

# Preliminary recommendations for ecological enhancement	
R16	<p>A new pond will be created as part of the proposed development on or close to the location of the historic pond at TN1 to increase habitat availability for species such as grass snake, amphibians and invertebrates such as dragonflies. The new pond will be profiled to incorporate a variety of depths, with shallow sloping sides providing access points for wildlife, and planted with appropriate native vegetation. Plants suitable for damp margins include; amphibious bistort <i>Persicaria amphibian</i>, marsh marigold <i>Caltha palustris</i>, reed canary grass <i>Phalaris arundinacea</i>, brooklime <i>Veronica beccabunga</i>, wild angelica <i>Angelica sylvestris</i>, purple loosestrife <i>Lythrum salicaria</i>, greater bird's-foot trefoil <i>Lotus uliginosus</i>, and gypsywort <i>Lycopus europaeus</i>. Aquatic vegetation includes; water crowfoot <i>Ranunculus aquatilis</i>, lesser spearwort <i>R. flammula</i>, water mint <i>Mentha aquatic</i>, water forget-me-not <i>Myosotis scorpioides</i> and branched bur-weed <i>Sparganium erectum</i>, all of which can be used by newts for egg laying. Drainage engineers and landscape architects will be involved in specifying the mix of species as their suitability is dependent on how frequently wetland areas will be inundated.</p>
R17	<p>The site's landscaping plans will utilise plant species which encourage bats. The table at Appendix IV lists species of plants that can provide benefit for bats either by providing a food source for insects on which bats feed, or providing additional roosting opportunities (Gunnell et al., 2012). The plant species are predominantly native to Britain, but not all species will be suitable in all situations. The aim is to encourage a diverse range of invertebrate food sources and increased bat roost potential.</p>
R18	<p>Habitat piles will be created, for example close to the new pond and within or on the edges of areas of woodland. These will provide additional hibernation and shelter resources for amphibians, invertebrates, reptiles, and a range of other wildlife, and egg-laying substrate for grass snakes. Hibernacula can be created by partially burying logs and stones in sheltered areas away from flood risk, and covering over with earth or turf. Breeding habitats can be created by collecting grass clippings and other prunings arising from landscape management of the site, and composting them. Deadwood piles can be created using arisings from site clearance to provide shelter and breeding opportunities for invertebrates, particularly saproxylic species which are dependent on deadwood.</p>
R19	<p>The value of the site for birds will be enhanced by installing a range of artificial nest boxes. These will be placed on retained mature trees within the development or at the site boundaries, or incorporated within building facades. For instance:</p> <ul style="list-style-type: none"> ▪ New buildings: nest boxes can be installed as part of (integral) or under the eaves of buildings for species such as swift <i>Apus apus</i> and house sparrow <i>Passer domesticus</i>. These species are of principal importance, and/or of conservation concern. ▪ Trees: nest boxes with entrance holes suitable for tit species, woodpeckers and nuthatches, and open-fronted boxes suitable for robin or song thrush.
R20	<p>The value of the site for bats will be enhanced by installing a range of artificial roost boxes. These will be placed on retained mature trees within the development or at the site boundaries, or incorporated within building facades. Boxes suitable for a range of species should be used, for instance:</p> <ul style="list-style-type: none"> ▪ New buildings: integral bat tubes can be installed within buildings which face vegetated areas. Bat tubes can be incorporated into the design of the building so that only the access holes are visible from the exterior of the building. The Schwegler 1FR or 2FR Bat Tube is designed to meet the characteristic requirements of the types of bats that inhabit buildings such as pipistrelles <i>Pipistrellus spp.</i> or serotines <i>Eptesicus</i>

Preliminary recommendations for ecological enhancement

serotinus. It is designed to be installed on the external walls of buildings, either flush or beneath a rendered surface.

- Pipistrelles: bat boxes suitable to install on mature trees either within or at the edges of the development include the Schwegler 1FF Flat Bat Box, or other manufacturer's equivalent.
- Noctules *Nyctalus spp.* and brown long eared bats *Plecotus auritus*: bat boxes suitable to install on mature trees either within or at the edges of the development include the Schwegler 2F General Purpose Bat Box or the 2FN Woodland Bat Box, or other manufacturer's equivalent.

Bat boxes should ideally be located south-facing (between south-east and south-west) and above 4m from ground level. They should be installed facing vegetation features such as mature hedgerows or trees, but with a clear line of flight for bats exiting the roost, and away from sources of artificial light.

6 Summary and Conclusions

6.1 Introduction

6.1.1 A Preliminary Ecological Appraisal was undertaken for the site of the proposed student residential development and refurbishment of the Grade II Listed building at Grandpont House, Abingdon Road, Oxford. The report has been prepared to establish the site's suitability for development, inform the design process for the proposal, record the ecological baseline and identify key ecological features within and around the proposal site.

6.2 Results

6.2.1 There are no internationally (SAC, SPA or Ramsar) or nationally (SSSI) important wildlife sites within the 1km desk study search area. However, there are seven non-statutory sites of local importance, including three Oxfordshire LWS and four OCWS. There is also one proposed Oxfordshire LWS, one proposed OCWS and one other Oxfordshire site. There are records of a range of protected or notable species in the locality, including amphibians, birds, fish, invertebrates, terrestrial mammals, flowering plants and terrestrial reptiles, together with four priority habitats: Coastal and Floodplain Grazing Marsh, Lowland Meadows, Lowland Fen and Deciduous Woodland, including Ancient Woodland.

6.2.2 The survey area lies to the south of the centre of Oxford. The site comprises c.0.73 ha of partly developed land, comprising a mosaic of woodland, scattered trees and scrub, introduced shrub, tall ruderal, amenity grassland, running water, buildings and bare ground. The wider landscape includes the built up area of Oxford, but also especially floodplain grassland, often set within hedgerows, and other greenspaces.

6.3 Evaluation

6.3.1 Table 6.1 presents a summary of ecological constraints and opportunities identified within the survey area.

Table 6.1: Summary of ecological constraints and opportunities

Feature	Detail
Constraints:	
Designated sites	None of the designated wildlife sites within the desk-study search zone are likely to be affected by the proposed development, considering the size and nature of the proposal and its distance from the designated sites.
Priority habitats	Most of the woodland Priority Habitat will be retained as part of the development, although there may be impacts on the area of Wet Woodland arising from the

Feature	Detail
	construction of a pond on the site of the historic pond (TN1). Given the very small size of the Wet Woodland (c.250m ²) these impacts are not expected to be significant.
Other habitats	Permanent losses of up to c.200m ² of dense ivy, tall ruderal and scattered scrub, depending on the extent and layout of development proposals. These areas are of relatively low ecological value but provide habitats suitable for a number of protected species (e.g. nesting birds, badger and reptiles).
Bats (roosting)	Buildings B1, B2, B3 and B4 were provisionally assessed as having <u>low</u> suitability and building B5 as having <u>high</u> suitability to support roosting bats. Other structures and ivy clad walls may also have some potential for roosting bats. The trees at T1-T11 contain features suitable for roosting bats (e.g. woodpecker holes, lifted bark, dense ivy clad). It is currently anticipated most woodland habitats will be retained as part of the proposed development.
Reptiles	Permanent losses of up to c.350m ² of suitable habitats (dense ivy, tall ruderal, scattered scrub and brash/rubble piles).
<i>Opportunities:</i>	
Priority habitats	The woodland priority habitats within the survey area are of high intrinsic value and can provide a focus for ecological enhancement measures.
Habitat enhancement	Habitat creation and enhancement opportunities include woodland management, pond creation/restoration, habitat piles and bird/bat boxes.

6.4 Recommendations

6.4.1 Recommendations are made for further botanical or protected species surveys, together with preliminary recommendations for the protection of important ecological features to avoid or mitigate ecological impacts, and to enhance the site for wildlife post-construction; these are summarised in Table 6.2. It is intended that these recommendations should be considered during future changes to the design of development proposals so that protection of important ecological features is secured and opportunities for ecological enhancement are realised. The recommendations should be reviewed following the completion of further ecological surveys.

Table 6.2: Summary of recommendations

#	Summary of recommendations
<i>Protected species surveys</i>	
R2	Presence / absence surveys for roosting bats within buildings B1, B2, B3, B4 and B5 and other suitable structures, if they are affected by proposals for the site, undertaken between May and August.
R3	Presence / absence surveys for roosting bats within trees T5 and T9 if they are affected by proposals for the site, undertaken between May and August.

# Summary of recommendations	
Precautionary measures	
R4	Removal of nesting bird habitats (including vegetation and buildings) will be undertaken outside of the bird nesting season, which runs from 1 March to 31 August. It will therefore be carried out between September and February, but should be planned and implemented in accordance with the findings of the further ecological surveys recommended above.
R6	If works to fell or lop the low suitability trees at T1-T4, T6-T8 and T10-T11 are required, they will be undertaken during March-April or September-October to avoid critical maternity and hibernation periods, and in accordance with a Non-Licensed Method Statement to reduce the risk of killing/injury to roosting bats.
R7	Vegetation clearance works at and around TN1&TN2 will be undertaken during the reptile active season (broadly March/April to September/October) and in accordance with a Precautionary Working Method Statement to reduce the risk of killing/injury to reptiles.
Ecological protection measures	
R8	As far as possible woodland habitats will be retained and protected during construction, and provide a focus for ecological enhancement measures.
R9	Standard site procedures to prevent impacts on trees will be adhered to during construction.
R10	Standard site procedures to prevent impacts on nearby aquatic environments will be adhered to during construction.
R11	The use of external lighting will be avoided or minimised to prevent impacts to nocturnal species. Lighting should not be directed towards retained trees, woodland or potential bat roost features.
R12	Small access gaps will be provisioned at the base of new fence boundaries to enable continued dispersal of small mammals across the site.
R13	At the end of each working day excavations will be covered over and open pipework capped to prevent entrapment of mammals, amphibians and other fauna.
R14	Destruction of fox dens or rabbit warrens will be undertaken in accordance with the Mammals Act 1996 by a registered pest control company.
Ecological enhancement	
R15	Retained woodland will be enhanced through active management to improve structure and native species composition.
R16	A new pond will be created as part of the proposed development to increase aquatic habitat availability.
R17	The site's landscaping plans will utilise plant species which encourage bats by providing additional food sources or roosting opportunities.
R18	Habitat piles for amphibians, invertebrates and reptiles will be created within or close to areas of retained rough grassland, scrub, woodland, hedgerows and ponds.

#	Summary of recommendations
R19	The value of the site for birds will be enhanced by installing a range of artificial nest boxes into or onto new buildings and retained trees.
R20	The value of the site for bats will be enhanced by installing a range of artificial roost boxes onto new buildings and retained trees.

6.5 Conclusions

6.5.1 The majority of land proposed for development is of low to moderate ecological value. Significant constraints to development were identified including Priority Habitats and the potential presence of nesting birds, [REDACTED] roosting bats and reptiles. Further ecological surveys and impact assessment are required in relation to [REDACTED] and roosting bats, prior to submitting a planning application, to determine the value of the site for these species and to formulate a suitable mitigation strategy. For the remaining constraints, proportionate and effective mitigation is available to protect against the risk of impacts and no further surveys are required.

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Appendix I: Phase 1 Habitats Plan

Please see insert.

Grandpont House, Abingdon Road, Oxford

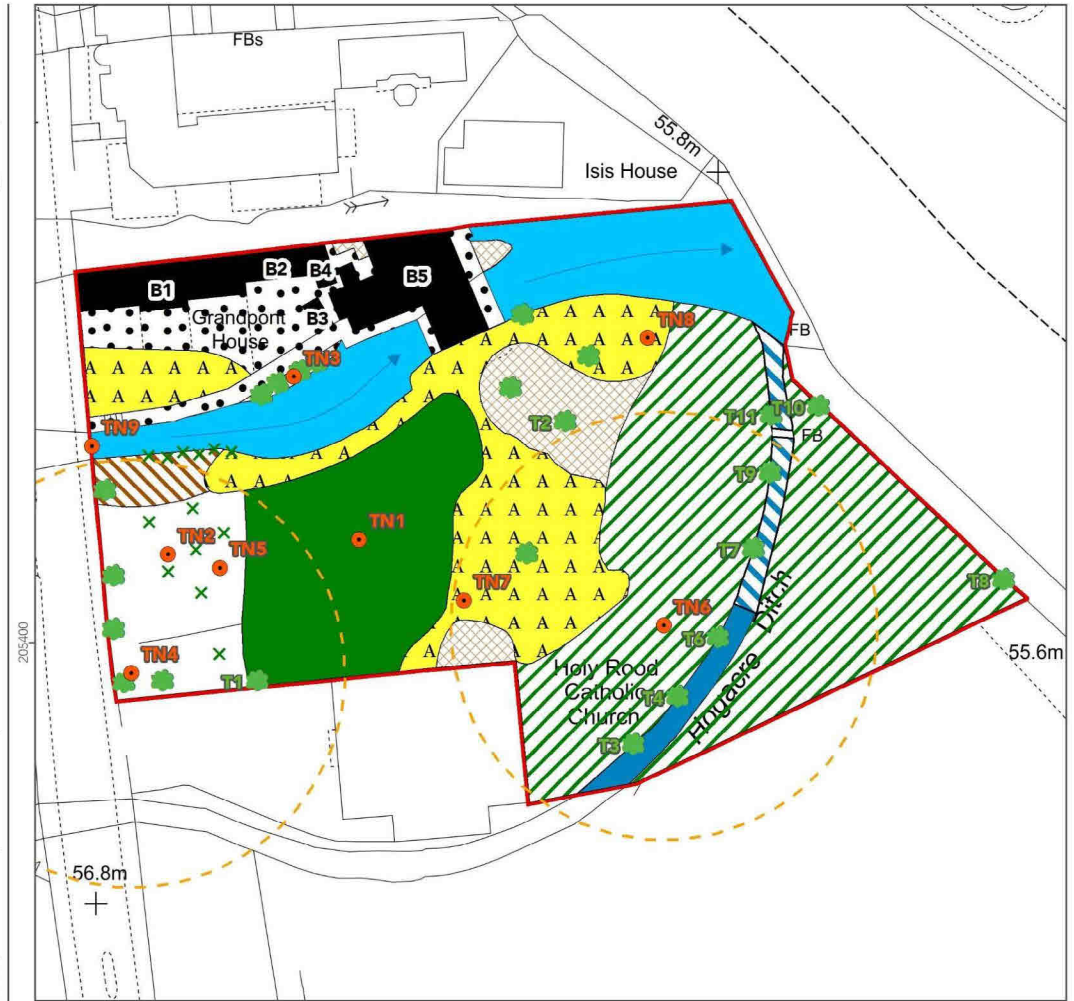
- Survey area
- Broadleaved woodland - semi-natural
- Broadleaved woodland - plantation
- Tall ruderal
- Amenity grassland
- Introduced shrub
- Running water
- Wet ditch
- Dry ditch
- Bare ground
- Building
- Target note
- x Scattered scrub
- Scattered tree



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Ordnance Survey 0100031673


Scale: 1:750 Created by: MT
Date: Feb 2022 Reviewed by: NP
Drawing number:
UE0490ECO-Grandpont_HabitatMap_220209

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Appendix II: Target Notes

Target Note	Photo
<p>1. Wetland/Wet Woodland on site of old pond. Standing water limited to c.15m² of a few centimetres deep. Dominated by mature crack willow but sedge and other wetland spp. abundant</p>	
<p>2. Open area dominated by dense ivy with some scattered scrub. Brash pile(s) present on northern edge. Adjoins tall ruderal with scattered scrub to north, with brash/log/rubble piles</p>	
<p>3. Section of unprotected bank (i.e. without hard walls) supporting trees, scrub and patchy ivy and tall ruderal.</p>	

Target Note	Photo
<p>5. Mammal path through dense ivy and small, apparently unused holes in ground</p>	 The 'Photo' column for item 5 contains two images. The larger image on the left shows a narrow, cleared path cutting through a dense thicket of ivy and other low-lying vegetation. The path appears to be a natural mammal route. The smaller image on the right is a close-up of the ivy leaves and stems, showing their characteristic shape and color.

Target Note	Photo
	
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[Redacted]	

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Appendix III: Pond Plan

Please see insert.