



Preliminary Ecological Appraisal

Land off Vine Street,
Gorton,
Manchester
M18 8SR

Prepared on behalf of
Kirkland Developments Ltd

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QUALITY MANAGEMENT

Quality Management Approved prior to Issue			
Report Ref:	SE0920-01_J01b_PEA_DH		
Site Address:	Land off Vine Street, Gorton, Manchester M18 8SR		
Doc Title:	Land off Vine Street, Gorton PEA		
Issue Date:	7 th December 2020	Revision No:	b
Prepared by:	Dr David Hackett , BSc (Hons) MLD PhD MCIEEM CEnv, Director	Signature:	
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This report has been prepared with all reasonable skill, care and diligence, within the terms of the contract with the client. This report is confidential to the Client. Biora Ltd accepts no responsibility of whatever nature to third parties to whom this report may be made known.

This report is based on survey data gathered in November 2020 at this site at land off Vine Street, Gorton, Manchester M18 8SR

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1.0 SUMMARY

- 1.1 Biora Ltd was appointed by Mike Stewart of Mike Stewart Architecture on behalf of Kirkland Developments Ltd to carry out a Preliminary Ecological Appraisal of land off Vine Street, Gorton, Manchester.
- 1.2 Survey was commissioned to identify any ecological constraints at this site to accompany a planning application for residential development at this site.

Site Characteristics and Surroundings					
Statutory designated sites within 2 km	0				
Non-statutory designated wildlife sites within 2 km	5				
Non-statutory designated wildlife sites within application boundary	0				
Protected habitats within application boundary	Broad-leaved woodland; scrub				
Buildings within application boundary	0				
Waterbodies within application boundary	0				
Waterbodies within 500 m of application boundary	0				
Protected Species Recorded					
	By desk study (within 2 km)	By field survey			
Great crested newt	Yes	Yes, and no ponds within 250 m of site			
Bats	Yes	Yes, but no buildings or mature trees			
Otter	No	No			
Water Vole	Yes	No			
Badger	No	No, record of badgers nearby			
Reptiles	No	Yes, but not within 250 and not connected by green corridor			
Breeding birds	Yes	No, limited suitable habitat			
Species	Local	County-wide	Regional	National	International
Breeding Birds	Moderate				
Badger	Moderate				
Bats	Low				
Reptiles	Low				
GCN					
Otter					
Water Vole					

KEY: Blue fill represents scale at which value/potential value of species is relevant. Unshaded box represents negligible value.

- 1.3 Recommendations:

R1	Any landscape scheme and management plan for the re-developed site should promote tree and hedgerow planting. Planting schemes for the landscape design should aim to utilise native species where possible.
R2	All vegetation clearance should be timetabled outside of the core British bird breeding season (i.e. March-September inclusive). Where this is not possible, all vegetation to be removed must be checked for active nests by a suitably experienced ecologist before undertaking the works.
R3	Nesting opportunities should be provided for birds in the provision of 5 nest boxes either on or built-in to the proposed development to replace the existing nesting habitat. Target species might include house sparrow and starling.
R4	A management regimes should be implemented for any retained scrub/woodland areas, to include enhancement with native species, including fruit-bearing, and retention of dead/dying trees to encourage invertebrates, to the benefit of birds, badgers and, possibly, reptiles.
R5	Consideration should be given to the potential impacts of lighting during development works and after development for bats at this location and to the possible effects of light spill on to the habitats such as hedgerows where bat foraging was recorded. Please see appendix 7 for BCT Guidance on Sympathetic Lighting Designs for Bats.
R6	The site should be re-surveyed for badgers immediately in advance of commencement of development work to inform any licensing that might be required, and a Reasonable Avoidance Method statement provided to ensure that work can take place without harm to badgers.

- 1.4 For further information on this survey report, contact Dr D. Hackett d.hackett@bioragroup.com

2.0 INTRODUCTION

2.1 Background and Scope of Survey

- 2.1.1 Biora Ltd was appointed by Mike Stewart of Mike Stewart Architecture on behalf of Kirkland Developments Ltd to carry out a Preliminary Ecological Appraisal (PEA) of land off Vine Street, Gorton, Manchester.
- 2.1.2 PEA survey was conducted on 20th November 2020 by Dr D. Hackett (lead) and B. Phythian (Ecologist) and employed Extended Phase 1 Habitat Survey methodology. Survey involved a walkover of all accessible land within and adjacent to the site. Broad habitat-compartments were mapped and the potential of each to support protected and notable species assessed. Target notes and photographs were taken of any points of ecological interest, including the presence of invasive or injurious species. Buildings were accessed for bat roosting potential.

2.2 Proposed Development Works and Expected Zone of Influence

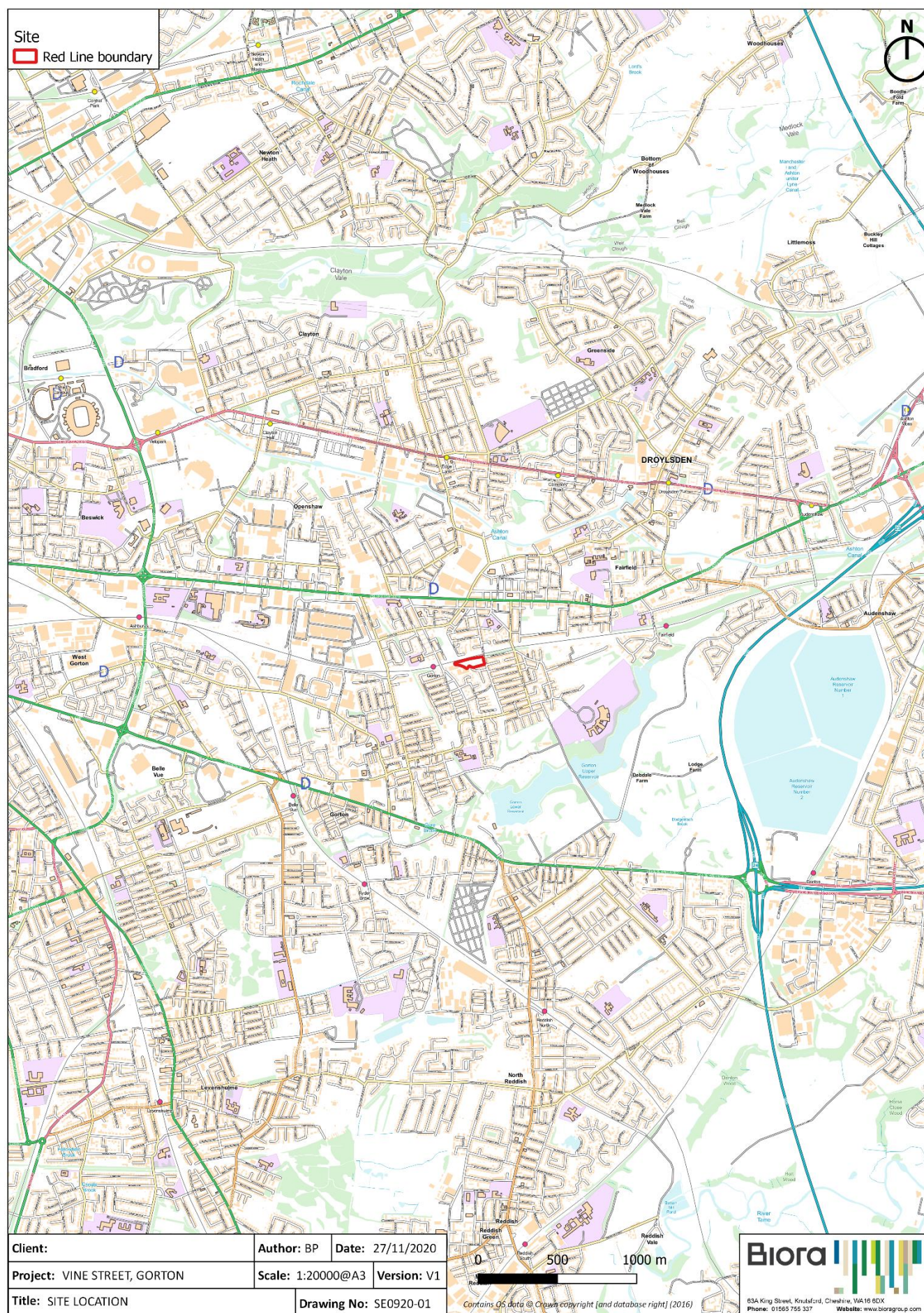
- 2.2.1 The proposed development is illustrated in [Plan 3](#). The proposals are for residential units with associated parking, on an access road with turning head off Vine Street.

2.3 Aims of the Survey

- 2.3.1 Preliminary Ecological Appraisal survey and report at this site aimed to:
- Determine the potential of the site to support protected habitats or species;
 - Assess the current ecological value of the site;
 - Assess the likely impacts of development on protected habitats and species; and
 - Advise on the requirement for further survey, mitigation, compensation, or licensing should the proposed re-development be considered likely to result in adverse impacts on biodiversity or fail compliance with current ecological legislation and/or planning policies.

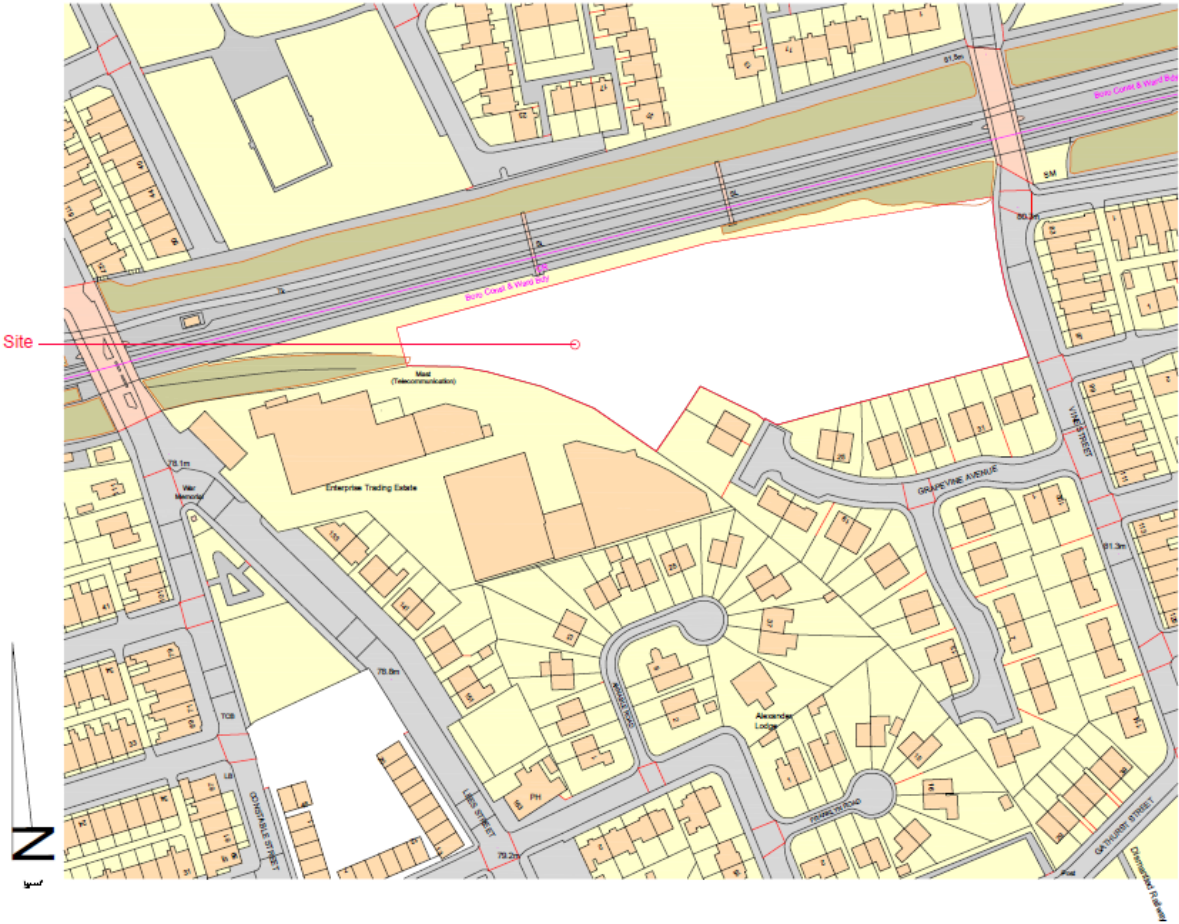
2.4 Site Description and Context

- 2.4.1 Measuring approximately 0.8 ha and situated on derelict land off Vine Street, Gorton, Manchester M18 8SR, the application site, hereby referred to as 'the site', comprised formerly developed land between housing and a railway line. The site is in an urban situation to the north-east of the city of Manchester to the south of a railway line and to the west of Vine Street.
- 2.4.2 The site is centred on OS grid reference: **SJ 89226 96964**.
- 2.4.3 The location of the site within the wider landscape is presented in [Plan 1](#); the application boundary is presented as a red line at [Plan 2](#). The proposed development is illustrated in [Plan 3](#).

Plan 1: Site Location (not to scale)

Plan 2: Site Red Line Boundary (not to scale)

Copyright Michael Stewart Architecture Ltd. Check all dimensions prior to construction. Please request clarification of any discrepancies.



VINE STEET, GORTON,
LOCATION PLAN.
1: 1250 @ A3

MANCHESTER

PLANNING
A3 original sheet size

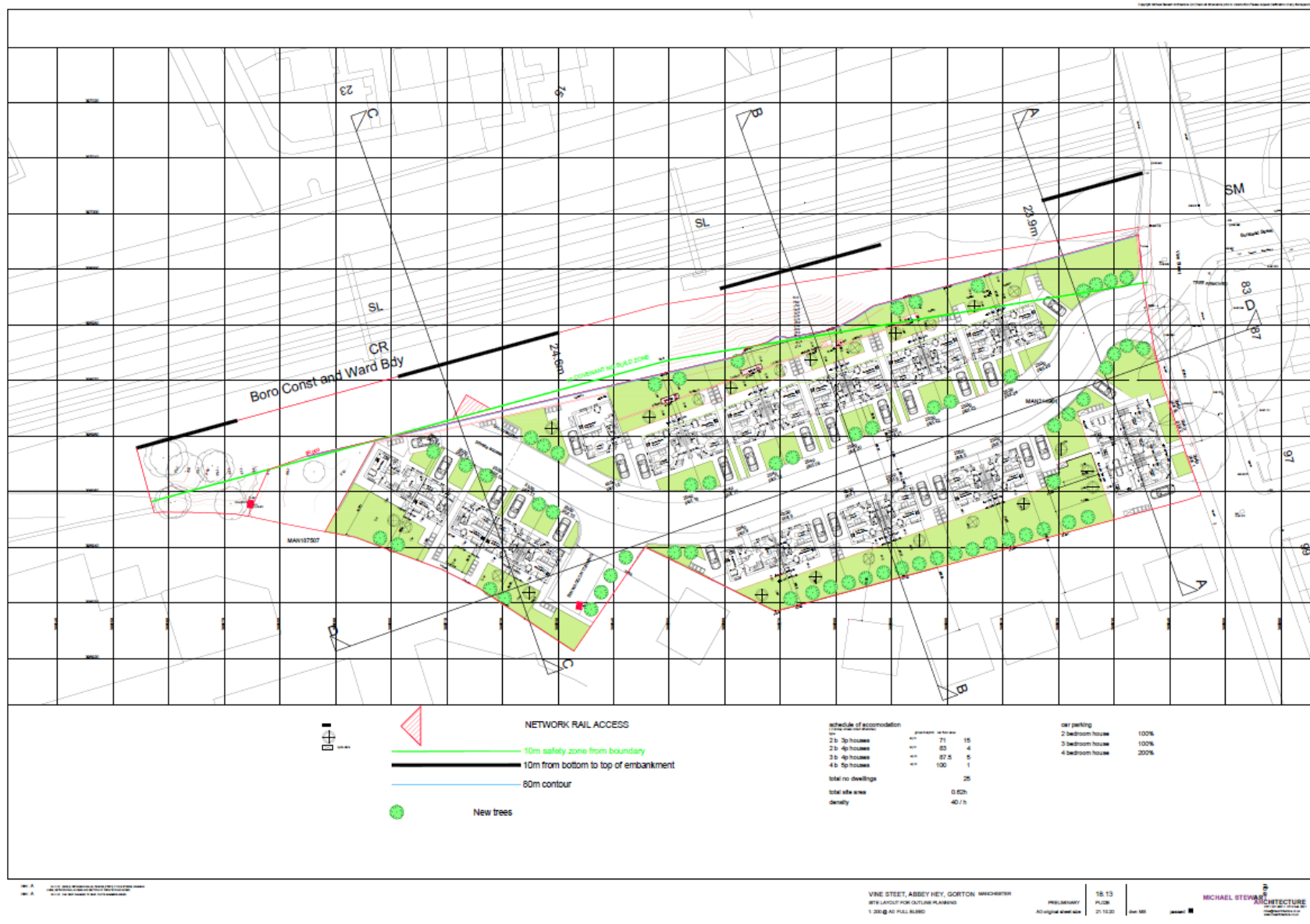
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3.0 SURVEY AND EVALUATION METHODOLOGIES

3.1 Pre-survey data search

- 3.1.1 Prior to field survey, and in accordance with the British Standard for Biodiversity¹, desk study was carried out to identify any nearby sites of national or local nature conservation designation, and a request for details of any legally protected or notable² species local to the site made to GMLRC, hosted by the Greater Manchester Ecology Unit (GMEU).
- 3.1.2 The Multi-agency Geographic Information for the Countryside (MAGIC) website was interrogated in August 2020 to identify any statutory designated nature conservation sites within 1 km of the application boundary. Details of all protected or notable species recorded within 1 km of the application site over the past decade were also acquired from rECOrd.
- 3.1.3 Desk study also included an examination of OS base maps and on-line satellite imagery to identify any potential great crested newt *Triturus cristatus* breeding sites, i.e. standing or slow-flowing water, within a search area that encompassed the site and all land within 500 m of its boundary. Additionally, any potentially significant barriers to newt dispersal that exist between these potential breeding locations and the site were noted.

3.2 Field survey

- 3.2.1 PEA survey was conducted on 20th November by Dr D. Hackett, Ecologist, and employed Extended Phase 1 Habitat Survey methodology. Survey involved a walkover of all accessible land within and adjacent to the site. Broad habitat-compartments were mapped and the potential of each to support protected and notable species assessed. Target notes and photographs were taken of any points of ecological interest, including the presence of invasive or injurious species. Buildings were accessed for bat roosting potential.
- 3.2.2 Phase 1 Habitat Survey followed guidance outlined in the *Handbook for Phase 1 Habitat Survey* (JNCC 2010). Every parcel of land within and immediately adjacent to the application boundary was classified, described, and mapped in accordance with a list of ninety specified habitat types using standard colour codes to allow rapid visual assessment of the extent and distribution of different habitat types.
- 3.2.3 This basic survey methodology was extended to provide further details in relation to notable or protected species present within the survey area, or in relation to habitats present that have the potential to support them. The potential of terrestrial, aquatic, and manmade habitats to support protected or notable species was assessed and any field evidence that confirmed or suggested their presence recorded. Field survey followed standard recognised methodologies outlined in current best practice guidance, details of which are given in section 3.5 of this report.
- 3.2.4 Details of field survey date(s), time, personnel, weather conditions and equipment used are presented in [Table 1](#) below.

Table 1: Survey Dates, Surveyors, Weather Conditions

Date & Time of Survey	Personnel	Weather Conditions	Survey Equipment
Date: 20/11/2020 Start time: 14.00	David Hackett Bethany Pythian	Air temperature: 12°C, Wind speed: 0 km/h, Cloud cover: 40%, Precipitation: None	Binoculars Digital camera Garmin GPS unit

3.3 Survey personnel

- 3.3.1 **David Hackett BSc (Hons) MLD PhD MCIEEM** is an ecologist and landscape architect of over twenty years' experience of leading ecological surveys, licensing and habitat design. David has been named ecologist in licensing for bats, badgers, otters and great crested newts. David is a Member of the Chartered Institute of Ecology and Environmental, the British Society for Soil Science, the British Ecological Society and a member of Cheshire Bat Group.
- 3.3.2 **Bethany Pythian BSc (Hons) GradCIEEM** is a Ecologist at Biora and is experienced in conduction habitat and protected species surveys. Bethany has specialism in NVC vegetation survey and is a member of the South Lancashire Bat Group.

3.4 Survey limitations

- 3.4.1 November is late for Phase 1 Habitat Survey and breeding-bird survey. However, the vegetation was typical of a regenerating formerly-disturbed site, with little of the vegetation observed relict habitat, rather, reflecting typical early

¹ BS:42020 (2013) Biodiversity. Code of practice for planning and development.

² Subject of a Species Action Plan under UK or Local Biodiversity Action Plan, or a species listed in Section 41 of the NERC Act (2006) as one of "principal importance for the conservation of biodiversity".

colonisers and garden escapes. The steepness of the bank down to the railway line made traversing difficult, but there were clear views through the vegetation of all areas that needed to be examined. Un-sanctioned clearance of the site was responsible for the stripping and stock-piling of topsoil and removal of vegetation cover over large areas of the site. There was no access to the adjacent private land.

3.5 Evaluation and Field Survey Methodologies

- 3.5.1 Evaluation of the suitability of habitats to support protected or notable species was based on professional judgement and standard recognised methodologies outlined in current best practice guidance (see below). Within [Section 4.3](#), each species/species group is ultimately assigned a 'value score' based on the applications sites' habitats and their likelihood to provide suitable value to said species, when also considering the site's location at the landscape scale. These value scores range from **NEGLIGIBLE** to **HIGH**. A score of negligible indicates that there is near certain likelihood that this species is not using the site, and therefore species assigned this score are scoped out of further assessment. Any species assigned low value and above are submitted to further assessment at [Section 5.3](#), where the proposed development works and 'zone of influence' is cross-referenced with the likelihood and/or extent of each species presence to determine impact assessment, and subsequent need for further, more detailed survey, mitigation, and licensing. Notable habitats, species and other ecological features of note are also discussed here where relevant.
- 3.5.2 The Chartered Institute of Ecology and Environmental Management (CIEEM) Ecological Impact Assessment (EclIA) guidelines (2016) recommend that the value or potential value of an ecological resource or feature should be determined within a defined geographical context. Therefore, when assigning a value score, this is also referred to at a specific scale, which gives a further indication of the sites potential importance for the given species group. Where too little information on a given species is provided from initial survey, the highest potential value and geographical context is assumed, and further survey effort subsequently recommended. CIEEM recommend that the following frame of reference be used (or adapted to meet local circumstances):
- International and European;
 - National;
 - Regional;
 - County (or Metropolitan); or
 - Local.
- 3.5.3 **Great Crested Newt:** Survey followed best-practice methodologies set out by Froglife and Natural England. An assessment was made of terrestrial habitat within and immediately adjacent to the application site to provide shelter, dispersal, and foraging opportunities for GCN and other amphibians. During terrestrial habitat assessment, any suitable refugia that could be lifted were also examined for amphibians.
- 3.5.4 Waterbodies located within or near (accessible) to the survey boundary were assessed for their suitability to support GCN, using selected indices of the Habitat Suitability Index (HSI) developed by Oldham et al. (2000). An HSI is a numerical index, between 0 and 1. 0 indicates unsuitable habitat, 1 represents optimal habitat. The HSI for the great crested newt incorporates ten suitability indices, all of which are factors thought to affect great crested newts. HSI is not a substitute for GCN presence/absence survey but can assist in determining the requirement for further survey effort.
- 3.5.5 **Bats:** The potential for buildings and trees to support roosting bats, and the potential value of the site for foraging and commuting, was categorised as **NEGLIGIBLE**, **LOW**, **MODERATE**, or **HIGH** based on the presence of suitable habitat features outlined in The Bat Conservation Trust (BCT) *Bat Surveys for Professional Ecologists – Good Practice Guidelines* (2016).
- 3.5.6 **Otter:** The suitability of land within the survey area to support Otter *Lutra lutra* was based on the presence of habitat features along or around any watercourses or waterbodies that could provide a place of shelter for this species. Factors that could affect the potential foraging value of these water features to otter, e.g. water quality and the likely presence of fish, and the connectivity of watercourses to the wider environment were also used to determine the potential for otter using land within the survey area.
- 3.5.7 **Water Vole:** Assessment of the suitability of watercourses and waterbodies within the survey area to support water vole *Arvicola amphibius* was based on guidance presented in third edition of *The Water Vole Conservation Handbook* (Strachan et al. 2011). Assessment of habitat suitability was guided by the presence of habitat conditions considered to influence the presence of water vole, i.e. water depth and flow, bankside cover, suitable food plants, bank gradient and suitable burrowing substrate, the presence of predators and/or competitors, e.g. brown rat, and the connectivity of the site to the wider environment.
- 3.5.8 **Badger:** If badger *Meles meles* is or has been present within a survey area then signs of activity, e.g. setts, paths, latrines, foraging, etc., are usually evident. In addition to these field signs, an assessment of the suitability of the habitats within the

survey area to support badger was made based on topography, substrate, land use and the quality of available foraging habitat.

- 3.5.9 **Reptiles:** The presence of habitat features outlined in the *Herpetofauna Workers' Manual* (JNCC 2003) as those favoured by reptiles, i.e. dry, species-rich undisturbed open ground with a mix of sparse and dense vegetation, sunny banks, gullies and hollows and south-facing banks with mammal burrows suitable for hibernation, was used to assess the suitability of land within the survey area to support this species group. The habitat conditions of the surrounding landscape, including the presence of both potential habitat corridors that might provide connectivity with the site and potential barriers to dispersal, e.g. busy roads, were also considered in the overall assessment.
- 3.5.10 **Breeding Birds:** The habitats within the survey area were assessed for their potential to support breeding birds based on surveyor experience and species breeding habitat requirements described in *A Field Guide to Monitoring Nests* (Ferguson-Lees *et al.* 2011).

4.0 SURVEY RESULTS AND EVALUATION

4.1 Desk study

4.1.1 Designated sites

4.1.1.1 The MAGIC website returned results of no statutory protected sites within 2km.

4.1.1.2 The results of the data request listed non-statutory designated areas within 2 km distance from the site, which are detailed in [Table 2](#) below.

Table 2: Non-statutory designated sites within 2 km of application site

Site Name	Designation	Location (approx.)
Grassland Opposite Kings Road Farm	Site of Biological Importance	1.25 km E
Ashton Canal (West)	Site of Biological Importance	1.1 km N/NW
Ashton Canal (East)	Site of Biological Importance	1.1 km NE
Ponds at Denton Golf Course	Site of Biological Importance	1.5 km SE
Audenshaw Reservoir	Site of Biological Importance	1.5 km SE/E

4.1.2 Protected and notable species

4.1.2.1 The ecological data interrogation returned records of several protected species which are within 2 km of the site, over the last decade. These are detailed in [Table 3](#) below. This table does not include the list of birds found in the local area; this list can be made available on request.

Table 3: Results of Ecological Data Request for Protected Species

Common Name	Scientific Name	Group	Records	Distance (closest)	Designations
Great Crested Newt	<i>Triturus cristatus</i>	Amphibian	20	700 m SE	LBAP, WCA5, S41, HabRegs2, UKBAP
Slow Worm	<i>Anguis fragilis</i>	Reptile	1	1.5 km N	LBAP, WCA5, UKBAP
Kingfisher	<i>Alcedo atthis</i>	Bird	1	1.5 km SE	LBAP, BAm [RSPB], WCA5, UKBAP
Little Ringed Plover	<i>Charadrius dubius</i>	Bird	11	1.5 km SE	LBAP, WCA5, UKBAP
Peregrine	<i>Falco peregrinus</i>	Bird	1	1.1 km SE/E	LBAP, WCA5, UKBAP
Song Thrush	<i>Turdus philomelos</i>	Bird	10	500 m SE	LBAP, BRd [RSPB], S41, UKBAP
Lapwing	<i>Vanellus vanellus</i>	Bird	4	1 km SE	LBAP, BRd [RSPB], S41, UKBAP
Brown Long-eared Bat	<i>Plecotus auritus</i>	Terrestrial Mammal	1	1.1 km E	LBAP, WCA5, S41, HabRegs2, UKBAP
Common Pipistrelle	<i>Pipistrellus pipistrellus</i>	Terrestrial Mammal	52	50 m NE	WCA5, S41, HabRegs2
Noctule Bat	<i>Nyctalus noctula</i>	Terrestrial Mammal	4	160 m NW	LBAP, WCA5, S41, HabRegs2, UKBAP
Pipistrelle species	<i>Pipistrellus</i>	Terrestrial Mammal	24	200m NW	WCA5, S41, HabRegs2
Soprano Pipistrelle	<i>Pipistrellus pygmaeus</i>	Terrestrial Mammal	5	1 km S	LBAP, WCA5, S41, HabRegs2, UKBAP

Daubenton's Bat	<i>Myotis sp.</i>	Terrestrial Mammal	2	120 m N	LBAP, WCA5, S41, HabRegs2, UKBAP
Whiskered Bat	<i>Myotis mystacinus</i>	Terrestrial Mammal	1	110 m NE	LBAP, WCA5, S41, HabRegs2
Eurasian Badger	<i>Meles meles</i>	Terrestrial Mammal	6x setts, 4x field signs	70m	BAct

4.1.3 Standing water inside 500 m search area

4.1.3.1 There are no waterbodies in the 500m search area.

4.1.4 Relevant historical ecological surveys in local area

4.1.4.1 No recent relevant ecological surveys were reported on land either within or immediately adjacent to this site.

4.2 Field survey: Phase 1 Habitat Survey

4.2.1 Site Context and Connectivity

4.2.1.1 The site is bordered by Vine Street and housing to the east, by housing to the south, light industrial development and offices to the south west, Lees street and housing to the west and the railway and housing beyond to the north. The vegetated embankments of the railway line represent a 'green corridor' running east-west through the city.

4.2.2 Habitat Compartments

4.2.2.1 Details of the broad habitats recorded within the survey area, including any recognised conservation value at the local or national scale are provided in [Table 4](#). Photographs of habitats described are provided in the [Appendix](#). The extent and distribution of these habitats within the survey area and adjacent land are presented in the [Extended Phase 1 Habitat Plan](#) at [Figure 1](#), below.

4.2.2.2 The target notes are as follows:

TN01: extensive site clearance, including deep excavation and soil mounding

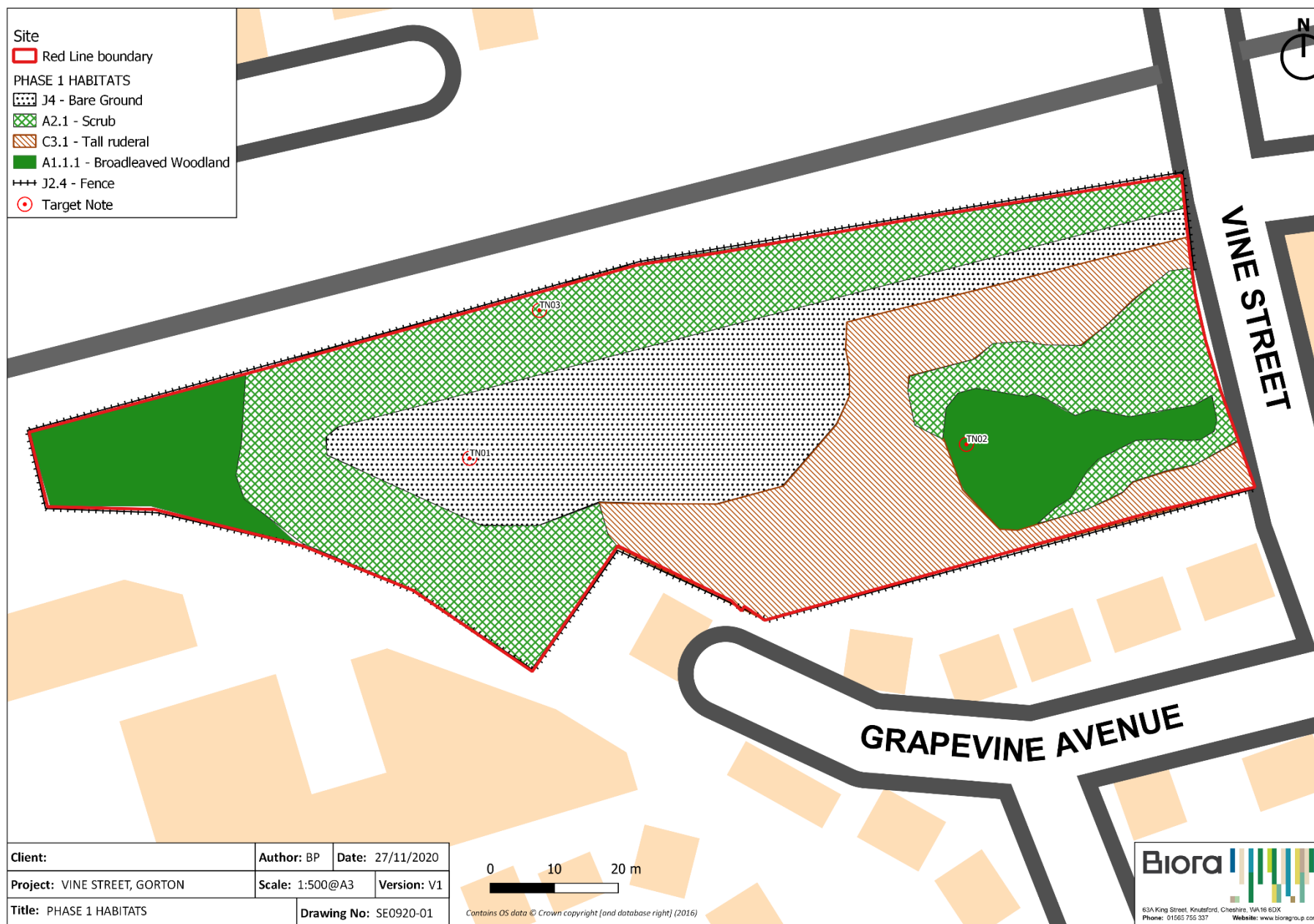
TN02: garden escape: Bamboo

TN03: extensive fly-tipping

Table 4: JNCC Phase 1 Habitats Recorded by Survey

Habitat Parcels	Description
A2.1 – Scrub	There were extensive patches of scrub, largely bramble <i>Rubus fruticosus</i> agg with young goat willow <i>Salix caprea</i> . and occasional gorse <i>Ulex europeaus</i> , broom <i>Cytisus scoparius</i> and raspberry <i>Rubus idaeus</i> .
A1.1.1– Broadleaved Woodland	The majority of this woodland comprises young birch <i>Betula pubescens</i> , with multi-stem goat willow, but also young poplar <i>Populus nigra</i> subsp. <i>betulifolia</i> ?, and occasional ash <i>Fraxinus excelsior</i> and cherry <i>Prunus padus</i>
J1.4 – Tall ruderal	There were patches of tall ruderals scattered across the site, with a variety of weed species, including Large-flowered Evening Primrose <i>Oenothera glazioviana</i>
J2.4 - Fence	The site was bordered by a fence of overlapping vertical timber sections on concrete posts to the south.
J4 – Bare ground	There were extensive areas of cleared ground on site, following illegal earthworks.

Figure 1: Extended Phase 1 Habitat Survey



4.3 Field Survey: Species and Species Groups

4.3.1 Plants

- 4.3.1.1 Only the scrub habitat and small amount of broad-leaved woodland (Biodiversity Action Plan) was of conservation concern or listed under any Schedule of the WCA 1981 for their value.

4.3.2 Great Crested Newt

- 4.3.2.1 There are several records of GCN presence in the 2km search area, with records 700m from the site. The location of records are cut off from the site by roads and buildings in the area.
- 4.3.2.2 There are no waterbodies on site and no waterbodies within 500 m of the site. The presence of GCN at this site is extremely unlikely and the site is considered to have **negligible value** for this species and is therefore **scoped out of further assessment**.

4.3.3 Bats

- 4.3.3.1 The ecological data request returned several records of bats within 2km of the site over the last 10 years.
- 4.3.3.2 As there were no buildings, or other structures, and no mature trees with hollows that could accommodate bats, there is unlikely to be bat roosts at this location.
- 4.3.3.4 The habitats within the application boundary generally provide moderate habitat for foraging and commuting bats; the site also connects to the railway line, which is now a green corridor, following the establishment of scrub and woodland on the embankments. For this reason, the site would have to be considered as having at least **moderate value** for this species at the **local level**.

4.3.4 Otter

- 4.3.4.1 Desktop survey returned no records of Otter within the search area over the past 10 years.
- 4.3.4.2 Field Survey identified no evidence of Otter and no watercourses within the 2km search. For this reason, the value of the site for Otter is currently considered to be **negligible** and this species is **scoped out of further assessment**.

4.3.5 Water Vole

- 4.3.5.1 The ecological data request returned no records of Water Voles within the 2km search area from the past 10 years.
- 4.3.5.2 Field survey identified no evidence of water vole activity and no habitat with the potential to support this species within the site or immediately adjacent to the site. For this reason, the value of the site for this species is currently considered to be **negligible** therefore this species is **scoped out of further assessment**.

4.3.6 Badger

- 4.3.6.1 Desk study returned records of badger adjacent to the site. Much of the site adjacent to the recorded location of badgers had been cleared, so any signs of activity by badgers will have been erased in the earthworks.
- 4.3.6.2 Field survey identified no evidence of Badgers (tracks, latrines, hairs, prints etc) on-site, and, generally, low-quality foraging habitat (likely low number of earthworms but invertebrates beneath stones), with a lack of fruit bearing trees and/or hedgerows present which would provide a food source for badgers. Immediately adjacent to the site along the southern boundary (beyond the fence) there was cover of scrub and mature trees, which surveyors could not access.
- 4.3.6.3 The site does provide resources for sett-building and limited foraging, and the railway corridor provides a commuting and foraging route. Given the points above together with the proximity of known badger setts, the site is assessed to be of **moderate value** for this species at the **local scale**.

4.3.7 Reptiles

- 4.3.7.1 Desktop survey returned no records of reptile species within the search area over the past 10 years.
- 4.3.7.2 The site does hold some habitats which have value to reptiles such as a scrub, hedgerow, and a compost pile which could be used as a refugia. However, in context these features are not in abundance and do not contribute towards a heterogeneous landscape mosaic suitable for reptiles, particularly with the large expanse of grazed, hedge-less fields. Overall, the site is considered to have **low value** to reptiles at the **local level**.

4.3.8 Breeding birds

- 4.3.8.1 The ecological data request returned relatively few records of birds within the 2km search area from the site over the last ten years, with the proximity of the motorway and lack of hedgerows, trees and scrub minimising the value of this survey area for birds.
- 4.3.8.2 The trees and limited scrub within the application boundary represents habitat for nesting bird. The value of the site would be higher before clearance of larger areas of scrub and ruderal vegetation.
- 4.3.8.3 The surrounding landscape represents generally low-quality habitat for birds but is adjacent to the railway which supports trees and scrub on the embankments. From the information above, the site is generally considered to have **moderate** value for nesting birds at the **local** level of scale.

4.3.9 Other notable species recorded by survey

- 4.3.9.1 There were several garden escape species, including bamboo and large-flowered evening primrose.

Table 5: Value summary table of protected/notable species

Species	Local	County-wide	Regional	National	International
Breeding Birds	Moderate				
Badger	Moderate				
Bats	Low				
Reptiles	Low				
GCN					
Otter					
Water Vole					

KEY: Blue fill represents scale at which value/potential value of species is relevant. Unshaded boxes represent negligible value impacts.

5.0 CONCLUSION AND RECOMMENDATIONS

5.1 Designated and Non-designated Sites

- 5.1.1 There are no designated sites within 2km of the survey site and the non-designated sites are too remote to be influenced by the development of the

5.2 Habitats

- 5.2.1 There was biodiversity value in the young trees, scrub and ruderals that covered this brownfield site. This was substantially reduced by the illegal actions of a third party in clearance and fly-tipping. Any redevelopment of the site should at least seek to preserve the value of the railway embankment as a part of the green corridor in the maintenance and enhancement of the trees and scrub at this location.

5.3 Bats

- 5.3.1 All British bats are European Protected Species (EPS) and are fully protected under Schedule 2 of The Conservation of Habitats and Species Regulations 2010 (as amended) and Schedule 5 of the Wildlife and Countryside Act 1981 (as amended). Under this legislation, it is an offence *to intentionally capture, kill, disturb, or injure a bat; to damage or destroy a breeding or resting place (whether in use or not); to obstruct access to their resting or sheltering places; or to possess, sell, control or transport live or dead bats, or parts of a bat.*
- 5.3.2 All species of British bat are also the subject of a UK-wide Biodiversity Action Plan (BAP), any many species are also listed under Section 41 of the 2006 Natural Environment and Rural Communities (NERC) Act.
- 5.3.3 Bat species in the local area may use this site occasionally for foraging and commuting, however, there were no apparent opportunities for roosting at this site.
- 5.3.4 The details of any proposed lighting throughout the site should be given careful consideration to avoid negative impacts on foraging and commuting bats. The proposed landscape would benefit bats where there is enhancement by native planting of shrubs and highly-scented herbs which will attract invertebrates, especially along the rail corridor.

5.4 Breeding birds

- 5.4.1 All wild British bird species and their nests are protected under the Wildlife and Countryside Act 1981 (as amended). It is an offence under the Act to intentionally or recklessly destroy any active bird nest or to remove its contents. Any development activity within the survey area, including the clearance of vegetation or the demolition of buildings, conducted within the core breeding season (March-August inclusive) has the potential to damage or destroy bird nests and so breach legislation. Any site clearance activity should, therefore, be timetabled outwith this period. Where this is not possible, development works should be preceded by a sufficiently licensed professional ecologist who can confirm the presence/absence of breeding birds on site immediately before works begin.
- 5.4.2 The young trees and scrub represent potential nest sites for breeding birds. If any of this habitat is removed during the core British bird breeding season of March to August inclusive, such activities have a high chance of destroying active nests, which would constitute an offence under the Wildlife & Countryside Act.
- 5.4.3 Any vegetation clearance should be timed out with the core bird breeding season period (March – August inclusive) to avoid breaching legislation. Where such works cannot realistically be carried out during this period, any vegetation and all building structures to be affected must be checked by a suitably experienced ecologist for the presence of birds' nests immediately before the habitat is removed.
- 5.4.4 The provision of nest sites (boxes) and enhancement of the vegetation with fruit-bearing species would assist in maintain the current value of the site for birds.

5.5 Reptiles

- 5.5.1 All reptiles are protected under the Wildlife and Countryside Act 1981 (as amended), which makes it an offence to intentionally kill or injure a reptile.
- 5.5.2 While there is record of slow worm approximately 1.5 km to the north, there is no obvious corridor between this and the proposed development site. However, the site does sit adjacent to a railway line that sits in a green corridor, absence of record does not always prove absence of species.
- 5.5.3 Maintenance of scrub and patches of open and bare ground within the embankment of the railway line would help maintain the opportunity for potential use by reptiles.

5.6 Badgers

- 5.6.1 There was no permitted access to adjacent land to confirm the current status with regards badger usage at this location. There were, however, no sign of use or occupation or foraging by badgers on the site. The site had been recently grossly disturbed, which might have removed any signs of activity. The railway embankment, on the northern boundary of the site, did have good potential habitat for badgers. While no evidence was found at the time of survey, badgers tend to be seasonal in their use of sites and can very rapidly colonise, particularly in the creation of outlier setts.
- 5.6.2 It is likely, given the proximity of the records, that badgers have foraged at this location and are therefore likely to forage at this site in the future. Measures should be taken, therefore, to ensure that foraging and communing opportunities are maintained at this location, in particular, to maintain access to the vegetated railway embankment.

5.7 Recommendations:

- R1 Any landscape scheme and management plan for the re-developed site should promote tree and hedgerow planting. Planting schemes for the landscape design should aim to utilise native species where possible.
- R2 All vegetation clearance should be timetabled outside of the core British bird breeding season (i.e. March-September inclusive). Where this is not possible, all vegetation to be removed must be checked for active nests by a suitably experienced ecologist before undertaking the works.
- R3 Nesting opportunities should be provided for birds in the provision of 5 nest boxes either on or built-in to the proposed development to replace the existing nesting habitat. Key species might include house sparrow and starling.
- R4 A management regimes should be implemented for any retained scrub/woodland areas, to include enhancement with native species, including fruit-bearing, and retention of dead/dying trees to encourage invertebrates, to the benefit of birds, badgers and, possibly, reptiles.
- R5 Consideration should be given to the potential impacts of lighting during development works and after development for bats at this location and to the possible effects of light spill on to the habitats such as hedgerows where bat foraging was recorded. Please see appendix 7 for BCT Guidance on Sympathetic Lighting Designs for Bats.
- R6 The site should be re-surveyed for badgers immediately in advance of commencement of development work to inform any licensing that might be required, and a Reasonable Avoidance Method statement provided to ensure that work can take place without harm to badgers.

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On-line resources:

- British Trust for Ornithology (BTO) website www.bto.org.uk
- UK BAP www.ukbap.org.uk

APPENDICES

APPENDIX 1: PHOTOGRAPHS

P1: Fly-tipping along the railway embankment, amongst willow scrub



P2: Area stripped of vegetation and soil



P3: Bamboo (garden escape) amongst the young willow scrub



P4: Ash trees in Vine Street.



APPENDIX 2: UK Legal Protection and Planning Guidance

A1 National Planning Policy Framework (NPPF)

The NPPF came into force in March 2012. It sets out the Government's planning policies for England and how these are expected to be applied. It gives guidance to local planning authorities on the content of their local plans but is also a material consideration in determining planning applications. **The NPPF states that the planning system should provide a net gain for biodiversity wherever possible.** The NPPF replaces much of the previous planning policy guidance, including PPS9: Biodiversity and Geological Conservation. However, the Government Circular 06/05: Biodiversity and Geological Conservation – Statutory Obligations and Their Impact within the Planning System (which accompanied PPS9) remains valid.

A2 Biodiversity Action Plans

UK Biodiversity Action Plans: The **UK Biodiversity Action Plan (UKBAP)** was established in response to the **Convention on Biological Diversity 1992**, signed by 150 members at the Rio Earth Summit, which aimed to promote sustainable development amongst all signatories. Specific action plans have been prepared for highly protected species. As well as a national Biodiversity Action Plan, local Biodiversity Action Plans identify species of note at local level throughout the UK.

A3 Priority Habitats and Species

Under the terms of the Natural Environment and Rural Communities Act 2006, all public bodies are required to have regard to the conservation of biodiversity when carrying out their activities. This means that efforts must be made to consider priority and protected species and habitats in particular. There would be a presumption in the land-use planning process against any development that would result in loss to an area of priority habitat or harm to the population of any priority species.

A4 Vegetation

The Wildlife and Countryside Act 1981 (as amended) lists plants which are statutorily protected. In relation to development these plants are rare and are not often encountered. The bluebell is scheduled, with commercial bulb-picking from the wild being prohibited. There is also a category of plants which it is an offence to introduce to the wild. This category includes Japanese knotweed, which is often found on brownfield sites. Care is needed to avoid spreading the species around the site during earthworks, and to ensure that any removal of infested soils off-site is to a licensed tip. Giant hogweed and Himalayan balsam are also listed in this category of invasive alien plant species. In addition, the Ragwort Control Act came into force on 20 February 2004 and enables the Secretary of State to make a Code of practice to prevent the spread of common ragwort.

A5 Hedgerows

As a priority habitat for conservation concern, hedgerows also receive further protection under the Hedgerow Regulations 1997. Under the Hedgerows Regulations 1997 it is against the law to remove or destroy certain hedgerows without permission from the local planning authority. Local planning authority permission is normally required before removing hedges that are at least 20 metres (66 feet) in length, more than 30 years old and contain certain plant species. The authority will assess the importance of the hedgerow using criteria set out in the regulations. The local planning authority is also the enforcement body for offences created by the Regulations. If a hedgerow is removed without permission, there may be an unlimited fine and the hedgerow may have to be replaced.

A6 Great crested newt

A European Protected Species (EPS) and fully protected under the Conservation of Habitats and Species Regulations 2010 and the Wildlife and Countryside Act 1981 (as amended). Under the legislation it is an offence to:

- *Intentionally or deliberately capture, kill or injure great crested newts (GCNs).*
- *Intentionally or recklessly disturb them in a place used for shelter or protection.*
- *Damage or destroy a breeding site or resting place.*
- *Intentionally or recklessly damage, destroy or obstruct access to a place used for shelter or protection.*
- *Possess a great crested newt, or any part of it, unless acquired legally.*
- *Sell, barter, exchange or transport or offer for sale great crested newts or parts of them.*

Where Great crested newts (GCNs) are present at a proposed development site it is usually possible to continue with the project, re-locating the animals in advance of development, but only upon receipt of a site-specific licence from Natural England. The licence application process can be complex and can only be conducted by a suitably qualified GCN-specialist ecologist. Each licence application must be supported by:

- Full optimal-season great crested newt survey results and analysis;
- A suitable mitigation strategy that ensures that the favourable conservation status of the GCN population will be maintained (this usually involves the provision by the developer of additional land with ponds as compensation for

loss of habitat and breeding sites). This mitigation strategy should usually be agreed by the ecologist through liaison with Natural England; and

- A method statement explaining how GCNs will be accommodated legally if found during the development process.

A7 Bats

All species of bats are European Protected Species and their breeding and nesting sites (roosts) are given a high degree of legal protection under the terms of the Wildlife and Countryside Act 1981 (as amended) and the Conservation of Habitats and Species Regulations 2010. In addition, all bats are the subject of a UK-wide Biodiversity Action Plan (BAP). This combined legislation offers bats, their roost sites and resting places strict protection from intentional or reckless disturbance (see wording of GCN legislation above). It should be noted that, under the legislation, a bat roost is defined as any structure or place which is used by bats to shelter, breed or perch whilst feeding. As bats tend to reuse the same roosts, the roost is legally protected, whether the bats are present at the time or not.

Where bats are present at a proposed development site it is usually possible to continue with the proposed project, but only upon receipt of a site-specific licence from Natural England. The licence application process can be complex and can only be conducted by a suitably qualified bat-specialist ecologist. Each licence application must be supported by:

- Full optimal-season bat survey results and analysis;
- A suitable mitigation strategy that ensures that the favourable conservation status of the bat population will be maintained (this usually involves the provision by the developer of replacement permanent bat roosts, additional bat boxes and both bat-friendly planting and lighting within the development site). This mitigation strategy should usually be agreed by the ecologist through liaison with Natural England; and
- A method statement explaining how bats will be accommodated legally if found during the development process.

A8 Otter

Otters are a European Protected Species (EPS) and fully protected under the Conservation of Habitats and Species Regulations 2010 and the Wildlife and Countryside Act 1981 (as amended). Otters and their resting places are fully protected, it is an offence to deliberately, capture, injure or kill them or to damage, destroy or obstruct their breeding or resting places. It is also an offence to disturb otters in their breeding or resting places.

Where otters are present at a proposed development site it is usually possible to continue with the proposed project, but only upon receipt of a site-specific licence from Natural England. The licence application process can be complex and can only be conducted by a suitably qualified otter-specialist ecologist. Each licence application must be supported by:

- Full optimal-season otter survey results and analysis;
- A suitable mitigation strategy that ensures that the favourable conservation status of the otter population will be maintained (this usually involves the provision by the developer of replacement waterbodies and holts within the development site). This mitigation strategy should usually be agreed by the ecologist through liaison with Natural England; and
- A method statement explaining how otters will be accommodated legally if found during the development process.

A9 Badger

All badgers are protected from harm under the Protection of Badgers Act (1992). Under this act it is an offence:

- To kill, injure or take a badger, or to attempt to do so;
- To use badger tongs in the course of killing or taking, or attempting to kill or take, any badger;
- To kill or take a badger with a firearm which does not fall within the specifications laid down in the Act;
- To dig for a badger;
- To cruelly ill-treat a badger;
- To possess or control a live badger;
- To sell or offer for sale a live badger;
- To mark, or attach any ring, tag or marking device to a badger;
- To possess or control any dead badger, any part of one, or anything derived from one;
- To interfere with a badger sett by (a) damaging a sett or any part of one; (b) destroying a sett; (c) obstructing access to or any entrance of a sett; (d) causing a dog to enter a sett; or (e) disturbing a badger when it is occupying a sett.

Where badgers are present at a proposed development site, it is usually possible to continue with the proposed project, but only upon receipt of a site-specific licence from Natural England. A licence is always required to shut down a badger sett or for works within 30m of a badger sett. The licence application process can be complex and can only be conducted by a suitably qualified badger-specialist ecologist. Each licence application must be supported by:

- Full optimal-season badger survey results and analysis;
- A suitable mitigation strategy that ensures that the favourable conservation status of the badger population will be maintained (this usually involves the provision by the developer of replacement artificial setts, planting of suitable

fruit-bearing shrubs, erection of badger gates and underpasses within the development site). This mitigation strategy should usually be agreed by the ecologist through liaison with Natural England; and

- A method statement explaining how badgers will be accommodated legally if found during the development process.

A10 Water vole

From 6th April 2008, water voles and their resting places gained full protection under the Wildlife and Countryside Act (1981). It is an offence to deliberately, capture, injure or kill them or to damage, destroy or obstruct their breeding or resting places. It continues to be an offence to disturb them in their breeding or resting places.

Where water voles are present at a proposed development site it is usually possible to continue with the project, re-locating the animals in advance of development, but only upon receipt of a site-specific licence from Natural England. The licence application process can be complex and can only be conducted by a suitably qualified water vole-specialist ecologist. Each licence application must be supported by:

- Full optimal-season water vole survey results and analysis;
- A suitable mitigation strategy that ensures that the favourable conservation status of the water vole population will be maintained (this usually involves the provision by the developer of additional land with ponds as compensation for loss of habitat and breeding sites). This mitigation strategy should usually be agreed by the ecologist through liaison with Natural England; and
- A method statement explaining how water voles will be accommodated legally if found during the development process.

A11 Reptiles

The four widespread species of reptile in the UK (ie common lizard, slow-worm, grass snake and adder) are all protected under the terms of the Wildlife and Countryside Act 1981 (as amended), however they are not fully protected under European law. This level of protection prohibits the intentional killing and injuring and trade of these reptiles. Where a survey identifies potential habitat for reptiles at a development site, a reptile survey may be needed prior to submission of a planning application and mitigation may be required by Natural England for any loss of reptile habitat as a result of a site's re-development

A12 Breeding birds

All wild birds, their nests and their eggs are protected by the Wildlife & Countryside Act 1981 (as amended). It is an offence (with certain exceptions), to intentionally or recklessly kill, injure or take any wild bird (this includes chicks); to take, damage or destroy any wild bird's nest while it is use or being built; and to take or destroy the egg of any wild bird. The definition of a wild bird is 'any bird of a kind which is resident in or a visitor to Great Britain in a wild state'.

Species named in Schedule 1 of the Act are given special protection and it is an offence to disturb these species at the nest or while they are caring for dependant young. The RSPB and the UK's leading bird conservation organisations work together to regularly review the status of birds within the UK. A total of 246 species are assessed against a set of objective criteria to place each on one of three lists - green, amber and red – indicating an increasing level of conservation concern. These lists provide a tool for guiding conservation actions for birds in the UK and for setting priorities for action on individual species. The last review of these lists was completed in May 2009.

For certain species, eg Feral Pigeon, general licences are available for an authorised person to lawfully carry out the actions outlined above providing that it is in the overriding interest of public health or air safety and that all other attempts to prevent the problem caused by the species have failed.

The Barn Owl has seen significant declines in recent history primarily due to habitat loss and the destruction, removal or renovation of traditional nesting sites. It is currently included in the amber-list of species of medium conservation concern, having been classified as a Species of European Conservation Concern (SPEC). In Great Britain it is listed on Schedule 1 of the Wildlife & Countryside Act (1981) as amended. It is an offence to disturb any wild bird included in Schedule 1 while it is building a nest or is at, on or near a nest containing eggs or young; or disturbs dependent young of such a bird. Note that if any of the above resulted from a person being reckless, even if they had no intention of committing the offence, their action would still be considered an offence. A person is not guilty of an offence if it can be shown that the act was 'the incidental result of a lawful operation and could not have been reasonably avoided'; only a court can decide what is 'reasonable' in any set of circumstances.

APPENDIX 3: Definition of designation abbreviations

BAct	Protection of Badgers Act 1992
HabRegs2	Conservation (Habs and Sp) Regulations 2010 - Schedule 2
HabRegs4	Conservation (Habs and Sp) Regulations 2010 - Schedule 4
HabRegs5	Conservation (Habs and Sp) Regulations 2010 - Schedule 5
S41	NERC S41
UKBAP	UK BAP Priority Species
WCA1	Wildlife and Countryside Act - Schedule 1
WCA5	Wildlife and Countryside Act - Schedule 5
WCA8	Wildlife and Countryside Act - Schedule 8
WCA9	Wildlife and Countryside Act Schedule 9
BAm [RSPB]	Birds of Conservation Concern [RSPB] - Amber
BRd [RSPB]	Birds of Conservation Concern [RSPB] - Red
IR	Internationally Rare
IUCN CE	IUCN Global Red List - Critically Endangered
IUCN En	IUCN Global Red List - Endangered
IUCN Ex	IUCN Global Red List - Extinct
IUCN ExW	IUCN Global Red List - Extinct in the wild
IUCN LC	IUCN Global Red List - Least Concern
IUCN NT	IUCN Global Red List - Near Threatened
IUCN Vul	IUCN Global Red List - Vulnerable
NR	Nationally Rare
NR Marine	Nationally Rare - Marine Species
NS	Nationally Scarce
NS Marine	Nationally Scarce Marine
INNS	Invasive Non-Native Species
LBAP	Local Biodiversity Action Plan Species
LRaSc	Locally Rare and Scare

APPENDIX 4: Native plant species suitable for bat foraging

Planting to enhance a site for bats should aim to provide a habitat rich in insects, and with the potential for alternative roosting sites. The following are examples of plant species, which can be used where appropriate, to enhance a landscape for bats.

Night-scented flowers

As bats usually feed at dusk and dawn it is advantageous to use night-scented flowers which will attract moths and other night-flying insects.

Re-seeding

Where re-seeding is to take place the choice of a 'conservation mix' of grass seed would be preferential. The management of grassland areas as hay meadows, without use of herbicides/fertilisers and allowing the grass to go to seed prior to cutting is beneficial in allowing larval stages of the insects to develop.

English Name	Latin Name
Trees and Shrubs (of local provenance where possible)	
Oak	<i>Quercus robur</i>
Ash	<i>Fraxinus excelsior</i>
Silver Birch	<i>Betula pendula</i>
Field Maple	<i>Acer campestre</i>
Hawthorn	<i>Crataegus monogyna</i>
Alder	<i>Alnus glutinosa</i>
Goat Willow	<i>Salix caprea</i>
Guelder Rose	<i>Viburnum opulus</i>
Hazel	<i>Coryllus avellana</i>
Blackthorn	<i>Prunus spinosa</i>
Elder	<i>Sambucus nigra</i>
Night-scented flowers	
Nottingham Catchfly	<i>Silene nutans</i>
Night -flowering Catchfly	<i>S. noctiflora</i>
Bladder Campion	<i>S. vulgaris</i>
Night-scented Stock	<i>Matthiola bicornis</i>
Dame's-violet	<i>Hesperis matronalis</i>
Common Evening-primrose	<i>Oenothera biennis</i>
Soapwort	<i>Saponaria officinalis</i>
Scented herbs	
Chives	<i>Allium schoenoprasum</i>
Sage	<i>Salvia officinalis</i>
Marjoram	<i>Origanum vulgare</i>
Borage	<i>Borago officinalis</i>
Mint	<i>Mentha</i> sp.
Climbers	
Honeysuckle (native)	<i>Lonicera periclymenum</i>
Traveller's-joys	<i>Clematis vitalba</i>
Dog-rose	<i>Rosa canina</i>
Sweet-briar	<i>R. rubiginosa</i>
Field-rose	<i>R. arvensis</i>
Ivy	<i>Hedera helix</i>
Bramble	<i>Rubus fruticosus</i> agg

APPENDIX 5: Specification for bird nest boxes (examples)

WoodStone® Seville 32mm Nest Box



Ark Wildlife

For House Sparrow

Height: 31 cm

Width: 20.5 cm

Depth: 20 cm

Entrance hole: 32 mm

Approximate unit cost: £22.00

Attach to building; guaranteed for 10 years

Also available in brown (code 90730)

For House Martin

Approximate cost for single unit: £13.00

Approximate cost for double unit: £20.00



WoodStone® Starling Nest Box



For Starling

Height: 38.5 cm

Width: 22 cm

Depth: 21.5 cm

Entrance hole: 45 mm

Approximate unit cost: £30.00

Attach to building; guaranteed for 10 years

APPENDIX 6: BCT Guidance on Sympathetic Lighting Designs for Bats

Guidance has been recently updated, provided by the Bat Conservation Trust (2018) in the following document: [<https://cdn.bats.org.uk/pdf/Resources/ilp-guidance-note-8-bats-and-artificial-lighting-compressed.pdf?mtime=20181113114229>]. General guidance for sympathetic lighting is also given below.

GENERAL

Type of lamp (light source)

The impact on bats can be minimised using low pressure sodium lamps or high pressure sodium instead of mercury or metal halide lamps where glass glazing is preferred due to its UV filtration characteristics.

Luminaire and light spill accessories

Lighting should be directed to where it is needed and light spillage avoided. This can be achieved by the design of the luminaire and by using accessories such as hoods, cowls, louvres and shields to direct the light to the intended area only. Planting can also be used as a barrier or manmade features that are required within the build can be positioned to form a barrier.

Lighting column

The height of lighting columns in general should be as short as is possible as light at a low level reduces the ecological impact. However, there are cases where a taller column will enable light to be directed downwards at a more acute angle and thereby reduce horizontal spill. For pedestrian lighting this can take the form of low level lighting that is as directional as possible and below three lux at ground level. The acceptable level of lighting may vary dependent upon the surroundings and on the species of bat affected.

Predicting where the light cone and light spill will occur

There are lighting design computer programs that are widely in use which produce an image of the site in question, showing how the area will be affected by light spill when all the factors of the lighting components listed above are taken into consideration. This should be a useful tool to inform the mitigation process.

Light levels

The light should be as low as guidelines permit. If lighting is not needed, don't light.

Timing of lighting

The times during which the lighting is on should be limited to provide some dark periods. Roads or trackways in areas important for foraging bats should contain stretches left unlit to avoid isolation of bat colonies. These unlit stretches should be 10 metres in length either side of commuting route.

SECURITY LIGHTING

Power

It is rarely necessary to use a lamp of greater than 2000 lumens (150 W) in security lights. The use of a higher power is not as effective for the intended function and will be more disturbing for bats.

Movement sensors

Many security lights are fitted with movement sensors which, if well installed and aimed, will reduce the amount of time a light is on each night. This is more easily achieved in a system where the light unit and the movement sensor can be separately aimed.

Timers

If the light is fitted with a timer this should be adjusted to the minimum to reduce the amount of 'lit time'.

Aim of light

The light should be aimed to illuminate only the immediate area required by using as sharp a downward angle as possible. This lit area must avoid being directed at, or close to, any bats' roost access points or flight paths from the roost. A shield or hood can be used to control or restrict the area to be lit. Avoid illuminating at a wider angle as this will be more disturbing to foraging and commuting bats as well as people and other wildlife.

Alternatives

It may be a better solution for security lighting on domestic properties to use a porch light.

APPENDIX 7: BCT Guidelines for Assessing Bat Roosting Potential

POTENTIAL	ROOSTING HABITATS	COMMUTING AND FORAGING HABITATS
NEGLECTIBLE	Negligible habitat features on site likely to be used by roosting bats.	Negligible habitat features on site likely to be used by foraging and commuting bats.
LOW	A structure with one or more potential roost sites that could be used by individual bats opportunistically. These potential roost sites do not, however, provide enough space, shelter, protection, appropriate conditions¹ and/or suitable surrounding habitat to be used on a regular basis or by larger numbers of bats (i.e. unlikely to be suitable for maternity or hibernation). A tree of sufficient size and age to contain potential roost features but with none seen from the ground or features with only very limited roosting potential.	Habitat that could be used by small numbers of commuting bats such as gappy hedgerow or unvegetated stream, but is isolated, i.e. not very well connected to the surrounding landscape by other habitats. Suitable, but isolated habitat that could be used by small numbers of foraging bats such as a lone tree (not in a parkland situation) or a patch of scrub.
MODERATE	A structure or tree with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions and surrounding habitat but unlikely to support a roost of high conservation status (with respect to roost type only – the assessments in this table are made irrespective of species conservation status, which is established after presence is confirmed).	Continuous habitat connected to the wider landscape that could be used by bats for commuting such as lines of trees and scrub or linked back gardens. Habitat that is connected to the wider landscape that could be used by bats for foraging such as trees, scrub, grassland or water.
HIGH	A structure or tree with one or more potential roost sites that are obviously suitable for use by large numbers of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions and surrounding habitat.	Continuous, high-quality habitat that is well connected to the wider landscape that is likely to be used regularly by commuting bats such as river valleys, streams, hedgerows, lines of trees and woodland edge. High-quality habitat that is well connected to the wider landscape that is likely to be used regularly by foraging bats such as broadleaved woodland, tree-lined watercourses and grazed parkland. Site is close to and connected to known roosts.