustly against the biodiversity and green space elements of the 'Cherwell Local Plan 2011 – 2031 (Part1) Partial Review – Oxford's Unmet Housing Need (Sept 2020)' and the National Planning Policy Framework 2021, with reference in particular to the protection of:

- Special Areas of Conservation (SACs)
- Sites of Special Scientific Interest (SSSIs)
- Local Wildlife Sites (LWS) and proposed Local Wildlife Site (which have the same protection level)
- District Wildlife Sites (DWS) and proposed DWS
- Ancient woodland and other irreplaceable habitats
- Priority habitat (under Section 41 of the NERC Act)

- Legally protected and notable species Priority species (under Section 41 of the NERC Act)
- Wild bird habitat (as covered under paragraph 9A “Duties in relation to wild bird habitat” of the Conservation of Habitats and Species (Amendment) Regulations 2012)
- Lower Cherwell CTA
- Oxford Canal Conservation Area

The impact on protected species, designated sites and any Species and Habitats of Principal Importance for Conservation in England (as listed under Section 41 of NERC Act (2006)) that may be affected will need to be assessed in relation to any planning applications on these sites. A full suite of habitat and species surveys should be carried out. The species surveys should address priority and notable species in addition to protected species. Surveys should include breeding bird surveys and, on the arable land, surveys for arable plants.

The most recent ecological records should be sought from TVERC (Thames Valley Environmental Records Centre) in addition to ecological surveys being carried out in the right survey season.

Buffer zones, design and layout

Both sites are adjacent to District Wildlife Sites, and adjacent to or within the Lower Cherwell Conservation Target Area, and both are upstream of sensitive wildlife sites including a SAC and further LWS, DWS and SSSI. There should be clearly identified and specified buffer zones provided around these. Local Wildlife Sites should have a buffer zone of at least 50m. Hedgerows should have a buffer zone of at least 10m. Veteran trees should have a minimum buffer of 5m greater than their natural canopy area.

The aim should be that buffer zones are themselves biodiverse-rich priority habitat and certainly that these are planned and managed so as to contribute greatly to the diversity of habitats on site. We think that the place-making principles should include a requirement that development be arranged so that back gardens are not directly adjacent to LWS, DWS, SSSIs or any buffer zones. This will minimise the impacts of dumping of garden (and other waste) over fences and of the installation and use of private access gates.

Compensation for impact on farmland and other birds

DEFRA has provided guidance to competent authorities (including local authorities) on how to comply with the legal requirements of the [Conservation of Habitats and Species Regulations 2010](#) as amended in paragraph 9a of the [Conservation of Habitats and Species \(Amendment\) 2012 Regulations](#)). The guidance is available at: <https://www.gov.uk/guidance/providing-and-protecting-habitat-for-wild-birds>

We are aware of populations of skylark and fieldfare in the arable areas and it is highly likely that there will be populations of other farmland bird priority species. Off-site compensation should be provided for farmland birds where these are impacted (and on-site compensation where this is possible – substantial nature reserves areas with zoning to control public access would be needed in this case since many of these species are not suited to built-up areas or disturbance by people, dogs and cats) to ensure that populations are maintained in line with the above quoted legislation. Such compensation is commonly required within Cherwell District, as evidenced for example by the NW Bicester Eco-Town development.

Conservation Target Areas

Conservation Target Areas (CTAs) identify some of the most important areas for wildlife conservation in Oxfordshire, where targeted conservation action will have the greatest benefit. Both sites adjoin or are close to the *Lower Cherwell Conservation Target Area*.

Their Oxfordshire Biodiversity Action Plan target habitats for creation should guide the habitats to be created on the proposed development sites. Oxfordshire Biodiversity Action Plan Targets associated with this CTA:

1. Lowland meadow – management, restoration and creation.
2. Floodplain grazing marsh – management, restoration and creation (for breeding waders in particular).
3. Lowland Fen (including swamp) – management and restoration.
4. Reedbed – management and creation.
5. Rivers – management and restoration (including management for water vole).

Note: “Management” implies both maintaining the quantity, and maintaining and improving the quality of existing BAP habitat and incorporates the following target definitions: “Maintaining extent” and “Achieving Condition”.

Site-specific comments

Site-specific comments: PR7b - Land at Stratfield Farm, Kidlington

120 homes are proposed for this site, on 5 hectares of a 10.5-hectare site. Part of the site adjoins the Lower Cherwell Conservation Target Area. It also includes a traditional protected orchard and adjoins both the Stratfield Brake District Wildlife Site and Oxford Canal, with the Meadows West of the Oxford Canal LWS.

We welcome the intention to, “provide a multi-functional green infrastructure network providing a range of ecosystem services:

- A Nature Conservation Area including habitat areas with limited public access, and publicly accessible informal open space
- A community orchard and associated community food growing garden
- Publicly accessible woodland / wetland
- Retained and enhanced hedgerow corridors and trees
- A public LAP/LEAP play area
- Drainage features and wetland
- Private gardens including the traditional orchard

However, we have concerns that increased public access to the ‘modern’ orchard is likely to result in a decline in condition of this priority habitat. It is estimated that since 1950 overall orchard area in

England has declined by 63% [Traditional Orchard Project in England: The creation of an inventory to support the UK Habitat Action Plan - NECR077 \(nepubprod.appspot.com\)](https://nepubprod.appspot.com/NECR077). We recommend the orchards should be carefully managed to prevent negative impacts to this priority habitat.

The stretch of canal immediately to the west and north of the site is a Local Key Area for water voles. The area is regularly surveyed and monitored by BBOWT's Water Vole Officer and there should be an aim to ensure suitable habitat at the canal edge and to take any opportunities that arise to enhance the habitat for water voles.

The existing biodiversity assets include two ponds and ditches / drains. The area to the west of the site is richest in biodiversity and should ideally be managed in such a way, for example by planting and path/desire line management, so as to reduce recreational impact on some parts of the site. Biodiversity could be greatly enhanced by conservation grazing in some areas. The aim should be to improve the western side of the site to be of sufficient biodiversity value to become an extension of the District Wildlife Site. This area of Kidlington with the existing bridge over the canal from the southwest corner of the DWS is already very popular with walkers including dog walkers but is heavily impacted by such access. The protected wet areas of the DWS are excellent, especially the section bordering this development site.

Efforts should be made to minimise the footprint of the new canal bridge, and the wider impacts during construction. We would recommend the advice of BBOWT's Water Vole Officer is followed.

Site-specific comments: PR9 Land West of Yarnton

540 dwellings are proposed for this site, built on 25 hectares of land within a 99-hectare site. The site is currently predominantly farmland: arable and grassland, including important ridge and furrow areas plus valuable wet grassland field, and double-hedged greenways with associated ditches, all valuable habitats. Begbroke Wood, an ancient woodland and Local Wildlife Site lies to the north-west. Frogwelldown Lane, a District Wildlife Site designated historic greenway and a public right of way forms the south west boundary of the site.

We welcome the intention to create, "An enhanced green infrastructure network..., providing connected wildlife corridors through the development site and enhancing wildlife connections with Begbroke Woodland, and along Frogwelldown Lane (which is a District Wildlife Site) and Dolton Lane."

Key features to include:

- informal parkland area on 24.8 hectares of land, that incorporates a new Local Nature Reserve
- 7.8 hectares of community woodland
- 39.2 hectares retained for agricultural use
- connected green corridors including the retention and enhancement of existing hedgerow corridors and trees
- habitat buffer to Begbroke ancient woodland
- public play spaces
- 0.49 hectares of community allotments
- retention of drainage features and new sustainable drainage features
- private gardens"

We would welcome further discussions on the potential for wildlife habitat creation within the areas of retained green space. We consider that there is great potential here for the creation of a large-scale nature reserve within this area, with zoning so that public access is provided in some areas

but managed in such a way that some areas do not have public access – see earlier section on this in the generic part of our response for more details on this.

Recommended habitats within the nature reserve include species-rich grassland, including wet grassland if applicable, ponds and scrapes, hedgerows, scrub and woodland.

Aerial photography and GIS suggest that the land is currently predominantly arable farmland, with some grassland, bounded by hedgerows and lines of trees. The Ecology Study identifies the grassland as semi-improved / improved in nature with some remnant ridge and furrow, broad-leaved woodland belts associated with historic rights of way and some potential veteran trees.

The mature and veteran trees present are considered to be of high ecological value and veteran trees are considered irreplaceable under the NPPF. In our opinion there are some great trees, including an excellent pollarded oak in the hedge line running eastwards from Frogwelldown Lane towards the build area, high on the hill. All mature and veteran trees should be retained and provided with above minimum buffer zone, as should all hedgerows. There are gaps in the hedgerow either side of the oak. These should be reinstated to avoid trampling, and for connectivity, unless there was some halo clearance, although it is unlikely a low hedge would encroach. We recommend that pathways are kept well away from large trees such as this oak, with wide buffer zones, both for habitat, and so that any concerns about aging oaks near footpaths do not lead to early crown reduction or felling.

While we welcome proposals for community woodland which can provide opportunities for volunteers and visitors to learn about the local environment and conservation, we have some concerns, subject to further work, which we would like to discuss about the exact area proposed for community woodland since it includes ridge and furrow in that area. Ridge and furrow is often associated with species-rich habitat and good soil ecology. It is rare in the district and much has been lost. In addition to many of the other proposed locations for planting we would welcome more tree planting alongside the existing exterior hedgeways, including Frogwelldown.

We would suggest that if some of the wildlife habitat could be near the school then it could be available, if appropriate and if the school desired, for wildlife education.

In addition to protection of trees and hedgerows should be protection of ditches as valuable, old habitats in their own right and linked to the greenways: Frogwelldown and Doulton. Bridges should be built as specific structured access points to reduce ad hoc pathways across the ditches.

We would recommend that all hedgeways be enhanced, particularly linking the greenways to Begbroke Wood and to new woodland strips / blocks wherever they are planted.

We welcome the proposed Local Nature Reserve linked to William Fletcher Primary School. The Local Nature Reserve could be an example of ex-arable reversion with wild flower meadow and grassland for ground-nesting birds.

We are aware of skylarks in this area. This should be considered in the zoning of the open access area as skylarks are vulnerable to disturbance by people and dogs.

We consider it is very important to conserve and enhance the condition of Frogwelldown Lane District Wildlife Site. It has the potential for future consideration as a LWS as it is already of good quality, but currently isolated from similar habitat. This is an opportunity to enhance this DWS - especially with extended good quality linking habitat to the north to link with woodland. But there is

in balance the potential for damage from increased right of way use and disturbance. We would potentially like to suggest an all-weather, accessible route to the east of Frogwelldown Lane right of way in parallel, with a buffer; community woodland planting to protect the DWS from some traffic, and also providing an accessible route while keeping the DWS central pathway open, as it needs to be for its habitats.

We would recommend that gaps should be filled to minimise meanderings through the greenway sides and that maintained dog mess waste bins are provided at intervals, including the start, end and formal access points. We would recommend there be bridge and ditch crossing points to avoid damaging ditchlines.

We are similarly concerned about damage to the adjoining Begbroke Wood LWS, including through highly likely recreational impacts (especially with its spring flower attractions, and being central to a likely highly popular circular walk route near the new build area), plus cat encroachment and predation. This clear potential for damage should be actively minimized through funding towards education/engagement activities providing information about the sensitivity of such sites as well as offering attractive, easily accessible, woodland elsewhere. This may in part be managed through careful design and management of the community woodland areas and the open access land. We refer to our comments above. We are concerned by the ecological consultancy report's suggestion that local residents are much more likely to walk at Blenheim Palace than on the local area's paths and green spaces. We consider it is highly likely that there would be significant increase in the use of local paths and green spaces.

Thank you again for inviting BBOWT to submit comments to inform the development briefs. Please do get in touch if you have any queries.