

Bury Hospice Car Park Upgrade

Ecological Appraisal Report

Bury Hospice

Project number: 08240054
08240054-ACM-XX-XX-RP-ECOL-00001

July 2023

Quality information

Prepared by	Checked by	Verified by	Approved by
Elizabeth Mattison BSc (Hons), ACIEEM Senior Ecologist	Jo Atkinson BSc (Hons), MCIEEM Associate Ecologist	Lorraine King BSc (Hons), MCIEEM, CEnv Regional Director	Vin Bamford BEng CEng MICE Technical Director
Jo Atkinson BSc (Hons), MCIEEM Associate Ecologist			

Revision History

Revision	Revision date	Details	Authorized	Name	Position
P01	August 2023	For Issue		VB	TD

Distribution List

# Hard Copies	PDF Required	Association / Company Name

Prepared for:

Bury Hospice

Prepared by:

Jo Atkinson
BSc (Hons)
M: 07881 511 261
E: jo.atkinson@aecom.com

AECOM Infrastructure & Environment UK Limited
5th Floor, 2 City Walk
Leeds LS11 9AR
United Kingdom

T: +44 (0)113 391 6800
aecom.com

© 2023 AECOM Infrastructure & Environment UK Limited. All Rights Reserved.

This document has been prepared by AECOM Infrastructure & Environment UK Limited ("AECOM") for sole use of our client (the "Client") in accordance with generally accepted consultancy principles, the budget for fees and the terms of reference agreed between AECOM and the Client. Any information provided by third parties and referred to herein has not been checked or verified by AECOM, unless otherwise expressly stated in the document. No third party may rely upon this document without the prior and express written agreement of AECOM.

Table of Contents

1.	Executive Summary.....	i
2.	Introduction.....	2
	Background.....	2
	The Site.....	2
	Purpose of the Ecological Appraisal.....	2
3.	Ecological Baseline, Constraints and Recommendations.....	4
	Designated Sites.....	4
	Habitats.....	4
	Great Crested Newt.....	5
	Other Protected or Notable Species.....	6
4.	Recommendations.....	7
	Further Survey.....	7
	Mitigation.....	7
	Biodiversity Net Gain.....	7
	Appendix A Figure 1: Phase 1 Habitat Map.....	8
	Appendix B Relevant Legislation and Planning Policy.....	9
	Appendix C Methodology.....	14
	Appendix D Target Notes and Photographs.....	17
	Appendix E Great Crested Newt Survey Data.....	19

Figures

Figure 1. Phase 1 Habitat Survey Map

1. Executive Summary

Site Details	Bury Hospice, Rochdale Old Road, Bury (central grid reference SD 823 115) Total Site equating to approximately 900m² of existing landscaping within the grounds of Bury Hospice.
Scheme Details	Creation of additional car parking spaces within the grounds of the hospice.
Ecological Features that may be affected by the Scheme	• There are no internationally or nationally designated sites for nature conservation within 1 km of the Site. • There is one Local Nature Reserve (LNR) within 1 km of the Site; this is Chesham Woods LNR, which is approximately 750 m north-west – as this designated site is separated from the Site by the M66 motorway, there is no reasonable likelihood that the LNR will be affected by the Scheme. • Great crested newt – this species has been previously recorded in the local area and the construction of the Bury Hospice in 2011/12 was subject to Natural England licensing for this species – however, eDNA surveys (June 2023) of the ponds within 500 m of the Site confirmed the likely absence of this species and no mitigation is required. • Breeding birds – hedgerow habitats within the Site boundary may support a small number of nesting birds. • Hedgehog could use the habitats present within the Site boundary. • There is no potential for any other protected species to occur within the Site. • No UK Priority Habitats are present within the Site boundary. The habitats within the Site comprise mostly mown amenity grassland around existing footpaths within the landscaped grounds of the hospice, as well as ornamental hedgerow, and are of low ecological value. A bee orchid was found within the grassland area.
Recommendations for further survey and assessment	No further surveys required.
Recommendations for Mitigation	• Replacement of hedgerows to ensure no net loss of biodiversity. • Seasonal restriction for breeding birds during construction phase (including the requirement to remove vegetation/undertake initial site clearance works outside the breeding bird season March to September inclusive). • Check vegetation for presence of hedgehog prior to removal. • Localised translocation of turf to retain bee orchid population within the grounds of the hospice.
Opportunities for Biodiversity Enhancements	• Installation of 2 No. bat boxes on suitable mature trees within the grounds of the hospice; • Installation of 2 No. bird nest boxes on suitable mature trees within the grounds of the hospice; and • Re-use of felled trunks from shrubs/ trees within the hedgerow to create 2 No. log piles around Pond 2 (which is within the grounds of the hospice) to increase ecological niches for amphibians and terrestrial invertebrates.

2. Introduction

Background

- 2.1 This Ecological Appraisal report has been prepared by AECOM on behalf of Bury Hospice (the client), to identify the ecological constraints associated with the proposed car park upgrade (hereafter referred to as the Scheme). The Scheme is located within the grounds of the hospice, which is located on Rochdale Old Road, north-east of Bury (central grid reference: SD 823 115) as shown by the red line boundary on Figure 1 in [Appendix A](#). All land situated within this red line boundary is hereafter referred to as the Site.
- 2.2 The assessment of ecological constraints has been undertaken with reference to current good practice¹ and forms part of the technical information commissioned by Bury Hospice in connection with the Scheme. This Ecological Appraisal addresses relevant wildlife legislation and planning policy as summarised in [Appendix B](#) and is consistent with the requirements of *British Standard 42020:2013 Biodiversity. Code of Practice for Planning and Development*.
- 2.3 This Ecological Appraisal is intended to set out the baseline habitat conditions within the Site, and to identify the potential for protected species to occur within the Site boundary that could require mitigation/compensation as a result of the Scheme.

The Site

- 2.4 The Site was formerly occupied by St Bede's Church and Church Hall, which was demolished before the hospice was built in 2011/ 12. The car park upgrade area is limited to a small parcel of land within the landscaped area at the rear of the hospice building, which will be accessed off Rochdale Old Road.

Purpose of the Ecological Appraisal

- 2.5 The approach and methodology followed to inform this Ecological Appraisal is provided in [Appendix C](#). This report presents ecological information obtained during the following:
- desk-study undertaken in July 2023 to obtain records of designated sites within 1 km of the Site (the area covered by the desk study is hereafter referred to as the Study Area), and a search of publicly available information on the planning portal to inform the likely potential for protected species to occur within 1 km of the Site;
 - extended Phase 1 habitat survey conducted on the 29th June 2023 to determine the presence/potential presence of Important Ecological Features (IEF)²; and
 - environmental DNA survey of two ponds within 500m of the Site boundary to establish the presence/likely absence of great crested newt (*Triturus cristatus*).
- 2.6 The purpose of the report is to provide a high-level ecological appraisal of the Site, specifically to:
- establish ecological baseline conditions and determine the presence of IEFs (or those that could be present), as far as is possible;
 - identify potential ecological constraints to the Scheme and make initial recommendations to avoid impacts on IEFs, where possible;
 - identify requirements for mitigation, where possible, including mitigation measures that will be required and those that may be required (depending on results of further surveys or final Scheme design);
 - establish any requirements for more detailed surveys (other than those undertaken already); and,
 - identify any opportunities offered by the Scheme to deliver biodiversity enhancements.

¹ CIEEM (2017). *Guidelines for Preliminary Ecological Appraisal, 2nd edition*. Chartered Institute of Ecology and Environmental Management, Winchester.

² Important Ecological Features are habitats, species, ecosystems and their functions and processes that are of conservation importance and could potentially be affected by the Scheme.

- 2.7 The methodology followed for undertaking the desk study and field surveys is detailed in Appendix C, including any limitations to the appraisal.

3. Ecological Baseline, Constraints and Recommendations

- 3.1 The following sections detail the results of the desk and field-based studies undertaken to inform this Ecological Appraisal. Where necessary, recommendations for mitigation measures to protect known IEFs, or further surveys to determine the presence or likely absence of IEFs, are provided.
- 3.2 With regard to background ecology data, 'recent' records are considered to be those no older than 10 years from the date of the desk study. Records outside of this period are historical and have only been reported where more recent records for a feature do not exist. Exceptions to this are detailed in the appropriate sections below.
- 3.3 Given the limited extent of the Scheme and the low value of the habitats identified within the Site boundary, desk study data were not obtained from the local ecological records centre (Greater Manchester Local Records Centre). However, documents pertaining to the original planning application for construction of the hospice (which was granted planning permission by Bury Council in March 2010) were examined for relevant ecological records (Planning Reference: 52107). A search of the Multi Agency Geographical Information for the Countryside (MAGIC) website was also undertaken to identify statutory designated nature conservation sites, UK Priority Habitats and European Protected Species Mitigation (EPSM) licence records within 1 km of the Site.

Designated Sites

- 3.4 No internationally or nationally designated nature conservation sites (Special Protection Areas, Special Areas of Conservation, Ramsar sites or Sites of Special Scientific Interest) are present within 1 km of the Site.
- 3.5 There is one Local Nature Reserve (LNR) within 1 km of the Site; this is Chesham Woods LNR, which is approximately 750 m north-west of the Site. As the LNR is located on the opposite side of the M66 motorway to the Site, there is no pathway by which it could be affected by the Scheme, and it is therefore not considered further in this Ecological Appraisal.

Habitats

Desk Study

- 3.6 A search of the MAGIC database did not identify any potential for UK Priority Habitats to occur within the Site or any areas connected with the Site.
- 3.7 A small area of deciduous woodland UK Priority Habitat is present to the south of Broad Oak Lane, approximately 200 m south of the Site. This woodland has no habitat connectivity to the Site and there is no pathway by which it could be affected by the Scheme; it is therefore not considered further in this ecological appraisal.

Field Survey

- 3.8 Summary descriptions of the habitats within the Site are provided below and shown on Figure 1 in [Appendix A](#), with specific features highlighted by Target Notes (TNs). TN descriptions and photographs are provided in [Appendix D](#).

Amenity Grassland

- 3.9 The majority of the habitat within the Site boundary is short mown amenity grassland within the landscaped grounds at the rear of the hospice building (TN1). The sward is dominated by perennial ryegrass (*Lolium perenne*) with some common bent (*Agrostis capillaris*) and Yorkshire fog (*Holcus lanatus*), and scattered silverweed (*Potentilla anserina*), dandelion (*Taraxacum officinalis* agg.), white clover (*Trifolium repens*), herb Robert (*Geranium robertianum*), selfheal (*Prunella vulgaris*) and common daisy (*Bellis perennis*). A single plant of bee orchid (*Ophrys apifera*) is present and has been left to grow tall and flower within the mown grassland area.

Species-poor Hedgerow

- 3.10 A beech (*Fagus sylvatica*) hedgerow is present alongside the footpaths within the Site boundary, and was also part of the site landscaping established in the hospice grounds in 2011/ 12 (TN2).

Species-rich Hedgerow

- 3.11 The northern boundary of the Site is a semi-mature hawthorn (*Crataegus monogyna*) hedgerow with goat willow (*Salix caprea*), sessile oak (*Quercus petraea*), sycamore (*Acer pseudoplatanus*), ash (*Fagus sylvatica*), holly (*Ilex aquifolium*) and lawson's cypress (*Chamaecyparis lawsoniana*), that forms the western boundary of the hospice grounds and was planted as part of the site landscaping/ screening when the hospice was constructed in 2011/ 12 (TN3).

Constraints and Recommendations

- 3.12 No habitats of principal importance were recorded within the Site boundary.
- 3.13 The Scheme will result in the removal of three young hedgerows; the northern boundary hedgerow, and the beech hedgerow within the central part of the Site that is split into two distinct sections either side of a footpath. These hedgerows are of low ecological value, although it is understood that the hedgerows will be replaced with hedgerows of a similar length/ species composition to ensure no net loss of biodiversity.

Great Crested Newt

Desk Study

- 3.14 A search of MAGIC identified a great crested newt record from a Natural England survey licence return at the United Utilities site at grid reference SD 821 112, approximately 700 m north of the Site (dated 2014).
- 3.15 A search of the planning portal for documents pertaining to the original planning application for the hospice (Planning Reference: 52107), referred to the presence of great crested newt in a pond “....30 m north of the Site [hospice construction site]” in a 2008 survey undertaken by Bowland Ecology on behalf of United Utilities (associated with pipeline construction works at the United Utilities site). Although the grid reference of this pond is not presented in the hospice planning documents, it is assumed to be the pond within a pasture field approximately 30 m north-east of the Site at SD 824 115. There is also a record on MAGIC of an EPSM licence for great crested newt at this location (EPSM-2010-1923) which is assumed to relate either to the construction of the hospice, or the United Utilities works.

Field Survey

- 3.16 There are no ponds within the Site boundary.
- 3.17 Two ponds were identified from Ordnance Survey 1:25,000 mapping within 500 m of the Site:
- Pond 1 (refer to Figure 1 in [Appendix A](#)) – this is a small ornamental pond within a smallholding pasture field approximately 30 m north of the Site boundary (grid reference SD 824 115). It is assumed that the 2008 great crested newt record referred to in the Bowland Ecology report was from this pond. The pond is scored as 'poor' for great crested newt using the HSI methodology (see [Appendix E](#)).
 - Pond 2 (refer to Figure 1 in [Appendix A](#)) – this is a small well-vegetated pond within the landscaped grounds of the hospice at the main entrance, created in 2011/ 12 when the hospice was built, approximately 80 m south-west of the Site boundary (grid reference SD 823 114). The pond is scored as 'average' for great crested newt using the HSI methodology (see [Appendix E](#)).
- 3.18 Both ponds were subject to environmental DNA (eDNA) survey on 29th June 2023 which is within the period for detecting great crested newts using this method. Samples from both ponds returned a negative result for great crested newt indicating the likely absence of this species. The laboratory results sheets are presented in [Appendix E](#).

Constraints and Recommendations

- 3.19 Despite the previous record of great crested newt from Pond 1 in 2008, the negative eDNA result obtained from water sampling indicates that this species is no longer likely to be present within the pond. The very low HSI score for the pond (see [Appendix E](#)) is indicative of the pond's low suitability for great crested newts, which is mostly due to the general lack of emergence/ aquatic vegetation (for egg laying and refuge) and presence of fish (which predate upon great crested newt larvae). Given the negative results for the species from the two ponds within 500 m of the Site boundary, it is concluded that there is no reasonable likelihood that great crested newt would be present in terrestrial habitat within the Site boundary. No mitigation for this species is therefore required.

Other Protected or Notable Species

- 3.20 The habitats within the Site boundary are extremely limited in extent, and the extended Phase 1 Habitat survey identified negligible potential for protected species to occur. A summary of the appraisal is provided below:
- Breeding birds – the hedgerows provide some suitable habitat for nesting birds, which may be present within the nesting period of March to August (inclusive).
 - Badger (*Meles meles*) – no evidence of badger was identified within the Site boundary, and there is no suitable habitat for sett construction within the grounds of the hospice.
 - Bats – none of the trees within the Site boundary were sufficiently mature to provide potential roosting habitat for bats. The vegetation within the northern boundary hedgerow may provide some foraging/ commuting habitat for bats, but has limited connectivity to any areas that may be of higher suitability for bats due to being surrounded by mostly residential development, and would only reasonably be used by small numbers of common species of bat such as common pipistrelle (*Pipistrellus pipistrellus*).
 - Reptiles – there is no suitable habitat for reptiles within the Site boundary as it is dominated by mown amenity grassland, which does not provide the mosaic of habitats that are required by reptiles for foraging, basking and refuge.
 - Hedgehog (*Erinaceus europaeus*) - the habitats on the Site are potentially suitable for hedgehog, although this species is not considered to represent a constraint to the Scheme, and any potential risk of killing/ injury of hedgehog during hedgerow clearance works for construction can be adequately mitigated through precautionary working methods.
 - No protected or notable species of plant, or evidence of non-native invasive plant species was recorded during the extended Phase 1 Habitat Survey.

4. Recommendations

Further Survey

- 4.1 There are no recommendations for further surveys to be undertaken prior to commencement of construction. This is on the basis that other than great crested newt, which based on survey results is considered to be likely absent from terrestrial habitat in the Site; the extended Phase 1 Habitat survey identified negligible potential for other protected species to be present.

Mitigation

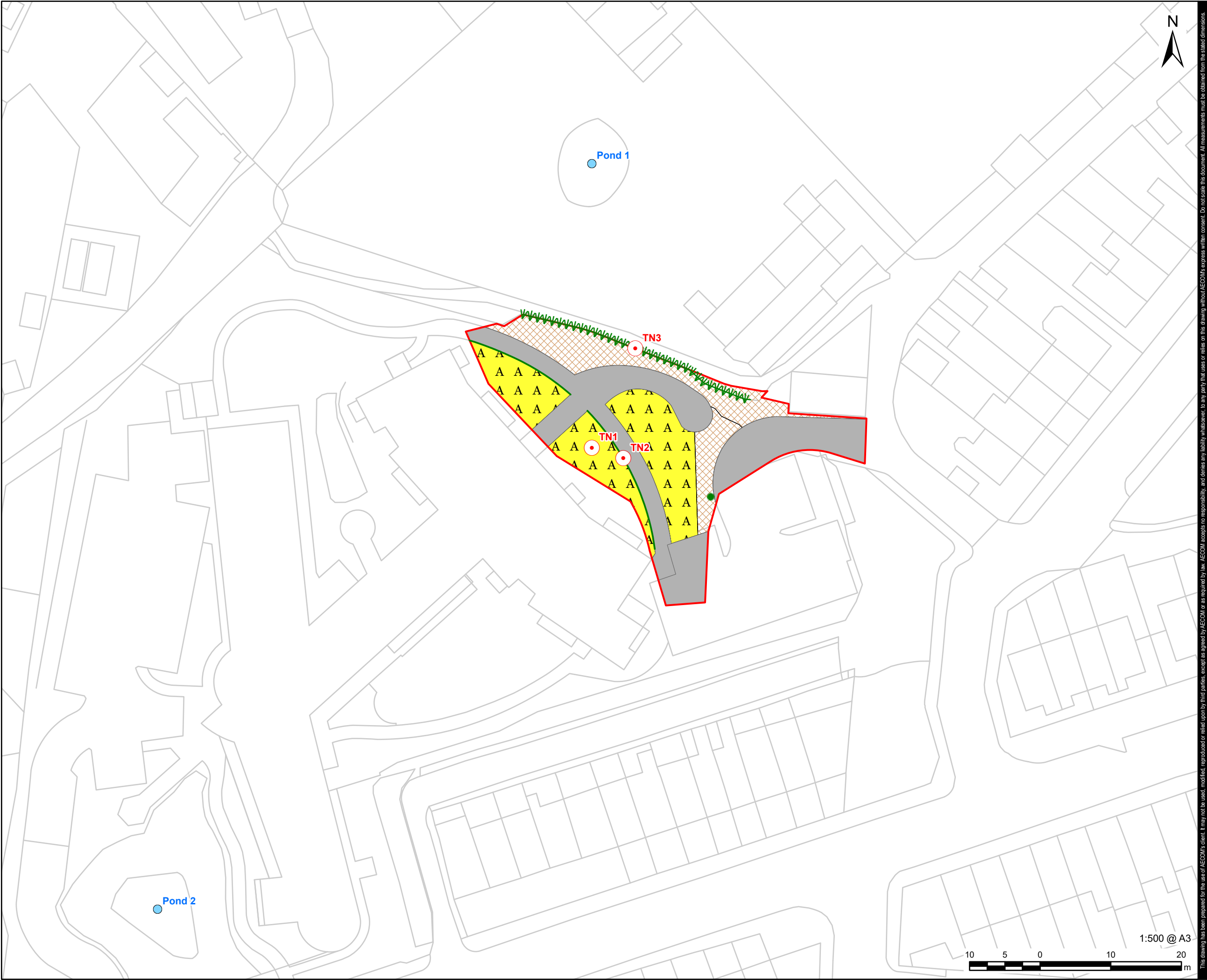
- 4.2 It is recommended that the hedgerows/ trees are removed outside the nesting bird season (avoiding the period March to August inclusive). All nesting birds are protected under the Wildlife and Countryside Act 1981 (as amended). Localised/ limited clearance may be able to proceed under a watching brief within this period, and any occupied nests avoided, although it is not considered feasible or advisable for the mature hedgerow along the eastern boundary in which occupied nests would be difficult to detect and avoid.
- 4.3 Hedgehog has been identified as being potentially present, and therefore any vegetation removal within the mature eastern boundary should be checked for the presence of hedgehog prior to removal, and any hedgehogs moved to a place of safety if found.
- 4.4 The sections of hedgerow removed for construction of the Scheme will be replaced as part of the site landscaping plan post-construction; the implementation of species-rich canopy and standard trees will ensure that there is no net loss of biodiversity.
- 4.5 It is recommended that the small area of grassland containing the bee orchid is translocated prior to the commencement of works into the undisturbed grassland surrounding pond 2 so that this population can be retained within the site. Given the very small area, it is recommended that the turf is lifted and moved by hand into the translocation site.

Biodiversity Net Gain

- 4.6 It is government policy that planning decisions should minimise impacts on and provide net gain for biodiversity (National Planning Policy Framework 2019). In addition, the Environment Act 2021 includes provisions to make biodiversity net gain (BNG) a mandatory requirement within the planning system in England requiring all relevant developments to achieve a minimum 10% net gain in biodiversity units relative to the Site's baseline biodiversity value, it is anticipated the secondary legislation mandating the need for 10% net gain will be in place by November 2023 for development within the Town & Country Planning Act. However, there is a delay in mandating this requirement for 'small sites' until at least April 2024. As the Scheme falls within the current exemption as a 'small site', because it is a non-residential development <1 ha in area, a Biodiversity Net Gain calculation using the Defra metric has therefore not been undertaken.
- 4.7 As set out above, hedgerows/ trees to be removed will be replaced within the landscaped areas of the site post-construction and it is reasonable to conclude that this will result in no net loss of biodiversity within the small area impacted by the Scheme.
- 4.8 It is recommended that the following enhancements for biodiversity are included as part of the re-landscaping of the construction area following completion of the works to demonstrate an overall modest biodiversity net gain to meet local and national planning policies:
- Installation of 2 No. bat boxes on suitable mature trees within the grounds of the hospice;
 - Installation of 2 No. bird nest boxes on suitable mature trees within the grounds of the hospice; and
 - Re-use of felled trunks from shrubs/ trees within the hedgerow to create 2 No. log piles around Pond 2 (which is within the grounds of the hospice) to increase ecological niches for amphibians and terrestrial invertebrates.

Appendix A Figure 1: Phase 1 Habitat Map

Filename: \\na.aecomnet.com\ifs\EME\ABasingstoke-UKBAS\Legacy\UKBAS\PRILW0014300 - Planning and Environment\3006 - Landscape\UOBS A-Z\B - Jost\Bury Hospice\GIS02_Maps\Phase1_Habitat_Plan_2023\727\Phase1_Habitat_Plan_2023-08-02



AECOM

PROJECT

Bury Hospice Car Park Upgrade

CLIENT

Bury Hospice

CONSULTANT

AECOM Limited
5th Floor
2 City Walk
Leeds, LS11 9AR
www.aecom.com

LEGEND

- Site Boundary
- Pond
- Phase 1 Habitat Feature
 - A3.1 - Broadleaved parkland/ scattered trees
 - Target Note
 - J2.1.2 - Intact hedge - species-poor
 - J2.3.1 - Hedge with trees - native species-rich
 - J1.2 - Cultivated/disturbed land - amenity grassland
 - J1.4 - Introduced shrub
 - Hardstanding

NOTES

Reproduced from Ordnance Survey digital map data © Crown copyright [2023]. All rights reserved. Licence number 0100031673.

ISSUE PURPOSE

FINAL

PROJECT NUMBER

08240054

FIGURE TITLE

Phase 1 Habitat Plan

FIGURE NUMBER

Figure 1

10 5 0 10 20
m

1:500 @ A3

Appendix B Relevant Legislation and Planning Policy

Legislation

- 4.9 The UK is no longer a member of the European Union (EU). EU legislation as it applied to the UK on 31 December 2020 is now a part of UK domestic legislation. EU legislation which applied directly or indirectly to the UK before 11.00 p.m. on 31 December 2020 has been retained in UK law as a form of domestic legislation known as 'retained EU legislation'.
- 4.10 The Secretary of State for the Environment, Food and Rural Affairs and Welsh Ministers have made changes to parts of the *Conservation of Habitats and Species Regulations 2017* (referred to as the 2017 Regulations) so that they operate effectively. Most of these changes involve transferring functions from the European Commission to the appropriate authorities in England. All other processes or terms in the 2017 Regulations remain unchanged and existing guidance is still relevant.

Designated Sites

Special Protection Areas (SPA) / Special Areas of Conservation (SAC)

- 4.11 These sites in the UK no longer form part of the EU's Natura 2000 ecological network. The *Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019* (referred to as the 2019 Regulations) have created a national site network on land and at sea, including both the inshore and offshore marine areas in the UK. The national site network includes:
- existing SACs and SPAs
 - new SACs and SPAs designated under these Regulations
- 4.12 Any references to Natura 2000 in the 2017 Regulations and in guidance now refers to the new national site network.
- 4.13 Formal Appropriate Assessment is required to be undertaken by the competent authority before undertaking, or giving consent, permission or other authorisation for any work which are likely to have a significant effect on such a site.

Wetland of International Importance (Ramsar site)

- 4.14 Designated under the *Convention on Wetlands of International Importance especially as Waterfowl Habitat 1971* (the Ramsar Convention), in the UK, these sites are treated as having the same level of protection as SPA's and SAC's.

Sites of Special Scientific Interest

- 4.15 Under the *Wildlife and Countryside Act 1981* (as amended), it is an offence to carry out or permit to be carried out any operations likely to damage the Site of Special Scientific Interest (SSSI). These operations are listed in the SSSI notification.
- 4.16 Owners, occupiers, public bodies and statutory undertakers must give notice and obtain the appropriate consent under S.28 of the *Wildlife and Countryside Act 1981* (as amended), before undertaking operations likely to damage a SSSI.

Locally Designated Sites

- 4.17 Local Wildlife Sites are sites with 'substantive nature conservation value'. They are defined areas, identified and selected for their nature conservation value, based on important, distinctive and threatened habitats and species with a region.
- 4.18 They are usually selected by the relevant Wildlife Trust, along with representatives of the local authority and other local wildlife conservation groups.
- 4.19 The LWS selection panel, select all sites that meet the assigned criteria, unlike SSSIs, which for some habitats are a representative sample of sites that meet the national standard. Consequently, many sites of

SSSI quality are not designated and instead are selected as LWSs. Consequently, LWSs can be amongst the best sites for biodiversity.

Protected Species

Bats / Otter / Great Crested Newt

- 4.20 These species, known as European Protected Species, are protected under Regulation 43 of the 2017 Regulations as amended by the 2019 Regulations. This makes it an offence to deliberately capture, injure or kill an animal; deliberately disturb an animal; or damage or destroy a breeding site or resting place used by an animal.
- 4.21 Deliberate capture or killing is taken to include “accepting the possibility” of such capture or killing. Deliberate disturbance of animals includes in particular any disturbance which is likely a) to impair their ability (i) to survive, to breed or reproduce, or to rear or nurture their young, or (ii) in the case of animals of hibernating or migratory species, to hibernate or migrate; or b) to affect significantly the local distribution or abundance of the species to which they belong.
- 4.22 Where development works are at risk of causing one or more of the offences listed above, a mitigation licence from Natural England can be obtained to facilitate the works that would otherwise be illegal.
- 4.23 These species are also protected under Schedule 5 of the *Wildlife and Countryside Act 1981* (as amended). This makes it an offence to intentionally or recklessly obstruct access to any structure or place used for shelter or protection or disturb an animal in such a place.
- 4.24 Lower levels of disturbance not covered by the *Conservation of Habitats and Species Regulations 2017* remain an offence under the *Wildlife and Countryside Act 1981* although a defence is available where such actions are the incidental result of a lawful activity that could not reasonably be avoided.

Water Vole

- 4.25 Water voles are protected under the *Wildlife and Countryside Act 1981* (as amended). As detailed on Gov.UK website³, a water vole mitigation licence can be applied for works which will affect water voles, including the need to:
- disturb them while they are in a place they use for shelter or protection;
 - damage or destroy places they use for shelter or protection;
 - stop water voles accessing places they use for shelter or protection;
 - kill or injure them; and
 - take, move, possess or control them.
- 4.26 The mitigation licence can only be obtained for certain purposes and must either:
- be for reasons of overriding public interest, including development;
 - preserve public health or safety;
 - prevent serious damage to livestock, animal feed, crops, growing timber, fisheries or any other property.
 - prevent the spread of disease
- 4.27 When development work is proposed in or near an area which is either known to or likely to contain water voles, then the developer will need to implement suitable mitigation to prevent impacts to water voles. The preferred mitigation option is to leave water voles *in situ*, with the development works adopting avoidance measures through redesign of the proposals.
- 4.28 Where impacts cannot be avoided, operations aimed at displacing water voles from a development Site are now no longer covered by the “*incidental result of an otherwise lawful action*” defence in the *Wildlife and Countryside Act 1981* (as amended). Displacement of water voles now needs to be undertaken under a licence.

³ <https://www.gov.uk/government/publications/water-voles-apply-for-a-mitigation-licence-a11>

- 4.29 In England, small scale (limited to continuous lengths of bank not exceeding 50 m) displacement of water voles can be carried out at certain times of the year (February to April) under a Class Licence by a registered person. For larger scale displacements or displacements outside of this period, displacement can be undertaken under a Mitigation Licence .
- 4.30 Where it is considered that the best outcome for water voles is capture and translocation to a different location then this action is considered by Natural England to be outside the scope of the defence as the intentional capture of water voles is unlikely to be considered 'incidental'. In these circumstances then a mitigation licence can be applied for as detailed above for the purpose of translocating the water vole population to suitable alternative habitat.

Nesting Birds

- 4.31 All wild birds are protected under the *Wildlife and Countryside Act 1981* (as amended), with some species afforded greater protection under Schedule 1 of the *Wildlife and Countryside Act 1981* (as amended). In addition to the protection from killing or taking that all birds receive, Schedule 1 birds and their young must not be disturbed at the nest.
- 4.32 There are no licensing purposes that explicitly cover development activities affecting wild birds.

Common Species of Reptile (common lizard, slow worm, grass snake and adder)

- 4.33 Common species of reptile are protected against intentional killing and injury under Schedule 5 of the *Wildlife and Countryside Act 1981* (as amended). There is no requirement for a licence where development works affect common species of reptiles. Instead, Natural England advise⁴ that where reptiles are present, they should be protected from any harm that might arise during the development works through appropriate mitigation.

Badger

- 4.34 Badgers and their setts are protected under the *Protection of Badgers Act 1992* (as amended). This makes it an offence to wilfully kill, injure or take a badger; or intentionally or recklessly damage, destroy or obstruct access to a badger sett or disturb a badger in its sett.
- 4.35 It is not illegal to carry out disturbance activities near setts that are not occupied, i.e. those that do not show signs of current use.
- 4.36 Where required, licences for development activities involving disturbance or sett interference or closure are issued by Natural England. Licences for activities involving watercourse maintenance, drainage works or flood defences are issued under a separate process.
- 4.37 When assessing the requirement for a licence in respect of development, Natural England⁵ state that badgers are relatively tolerant of moderate levels of noise and activity around their setts, and that a low or moderate level of apparent disturbing activity at or near to badger setts does not necessarily disturb the badgers occupying those setts.
- 4.38 Licences are normally not granted from December to June inclusive (the badger breeding season) because dependent cubs may be present within setts.

Species and Habitats of Principal Importance for the Conservation of Biodiversity

- 4.39 Section 40 of the Natural Environment & Rural Communities Act (NERC) 2006 sets out the duty for public authorities to conserve biodiversity in England.
- 4.40 Habitats and species of principal importance for the conservation of biodiversity are identified by the Secretary of State for England, in consultation with Natural England, are referred to in Section 41 of the NERC Act for England. The list, known as the 'England Biodiversity List', of habitats and species can be found on the Natural England web site.

⁴Reptiles: guidelines for developers, English Nature 2004

⁵ Interpretation of 'Disturbance' in relation to badgers occupying a sett, Natural England (2009)

- 4.41 The 'England Biodiversity List' is used as a guide for decision makers such as public bodies, including local and regional authorities, in implementing their duty under Section 40 of the NERC Act 2006 to have regard to the conservation of biodiversity in England when carrying out their normal functions.

Hedgerows

- 4.42 Under The Hedgerows Regulations 1997, it is against the law to remove or destroy certain hedgerows without permission from the local planning authority. In general, permission will be required before removing hedges that are at least 20 metres in length, over 30 years old and contain certain species of plant. The local planning authority will assess the importance of the hedgerow using criteria set out in the regulations.

Planning Policy

National Planning Policy Framework, 2019

- 4.43 The National Planning Policy Framework (NPPF) sets out the Governments planning policies for England and how these are expected to be applied by Local Authorities within their Local Development Frameworks (LDF). Chapter 15 of the NPPF '*Conserving and enhancing the natural environment*' sets out the requirements to consider biodiversity in planning decisions.

Local Planning Policy

- 4.44 Current planning policy for Bury is contained within the Bury Unitary Development Plan (UDP), which was adopted in August 1997, which will eventually be replaced by the emerging Bury Local Plan (see below).
- 4.45 The Bury Local Plan is currently being developed to replace the Bury UDP, and 'Topic Paper 7 – Natural Environment' was prepared in October 2018 as part of the evidence gathering to support Bury's emerging Local Plan. This paper "*...sets out the current key policies, plans and strategies relating to the natural environment that will form the framework for the development of the Local Plan and to present a profile of the Borough that will highlight key issues, problems and challenges that the Local plan should ultimately seek to deal with.*"
- 4.46 The Bury Local Plan will also be informed by the Greater Manchester Spatial Framework (GMSF), which was a joint approach by nine councils in Greater Manchester that commenced in 2014. This plan, which has since evolved into the "Places for Everyone" plan, has now been submitted to the Secretary of State for Levelling Up, Housing and Communities following consultation undertaken between August and October 2021 and is going through examination by the Secretary of State.
- 4.47 Relevant policies within the Bury UDP for ecology and nature conservation are summarised below.

Policy Document	Policy Number	Policy Detail
EN6	Conservation of the Natural Environment	EN6/1 – Sites of Nature Conservation Interest (Sites of Special Scientific Interest, National Nature Reserves and Grade A Sites of Biological Importance) <i>"Planning permission will not be granted for development in or in the vicinity of a designated or proposed site of national or county/regional importance (Site of Special Scientific Interest or National Nature Reserve or Site of Biological Importance which has been identified as of national or county/regional importance i.e. Grade A) which would destroy or adversely affect, either directly or indirectly, the nature conservation interest of the site, unless it can be demonstrated that other material considerations outweigh the special interest of the site."</i> EN6/2 – Sites of Nature Conservation Interest (Local Nature Reserves and Grade B and C Sites of Biological Importance) <i>"Planning permission will not be granted for development which would damage either directly or indirectly, the nature conservation interests of sites of particular ecological significance (Local Nature Reserves or Grade B and C Sites of Biological Importance) unless conditions can be imposed that would acceptably mitigate those impacts."</i> EN6/3 - Features of Ecological Value <i>"The effect of land use changes on existing features of ecological or wildlife value will be taken into account when assessing development proposals. Any proposal should seek to retain such features and incorporate them into the development."</i> EN6/4 - Wildlife Links and Corridors

Policy Document	Policy Number	Policy Detail
		<i>"The Council will seek to consolidate and, where appropriate, strengthen wildlife links and corridors, and will not permit development which would adversely affect identified areas. In particular, the Council will seek to ensure that new development within or adjacent to identified links or corridors contributes to their effectiveness through the design, landscaping and siting of development proposals and mitigation works, where appropriate."</i>
EN8	Woodland and trees	EN8/1 - Tree Preservation Orders <i>"The Council will make Tree Preservation Orders where they are needed to protect trees and woodlands."</i> EN8/2 - Woodland and Tree Planting <i>"The Council will support and encourage new woodland and tree planting in the Borough. In considering development proposals, the Council will encourage the planting of hedges, trees and woodlands using locally native species."</i>

Local Biodiversity Action Plans

- 4.48 The Greater Manchester Biodiversity Action Plan 2009 (https://gmlrc.org/projects/gm_bap/) provides an overarching document covering all ten districts in Greater Manchester (Bolton, Bury, Manchester, Oldham, Rochdale, Salford, Stockport, Trafford, Tameside and Wigan). This document outlines biodiversity conservation objectives within the Greater Manchester region and identifies priorities for action for priority habitats, species, locally important wildlife, and sites.

Appendix C Methodology

Desk Study

Background Records Search

- 4.49 The preliminary ecological appraisal includes a desk study to obtain background records relevant to a Site and the Scheme. The data obtained provides contextual information for the scope of field surveys, to aid the evaluation of field survey results, and to provide supplementary information where complete field survey coverage is not possible.
- 4.50 The Study Area is dependent upon the nature, timing and scale of the Scheme, as well as the location of the Site and the surrounding landscape. These variables all contribute to what is referred to as the Zone of Influence (Zoi) of the Scheme, which is the area over which ecological features may be affected by biophysical changes because of the works and associated activities.
- 4.51 A review of documents pertaining to the original planning application (Planning Reference: 52107) for construction of the hospice was undertaken for relevant ecological records, including:
- Records of non-statutory designated sites within 1 km of the Site boundary;
 - Records of legally protected and notable species (fauna and flora) within 1 km of the Site boundary, including Species of Principal Importance for the Conservation of Biodiversity listed under Section 41 of the Natural Environment & Rural Communities Act 2006 in the England Biodiversity List⁶.
- 4.52 The Multi-Agency Geographic Information for the Countryside (MAGIC) website (www.magic.gov.uk) was reviewed for the following information:
- Designated sites of nature conservation importance (statutory sites only) within 1 km of the Site;
 - European Protected Species Mitigation (EPSM) licence records within 1 km of the Site; and,
 - Notable habitats within 1 km of the Site, these being areas of ancient woodland and 'Habitats of Principal Importance for the Conservation of Biodiversity' included in the England Biodiversity List.

Great Crested Newt Pond Search

- 4.53 Ordnance Survey maps and the *Where's the Path* website (<https://wtp2.appspot.com/wheresthepath.htm>) have been used to identify the presence of water bodies within 250 m of the Site boundary, in order to help establish if the land within and immediately surrounding the Site could be used by great crested newts. This species can use suitable terrestrial habitat up to 500 m from a breeding pond⁷, though there is a notable decrease in great crested newt abundance beyond 250 m from a breeding pond⁸.

Field Survey

Extended Phase 1 Habitat Survey

- 4.54 The preliminary ecological appraisal includes a walkover survey of the Site, broadly following the Phase 1 habitat survey methodology as set out in Joint Nature Conservation Committee guidance (JNCC, 2010)⁹. This survey method records information on habitat types and is 'extended' to record any evidence of and potential for protected or notable species to be present. Plant names recorded during the survey follow Stace (2019)¹⁰.
- 4.55 During the walkover survey, the following protected or notable species are considered:

⁶Section 40 of the Natural Environment & Rural Communities Act 2006 requires that very public authority must, in exercising its functions, have regard, so far as is consistent with the proper exercise of those functions, to the purpose of conserving biodiversity. The Secretary of State has drawn up, in accordance with Section 41 of the Act and in consultation with Natural England, a list of habitats and species of principal importance for the conservation of biodiversity in England that is known as the [England Biodiversity List](#)

⁷ Great Crested Newt Mitigation Guidelines (English Nature, 2001).

⁸ Natural England. An assessment of the efficiency of capture techniques and the value of different habitats for the great crested newt (ENRR576) <http://publications.naturalengland.org.uk/publication/134002>.

⁹ Joint Nature Conservation Committee (2010) *Handbook for Phase 1 habitat survey - a technique for environmental audit*.

¹⁰ Stace, C E (2019) *New Flora of the British Isles, 4th Edition*. Cambridge University Press.

- **Badger:** the survey involves searching for signs of badger activity including setts, tracks, snuffle holes and latrines, following the methodology detailed in Scottish Badgers (2018)¹¹ and Harris et al (1989)¹²;
- **Bats:** the survey involves searching for potential roosting sites for bats within trees and structures (such as buildings, bridges or underground features such as mines) and categorising the potential of those trees or structures to support roosting bats (negligible to high, or confirmed roost), in accordance with Bat Conservation Trust (BCT) guidance (2016)¹³;
- **Otter:** the survey involves assessing the potential of watercourses and water bodies, and adjacent terrestrial habitat within the Survey Area to support otter, following RSPB (1994)¹⁴ and Chanin, P. (2003)¹⁵ guidance;
- **Water vole:** the survey involves assessing the potential of watercourses and water bodies within the Survey Area to support water vole, following The Mammal Society (2016)¹⁶ guidance;
- **Birds:** the survey involves assessing the potential of habitats within the Survey Area to support breeding, wintering or migrating birds, either individually notable species or assemblages of both common and rarer species;
- **Great crested newt:** the survey involves assessing the potential of habitats within the Survey Area to support great crested newt, following English Nature (2001)¹⁷ and Froglife (2001)¹⁸ guidance;
- **Reptiles:** the survey involves assessing the potential of habitats within the Survey Area to support reptiles (typically adder, grass snake, common lizard and slow worm only, though in some locations and habitat types (most notably heathland) may also include smooth snake and sand lizard), following Froglife (1999)¹⁹ and JNCC (2003)²⁰ guidance;
- **Notable species of invertebrate:** the survey involves assessing the potential of habitats within the Survey Area to support notable species of invertebrates, both terrestrial and aquatic (including white-clawed crayfish);
- **Protected or Notable species of plants:** the survey involves recording protected or notable plant species;
- **Other notable species:** the survey involves assessing the potential of habitat within the Survey Area to support other Notable Species, such as hedgehog, brown hare, polecat or common toad;
- **Non-native invasive plant species:** the survey involves recording evidence of the presence of invasive plants listed on Schedule 9 of the *Wildlife and Countryside Act 1981* (as amended) and subject to strict legal control.

Great Crested Newt Survey

Habitat Suitability Index Assessment

- 4.56 Where accessible for the purposes of survey, waterbodies were assessed for their potential to support great crested newt using the HSI in accordance with standard methodology.
- 4.57 The HSI assessment considers the following ten habitat attributes that are considered to influence the suitability of a pond for breeding great crested newt:
- Location – within a UK-wide context reflecting the differences in national distribution of this species;

¹¹ Scottish Badgers (2018). *Surveying for Badgers: Good Practice Guidelines*. Version 1.

¹² Harris, S. Cresswell, P. and Jefferies, D. (1989). *Surveying Badgers*.

¹³ Collins, J.(ed) (2016). *Bat Surveys for Professional Ecologists: Good Practice Guidelines* (3rd edition). The Bat Conversation Trust. London.

¹⁴ Ward, D. Holmes, N. Jose, P. (1994). *The New Rivers and Wildlife Handbook*. Royal Society for the Protection of Birds. Bedfordshire.

¹⁵ Chanin, P (2003b). *Monitoring the Otter Lutra lutra*. Conserving Natura 2000 Rivers Monitoring Series No 10. English Nature, Peterborough.

¹⁶ Dean, M. Strachan, R. Gow, D. Andrews, R. (2016). *The Water Vole Mitigation Handbook (The Mammal Society Guidance Series)*. Eds Fiona Mathews and Paul Chanin. The Mammal Society. London.

¹⁷ English Nature (2001). *The Great Crested Newt Mitigation Guidelines*.

¹⁸ Froglife (2001). *The Great Crested Newt Conservation Handbook*.

¹⁹ Froglife (1999). *Reptile Survey: An introduction to planning, conducting and interpreting surveys for snake and lizard conservation*. Froglife Advice Sheet 10. Froglife, Halesworth.

²⁰ Joint Nature Conservation Committee (2003). *Herpetofauna Workers Manual*.

- Area – waterbodies between 100 and 300 m² in size are considered to represent the most suitable habitat for great crested newt;
- Drying – the number of years in which a waterbody dries over a ten year period. Occasional drying kills fish which is beneficial for great crested newt, but the species predominantly favours waterbodies that do not dry out every year.
- Water quality – qualitative evidence-based assessment to infer good (diverse aquatic invertebrate assemblage), moderate (moderate invertebrate diversity), poor (low invertebrate diversity, few submerged plants) or bad (clearly polluted) water quality.
- Shade – percentage of pond perimeter shaded to at least 1 m from the shore. great crested newt favours lightly shaded waterbodies;
- Waterfowl – qualitative evidence-based assessment of presence or absence and numbers is made. Large numbers of waterfowl can result in nutrient enrichment of the water and habitat damage, which is less favourable for great crested newt;
- Fish – qualitative evidence-based assessment of likely presence or absence is made. great crested newt favour breeding ponds that do not support fish because their open-water swimming larvae are vulnerable to fish predation;
- Number of waterbodies within 1 km – great crested newt populations are typically best developed where they have access to a network of waterbodies, and therefore the species is more likely to be found where there are several waterbodies within 1 km that are linked by suitable terrestrial habitat; and
- Macrophyte cover – percentage of pond surface area occupied by macrophyte cover. Female great crested newt require aquatic vegetation for egg-laying.

Environmental DNA Survey

- 4.58 An eDNA sample was collected from Pond 1 and Pond 2 on 29th June 2023 and sent to Surescreen for analysis in accordance with approved field and laboratory protocols.
- 4.59 The waterbodies were not entered by the surveyor during sample collection. The samples were collected by a suitably qualified ecologist holding a Natural England great crested newt survey licence.
- 4.60 The presence or absence of great crested newt was determined based on the results of the eDNA analysis. If eDNA is detected this provides confirmation of presence and the relevant waterbodies are likely to represent a development constraint that requires further consideration. If eDNA is not detected then this provides high confidence that there is no reasonable likelihood of great crested newt being present in the relevant waterbodies, and they require no further assessment with regard to this species.

Limitations and Assumptions

- 4.61 The aim of a desk study is to help characterise the baseline context of a Scheme and provide valuable background information that would not be captured by a single site survey alone. Information obtained through desk study is dependent upon people and organisations having made and submitted records for the area of interest. As such, a lack of records for a particular habitat or species does not necessarily mean that it does not occur in the study area. Likewise, the presence of records for particular habitats and species does not automatically mean that these still occur within the area of interest or are relevant in the context of the Scheme.
- 4.62 Where habitat boundaries coincide with physical boundaries recorded on OS maps the resolution is as determined by the scale of mapping. Elsewhere, habitat mapping is as estimated in the field and/or recorded by hand-held Global Positioning System (GPS). Where areas of habitat are given these are approximate and should be verified by measurement on site where required for design or construction. While indicative locations of trees are recorded this does not replace requirements for detailed specialist arboricultural survey to British Standard 5837:2012 Trees in Relation to Design, Demolition and Construction.

Appendix D Target Notes and Photographs

Target Note	Description	Photograph(s)
TN1	Closely mown amenity grassland adjacent to footpaths and car park. Perennial rye grass, common bent, Yorkshire fog, dock, silver weed, dandelion, white clover, herb Robert, self heal, thistle, daisy, bee orchid.	
TN2	Mature beech hedgerow along edge of footpath within landscaped grounds of the hospice.	
TN3	Hedge with trees forming a boundary between the site and a public footpath. Understory contains a shrub layer mixture of native and ornamental species planting	

Target Note	Description	Photograph(s)
Pond 1	Small, round ornamental pond in the centre of a small holding (pasture) with resident geese present. Limited emergent and aquatic vegetation. Landowner commented that several fish are present including carp and a heron visits frequently. The pond has a liner in it and some ornamental semi-mature trees to the margins.	
Pond 2	Ornamental pond created at site entrance as part of hospice landscaping in 2011/12. Pond is covered by netting. Caretaker commented that 2 ducks and a heron visit frequently, and that fish are present. Abundant emergence vegetation including bulrush (<i>Typha latifolia</i>) and watermint (<i>Mentha aquatica</i>). Limited shading to water's edge by surrounding bankside scrub/ tall grassland.	

Appendix E Great Crested Newt Survey Data

Habitat Suitability Index Assessment

Pond 1

Habitat Attribute	Field Score	HSI Score
Location	A	1.00
Pond area	Circular with radius of 12 m 113 m ²	0.30
Pond drying	Never	0.90
Water quality	Bad	0.01
Shoreline shade	0-60%	1.0
Fowl	Major	0.01
Fish	Major	0.01
Pond density	Ponds within 1 km = 1 Density = 0.31	0.45
Terrestrial habitat	Poor	0.33
Macrophytes	10%	0.4
SCORE		0.17 (Poor)

Pond 2

Habitat Attribute	Field Score	HSI Score
Location	A	1.00
Pond area	15 x 10 m = 150m ²	0.30
Pond drying	Sometimes dries	0.50
Water quality	Moderate ²¹	0.67
Shoreline shade	0-60%	1.0
Fowl	Minor	0.67
Fish	Minor	0.33
Pond density	Ponds within 1 km = 1 Density = 0.31	0.45
Terrestrial habitat	Moderate	0.67

²¹ Based on visual assessment; pond was not subject to specific survey for aquatic invertebrates

Habitat Attribute	Field Score	HSI Score
Macrophytes	70%	1.0
SCORE		0.61 (Average)

eDNA Results

Folio No: E18645
Report No: 1
Purchase Order: 1599077
Client: AECOM INFRASTRUCTURE
AND ENVIRONMENT
Contact: Liz Mattison

TECHNICAL REPORT

ANALYSIS OF ENVIRONMENTAL DNA IN POND WATER FOR THE DETECTION OF GREAT CRESTED NEWTS (TRITURUS CRISTATUS)

SUMMARY

When great crested newts (GCN), *Triturus cristatus*, inhabit a pond, they continuously release small amounts of their DNA into the environment. By collecting and analysing water samples, we can detect these small traces of environmental DNA (eDNA) to confirm GCN habitation or establish GCN absence.

RESULTS

Date sample received at Laboratory: 03/07/2023
Date Reported: 17/07/2023
Matters Affecting Results: None

Lab Sample No.	Site Name	O/S Reference	SIC	DC	IC	Result	Positive Replicates
6336	Bury Hospick Pond 1	SD 82426 11588	Pass	Pass	Pass	Negative	0
6337	Bury Hospick Pond 2	SD 82362 11484	Pass	Pass	Pass	Negative	0

If you have any questions regarding results, please contact us: ForensicEcology@surescreen.com

Reported by: Chris Troth

Approved by: Chelsea Warner



METHODOLOGY

The samples detailed above have been analysed for the presence of GCN eDNA following the protocol stated in DEFRA WC1067 'Analytical and methodological development for improved surveillance of the Great Crested Newt, Appendix 5.' (Biggs et al. 2014). Each of the 6 sub-sample tubes are first centrifuged and pooled together into a single sample which then undergoes DNA extraction. The extracted sample is then analysed using real time PCR (qPCR), which uses species-specific molecular markers to amplify GCN DNA within a sample. These markers are unique to GCN DNA, meaning that there should be no detection of closely related species.

If GCN DNA is present, the DNA is amplified up to a detectable level, resulting in positive species detection. If GCN DNA is not present then amplification does not occur, and a negative result is recorded.

Analysis of eDNA requires scrupulous attention to detail to prevent risk of contamination. True positive controls, negative controls and spiked synthetic DNA are included in every analysis and these have to be correct before any result is declared and reported. Stages of the DNA analysis are also conducted in different buildings at our premises for added security.

SureScreen Scientifics Ltd is ISO9001 accredited and participate in Natural England's proficiency testing scheme for GCN eDNA testing. We also carry out regular inter-laboratory checks on accuracy of results as part of our quality control procedures.

INTERPRETATION OF RESULTS

- SIC:** **Sample Integrity Check** [Pass/Fail]
When samples are received in the laboratory, they are inspected for any tube leakage, suitability of sample (not too much mud or weed etc.) and absence of any factors that could potentially lead to inconclusive results.
- DC:** **Degradation Check** [Pass/Fail]
Analysis of the spiked DNA marker to see if there has been degradation of the kit or sample between the date it was made to the date of analysis. Degradation of the spiked DNA marker may lead indicate a risk of false negative results.
- IC:** **Inhibition Check** [Pass/Fail]
The presence of inhibitors within a sample are assessed using a DNA marker. If inhibition is detected, samples are purified and re-analysed. Inhibitors cannot always be removed, if the inhibition check fails, the sample should be re-collected.
- Result:** **Presence of GCN eDNA** [Positive/Negative/Inconclusive]
Positive: GCN DNA was identified within the sample, indicative of GCN presence within the sampling location at the time the sample was taken or within the recent past at the sampling location.
Positive Replicates: Number of positive qPCR replicates out of a series of 12. If one or more of these are found to be positive the pond is declared positive for GCN presence. It may be assumed that small fractions of positive analyses suggest low level presence, but this cannot currently be used for population studies. In accordance with Natural England protocol, even a score of 1/12 is declared positive. 0/12 indicates negative GCN presence.
Negative: GCN eDNA was not detected or is below the threshold detection level and the test result should be considered as evidence of GCN absence, however, does not exclude the potential for GCN presence below the limit of detection.



aecom.com