



Land at South Farm, Wickwar

Addendum to Ecological Appraisal

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**The Environmental Dimension
Partnership Ltd**

On behalf of:
Bloor Homes (South West)

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Section 1 Introduction

- 1.1 This Addendum to the Ecological Appraisal Report (edp6190_r007) has been prepared by Environmental Dimension Partnership Ltd (EDP) on behalf of Bloor Homes (South West) (hereafter referred to as 'the Applicant'), in relation to proposed residential development of Land at South Farm, Wickwar (hereafter referred to as 'the Application Site').
- 1.2 EDP is an independent environmental planning consultancy with offices in Cirencester, Cardiff and Cheltenham. The practice provides advice to private and public sector clients throughout the UK in the fields of landscape, ecology, archaeology, cultural heritage, arboriculture, rights of way and masterplanning. Details of the practice can be obtained at our website (www.edp-uk.co.uk).
- 1.3 An Ecological Appraisal Report (edp6190_r007) detailing the current ecological interests within and around the Application Site was previously prepared during December 2021 to inform an Outline planning application to South Gloucestershire Council (SGC) (planning reference: P22/01300/O) for its development.
- 1.4 Following receipt of initial comments on the application from SGC Officers, Statutory Consultees and the Design Review Panel, a revised planning application is proposed for submission alongside a revised Framework Masterplan (provided at **Appendix EDP 1**) and Landscape Strategy (**Appendix EDP 2**) for the proposed development.
- 1.5 This Addendum has, therefore, been prepared to assess the potential implications of the revised Framework Masterplan upon the ecological interests of the Application Site (where additional negative/positive impacts are likely) and to address consultee comments and/or requests for further information on site ecology.

DEVELOPMENT PROPOSALS

- 1.6 Revised proposals for the Application Site concern development of up to 180 homes and associated infrastructure including highways and drainage, together with publicly accessible open space and a new village shop. A revised Framework Masterplan is provided at **Appendix EDP 1**, which includes the following changes pertinent to ecology:
 - Revision of the Sustainable Drainage (SuDS) strategy, replacing a single basin with three basins distributed across the development;
 - Inclusion of rain gardens within the built development footprint, providing further opportunities for biodiversity enhancement whilst contributing to the overall drainage strategy;
 - Relocation of the Local Equipped Area of Play (LEAP) and Local Area of Play (LAP) from green open space along the western boundary to within the built-development footprint, facilitating the creation of additional habitat for wildlife;

- Additional planting along the northern boundary of the Application Site, enhancing wildlife corridors for dispersal of protected/notable species across the Application Site whilst providing additional breeding/foraging habitat;
- Additional tree planting across the development, including orchard trees providing additional habitat for protected/notable species and enhancing biodiversity overall whilst delivering benefits to visual amenity; and
- Provision of additional footpath routes/connections through the Application Site, improving links to the wide Public Right of Way (PRoW) network, providing additional benefits to recreation and visual amenity whilst seeking to reduce recreational pressures on statutory designated sites in the wider landscape.

1.7 A description of the revised proposals is provided within the Design and Access Statement prepared by Turley (Revision B, December 2022).

Section 2 Consultation

- 2.1 This section seeks to address consultee comments received in response to the Outline planning application submission and provides further information regarding ecological constraints to development of the Application Site where necessary, with reference to the revised Framework Masterplan.

NATURAL ENGLAND AND GLOUCESTERSHIRE WILDLIFE TRUST

- 2.2 In relation to ecology matters, the following pertinent comments were received from Natural England in respect of two Sites of Special Scientific Interest (SSSI), Lower Woods SSSI and Bishops Hill Wood SSSI:

“Lower Woods is an exceptionally important site in ecological terms. The SSSI is the most extensive ancient woodland in Avon and comprises a mosaic of different habitat types which give rise to an extraordinarily rich and diverse ecological community. This includes 12 species of bats recorded on the site notably a Bechstein’s maternity roost and a likely Barbastelle maternity roost. Bishops Hill Wood SSSI is designated for species-rich, ancient broadleaved woodland together with associated and steeply sloping, neutral-grassland habitats on damp and heavy soils.

Natural England has concerns regarding the potential for this proposal to result in an increase in recreational pressure at Lower Woods SSSI and Bishop’s Hill Wood SSSI. This application would result in an increase in housing in close proximity to the SSSIs, both of which appear to be within walking distance of the site.

We have previously raised concerns regarding recreational pressure at Lower Woods SSSI in our response to the South Gloucestershire GI strategy, and the potential for settlement growth in close proximity to Lower Woods SSSI and Bishop’s Hill Wood SSSI to result in an adverse effect on the reasons for designation for these sites in our response to the South Gloucestershire New Local Plan Phase 2 consultation.

The Lower Woods SSSI management plan adopted in 2016 noted that increased visitor numbers were already having impacts on the site through paths becoming wider and muddier and the near total loss of trackside vegetation in some places. In addition to this, problems associated with more frequent use of the site by dog walkers such as defecation and disturbance are also noted. Natural England understand that recreational pressure at Lower Woods SSSI has increased during Covid. It is our understanding through conversations with Gloucestershire Wildlife Trust that increased visitor numbers are putting an increasing financial pressure on site management.

We recommend that the LPA consult Gloucestershire Wildlife Trust, as the managers of the site they will be well placed to advise on the existing pressure at Lower Woods SSSI.”

- 2.3 Of further consideration are public comments received from Gloucestershire Wildlife Trust (GWT) submitted 12 August 2022 which states:

"I am writing to provide Gloucestershire Wildlife Trust's (GWT) comments regarding the above outline planning application. We were not consulted on the proposals, despite its proximity to GWT managed Lower Woods Nature Reserve, hence our delayed awareness of the proposals and response. GWT object to this proposal due the added recreational pressure it will add to Lower Woods SSSI and nature reserve.

The addition of 180 homes and a substantial number of new residents, just over a km and within walking distance of Lower Woods, will certainly increase the impact on this designated site which is already under pressure. This is in addition to new residential development within the locality. From our experience, it is almost inevitable that the site will become a main local recreational space for new residents, particularly for dog walking and mountain biking.

We acknowledge that the increase in recreational pressure has been recognised in the ecological appraisal. However, we disagree that the inclusion of limited green space along the western boundary of the site will serve to reduce footfall at nearby designated sites. It is in the view of the Trust that the applicant has not provided sufficient information to demonstrate that this impact can be avoided or mitigated and we therefore do not consider the application to be compliant with the National Planning Policy Framework, specifically paragraph 180(b).

We are also aware that some residents of Wickwar drive to Lower Woods to use it as a recreation space. During school holidays at the weekends, there is already insufficient parking capacity to deal with the existing number of visitors to Lower Woods. This results in haphazard and sometimes dangerous parking, which can negatively impact the biodiversity of the site. The potential addition of a large number of regular users visiting by car will cause additional wear and tear to the entrance track, imposing a substantial additional financial burden on Gloucestershire Wildlife Trust.

In conclusion, the proposal has not taken sufficient steps to avoid and mitigate the adverse impacts of substantial additional recreation pressure it is highly likely to impose on Lower Woods SSSI and nature reserve. As a result, it will be detrimental to a nationally designated biodiversity site and cause undue financial burden to a local charity."

- 2.4 As described within Section 3 of the Ecological Appraisal (reference: edp6190_r007), there are two statutory designations within the potential zone of influence of the Application Site: Bishop's Hill Woods SSSI and Lower Woods SSSI. A previous assessment of potential impacts is provided below:

"Both designations are considered sufficiently distant from the Application Site such that no direct impacts to either SSSI or their qualifying features are predicted. However, indirect effects associated with an increase in recreational pressure and subsequent degradation of habitats and/or disturbance of associated passerine birds following occupation of development may arise. Inherent within development proposals, however, is the inclusion of open green space along the full western boundary of the Application Site, proposed to accommodate semi-natural habitat features as well as formal play areas and community

allotments which will provide alternative recreational opportunities for new residents and combined with footpath links to Public Rights of Way (PRoW) in the wider landscape, will serve to reduce footfall at statutory designated sites.”

- 2.5 Following receipt of consultation comments from Natural England and revision of the Framework Masterplan, additional information regarding the ecological baseline for the Application Site in the context of these designated sites, an assessment of effects, inherent mitigation embedded within the Framework Masterplan and any additional mitigation required to avoid/reduce negative effects, is provided below.

Bishop’s Hill Woods SSSI

- 2.6 Bishop’s Hill Woods SSSI is located to the east of the settlement of Wickwar, 670m from the Application Site. This site is designated for its species-rich, ancient broadleaved woodland and steeply sloping, neutral-grassland habitats on damp and heavy soils in the north of Avon. Of further note, adder (*Vipera berus*) is present on some of the sunny and sheltered banks. Nightingale (*Luscinia megarhynchos*) has been recorded from the denser thickets bordering the woodland. The SSSI is subdivided into three units, all in ‘Unfavourable-Recovering’ condition following the most recent site assessments in 2021 and 2010, with recovery attributed to management efforts under a land stewardship scheme.
- 2.7 As per the Ecological Appraisal Report, no direct impacts associated with, for example, habitat loss, are anticipated, given the distance and spatial separation of the SSSI from the Application Site. The potential for indirect impacts associated with an increase in recreational pressure and subsequent degradation of sensitive habitats was considered.
- 2.8 Bishop’s Hill Wood SSSI appears to be under private ownership and publicly inaccessible. Although located within walking distance of the Application Site, public footpaths within the surrounding landscape circumnavigate the woodland, precluding authorised public access. As such, recreational impacts upon qualifying features of Bishop’s Hill Wood SSSI are considered unlikely.

Lower Woods SSSI

- 2.9 Lower Woods SSSI is located 1.2km east of the Application Site and comprises the most extensive ancient woodlands in Avon, in addition to areas of lowland neutral grassland and standing open water. The site supports large populations of passerine birds and has a rich invertebrate fauna. The SSSI has been subdivided into 10 units, circa 62% of which are in ‘Unfavourable-Recovering’ condition and c.37% in ‘Favourable’ condition. Part of the woodland is managed by Gloucestershire Wildlife Trust as a nature reserve. In contrast to Bishop’s Hill Wood SSSI, Lower Woods is publicly accessible and is criss-crossed by a network of public footpaths. As such, there remains some potential for indirect effects to arise upon qualifying habitats associated with an increase in recreational pressure following occupation of the Application Site.

Impacts and Mitigation

- 2.10 Residential development of the Application Site will result in construction of up to 180 households. Based on an average occupancy rate of 2.4 people per household, this equates to an estimated population of 432. In the absence of mitigation, potential indirect impacts upon Lower Woods SSSI, following an increase in visitors to the site, include the degradation of sensitive habitats by trampling and changes in the ground flora communities following enrichment by dog-fouling.
- 2.11 Inherent within the development, however, is the provision of alternative opportunities for recreation and visual amenity including:
- The provision of c.2.04 hectares (ha) of open green space along the full western and northern boundaries of the Application Site. Such areas are proposed to accommodate new landscape planting including species-rich amenity grassland, wildflower meadow, trees and shrubs, as well as orchards and an allotment and to enhance new residents' connection with nature whilst delivering biodiversity benefits;
 - The provision of additional open green space around the remaining peripheries of the Application Site, accommodating sustainable drainage features, species-rich grassland and/or shrub planting amounting to 0.98ha;
 - The inclusion of attenuation basins designed with levels no more than 1:3, accommodating species-rich grassland to provide additional habitat for wildlife and benefits to visual amenity; and
 - The inclusion of LAPs/LEAPs (amounting to c.0.09ha) integrated with open green space to provide further opportunities for recreation.
- 2.12 A total of 3.02ha of green open space will therefore be provided as part of the development proposals, encompassing both formal and informal areas of public open space. In comparison, Fields In Trust (FIT) guidance¹ in respect of public open space requirements recommends the provision of 2.04ha of accessible green space per 1000 population.
- 2.13 The Application Site is also directly connected to a network of pathways extending to the immediate west and east, whilst National Cycle Route 410, 'Avon Cycleway', passes c.840m to the north and 1.6km to the south. Further details regarding the wider Public Right of Way (PRoW) network are provided within the Landscape and Visual Baseline submitted with an Outline planning application (report reference: edp6190_r001c). Amendments to the Framework Masterplan include provision of a new footpath link in the north-western corner of the Application Site, connecting development to the wider PRoW network and providing direct access to the countryside and alternative walking routes for new residents.
- 2.14 In light of the provision of green infrastructure within the proposed development, amounting to c.38% of the Application Site, combined with the maintenance of footpath links connecting the Application Site to PRoWs within the immediate landscape, it is considered

¹ FiT (2014). Available at: <https://www.fieldsintrust.org/Upload/file/guidance/Guidance-for-Outdoor-Sport-and-Play-England.pdf> [Accessed on 14 February 2023].

that significant effects arising upon the Lower Woods SSSI as a result of increased recreational pressure can be adequately mitigated.

SOUTH GLOUCESTERSHIRE COUNCIL

- 2.15 Additional comments were received from Arup during February 2023, appointed by SGC to review the ecological information and reports submitted with a planning application. A summary of pertinent ecological comments received via SGC are provided in **Table EDP 2.1** below alongside additional information compiled by EDP to address each comment individually. The full consultation reports is provided at **Appendix EDP 3**.

Table EDP 2.1: Summary of SGC Consultation Comments and Response

SGC/Arup Comments	EDP's Response
<p>Designated sites for Nature Conservation:</p> <p><i>Bishop's Hill Woods SSSI and Lower Woods SSSI identified within the potential zone of influence of the Application Site. I recommend that the design and management proposals are outlined within a Landscape and Ecology Management Plan. I agree with the concerns of Natural England in their correspondence dated 03 August 2022 for Lower Woods SSSI & Bishop's Hill Wood SSSI with regards to recreational pressure on these sites and the potential for settlement growth in close proximity to Lower Woods SSSI and Bishop's Hill Wood SSSI to result in an adverse effect on the reasons for designation for these sites. I agree with the concerns of the Gloucestershire Wildlife Trust's Public Comment dated 12 August 2022 regarding recreational pressure on the two sites.</i></p> <p><i>Ladden Brook SNCI is within the potential zone of influence of the application site and no direct impacts anticipated. Indirect impacts may arise during construction and operation e.g. contamination run off, pollution incidents leading to deterioration of water quality and increase in suspended solids. I would expect pollution prevention measures to be outlined within a Construction Environmental Management Plan.</i></p>	<p>A detailed response in respect of potential impacts to Bishop's Hill Woods SSSI and Lower Woods SSSI together with a proposed mitigation package is provided above.</p> <p>We acknowledge the requirement for preparation of a Landscape and Ecology Management Plan (LEMP) and Construction Environmental Management Plan (CEMP) to ensure the appropriate protection and management of ecological and landscape features to be retained, enhanced or newly created onsite. We would consider it reasonable for these documents to be prepared as a condition to any forthcoming outline planning consent, to be delivered alongside a detailed planting scheme provided as part of a future Reserved Matters (RM) application.</p>

SGC/Arup Comments	EDP's Response
<p>Hedgerows: I would expect the provision for hedgerow creation and management to be outlined within a Landscape and Ecology Management Plan.</p> <p>Arable Field Margins: Arable field margins are Section 41 habitats of principal importance. The Ecological Appraisal does not acknowledge that field margins are Section 41 habitats and locations are not mapped/target noted as part of the Phase 1 survey.</p>	<p>This is noted and agreed. As above, it is anticipated that an LEMP would be provided as a condition of any forthcoming outline planning consent.</p> <p>With reference to paragraph A3.8 of the Ecological Appraisal Report (reference: edp6190_r007), "<i>field margins are typically narrow (less than 1m) and characterised by a species-poor grassland sward.</i>" In addition, "<i>no notable species were recorded during the Extended Phase 1 habitat survey, with habitats onsite typically botanically poor.</i>" With reference to JNCC's Priority Habitat Descriptions (2011)², the following features would qualify arable field margins as a priority habitat: cultivated low input margins (cultivated periodically but not sprayed with herbicide and includes conservation headlands and land managed specifically to create habitat for annual arable plants; margins sown to provide seed for wild birds; margins sown with wild flowers or agricultural legumes and managed to allow flowering to provide pollen and nectar resources for invertebrates; and margins providing permanent, grass strips with mixtures of tussocky and fine-leaved grasses.</p> <p>Given the narrow width of arable field margins onsite, their poor structural and botanical diversity of limited value for a bird and invertebrate assemblage, and an absence of active management for wildlife benefits, it is concluded that the arable field margins onsite do not meet JNCC's definition of a Priority habitat.</p>
<p>Invasive species (INNS): INNS is not acknowledged/included within the report therefore recommend a pre-construction walkover survey of the Application Site, and if required, an INNS management plan to be prepared by a suitably qualified/specialist INNS consultant.</p>	<p>We can confirm no INNS were identified during the Extended Phase I survey or during the course of great crested newt surveys in respect of ponds/ditches on and adjacent to the site. Pre-commencement surveys should be undertaken prior to commencement of site clearance, however,</p>

² JNCC (2011). UK Biodiversity Action Plan: Priority Habitat Descriptions. Available at: <https://hub.jncc.gov.uk/assets/2728792c-c8c6-4b8c-9ccd-a908cb0f1432>. [Accessed on 22 February 2023].

SGC/Arup Comments	EDP's Response
	and should include a walkover for evidence of INNS with any identified species subject to appropriate control/treatment. The scope of pre-commencement survey effort will be included within an CEMP to be discharged as a condition of planning.
<p>Roosting Bats: Three trees identified as moderate potential and two as low potential. T3 (moderate) and T1 (low) are potentially lost. The aerial inspection did not identify evidence of bats and concluded that no impacts to tree roosting bats anticipated, however, the Ecological Appraisal does not recommend emergence / re-entry surveys for the moderate tree (T3) potentially lost to facilitate construction. Further clarification is required for the absence of emergence/re-entry surveys.</p>	<p>Aerial inspections of trees with moderate to high bat roost potential were undertaken to inform the planning submission, with all roosting features accessed at height and inspected with a torch and endoscope. This is a suitably robust method to confirm presence/infer absence of a bat roost relative to dusk emergence/dawn re-entry surveys where poor light conditions and dense foliage could obscure evidence of emergence/re-entry activity. This is consistent with best practise guidelines³ which, in relation to tree climbing surveys, state that <i>"close inspection of features can be extremely useful because it facilitates a much more reliable assessment of suitability and provides an opportunity for bats and bat droppings to be found if present"</i> (Section 6.3.4) and <i>"these surveys are valuable to prevent any unnecessary emergence/dawn work where features appear to be of high suitability from the ground but are actually of limited or no suitability. Tree climbing is often the most effective way to access all features...."</i> (Section 6.3.1). Indeed, trees previously assessed as high and moderate potential for the ground were downgraded to moderate or low potential following completion of aerial surveys. It is considered that current survey effort is sufficient to reliably assess the potential of roosting features and to confirm presence/infer absence of a roost. Nevertheless, and in respect of the ability of bats to establish new roosts within a short timeframe, the Ecological Appraisal Report (reference: edp6190_r007) recommends that update ground-level and aerial inspections are undertaken prior to any proposed tree felling to re-confirm presence/continued absence. The scope of pre-commencement survey effort will be included within a CEMP to be discharged as a condition of planning.</p>

SGC/Arup Comments	EDP's Response
<p>Foraging and commuting bats: The Ecological Appraisal states that 'Anabat SD2 (hereafter referred to as 'Anabats') were deployed in two locations throughout the Application Site'. The bat report plan (refer to drawing title 'Plan EDP 4a: Automated Bat Detector Locations and Transect Route') shows the location of two bat detectors outside of the red line boundary. There no automated bat detectors deployed within the Application Site boundary to further consider/understand bats how bats utilise the Application Site. Reference to the Bat Conservation Trust's Bat Surveys: for Professional Ecologists: Good Practice Guidelines was made in the report, however I wish to seek further clarification on why both detectors were deployed outside of the Application Site without any within the Application Site.</p>	<p>Following review of the plan in question we clarify that this is due to a transcription error within the digitised drawings. A revised drawing (refer to Appendix EDP 4) illustrates the correct locations of the Anabats and confirms the direction in which the microphones were pointed. These have been cross referenced with the field data which can be made available to SGC on request.</p> <p>Overall, the Site was considered to be of low suitability to a bat assemblage by virtue of its intensely managed agricultural nature, although hedgerow corridors were noted as an important feature for dispersal of a bat assemblage across the wider landscape. However, in consideration of the presence of desk study records for notable species and bat roosts within the immediate landscape, survey effort comprised monthly manual transect and automated detector surveys between April and September 2021. Transects encompassed land offsite to the west and north, in order to follow natural field boundaries whilst detectors were placed so as to cover those different habitats recorded onsite i.e. hedgerows and grassland. As such, the results of survey effort are considered to remain representative of the Application Site.</p>
<p>Great Crested Newt: The Ecology Appraisal notes 'a pond circa. 10m' is present north of the application site. The pond P1 within the drawing 'Plan EDP 8: Great Crested Newt Survey Results' show this pond to be >10m. Clarification is required to confirm where this 'pond circa. 10m' is located. A low population is concluded therefore I would expect avoidance and mitigation measures for GCN outlined within an amphibian mitigation strategy and appropriate Natural England licence application.</p>	<p>The previous quoted distance is an error. This pond is located 100m north of the Application Site. The location of pond P1 is illustrated within the Ecological Appraisal at Plan EDP 8. Given the presence of a low population of great crested newt onsite/within the immediate landscape, an EPS Mitigation Licence will be sought from Natural England or otherwise delivered under the District Licence Scheme in operation within the County.</p>

SGC/Arup Comments	EDP's Response
<p>Dormouse: The surveys were undertaken within guidelines, however nest tubes are known to under detect in low density areas. It is disappointing that footprint tunnels were not used as supplementary technique. Guidance for these methods have been made available by People's Trust for Endangered Species (PTES) and the Chartered Institute of Ecology and Environmental Management (CIEEM) since 2018. Clarification is needed to confirm that the 23.11.21 survey date is 23.11.20 in Table EDP A7.1 of the Ecological Appraisal.</p>	<p>Dormouse surveys were undertaken in accordance with best practice guidance and involved the deployment of nest tubes over two consecutive years (March 2020 – August 2021), thereby exceeding the minimum survey period considered necessary to confirm presence/infer absence of a population. We also confirm the correct survey date for the November visit is 23.11.20.</p>
<p>Otter: Avoidance and mitigation measures for otter to be included within a Precautionary Working Method Plan/Construction Environmental Management Plan.</p> <p>Nesting birds: I would expect timing of vegetation clearance works to be undertaken outside of nesting bird season. If this is not possible, nesting bird checks and vegetation clearance to be undertaken by and under supervision of a suitably qualified ecologist.</p> <p>Reptiles: Avoidance and mitigation measures for reptiles to be included within a Precautionary Working Method Plan/Construction Environmental Management Plan.</p> <p>Fish: I would expect pollution prevention measures to the ditch network to be outlined within a Construction Environmental Management Plan.</p> <p>Badger: Due to the presence of suitable habitats for badgers within the Application Site, avoidance and mitigation measures for badger to be included within a Precautionary Working Method Plan/Construction Environmental Management Plan. A pre-construction survey should form a planning condition.</p>	<p>These comments are noted.</p> <p>Recommendations are consistent with those detailed within the Ecological Appraisal Report or else will be further detailed within a CEMP to be delivered as a condition to any forthcoming outline planning consent.</p>

SGC/Arup Comments	EDP's Response
<p>Amphibians: General measures for the welfare of common amphibians to be included within a Precautionary Working Method Plan/Construction Environmental Management Plan.</p>	
<p>Hedgehog: It is disappointing that hedgehogs are not acknowledged as a Local BAP or Section 41 species or discussed in results from desk study records searches and there is suitable habitat within the Application Site for hedgehogs. In addition, hedgehogs are listed as Vulnerable on the Red List for England's Mammals. Avoidance and mitigation measures for hedgehogs to be included within a Precautionary Working Method Plan/Construction Environmental Management Plan.</p>	<p>With reference to paragraph 3.56 of the Ecological Appraisal Report desk study <i>"records of other mammal species within 2km of the Application Site were limited to brown hare (Lepus europaeus) in association with Lower Wood."</i></p> <p>Nevertheless, the report acknowledges the presence of suitable habitat for European hedgehog at paragraph 5.62 of the report: <i>"a precautionary approach to habitat clearance is recommended to ensure no harm to these species [reptiles], as well as other priority species such as European hedgehog potentially present."</i> Measures for the sensitive clearance of habitats suitable for European hedgehog is provided at paragraph 5.63 of the Ecological Appraisal Report. It is noted that such measures will also be included within a CEMP to be prepared as a condition to any forthcoming outline planning consent.</p>
<p>Birds of Conservation Concern: BoCC5 was published on 01 December 2021. I recommend that this list is revised to check if bird status have changed since BoCC4. Avoidance and mitigation measures for breeding birds to be included within a Precautionary Working Method Plan/Construction Environmental Management Plan.</p>	<p>We can confirm an assessment was undertaken with reference to BoCC5⁴.</p> <p>Avoidance and mitigation measures for a bird assemblage are included at Section 5 of the Ecological Appraisal and will be included within a CEMP to be prepared as a condition to any forthcoming outline planning consent.</p>
<p>Wildlife corridors/Green Infrastructure: Considerations for minimising loss of hedgerows and compensation for unavoidable losses to be outlined within a Landscape and Ecology Management Plan.</p>	<p>Measures for the enhancement and management of retained hedgerows alongside measures for the establishment and management of newly created hedgerows and wildlife corridors will be provided within a LEMP to be prepared as a condition to any forthcoming outline planning consent.</p>

⁴ Stanbury, A., Eaton, M., Aebischer, N., Balmer, D., Brown, A., Douse, A., Lindley, P., McCulloch, N., Noble, D., and Win I. 2021. The status of our bird populations: the fifth Birds of Conservation Concern in the United Kingdom, Channel Islands and Isle of Man and second IUCN Red List assessment of extinction risk for Great Britain. British Birds 114: 723-747.

SGC/Arup Comments	EDP's Response
<p>Biodiversity Impact Assessment: The wet and dry ditch habitat (D1, D2, D3, D7 and D8) not accounted for in the metric. Whilst this is included in association as a hedgerow feature, the ditch habitat should be included within the River calculation tab and any section that will be a culvert.</p>	<p>Ditches recorded within site boundaries are associated with the hedgerow network. D1 and D7 are dry. Whilst D2 and D3 were wet during the Extended Phase I survey, with water depth variable and with sections of the ditch also dry. No macrophyte community was identified in association with the ditch network with any vegetation terrestrial in nature. There was no recognisable riparian buffer. Each ditch is culverted in places to facilitate vehicle access to agricultural fields. With reference to the Technical Supplement for Biodiversity Metric 3.0 and 3.1, '<i>ditches where the vegetation indicated that the channel holds water throughout the year should be recorded under the Rivers and Streams metric</i>'. Of further pertinence, '<i>when a ditch is present alongside a hedgerow it should only be recorded once in the metric.</i>' As discussed, above, a macrophyte and riparian plant community is absent with any limited vegetation cover representative of terrestrial grassland species, such that the ditch network onsite was not considered to qualify for inclusion with the Rivers and Streams network. Nevertheless, their relative biodiversity value has been considered within the Hedgerows metric.</p>
<p>Site Habitat Baseline: It is not clear how the condition score was generated for modified grassland for baseline. Assessor comments should include this justification.</p>	<p>The Biodiversity Net Gain Calculations and associated report have been updated in line with a revised Framework Masterplan and Landscape Strategy for the Application Site. Further details pertaining to the condition assessment of baseline habitats is provided within the report (reference: edp6190_r006b).</p> <p>The calculations have been amended accordingly.</p> <p>The Biodiversity Net Gain Calculations and associated report have been updated in line with a revised Framework Masterplan and Landscape Strategy for the Application Site. Further details pertaining to the condition assessment of proposed habitats is provided within the report (reference: edp6190_r006b).</p>

SGC/Arup Comments	EDP's Response
<p>Arable is a habitat included in the Local BAP. Consider Strategic Significance 'Within area formally identified in local strategy'.</p> <p>Site Habitat Creation: It is not clear how the condition score was generated for each of the habitats (where applicable).</p>	<p>The LAP/LEAP are entered into the metric as 'developed land; sealed surface.' Open space is subdivided into different categories according to the Landscape Masterplan with notes provided within the Assessor's column. Open space encompasses 'neutral grassland' (subdivided into areas managed for amenity and areas managed for wildlife), allotments, SUDS, a pond and mixed scrub.</p>
<p>It is not clear how the local area for play and local equipped area for play and open space are accounted for.</p>	<p>The calculations have been amended with respect to mixed scrub and grassland to be managed for wildlife.</p>
<p>Habitat types such as mixed scrub and other neutral grassland are ecologically valuable.</p> <p>Consider Strategic Significance 'Location ecologically desirable but not in local strategy.'</p> <p>Site Habitat Enhancement: It is not clear how the condition score 'Moderate' was generated for other neutral grassland.</p>	<p>The Biodiversity Net Gain Calculations and associated report have been updated in line with a revised Framework Masterplan and Landscape Strategy for the Application Site. Further details pertaining to the condition assessment of enhanced habitats is provided within the report (reference: edp6190_r006b).</p> <p>The calculations have been amended with respect grassland to be managed for wildlife.</p> <p>The calculations have been amended accordingly.</p>

SGC/Arup Comments	EDP's Response
<p>Neutral grassland is ecologically valuable. Consider Strategic Significance 'Location ecologically desirable but not in local strategy'.</p> <p>Site Hedge Baseline: Hedgerows were assessed as 'Area/compensation not in local strategy/no local strategy' however are included within the Local BAP. Recommend that these are amended to 'Within area formally identified in local strategy'.</p> <p>Site Hedge Creation and Enhancement: It is not clear how the condition score 'Good' was generated.</p> <p>Hedgerows were assessed as 'Area/compensation not in local strategy/no local strategy' however are included within the Local BAP. Recommend that these are amended to 'Within area formally identified in local strategy'.</p>	<p>The Biodiversity Net Gain Calculations and associated report have been updated in line with a revised Framework Masterplan and Landscape Strategy for the Application Site. Further details pertaining to the condition assessment of enhanced habitats is provided within the report (reference: edp6190_r006b).</p> <p>The calculations have been amended accordingly.</p>

Section 3

Predicted Impacts and Mitigation

- 3.1 This section of the Addendum considers any additional impacts of the proposed Framework Masterplan included as **Appendix EDP 1** on the existing ecological resource, beyond those impacts previously reported within the Ecological Appraisal Report (reference: edp6190_r007) submitted with planning application P22/01300/O. Any additional mitigation or enhancement measures, necessary to enable the proposed development to meet legislative and/or planning policy requirements, are also discussed here.
- 3.2 No changes are proposed to the assessment of potential effects and to those recommended mitigation/enhancement measures presented within the Ecological Appraisal upon non-statutory designations and protected/notable species discussed therein, including: bats; birds; badger (*Meles meles*); great crested newt (*Triturus cristatus*); common reptiles; and other notable mammals. Further information is, however, provided in respect of habitats, whilst statutory designations have been discussed above within **Section 2**.

HABITATS

- 3.3 No additional impacts upon habitats are anticipated following changes to the Framework Masterplan, with a previous assessment remaining relevant. The masterplan will, however, deliver additional enhancements including:
- The inclusion of two orchards within open green space across the northern extent of the Application Site;
 - The relocation of proposed LAPS/LEAPs increasing provision of open green space along the western boundaries of the Application Site;
 - The inclusion of extensive tree planting within the development footprint and across proposed areas of open green space;
 - The subdivision of the attenuation feature into three separate basins including dry and wet basins, providing diverse opportunities for habitat creation;
 - The inclusion of rain gardens within the development footprint, to be planted with native species and/or those of value to wildlife; and
 - The creation of a pond for wildlife adjacent to the western boundary of the Application Site.
- 3.4 Owing to the redistribution of development features within the Framework Masterplan and Landscape Strategy, an update has been undertaken of the Biodiversity Net Gain (BNG) calculations. The results of the updated BNG assessment are provided within a separate document (report reference: edp6190_r006b) to be re-submitted to South Gloucestershire Council. In brief, however, the biodiversity impact habitat area score of the proposed development has been calculated as follows:

- Total net unit change = 5.64 units (net gain); and
- Total net percentage change = 35.14% (net gain).

3.5 With respect to the biodiversity impact score of the proposed development for hedgerows specifically, this has been calculated as follows:

- Total net unit change = 26.94 units (net gain); and
- Total net percentage change = 50.91% (net gain).

Section 4

Summary and Conclusions

- 4.1 This Addendum to the Ecological Appraisal Report (edp6190_r007) has been prepared by EDP on behalf of Bloor Homes (South West) in relation to proposed residential development of Land at South Farm, Wickwar. This Addendum has been prepared to assess the potential implications of a revised Framework Masterplan upon the ecological interests of the Application Site.
- 4.2 Specifically, this report considers the potential for indirect negative effects to arise upon qualifying features of Bishop Hill Wood's SSSI and Lower Woods SSSI within the zone of influence of the Masterplan and any inherent and/or additional mitigation measures necessary, to avoid and reduce effects upon these designated sites. This report also considers the potential for additional negative or positive impacts on valued habitats alongside an updated Biodiversity Impact Assessment (edp6190_r006b).
- 4.3 No direct impacts upon Bishop's Hill Woods SSSI are anticipated, given its distance and spatial separation from the Application Site. With respect to indirect recreational effects, the woodland is within private ownership whilst public footpaths within the surrounding landscape circumnavigate the woodland, precluding authorised public access. Negative effects upon qualifying features of the woodland arising from development of the Application Site are, therefore, considered unlikely.
- 4.4 In contrast, Lower Woods Hill SSSI is publicly accessible via PRoWs and also managed by the Gloucestershire Wildlife Trust as a Local Nature Reserve, such that impacts associated with trampling and dog-fouling of sensitive habitats are likely in the absence of mitigation. Inherent in the Framework Masterplan and Landscape Strategy, however, is the provision of c.2.04ha of open green space along the northern and western boundaries of the Application Site. Such areas encompass allotments, orchards and semi-natural habitat linked by a roughly circular footpath, which also connects to an existing ProW offsite in the wider landscape, considered sufficient to provide alternative space for play and recreation as well as providing benefits to visual amenity and biodiversity. This is in addition to an additional 0.98ha of natural green space around the remaining peripheries of the Application Site, softening the edges of development whilst incorporating shrub and grassland planting of value to wildlife.
- 4.5 With respect to habitats, the revised Framework Masterplan continues to provide opportunities for biodiversity net gain, delivering the minimum 10% mandatory net gain required by the *Environment Act 2021*. Retained, enhanced and newly created habitats will, however, require monitoring and sensitive management to ensure that the target habitat conditions required for the assessment will be achieved.
- 4.6 Consistent with the conclusions of the Ecological Appraisal (edp6190_r007), EDP considers that the scheme is capable of compliance with relevant planning policy for the conservation of the natural environment at all levels, subject to implementation of those mitigation and enhancement measures discussed above and previously within the Ecological Appraisal Report.

Appendix EDP 1
Framework Masterplan
(Drawing number: 3001 Rev M, 03 January 2023)



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- KEY
- Site Boundary (7.89 ha/19.51 ac)
 - Residential Development (4.49 ha/11.10 ac)
 - Area reserved for potential shop extents (0.15 ha/0.37 ac)
 - Open Space including Informal Recreational and Natural & semi-natural urban green space (3.25 ha/8.04 ac)
 - Allotments (0.09 ha/0.22 ac)
 - Provision for Children and Young People LAP & LEAP (0.11 ha/0.28 ac)
 - PROW (public rights of way)
 - Primary Roads
 - Areas of boundary to be bolstered with additional Planting
 - Existing Hedgerow
 - Existing Trees
 - Proposed Pumping Station
- Proposed Access Points
 - Proposed LAP (local area of play)
 - Proposed LEAP (local equipped area of play)
 - Proposed attenuation basin
 - Proposed swale
 - Proposed Rain Garden
 - Opportunity to provide new PROW link
 - Opportunity for views to Holy Trinity Church
 - Allotments

c.180 homes @ 40dph net

CLIENT:
Bloor Homes

PROJECT:
Land at Wickwar

DRAWING:
Framework Masterplan

PROJECT NUMBER:
BLOA3039

DRAWING NUMBER: 3001 **CHECKED BY:** CD

REVISION: M **STATUS:** Post-Submission

DATE: 03/01/2023 **SCALE:** 1:2500 @ A3

Appendix EDP 2
Landscape Strategy
(edp6190_d026a 13 February 2023 MMm/Eba)



the environmental
dimension partnership

Registered office: 01285 740427 - www.edp-uk.co.uk - info@edp-uk.co.uk

date 13 FEBRUARY 2023
drawing number edp6190_d026a
scale 1:2500 @ A3
drawn by MMm
checked EBa
QA JFr

client Bloor Homes (South West)
project title Land at South Farm, Wickwar
drawing title Landscape Strategy

Appendix EDP 3

South Gloucestershire Council Ecology Comments

South Gloucestershire Council

Department for Environment and Community Services
Strategic Planning Policy and Specialist Advice
PO Box 1954
Bristol
BS37 0DD

Memorandum to: Charmian Eyre-Walker

From: Marie Fleming

cc:

Date: 08/02/2023

Your Reference: P22/01300/O

Telephone: 0121 213 3964

Email: marie-d.fleming@arup.com

RE: Land At Sodbury Road Wickwar South Gloucestershire GL12 8PG

Description of Proposal

Erection of up to 180 dwellings, a local shop and associated infrastructure (Outline) with access to be determined; all other matters reserved.

Description of Site

The Application Site comprises agricultural fields including arable crops, improved/poor semi-improved grassland and hedgerows.



Planning layout, Aerial imagery, Planning layout

Initial Ecology Comments

Designated sites for Nature Conservation (European Sites, SSSI's and local sites (Sites of Nature Conservation Interest or Regionally Important Geological Sites):

Bishop's Hill Woods SSSI (670m east from the Application Site) and Lower Woods SSSI (1.2km east of the Application Site) identified within the potential zone of influence of the Application Site. The appraisal considers no direct impacts to the designated sites or qualifying features. Indirect effects identified include recreation pressure and habitat degradation. Open green spaces included as part of development proposals to include semi-natural habitats such as allotments and play areas. I recommend that the design and management proposals are outlined within a Landscape and Ecology Management Plan.

I agree with the Landscape Architect's recommendations dated 21 June 2022 for the requirement of a Landscape and Ecology Management Plan covering the enabling works operations/period and a subsequent 20 Year management period, identifying existing and proposed landscape and ecology related site assets, associated management objectives, schedules of annual maintenance work together with longer term management operations.

I agree with the concerns of Natural England in their Correspondence dated 03 August 2022 for Lower Woods SSSI & Bishop's Hill Wood SSSI with regards to recreational pressure on these sites and the potential for settlement growth in close proximity to Lower Woods SSSI and Bishop's Hill Wood SSSI to result in an adverse effect on the reasons for designation for these sites.

I agree with the concerns of the Gloucestershire Wildlife Trust's Public Comment dated 12 August 2022 regarding recreational pressure on the two sites. The Trust disagrees that the inclusion of limited green space along the western boundary of the Application Site will serve to reduce footfall at nearby designated sites is sufficient. The Trust's view is that *'the proposals have not taken sufficient steps to avoid and mitigate the adverse impacts of substantial additional recreation pressure it is highly likely to impose on Lower Woods SSSI and nature reserve. As a result, it will be detrimental to a nationally designated biodiversity site and cause undue financial burden to a local charity'*.

Ladden Brook SNCI is within the potential zone of influence of the application site and no direct impacts anticipated. Indirect impacts may arise during construction and operation e.g. contamination run off, pollution incidents leading to deterioration of water quality and increase in suspended solids. I would expect pollution prevention measures to be outlined within a Construction Environmental Management Plan.

Habitats (including habitats of principal importance (Priority Habitats) Section 41 Natural Environment and Rural Communities (NERC) Act 2006:

- **Hedgerows**

Hedgerow H6 was considered to qualify as an Important hedgerow. Native hedgerows are considered at local value and loss of circa 28m with associated culverting of ditches and to incorporate access roads and footpath links. Creation of 670m new species-rich hedgerows, tree and shrub planting to enhance retained hedgerows along the Application Site boundaries. Root protection buffers included within the design and protective fencing to be erected as recommended within BS5837:2012 to protect retained habitats on site. I would expect the provision for hedgerow creation and management to be outlined within a Landscape and Ecology Management Plan.

- **Arable field margins**

Arable field margins are Section 41 habitats of principal importance. The Ecological Appraisal does not acknowledge that field margins are Section 41 habitats and locations are not mapped/target noted as part of the Phase 1 survey.

Invasive species (INNS)

INNS is not acknowledged/included within the report therefore recommend a pre-construction walkover survey of the Application Site, and if required, an INNS management plan to be prepared by a suitably qualified/specialist INNS consultant.

Species protected under the Conservation Regulations 2017 ('European Protected Species') as well as the Wildlife & Countryside Act 1981 (as amended):

- **Bats**

Roosting - A suite of surveys was undertaken, and the Ecological Appraisal considered bats to be of local importance. Three trees identified as moderate potential and two as low potential. T3 (moderate) and T1 (low) are potentially lost. The aerial inspection did not identify evidence of bats and concluded that no impacts to tree roosting bats anticipated, however the Ecological Appraisal does not recommend emergence / re-entry surveys for the moderate tree (T3) potentially lost to facilitate construction. Further clarification is required for the absence of emergence/re-entry surveys.

Foraging and commuting bats - The Ecological Appraisal states that '*Anabat SD2 (hereafter referred to as 'Anabats')* were deployed in two locations throughout the Application Site'. The bat report plan (refer to drawing title '*Plan EDP 4a: Automated Bat Detector Locations and Transect Route*') shows the location of two bat detectors outside of the red line boundary. There no automated bat detectors deployed within the Application Site boundary to further consider/understand bats how bats utilise the Application Site. Reference to the Bat Conservation Trust's Bat Surveys: for Professional Ecologists: Good Practice Guidelines was made in the report, however I wish to seek further clarification on why both detectors were deployed outside of the Application Site without any within the Application Site.

I agree with the recommendations outlined in the Ecological Appraisal for the installation of Schwegler bat boxes on retained suitable semi-mature trees for biodiversity enhancements.

As highlighted by the Lightning Engineer on 12 April 2022, no lighting designs have been submitted on the planning portal. Any lighting designs should adhere to the Bat Conservation Trust and the Institution of Lighting Professional Guidance Note.

The Ecology Appraisal acknowledges the requirement of a lighting strategy sensitive to bats, which should be secured through condition.

- **Great crested newt (GCN)**

The Ecology Appraisal notes 'a pond circa. 10m' is present north of the application site. The pond P1 within the drawing '*Plan EDP 8: Great Crested Newt Survey Results*' show this pond to be >10m. Clarification is required to confirm where this 'pond circa. 10m' is located. A low population is concluded therefore I would expect avoidance and mitigation measures for GCN outlined within an amphibian mitigation strategy and appropriate Natural England licence application.

- **Dormouse**

The surveys were undertaken within guidelines, however nest tubes are known to under detect in low density areas. It is disappointing that footprint tunnels were not used as supplementary

technique. Guidance for these methods have been made available by People's Trust for Endangered Species (PTES) and the Chartered Institute of Ecology and Environmental Management (CIEEM) since 2018. Clarification is needed to confirm that the 23.11.21 survey date is 23.11.20 in Table EDO A7.1 of the Ecological Appraisal. Hedgerow creation proposed will provide foraging and dispersal habitats for dormice.

The surveys did not identify any evidence of dormice and are not considered further.

- **Otter**

A single otter spraint was found along Ladden Brook SNCI. The Ecological Appraisal concluded the wet ditch network may facilitate the dispersal of otter across the wider landscape whilst associated hedgerows provide some cover to this species. Avoidance and mitigation measures for otter to be included within a Precautionary Working Method Plan/Construction Environmental Management Plan.

Species protected under the Wildlife and Countryside Act 1981 (as amended):

- **Nesting birds**

The Ecological Appraisal considered breeding birds to be of local importance. I would expect timing of vegetation clearance works to be undertaken outside of nesting bird season. If this is not possible, nesting bird checks and vegetation clearance to be undertaken by and under supervision of a suitably qualified ecologist.

- **Reptiles**

The Ecological Appraisal scoped out reptile surveys due to limited extent of suitable habitat for common reptiles. The Ecological Appraisal acknowledges that it is unlikely that the Application Site supports a significant reptile population, and low numbers could be present in field margins. Avoidance and mitigation measures for reptiles to be included within a Precautionary Working Method Plan/Construction Environmental Management Plan.

- **Water vole**

The surveys did not identify any evidence of water vole and are not considered further in this report.

- **Fish**

There is a ditch network present within the Application Site. The Ecological Appraisal noted poor water quality and absence of a notable fish population of value. Fish are not considered further in this report. I would expect pollution prevention measures to the ditch network to be outlined within a Construction Environmental Management Plan.

Badger Act 1992

There is no evidence of setts within Application Site. Three subsidiary and a single outlier sett were recorded outside the Application Site within wider survey area. Due to the presence of suitable habitats for badgers within the Application Site, avoidance and mitigation measures for badger to be included within a Precautionary Working Method Plan/Construction Environmental Management Plan. A pre-construction survey should form a planning condition.

Species of principal importance (Priority Species) Section 41 Natural Environment and Rural Communities (NERC) Act and Local Biodiversity Action Plan Species:

- **Hedgehog**

It is disappointing that hedgehogs are not acknowledged as a Local BAP or Section 41 species or discussed results from desk study records searches and there is suitable habitat within the Application Site for hedgehogs. In addition, hedgehogs are listed as Vulnerable on the Red List for England's Mammals. Avoidance and mitigation measures for hedgehogs to be included within a Precautionary Working Method Plan/Construction Environmental Management Plan.

- **Invertebrates**

Invertebrate surveys were scoped out as the Application Site is dominated by agricultural land likely to support a limited assemblage of common and widespread species. Invertebrates are not considered further in this report.

- **Amphibians**

General measures for the welfare of common amphibians to be included within a Precautionary Working Method Plan/Construction Environmental Management Plan.

Birds listed on the Red, Amber or Green Lists of Species of Conservation Concern (PSP19)

Six red list species and seven amber list species were noted in the Ecology Appraisal, of which five are priority species. BoCC5 was published on 01 December 2021. I recommend that this list is revised to check if bird status have changed since BoCC4.

The breeding bird assemblage within the Application Site has been assessed as local importance. Avoidance and mitigation measures for breeding birds to be included within a Precautionary Working Method Plan/Construction Environmental Management Plan.

Wildlife corridors or new green infrastructure, which enable the dispersal and favourable status of flora and fauna species (PSP19) and the protection and enhancement of biodiversity through safeguarding ecological networks (NPPF para 174)

Considerations for minimising loss of hedgerows and compensation for unavoidable losses to be outlined within a Landscape and Ecology Management Plan.

Brownfield sites supporting notable assemblages of invertebrates (PSP19)

Not applicable as brownfield sites are not present on site.

Biodiversity enhancements and biodiversity gain (NPPF para 174 (b) and 175 (d) and PSP19)

It is positive that calculations indicate that the development proposes to deliver >20% habitat units and >34% hedgerow units through creation and enhancement on-site with Trading Rules satisfied.

- The wet and dry ditch habitat (D1, D2, D3, D7 and D8) not accounted for in the metric. Whilst this is included in association as a hedgerow feature, the ditch habitat should be included within the River calculation tab and any section that will be a culvert.

A-1 Site Habitat Baseline:

- Incomplete cells 'Area Retained', 'Area enhanced' and 'Bespoke compensation agreed for unacceptable losses'. The 'Assessor comments' column is not readable and the 'Reviewer comments' column is not complete;

- It is not clear how the condition score was generated for modified grassland for baseline. Assessor comments should include this justification;
- Strategic significance for crops '*Area/compensation not in local strategy/no local strategy*'. Arable is a habitat included in the Local BAP. Consider Strategic Significance '*Within area formally identified in local strategy*';

A-2 Site Habitat Creation:

- Incomplete cells '*Habitat created in advance/years*' and '*Delay in starting habitat creation/years*'. The '*Assessor comments*' column is not readable and the '*Reviewer comments*' column is not complete;
- It is not clear how the condition score was generated for each of the habitats (where applicable);
- It is not clear how the local area for play and local equipped area for play and open space are accounted for;
- Habitat types such as mixed scrub and other neutral grassland are ecologically valuable. Consider Strategic Significance '*Location ecologically desirable but not in local strategy*'.

A-3 Site Habitat Enhancement:

- It is not clear how the condition score '*Moderate*' was generated for other neutral grassland;
- Neutral grassland is ecologically valuable. Consider Strategic Significance '*Location ecologically desirable but not in local strategy*'.
- Incomplete cells '*Habitat created in advance/years*' and '*Delay in starting habitat creation/years*'. The '*Assessor comments*' column is not readable and the '*Reviewer comments*' column is not complete;

B-1 Site Hedge Baseline

- Incomplete cells for '*Length retained*' and '*Length enhanced*'. The '*Assessor comments*' column is not readable and the '*Reviewer comments*' column is not complete;
- Hedgerows were assessed as '*Area/compensation not in local strategy/no local strategy*' however are included within the Local BAP. Recommend that these are amended to '*Within area formally identified in local strategy*';

B-2 Site Hedge Creation

- 'New hedge number' not complete;
- It is not clear how the condition score '*Good*' was generated
- Hedgerows were assessed as '*Area/compensation not in local strategy/no local strategy*' however are included within the Local BAP. Recommend that these are amended to '*Within area formally identified in local strategy*';
- Incomplete cells '*Habitat created in advance/years*' and '*Delay in starting habitat creation/years*'. The '*Assessor comments*' column and the '*Reviewer comments*' column are not complete;

B-2 Site Hedge Creation

- It is not clear how the condition score '*Good*' was generated
- Hedgerows were assessed as '*Area/compensation not in local strategy/no local strategy*' however are included within the Local BAP. Recommend that these are amended to '*Within area formally identified in local strategy*';

- Incomplete cells '*Habitat created in advance/years*' and '*Delay in starting habitat creation/years*'. The '*Assessor comments*' column and the '*Reviewer comments*' column are not complete;

Paragraph on page 3 incomplete: '*The remainder of green space planting has been split between wildflower grassland and. The target condition for wildflower grasses and scrub is appropriately higher as future management plans will seek to maintain these for their benefit to wildlife;*'

'BIA' is included in 3.4 of the Biodiversity Net Gain Calculations report. The definition of BIA is required.

National Planning Policy Framework (NPPF) and Local Plan Policy (South Gloucestershire Local Plan: Policies, Sites and Places Plan (PSP) (adopted November 2017)) Context

NPPF Para 170 – 177 (Conserving and Enhancing the Natural Environment), National Planning Policy Framework

PSP18 – (Statutory Wildlife Sites: European Sites and Sites of Special Scientific Interest (SSSIs)) - South Gloucestershire Local Plan (PSP Plan)

PSP19 (Wider Biodiversity) - South Gloucestershire Local Plan (PSP Plan)

CS9 (Managing the Environment and Heritage) - Core Strategy

CS2 (Green Infrastructure) - Core Strategy

PSP3 (Trees and Woodland) - South Gloucestershire Local Plan (PSP Plan)

Conclusion and Recommendations

I would recommend that the stakeholder concerns are addressed especially Natural England and Gloucestershire Wildlife Trust comments regarding recreational pressure on Bishop's Hill Woods SSSI and Lower Woods SSSI prior to planning determination.

A lighting design to be submitted to support the planning application and implementation of a sensitive lighting strategy for bats to be part of a planning condition.

A low population of GCN is concluded therefore I would expect avoidance and mitigation measures for GCN outlined within an amphibian mitigation strategy and secured through condition with appropriate Natural England licence application.

I recommend that a detailed Landscape Masterplan and a Landscape and Ecological Management Plan is secured through a condition to demonstrate the delivery of biodiversity net gain for the habitats proposed with the proposed target conditions. In addition, the Landscape and Ecological Management Plan to demonstrate how maintenance and management for a 30-year period can be achieved. I recommend that the biodiversity net gain is recalculated, and the metric completed following detailed Landscape Masterplan, to include UK Habitat Classification and provide detailed condition scoring justification. The delivery of the proposed >20% biodiversity net gain to be a condition of planning.

It is recommended that all proposed construction stage avoidance and ecological mitigation is set out within a Precautionary Working Method Plan/Construction Environmental Management Plan and secured through a condition.

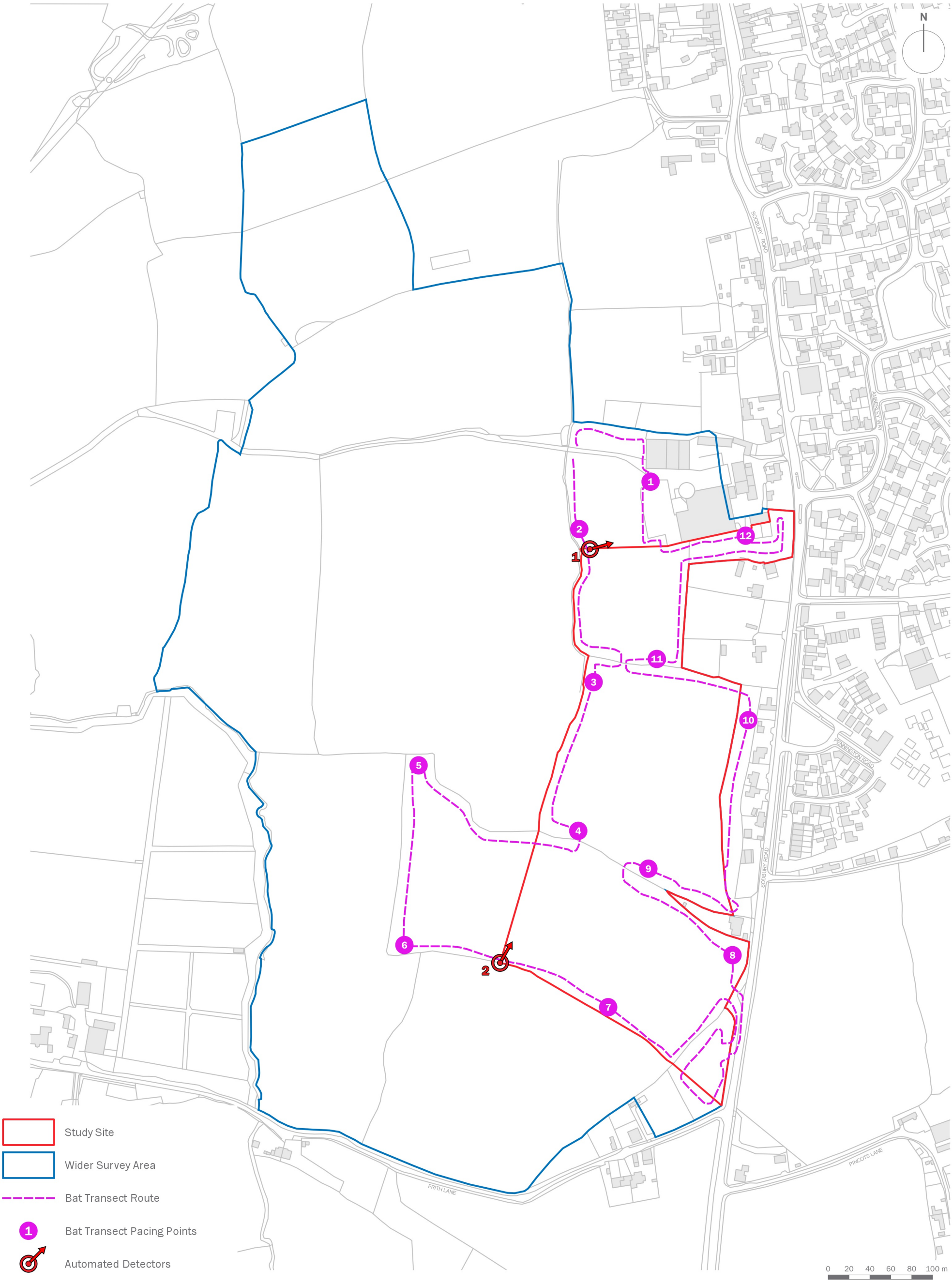
All concerns within my comments to be addressed prior to determination.

Marie Fleming

Senior Ecologist, Arup

On behalf of South Gloucestershire Council

Appendix EDP 4
Automated Bat Detector Locations and Transect Routes
(edp6190_d017a 22 February 2023 DJ/EWi)





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