

Ambrose Way, Impington Ecology Briefing Paper edp5518_r004d

1. Introduction

- 1.1 The Environmental Dimension Partnership Ltd (EDP) was instructed by Martin Grant Homes to undertake an ecology desk study and an Extended Phase 1 Habitat survey of Ambrose Way, Impington (hereafter referred to as 'the Site'). This briefing paper provides the results of those studies, recommendations for future survey, any ecological constraints, and opportunities for mitigation and enhancement measures to ensure compliance with planning policy.
- 1.2 EDP is an independent environmental planning consultancy with offices in Cirencester, Cheltenham, and Cardiff. 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).

Site Context

1.3 The Site is located to the east of Histon, off Ambrose Way. The Site is bounded by agricultural land to the north and east, with existing residential development to the west and recent residential development to the south of the Site. The Site measures 8.71 hectares (ha) and comprises two grassland fields that are bounded by hedgerows and ditches. The location and extent of the Site is illustrated on **Plan EDP C1**.

2. Planning Policy

National Policy

2.1 There are several mechanisms through which habitats receive protection with the statutory and non-statutory designated site frameworks. For instance, certain habitats are identified in policies within National Planning Policy Framework (NPPF)¹. Furthermore, the NPPF states:

"180. When determining planning applications, local planning authorities should apply the following principles:

¹ Ministry of Housing, Communities and Local Government (July 2021) National Planning Policy Framework. [Online]. Available from: https://www.gov.uk/government/publications/national-planning-policy-framework-2 [Accessed 23 November 2021].



 a) If significant harm to biodiversity resulting from a development cannot be avoided (through locating on alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused;

...

- development proposals resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons and a suitable compensation strategy exists; and
- d) development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to improve biodiversity in and around developments should be integrated as part of their design, especially where this can secure measurable net gains for biodiversity or enhance public access to nature where this is appropriate."

Local Policy

- 2.2 The South Cambridge Local Plan² was adopted by South Cambridge District Council in 2018. Policy NH/4: Biodiversity of the South Cambridge Local Plan states that "development proposals where the primary objective is to conserve or enhance biodiversity will be permitted".
- 2.3 In addition, the policy requires new development must aim to "maintain, enhance, restore or add to biodiversity".
- 2.4 With regards to protected species and habitats, the policy states:
 - "If significant harm to the population or conservation status of a Protected Species, Priority Species or Priority Habitat resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission will be refused."
- 2.5 These policies are reflected in the draft proposals for the Greater Cambridge Local Plan³. Policy BG/BG: Biodiversity and geodiversity states;
 - "The policy will require development to achieve a minimum 20% biodiversity net gain, noting that:
 - Biodiversity net gain calculations should be submitted using the Defra Biodiversity Metric 3.0 or its successor;

² South Cambridge District Council (Adopted 2018) South Cambridge Local Plan. [Online] Available from: https://www.scambs.gov.uk/media/12740/south-cambridgeshire-adopted-local-plan-270918_sml.pdf [Accessed 28 November 2019].

³ Greater Cambridge Local Plan. [Online] Available from- https://www.greatercambridgeplanning.org/localplan [Accessed 23 November 2021]



- Biodiversity net gain should be delivered on-site where possible, recognising that for smaller developments in particular, more significant and long-lasting biodiversity enhancements may be achieved via contributions towards off-site, larger scale projects;
- Where it is agreed that off-site habitat measures would bring greater biodiversity benefits than on-site measures, these must be consistent with the strategic aims of the Greater Cambridge green infrastructure network strategic initiatives; and
- The Councils will seek to use planning conditions to secure on site habitat creation and its long-term management, and obligations where BNG is on land outside the applicant's control.

The policy will also seek wider environmental net gains. Ways of measuring this are currently being developed at a national level, and at the draft plan stage we will review whether and how to implement this policy requirement.

The policy will state that development proposals adversely affecting sites of biodiversity or geological importance will not normally be permitted. Exceptions will only be made where the public benefits significantly outweigh any adverse impacts. In such cases where development is permitted, we will require that the intrinsic natural features of particular interest are safeguarded or enhanced.

The policy will require development to mitigate evidenced recreational impacts on designated biodiversity and geodiversity sites, including applying Natural England's Impact Risk Zones for Sites of Special Scientific importance."

2.6 Policy BG/GI: Green Infrastructure offer protection for the wider green infrastructure network. The policy states;

"...

The policy will also require development proposals to protect and enhance the wider green infrastructure network as follows:

- Require all new development to protect the existing green infrastructure assets, which will be identified on the policies map which will accompany the local plan;
- Our Green Infrastructure Opportunity Mapping has identified a number of strategic green infrastructure initiatives which have the potential to enhance the existing network. This policy will require all new development to help deliver or contribute to support delivery of the green infrastructure strategic initiative objectives. Contributions will include the establishment, enhancement and the on-going management costs."



- 2.7 Policy BG/TC: Improving Tree Canopy Cover and the Tree Population offers protection to existing hedgerows and trees within a site. The policy states;
 - "The policy will require development proposals to:
 - Preserve, protect and increase the amount and distribution of tree canopy cover.
 - Protect and enhance the tree population on site, including its diversity and distribution.
 - Protect existing trees of value (including landscape, heritage, cultural, amenity, biodiversity, ecosystem service or aesthetic value) as measured by a recognised tool such as iTree.
 - Protect existing hedgerows and the surrounding land that supports them, and to require the planting of new ones where appropriate
 - Provide sufficient space above and below ground for trees and other vegetation to mature.
 - Provide appropriate replacement tree or hedgerow planting, where felling is proved necessary.

The policy will also encourage the provision of new woodland of locally appropriate species in appropriate locations."

3. Methodology

- 3.1 A suitably experienced ecologist undertook an Extended Phase 1 survey on 01 April 2019 with reference to published guidance⁴. This was augmented with an ecological desk study using web-based sources including the Multi-Agency Geographic Information for the Countryside (MAGIC) website⁵. A request was made to Cambridgeshire and Peterborough Environmental Records Centre (CPERC) for non-statutory designations and species records within 2km of the Site and Annex II bat records⁶ within 6km of the Site.
- 3.2 The purpose of these baseline investigations was to identify any potentially significant ('in principle') ecological constraints and opportunities to development proposed within the Site.
- 3.3 Based upon established geographical value systems⁷, value is assigned to ecological features by EDP within this report on a scale of International/European (highest value) > National > Regional > County > District > Local > Site-level.

⁴ Joint Nature Conservation Council (2010) *Handbook for Phase 1 Habitat Survey – A Technique for Environmental Audit* (reprinted with minor corrections for original Nature Conservancy Council publication).

⁵ https://magic.defra.gov.uk/ [Accessed 23 November 2021]

⁶ Bat species listed in Annex II of the European Commission Habitats Directive, namely Greater horseshoe, Lesser horseshoe, Barbastelle and Bechstein's bats

⁷ CIEEM (2018). Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine version 1.1 Chartered Institute of Ecology and Environmental Management, Winchester.



3.4 Except where indicated otherwise, 'Priority Species' and 'Priority Habitats' refers to species and habitats of principal importance for nature conservation listed under Section 41 of the *Natural Environment and Rural Communities Act 2006*, to which Local Planning Authorities (LPA) must have regard when exercising their functions under Section 40 of the Act.

4. Results

Designations

4.1 There are three statutory designations of International value within a distance of 15km of the Site, both designated for their wetland resource. Whilst there are two statutory sites of National value within 5km of the Site, these are designated for geological reasons and are therefore not discussed further in this report. There are no statutory sites of Local importance within 2km of the Site. Further information regarding these sites is shown in **Table EDP 4.1**.

 Table EDP 4.1:
 Statutory Designations within the Site's Potential Zone of Influence

| Name | Designation | Distance and Direction from Site | Main Interest Feature(s) |
|---------------|--------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Wicken Fen/- | Ramsar, | 11km | Wetland of international importance. |
| Fenland | Special Area of Conservation (SAC) Overlapping designations of National Value (SSSI and National Nature Reserves (NNR)) | north-east | Vegetation includes rushes, sedges and orchids. There is a diverse assemblage of wetland plants, invertebrates and waterbirds. This includes teal (<i>Anas crecca</i>), pochard (<i>Aythya farina</i>) and tufted duck (<i>Aythya fuligula</i>). |
| Ouse Washes | Ramsar, Special Protection Area (SPA) and (SAC) Overlapping designations of National Value (SSSI) | 12km north-west | Wetland of international importance, with an abundant breeding bird assemblage including teal, pochard, wigeon (Anas penelope), shoveler (Anas clypeata) and Bewick's swan (Cygnus bewickii). Also designated as containing Annex I species, spined loach (Cobitis taenia). |
| Eversden and | SAC | 14km | Ancient semi-natural woodland designated |
| Wimpole Woods | | south-west | for its population of barbastelle bats |
| SAC | Overlapping designations of | | (Barbastella barbastellus). |



| Name | Designation | Distance and Direction from Site | Main Interest Feature(s) |
|------|--------------------------|----------------------------------|--------------------------|
| | National Value (SSSI) | | |

- 4.2 The Site is situated within a SSSI Impact Risk Zone, however, this relates to aviation and mineral, oil and gas extraction and does not concern residential development.
- 4.3 On this basis, and due to reasons of distance and a lack of obvious receptor-effect pathways (such as connection via surface water course), EDP considers it is unlikely that the designated sites would require significant consideration as part of any future planning application.
- 4.4 There are two non-statutory designations of County-level value or less (or other designations that should be considered at this level), within 2km of the Site, as shown in **Table EDP 4.2**.

Table EDP 4.2: Non-statutory Designations within the Site's Potential Zone of Influence

| Name | Designation | Distance and Direction from | Main Interest Feature(s) |
|-----------------|----------------|-----------------------------|------------------------------------------------|
| | | Site | |
| Beach Ditch and | County | 1.7km north | Supports more than five submerged, |
| Engine Drain | Wildlife Site | | floating and emergent plant species per |
| | of County | | 20m stretch (and more than 10 species per |
| | Value | | 20m if bank flora is included). |
| King's Hedges | City Wildlife | 2km south-east | Supports hedgerow at least 100m in length |
| Hedgerow | Site of County | | and 2m in width at its widest point with four |
| | Value | | or more woody species, and with at least |
| | | | part of the hedge allowed to flower and fruit. |

- 4.5 EDP considers it unlikely, due to reasons of distance and lack of obvious receptor-effect pathways (such as connection via surface water course) and habitat connection, that the two non-statutory sites would require consideration as part of any future planning application.
- 4.6 The Site contains no known Priority Habitat. However, five small areas of Priority Habitat (under one ha) occur within 500m. This includes an area of deciduous woodland to the south-west and traditional orchard to the south, east and north of the Site.

Habitats and Species

- 4.7 As shown on **Plan EDP C1**, the Site comprises predominantly improved grassland, with a hedgerow network of varying conditions, management and maturity. Species include hawthorn (*Crataegus monogyna*), elm (*Ulmus minor*) and elder (*Sambucus nigra*).
- 4.8 In terms of the semi-improved grassland, the northern field is more species diverse in comparison to the two southern fields. It contains species such as ox-eye daisy (Leucanthemum vulgare), bristly ox-tongue (Helminthotheca echioides), smooth tare (Vicia tetrasperma), meadow buttercup (Ranunculus acris), curled dock (Rumex crispus), false



- oat grass (Arrhenatherum elatius), cock's foot (Dactylis glomerata), spear thistle (Cirsium vulgare), cut-leaved and dove's-foot cranesbill (Geranium dissectum, G. molle), ribwort plantain (Plantago lanceolata), hard rush (Juncus effusus), tufted hair grass (Deschampsia cespitosa), red fescue (Festuca rubra), yarrow (Achillea millefolium) and knapweed (Centaurea nigra).
- 4.9 Additionally, two ditches which contain water are found along the southern and northern boundary. The southern ditch is shallow and choked with willowherb (*Epilobium sp.*) and bramble (*Rubus fruticosus* agg.). The northern ditch is a steep sided ditch with bramble along the banks. Within the ditch is branched bur-weed (*Sparganium erectum*), fool's water-cress (*Apium nodiflorum*) and algae. A dry ditch is located along the south-western boundary.
- 4.10 The on-site grasslands are considered by EDP to be of Local-level intrinsic nature conservation value or less, being limited in distinctiveness, extent, botanical species richness or a combination. EDP considers that none of these on-site habitats/land uses represent 'in principle' (significant) ecological constraints that otherwise may preclude development. However, the loss of large areas of semi-improved neutral grassland is likely to result in the need for significant mitigation and/or off-setting as a result of the requirement to achieve a net gain in biodiversity, in line with local and national planning policy.
- 4.11 On-site habitats are likely to support a range of protected and Priority Species populations/assemblages. With reference to CPERC results, this is likely to include reptiles and a variety of bird and invertebrate species. It may also include water vole (*Arvicola amphibius*) and/or other notable mammals (including brown hare (*Lepus europaeus*) and otter (*Lutra lutra*)).
- 4.12 During the Phase 1 survey, an active badger (*Meles meles*) sett with removed bedding was found within an area of scrub comprising of bramble on the southern boundary. Additionally, a tree along the southern boundary of the Site is considered to have moderate bat roosting potential. Features identified include flaking bark, dead wood and a woodpecker hole.
- 4.13 There appear to be two ponds within 250m of the Site, both of which are located to the west of the Site, with the closest situated 180m away. The ponds are separated from the Site by existing development and the Glebe Way (B1049), which is a busy road with a kerbed pavement. This would act as a barrier to great crested newt dispersal. No records of great crested newts (*Triturus cristatus*) were returned by CPERC within 1km of the Site. The closest record was from approximately 1.8km south-west.
- 4.14 The grassland field to the south of the Site was used as a receptor site for reptiles during a translocation for a previous development. Common lizard (*Zootoca vivipara*) are therefore present in the wider landscape. The Site represents a large area of suitable habitat for this species, and it is likely that the population translocated into the field to the south will have expanded into suitable habitats within the Site.
- 4.15 The position of the Site, next to existing residential development, and the management regime and limited intrinsic value of the southernmost fields will, in EDP's opinion, limit the value of any



protected species populations/assemblages; they are likely to be of only Local-level value or less, although there is a possibility for more valuable assemblages of species to be present, subject to further surveys.

4.16 The scope of further Phase 2 survey work for protected/Priority Species populations/assemblages will be required to support any future planning application. A focused and proportionate survey programme for the following species/species groups is likely to be required: foraging and roosting bats; badgers; water vole and otter; and reptiles. The results of the Phase 2 survey work and consultations will influence the final masterplan proposals and will enable the design of appropriate and proportionate levels of ecological mitigation measures in relation to fauna species.

5. Opportunities and Constraints

- 5.1 The Site is not considered by EDP to be directly or indirectly constrained by other off-site designations. In addition, EDP considers that there are no 'in principle' (significant) ecological constraints posed by the habitats present on-site which are mostly low in their intrinsic value and are unlikely to support either unique or exceptional species populations/assemblages.
- 5.2 A focused suite of Phase 2 surveys and an ecological assessment will be required to support any planning application coming forward for the Site and to inform the design of a robust masterplan.
- 5.3 Given the relatively low intrinsic value of the majority of habitats present, and dependent on sensitive habitat retention and mitigation measures, the Site represents an opportunity to enhance existing habitats, and the provision of new habitats to provide further opportunities for wildlife within the Site.
- 5.4 The northernmost field holds slightly higher ecological value given the presence of semiimproved neutral grassland and scattered scrub. These habitats do no present an 'in principle' constraint to development but will need to be considered as part of the overall mitigation/compensation package for the Site and may limit the potential to gain a biodiversity net gain of 20% within the Site itself.
- 5.5 Therefore, there are no obvious 'in principle' (significant) ecological constraints that would preclude development, and which cannot be avoided by good design. Moreover, through delivery of a suitable mitigation and compensation package, EDP considers that the Site presents an opportunity to deliver a net gain to local biodiversity and access to nature for community wellbeing, ensuring local and national policy compliance.



6. Ecological Recommendations

- 6.1 The 'Ambrose Way, Impington Framework Plan' (as included as **Appendix EDP 1**) includes the retention and creation of key habitats and, as such, it is considered that the majority of impacts on habitats and protected species (if present) can be avoided through proposed measures including the following:
 - New native tree/shrub/hedgerow planting to enhance the retained boundary network;
 - Ecological enhancement of the boundary ditch network;
 - Enhancement and management of areas of existing semi-improved neutral grassland to promote wildflower growth and diversity; and
 - Appropriate design of sustainable drainage scheme (Sustainable urban Drainage System (SuDS)) features (such as permanent ponds with varying shelf profiles and aquatic planting) to increase biodiversity value.
- 6.2 Further benefits can be achieved with the additional following recommendations and enhancement measures, which can be provided on-site:
 - Creation of additional wildflower grassland in open space within the south and west of the Site:
 - Incorporation of a range of bat and bird boxes on retained trees and new buildings to provide new roosting and nesting opportunities; and
 - Wildlife-sensitive lighting scheme to minimise the effects of artificial lighting on commuting and foraging bats and other nocturnal wildlife.
- 6.3 In addition to the on-site measures and given the size of the Site and presence of semi-natural grasslands (albeit of relatively low value), it is likely a biodiversity offsetting scheme will be required to achieve a 20% net gain, as proposed in the draft Greater Cambridge Local Plan. This could be achieved through the provision of enhancements on land within the proposed North Cambridge Green Space or through financial contributions to an approved offsetting scheme. Any offsetting options should be approved by the LPA. It is possible, subject to further survey, that land used to achieve a 20% net gain to biodiversity may also be suitable as a receptor site for reptiles translocated from within the Site if required.

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Appendix EDP 1
Ambrose Way, Impington - Concept Masterplan
(edp5518_d023c 19 November 2021 CG/PW)







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date 19 NOVEMBER 2021 drawing number edp5518_d023c scale 1:2500 CG drawn by checked QA

client

Martin Grant Homes

project title

Ambrose Way, Impington

drawing title

Concept Masterplan

Ambrose Way, Impington Ecology Briefing Paper edp5518_r004d



Plan EDP C1
Phase 1 Habitat Survey
(edp5518_d016b 01 December 2021 GY/WC)

