PRELIMINARY ECOLOGICAL APPRAISAL AND GREEN INFRASTRUCTURE STATEMENT

WREXHAM UNIVERSITY CAMPUS, WREXHAM

17 June 2026

Sambrook Associates Ltd
5 Barnhill Grange | Old Coach Road | Barnhill | Broxton | Cheshire CH3 9JJ
sambrookassociates.co.uk

Report prepared by	Rebecca Sambrook
Date	17-06-2026
Report Reference	R001
Version	V1
Status	Draft

This report has been prepared by Sambrook Associates Ltd on behalf of Cityheart in connection with the development of student accommodation at Wrexham University Campus, Wrexham and takes into account their particular instructions and requirements. It is not intended for, and should not be relied on, by any third party and no responsibility is undertaken to any third party.

Contents

1 INTRODUCTION 4
1.1 Background Information 4
1.2 Site Description 4
2 LEGISLATION AND PLANNING POLICY 5
3 METHODOLOGY 8
3.1 Introduction 8
3.2 Desk-top Study 8
3.3 Walk-over Survey 8
3.4 Limitations 9
4 RESULTS 10
4.1 Introduction 10
4.2 Desk-top Study 10
4.3 Walk-over Survey 10
4.4 Appraisal of Potential Effects 12
5 GREEN INFRASTRUCTURE STATEMENT 14
5.1 Assessed Losses 14
5.2 Proposed Biodiversity Net Benefit 14
6 CONCLUSION & RECOMMENDATIONS 16
7 REFERENCES 17

1 INTRODUCTION

1.1 Background Information

1.1.1 Sambrook Associates Ltd was instructed by Cityheart to undertake a Preliminary Ecological Appraisal (PEA) in relation to the construction of student accommodation blocks, associated car parking and landscaping on an existing carpark within the university campus, Wrexham.

1.1.2 As part of the Appraisal, a site walk-over comprising an extended phase 1 habitat survey of the Site and a desktop study were undertaken in 2026. This report provides the results of these, as well as an appraisal of the potential effects the proposed development may have on biodiversity, and recommendations for further survey, mitigation and enhancement, where required. A Green Infrastructure Statement is also included in this report.

1.1.3 The aim of the appraisal is to provide sufficient ecological information to inform the planning application. The objectives of the study were to:

- Provide baseline information on the current ecological features both on-site and in the immediate surrounding area (up to 30m where accessible);
- Identify the presence or potential presence of any protected species or habitats and provide an appraisal of potential effects that the proposed development may have on these;
- Identify the proximity of any sites designated for nature conservation interest and provide an appraisal of potential effects that the proposed development may have on these; and
- Provide recommendations for further survey work and / or mitigation measures if required and present opportunities for habitat enhancement.

1.1.4 In consideration of the nature of the proposed work (principally constructing within an urban environment), the assessment focuses on bats and birds but habitats and other mobile species such as great crested newts and badgers are also assessed.

1.2 Site Description

1.2.1 The Site is in Wrexham City Centre. It is an existing tarmacadam car park within the university campus.

1.2.2 The proposed development is hereby referred to as the Site and comprises the land within the red-line boundary. The walk-over survey covered an area greater than this (where access permitted) for mobile species such as great crested newts, badgers, water vole and otter and to look at how nearby habitats may influence the use of the site by bats.

2 LEGISLATION AND PLANNING POLICY

2.1.1 Many sites, animals and plants are protected by European and/or UK legislation either because of their decline across Europe and the UK or due to the persecution they have placed upon them by negligent or illegal acts such as baiting or trade. Legislation is also in place to prevent the spread of introduced or non-native invasive species and harmful weeds. When undertaking an appraisal of a proposed development, such legislation is taken into account as follows.

- **European:** Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora (the 'Habitats Directive'); and Directive 2009/147/EC of the European Parliament and of the Council on the conservation of wild birds (codified version of Directive 79/409/EEC as amended) (the 'Birds Directive').
- **UK (England & Wales):** The Environment Act 2021, The Conservation of Habitats and Species Regulations 2017, as amended (the 'Habitat Regulations') which transposes the Habitats Directive in UK law. Since 1st January 2021, the UK is no longer a member of Europe but since the Habitats Directives are embedded into UK statute, The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 was published and still applies in England and Wales; The Wildlife and Countryside Act 1981 (as amended); the Countryside and Rights of Way Act (CRoW) 2000; the Protection of Badgers Act 1992; the Natural Environment and Rural Communities Act (NERC) (2006) and the Environmental Protection Act (EPA) 1990.

2.1.2 Species such as bats, great crested newts, otter, water vole, reptiles, birds and badgers are all protected to varying degrees under this legislation.

2.1.3 The Environment (Wales) Act 2016 introduced an enhanced biodiversity and resilience of ecosystems duty (Section 6 Duty). This duty applies to public authorities in the exercise of their functions in relation to Wales and will help maximise contributions to achieving the well-being goals. The Nature Recovery Action Plan supports this legislative requirement to reverse the decline in biodiversity, address the underlying causes of biodiversity loss by putting nature at the heart of decision-making and increasing the resilience of ecosystems by taking specific action focused around the 6 objectives for habitats and species.

2.1.4 In addition to legislation, there are also national and local planning policies pertaining to the protection of biodiversity. Planning Policy Wales (PPW) Edition 12 (February 2024) requires the planning system to have a key role in helping to reverse the decline in biodiversity and increasing the resilience of ecosystems, at various scales, by ensuring appropriate mechanisms are in place to both protect against loss and to secure enhancement. Development plan strategies, policies and development proposals must consider the need to:

- support the conservation of biodiversity, in particular the conservation of wildlife and habitats;
- ensure action in Wales contributes to meeting international responsibilities and obligations for biodiversity and habitats;

- ensure statutorily and non-statutorily designated sites are properly protected and managed;
- safeguard protected and priority species and existing biodiversity assets from impacts which directly affect their nature conservation interests and compromise the resilience of ecological networks and the components which underpin them, such as water and soil, including peat;
- secure enhancement of and improvements to ecosystem resilience by improving diversity, condition, extent and connectivity of ecological networks;
- provide measurable biodiversity net benefit which is secured through the production and implementation of a Green Infrastructure Statement which comprises a commitment to biodiversity gain through the creation and long term management of valuable habitats.

2.1.5 Chapter 6 of PPW 12 specifically requires (as per Annex to Heads of Planning Letter Dated 11 October 2023: Addressing the Nature Emergency through the Planning System: Updated National Planning Policy for Chapter 6 of Planning Policy Wales):

- Green Infrastructure: stronger emphasis on taking a proactive approach to green infrastructure covering cross boundary considerations, identifying key outputs of green infrastructure assessments, the submission of proportionate green infrastructure statements with planning applications and signposting Building with Nature standards.
- Net Benefit for Biodiversity and the Step-wise Approach: further clarity is provided on securing net benefit for biodiversity through the application of the step-wise approach, including the acknowledgement of off-site compensation measures as a last resort, and, the need to consider enhancement and long-term management at each step. The use of the green infrastructure statement as a means of demonstrating the stepwise approach is made explicit. A simplified diagram of the policy approach has been developed (which will be further refined in the consolidated version of PPW12). The importance of strategic collaboration to identify and capture larger scale opportunities for securing a net benefit for biodiversity is recognised.
- Protection for Sites of Special Scientific Interest: strengthened approach to the protection of SSSIs, with increased clarity on the position for site management and exemptions for minor development necessary to maintain a 'living landscape'. Other development is considered unacceptable as a matter of principle. Exceptionally, a planned approach may be appropriate where necessary safeguards can be secured through a development plan.
- Trees and Woodlands: closer alignment with the stepwise approach, along with promoting new planting as part of development based on securing the right tree in the right place.

2.1.6 To accompany the PPW, Technical Advice Note 5 (TAN5) demonstrates how local authorities, developers and stakeholders can deliver sustainable development that does not result in losses to biodiversity and takes the opportunity to protect and enhance it. Flintshire council also have their own guidance and local policy to promote ecological resilience in their decision making.

2.1.7 Under the NERC Act, local authorities (and other public bodies) have a duty to conserve biodiversity. The Act confers responsibility on the local authority to take the protection of priority habitats and species (as listed in Section 41) into consideration when making a planning decision. Habitats listed in this section include eutrophic standing waters, rivers, lowland meadows and lowland mixed deciduous woodland. Species listed in this section include great crested newt *Triturus cristatus*, sky lark *Alauda arvensis*, hedgehog *Erinaceus europaeus*, otter *Lutra lutra*, soprano pipistrelle *Pipistrellus pygmaeus* and red squirrel *Sciurus vulgaris.* Full habitats and species' lists can be found at the Natural History Museum website, nhm.ac.uk or jncc.defra.gov.uk.

2.1.8 The RSPB's Birds of Conservation Concern 5' (Eaton et al., 2021) is also taken into consideration when undertaking this appraisal.

3 METHODOLOGY

3.1 Introduction

3.1.1 To inform this Ecological Appraisal, a site walk-over survey was conducted in April 2026 which comprised recording of habitats within the Site and an inspection of the trees within the site boundary for bats (i.e. a bat scoping survey) and birds. The survey also included potential for protected and notable species, and invasive species such as Japanese knotweed *Fallopia japonica* and Himalayan balsam *Impatiens glandulifera*. In addition to this, a desk-top study was also undertaken.

3.2 Desk-top Study

3.2.1 The desktop study involved publicly available data searches for statutory and non-statutory sites, legally protected species and other features of interest within a 1km radius of the site. The centre of the site (Ordnance Survey Grid Reference SJ32895110) was used for the data search.

3.2.2 The following sources were searched for information about the Site:

- Defra's 'MAGIC' website;
- Google Earth;
- Bing Maps; and
- Wrexham Council website.

3.3 Walk-over Survey

3.3.1 The purpose of the survey was to determine:

- the habitats present;
- legally protected species potentially present;
- the presence of invasive plant and animals;
- any potential constraints to development; and
- any requirement for additional ecological surveys.

3.3.2 Rebecca Sambrook carried out the walk-over survey of the Site on 24 April 2026. The weather was very warm and sunny with an average temperature of 21°C.

3.3.3 The survey was not a full Phase 1 Habitat survey; due to the urban nature of the site, this was considered unnecessary. The Site and immediately adjacent areas (up to 30m) were searched for evidence of protected species that may occur in this area such as bats, birds, great crested newts *Triturus cristatus*, badgers *Meles meles*, otters *Lutra lutra*, and water vole *Arvicola amphibious* and any invasive plants or animals.

3.3.4 Photographs are included within this report. Plant names follow the third edition of the New Flora of the British Isles (Stace, 2010). The common name of the plant is stated first and is followed by the Latin name, on the first occasion that it is used. Only the common name is used subsequently.

3.4 Limitations

3.4.1 No significant limitations were encountered during the survey.

4 RESULTS

4.1 Introduction

4.1.1 This section provides a commentary on the data collected during the desk-top study and survey undertaken in 2026.

4.2 Desk-top Study

4.2.1 There is one statutory designated site within the 1km search area. This is Gatewen Marsh Site of Special Scientific (SSSI) which is c. 920m from the application site, to the west of the A483.

4.2.2 There do not appear to be any ponds within 250m of the proposed site.

4.2.3 The council planning portal did not reveal any pertinent information and there do not appear to be any current adjacent developments that would likely cause any in-combination effects with the proposed Site.

4.3 Walk-over Survey

4.3.1 The Site comprises a carpark with tarmacadam surface (developed land – sealed surface) and a small area on the western edge comprising modified (amenity) grassland which is mown short and is patchy in places due to wear. Within this area is a mono-species ornamental hedge and two bird cherry *Prunus padus* trees. There is a single bird cherry tree adjacent to the western boundary. Along the southern boundary is a strip of amenity grassland and row of poplar trees and along the eastern boundary is another strip of amenity grassland. To the north, east and west are the internal access roads around campus and to the south is student housing.

4.3.2 No evidence of non-native invasive or harmful weeds such as Japanese knotweed or Himalayan balsam was identified during the survey.

4.3.3 There are no irreplaceable or priority habitats within the site.

4.3.4 The site does not provide any significantly suitable habitat for protected or notable species. The three bird cherry and row of poplar trees were assessed for their potential to support **bats** and **birds**. There are no significant features on these trees that would support either species groups. The ornamental box hedging is dense, highly disturbed and intensively managed and highly unlikely to support nesting birds. Nevertheless, both bats and birds may well use the site on occasion for foraging, flying through, and in the case of birds, using the tree branches for rest and shelter.

4.3.5 The site does not support habitat that is suitable for **great crested newts**, **badgers**, **hedgehogs, otter, water vole** and **reptiles**; given the isolated and highly disturbed urban nature of the site, it is unlikely to support these species and they are not considered further.

4.3.6 Photographs of the site are provided in Table 4.1 below.

Table 4.1: Photographs of the Site

4.4 Appraisal of Potential Effects

4.4.1 The proposal comprises the preparation of the site for the construction of three student accommodation blocks with associated car parking and soft landscaping. See Landscape Proposals Drawing (DEP Landscape Architecture Ltd, rev P03).

4.4.2 The statutory site Gatewen Marsh located almost 1km from the site is at such a distance and separated/buffered by significant infrastructure that there are no foreseen airborne, terrestrial or aquatic impact pathways between the application site and the designated site.

4.4.3 A proportion of the on-site amenity grassland, section of ornamental hedge and a single bird cherry tree will be lost to accommodate the new site layout but otherwise, all of the new buildings and infrastructure will be accommodated within the existing hard standing car park area. The amenity grassland and tree do not support protected or notable species but nevertheless do have inherent value in an otherwise urban landscape. The remaining amenity grassland and trees will be retained and protected throughout construction.

4.4.4 To compensate for the loss of this habitat and enhance the soft landscaping, it is proposed to extend the strip of grassland along the southern boundary of the site to make a wider amenity area and enhance this grassland and grassland along the eastern boundary using a species rich

seedmix. Native and ornamental trees, native and ornamental shrub planting and rain gardens will be created. To ensure the long-term viability of the newly created habitat, it will be managed in the long term. See Section 5.

4.4.5 Overall, protected and notable species are highly unlikely to be present with the exception of birds that will frequent tree branches for roosting/resting and bats that may fly through the site at night.

4.4.6 Even in urban environments where bats may, from time to time, fly through and around, it is best practice to avoid impacts on bats and their habitats, and other species including birds and invertebrates, by maintaining as far as practicably possible, a dark environment above 2.5m height. This can be achieved by ensuring the lighting scheme is sensitive to the requirements of bats (and other species) and designed in accordance with the current guidance jointly issued by the Institution of Lighting Professionals and Bat Conservation Trust; Guidance Note 08/18: Bats and Artificial Lighting in the UK.

4.4.7 No active bird nests were identified in the vegetation, but it is possible (although unlikely) birds may nest at some point between the survey and start of proposed works. It is advised that the disturbance and/or destruction of breeding birds and their nests is illegal under the Wildlife and Countryside Act 1981 (as amended). If any nests are built between the survey and the outset of works, and the nest is likely to undergo any disturbance, an ecologist should be contacted for advice. If nests are identified, the nests must remain intact and undisturbed until young have fledged. Any vegetation required to be removed, must be done outside of the nesting bird season which includes the months of March to August inclusive, unless the vegetation is first checked by an experienced ecologist and no nests are found.

4.4.8 To address the impacts identified above, mitigation and compensation will be implemented to ensure that the application offers net benefit to biodiversity in the long term. See Green Infrastructure Statement in Section 5.

5 GREEN INFRASTRUCTURE STATEMENT

5.1 Assessed Losses

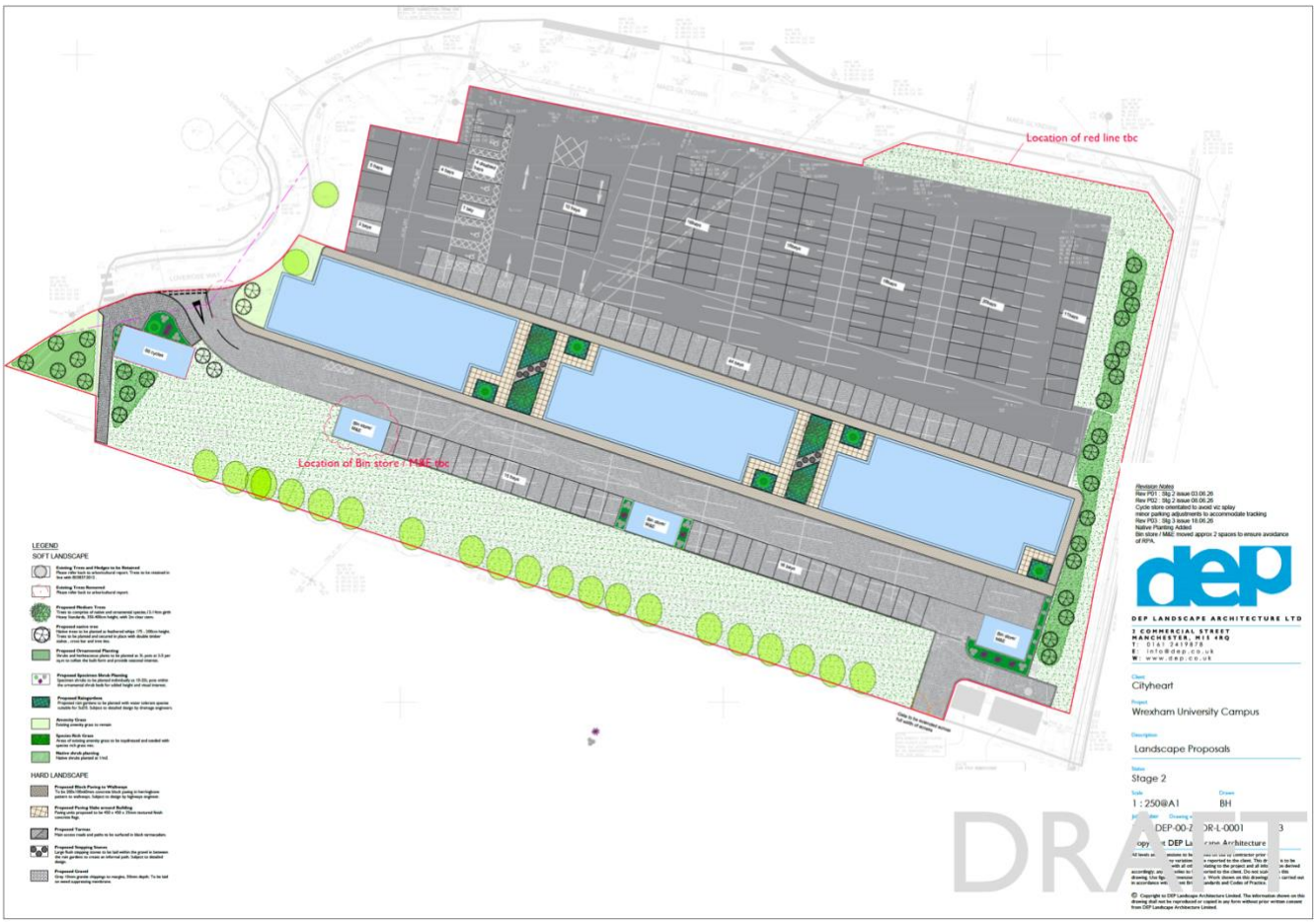
5.1.1 The proposed development will result in the loss of:

- Approximately 20m of a 41m ornamental box hedging;
- Single bird cherry tree;
- Approximately 350m² amenity grassland in poor condition.

5.2 Proposed Biodiversity Net Benefit

5.2.1 The proposed development includes a soft landscaping scheme which will be created with a biodiversity focus. The screenshot below shows the area of proposed landscaping (taken from Landscape Proposals Drawing (DEP Landscape Architecture Ltd, Rev P03)). Within this area, the following will be undertaken:

- Enhancement of approx. 2,286m² of existing amenity grassland by overseeding with a species rich wildflower seed mix such as Emorsgate EM2 Standard General Purpose Meadow Mixture or similar.
- Planting of 32no. native trees comprising species such as bird cherry *Prunus avium* and crab apple *Malus sylvestris* or similar.
- Planting of 4no. native and ornamental trees
- Native shrub/scrub planting.
- Ornamental planting comprising shrubs and herbaceous plants to be planted as 3L pots at 3-5 per sq.m.
- Rain gardens to be planted with water tolerant species suitable for SuDS.
- Installation of 3no. wooden bird boxes on the poplar trees along the southern boundary, at a height of at least 4m to reduce the risk of human interference, and out of artificial light.



5.2.2 A Landscape and Biodiversity Management Plan will be produced in conjunction with the Landscape Architects which will detail the planting specification and 30-year management plan of the created habitats.

6 CONCLUSION & RECOMMENDATIONS

6.1.1 The site has been the subject of a Preliminary Ecological Appraisal in 2026 which concludes that the Site is of limited ecological value to protected and notable species. However, bats may fly through the site and forage from time to time and birds may use the trees to rest on occasion. The proposed landscape scheme will provide a clear and tangible net biodiversity benefit.

6.1.2 The following recommendations are made in respect of bats.

- **Recommendation:** a bat sensitive lighting scheme should be designed in accordance with the current guidance jointly issued by the Institution of Lighting Professionals and Bat Conservation Trust; Guidance Note 08/18: Bats and Artificial Lighting in the UK.

6.1.3 The following recommendations are made in respect of birds.

- **Recommendation:** to prevent impacts on nesting birds, vegetation removal shall occur outside of the nesting bird season i.e. not during the months of March through to August inclusive. If vegetation removal is required during this time, the vegetation shall first be checked by a competent Ecologist and only if no nests are found can vegetation be removed. If nests are found, they will remain in-situ and undisturbed until the young have fledged.

- **Recommendation:** it is recommended that three wooden bird nest boxes (suitable for passerines) are installed on the poplar trees on the edge of the southern boundary, away from artificial lighting.

6.1.4 To provide a biodiversity net benefit, the following recommendation is made.

- **Recommendation:** the landscaping scheme is to be implemented as per the specification provided in Section 5 above.

- **Recommendation:** a Landscape and Biodiversity Management Plan is to be produced to ensure the management of the created habitats is conducted in a sensitive manner and encourages the establishment and maturity of habitats so that they provide value in perpetuity.

6.1.5 Taking into consideration these recommendations, long term negative effects on biodiversity are not anticipated and the proposed development actually gives rise to biodiversity enhancement opportunities within the Site, improving biodiversity at a local level.

7 REFERENCES

BSI (2013). *BS 42020 Biodiversity. Code of practice for planning and development*.

CIEEM (2013). *Guidelines for Preliminary Ecological Appraisal*. Winchester. CIEEM.

Collins, J (ed.). 2023. *Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th edn)*. The Bat Conservation Trust. London.

English Nature (2001). *Great Crested Newt Mitigation Guidelines*. Peterborough.

Entwistle, A.C; Racey, P.A; Speakman, J.R. 1997. *Roost Selection by the brown long-eared bat Plecotus auritus*. Journal of Applied Ecology.

Harris, S., Cresswell, P. and Jefferies, D.J., (1998). *Surveying for Badgers*. Mammal Society Occasional Publication 9.

Institute of Environmental Assessment (1995). *Guidelines for Baseline Ecological Assessment*. IEA. London.

Mitchell-Jones, A.J. 2004. *Bat Mitigation Guidelines*. English Nature, Peterborough

JNCC, (2010). *Handbook for Phase 1 Habitat Survey: A technique for environmental audit (reprint*). Joint Nature Conservation Committee, Peterborough.

Natural England (2010). *European Protected Species and the Planning Process*.

Royal Society for the Protection of Birds (2021). *Birds of Conservation Concern (5)*.

Stace, C. (2010). *New Flora of the British Isles*. Third Edition. Cambridge University Press.