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Report prepared for: Michael Snook

For the Site of: 11 Glebe Road, Reading, RG2 7AG

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Cherryfield Ecology has prepared this report for the named clients' use only.

Ecological reports are limited in shelf life, Natural England usually expect reports for licences to be from the most recent or current season, e.g. May 2024 to May 2025 for bats. Therefore, should the project not proceed within 12 months of this report an updated survey should be undertaken in order to check for changes that may have occurred on site. Information is believed to be accurate at the time of the survey; recommendations are made without bias based on good practice guidelines within the industry. However, species presence and ecological parameters can change over time.

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Ecological Appraisal (EA)

0.0 Non-Technical Summary

0.1 Background

This report follows national guidelines JNCC (2010) and UKHab's (2023) allowing for a daytime inspection and recommends for further surveys if considered necessary. If a deviation from the guidelines has been made, this will be detailed in the Method Section.

The following report details the findings and recommendations for the site of 11 Glebe Road, Reading, RG2 7AG.

The client commissioned Cherryfield Ecology to undertake an EA as the proposals include for converting the existing building into residential flats including a side extension on the north elevation, the construction of a two-storey detached dwelling, and associated landscaping and access. Plans have been provided (Appendix I).

0.2 Results and Findings

The site consists of one detached, three-storey, commercial building with a single-storey flat roof extension, developed land; sealed surface, artificially unvegetated: unsealed surface, modified grassland, introduced shrubs and broadleaved woodland. No protected species or evidence of protected species were found on site at the time of the survey.

The site provides **negligible** potential for badger and reptiles due to the limited suitable habitat on site and poor connectivity to more suitable habitats.

The site provides **negligible** potential for Great Crested Newt (GCN) due to the absence of suitable aquatic habitat, limited suitable terrestrial habitat and poor connectivity to other suitable habitat. The closest pond is ~480m southeast and the site resides in a green DLL zone.

The building (B1) provides **low** potential for roosting bats due to the presence of roosting features in the form of lifted and missing roof tiles.

The buildings (B2 and B3) provide **negligible** potential for roosting bats due to the lack of roosting features and access points throughout the building.

The introduced shrubs and broadleaved woodland habitats provide **high** potential for breeding birds.

The site provides **negligible** potential for other protected species due to the lack of suitable habitat onsite.

0.3 Impact Assessment and Recommendations

Badger - No further surveys are necessary; however, if any badger setts are found throughout works, all works must stop, and advice sought.

Bats - **B1: Presence/likely absence survey (low)** will be required (one survey), with four surveyors to cover the building B1; this must be undertaken between May to August. If bats are found to be present, two further surveys will be required (a minimum of three weeks apart), one of which can be undertaken in September if required.

B2 & B3: No further surveys are necessary; however, if bats are found throughout works, all works must stop, and advice sought.

Breeding Birds - No further surveys are recommended; however, the development should take place outside the nesting season (March to August). If this is not possible, it is recommended that a qualified ecologist is on-site to ensure the building/vegetation is not occupied by breeding birds, prior to demolition/clearance. Should an occupied nest be found, a buffer zone would need to be created until the nest is no longer in use.

Great Crested Newt (GCN) - No further surveys are necessary; however, if GCN are found on site, all works must stop, and advice sought.

Reptiles - No further survey is necessary; however, if reptiles are found on-site, all works must stop, and advice sought.

Other protected species - No further survey is necessary; however, if any other protected species are found on site, all works must stop, and advice sought.

Habitats - All habitats found are common and widespread, no impacts are foreseen.

The findings outlined in this report are valid for one year, after which updated surveys will be required.

Enhancements and mitigation are recommended (please see Section 4.4 for further details).

1.0 Introduction

1.1 Aim

The aim of this report is to inform of ecological constraints that may affect the development proposals and recommend to the client if further surveys are required for protected species. An impact assessment is undertaken at this stage; however, if further surveys are required, additional and unexpected impacts may result. The information within this report can be used as the baseline for any Biodiversity Net Gain (BNG) metric requirements, however, the calculations are not included within this report.

1.2 Background Information

The client, Michael Snook, has commissioned Cherryfield Ecology to undertake an EA for the site of 11 Glebe Road, Reading, RG2 7AG. Planning permission is being sought for converting the existing building into residential flats including a side extension on the north elevation, the construction of a two-storey detached dwelling, and associated landscaping and access.

This survey has checked all habitats, buildings, trees (from ground level only) or structures due to be affected by the proposals on site; it includes checking for protected species, signs of protected species or habitat value e.g. crevices, badger setts, ponds etc. as well as mapping the habitats on site.

The inspection was conducted on 01/07/2024.

The survey can only ever provide a 'snapshot' of the site at the time of the survey and circumstances may change following this report. Health and Safety restrictions or obstructions may limit the ability to find evidence.

Biological records have been requested to give the report context and allow a study of the surrounding area. The information is often sensitive and therefore a synopsis is provided.

The survey can be conducted year-round with the optimal period between mid-March and mid-October (south)/1st April and 30th September (north). However, it can be limited due to bad weather and in the winter, when some species are not as active,

thus evidence and species are often not found. During these periods, habitat value (likely presence) becomes more important to the assessment of the site.

Summary of legislation and National Planning Policy that protects wildlife in England:

- The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019.
- Wildlife and Countryside Act 1981 as amended.
- Countrywide and Rights of Way Act 2000.
- Natural Environment and Rural Communities Act 2006.
- National Planning Policy Framework (“NPPF”).
- Circular 06/05.

This legislation makes it illegal to:

- Intentionally or deliberately kill, injure or capture a protected species.
- Deliberately disturb a protected species, whether at rest or not.
- Damage, destroy or obstruct access to a resting place.
- Possess or transport a protected species or any part of that species, unless acquired legally.
- Sell, barter or exchange a protected species, or any part of a species.

1.3 Species Specific Information

All UK-protected species have the same protection and the detail under Bats also applies to GCN, Dormouse, Otters and the two UK-protected reptiles.

1.3.1 Breeding Birds

All nesting birds are protected under the Wildlife and Countryside Act (as amended) 1981, which makes it an offence to intentionally kill, injure or take any wild bird or take, damage or destroy its nest whilst in use or being built, or take or destroy its eggs. Furthermore, a number of birds enjoy further protection under that Act and are listed on Schedule 1 of the Act. These further protected birds are also protected from disturbance and it may be necessary to operate a “no-go” buffer zone around such nests - typically out to 5m.

1.3.2 Bats

All 18 species of bat common in the UK (17 known to be breeding) are fully protected under the Wildlife and Countryside Act (as amended) 1981 through inclusion in Schedule V of the Act. All bat species in the UK are also included in Schedule II of The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019, which transpose Annex II of the Directive 92/43/EEC 1992 on the Conservation of Natural Habitats and of Wild Fauna and Flora (“Habitats Directive”) which defines United Kingdom protected species of animals.

Bats species are afforded further protection by the Countryside and Rights of Way Act 2000; and the Natural Environment and Rural Communities Act 2006.

This combined legislation makes it an offence to:

- Intentionally or deliberately kill, injure or capture bats.
- Deliberately disturb bats, whether at roost or not.
- Damage, destroy or obstruct access to bat roosts.
- Possess or transport bats, unless acquired legally.
- Sell, barter or exchange bats.

1.3.3 Reptiles

There are six species of reptiles in Great Britain (Edgar *et al.*, 2010) and four of these are commonly found; the Barred Grass Snake *Natrix helvetica*, Adder *Vipera berus*, Common Lizard *Zootoca vivipara* and Slow Worm *Anguis fragilis*.

All native British species of reptiles are legally protected through their inclusion in Schedule V of the Wildlife and Countryside Act 1981. As such, all species are protected from deliberate killing or injury. Therefore, where development is permitted, and there will be a significant change in land use, a reasonable effort must be undertaken to avoid committing an offence. The same act makes the trading of native reptile species a criminal offence without appropriate licensing.

Two species of reptile; the Smooth Snake *Coronella austriaca* and Sand Lizard *Lacerta agilis* are further protected under The Conservation of Habitats and Species

(Amendment) (EU Exit) Regulations 2019, which defines UK protected species of animals (“rare reptiles”).

1.3.4 Badgers

Badger *Meles meles* and its habitat are protected under The Protection of Badgers Act 1992, Schedule V of the Wildlife and Countryside Act 1981, and Appendix III of the Bern Convention 1979.

This legislation makes it an offence to:

- Kill, injure, take or possess a badger.
- Interfere with, damage or destroy a badger sett including e.g. obstructing access to a badger sett.
- Cruelly treat or harm a badger.
- Disturb a badger in a sett.

1.3.5 Great Crested Newts

Great Crested Newts (GCN) *Triturus cristatus* are listed in both The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 and in Schedule V of the Wildlife and Countryside Act 1981.

GCN are afforded further protection by the Countryside and Rights of Way Act 2000; and the Natural Environment and Rural Communities Act 2006.

1.3.6 Otter

The Eurasian Otter *Lutra lutra* is the only Otter species native to the UK. The Eurasian Otter is fully protected under Schedule V of the Wildlife and Countryside Act (as amended) 1981 and in Schedule II of The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019, which transpose Annex II of the Directive 92/43/EEC 1992 on the Conservation of Natural Habitats and of Wild Fauna and Flora (“Habitats Directive”) which defines United Kingdom protected species of animals. This legislation makes it illegal to:

- capture, kill, disturb or injure otters (on purpose or by not taking enough care).
- damage or destroy a breeding or resting place (deliberately or by not taking enough care).
- obstruct access to their resting or sheltering places (deliberately or by not taking enough care).
- possess, sell, control or transport live or dead otters, or parts of otters.

1.3.7 Water Vole

The Water Vole *Arvicola amphibius* is protected under Schedule V of the Wildlife and Countryside Act 1981 and is a priority conservation species. This legislation makes it illegal to:

- intentionally capture, kill or injure water voles.
- damage, destroy or block access to their places of shelter or protection (on purpose or by not taking enough care).
- disturb them in a place of shelter or protection (on purpose or by not taking enough care).
- possess, sell, control or transport live or dead water voles or parts of them (not water voles bred in captivity).

1.4 Protected Sites and Priority Habitats

Some areas with distinctive plants, animals, habitats, geology or landforms are protected at the international, European, national and local-level under statutory and non-statutory sites. Some habitats have been identified as needing priority conservation action; UK BAP Priority Habitats are a range of semi-natural habitat types that are identified as being the most threatened and requiring conservation action.

2.0 Methods

The survey follows the national guidelines JNCC (2010) and UKHabs (2023), and the following equipment is available for the inspection:

- Torches (e.g. LED Lensar type).
- Ladders (Standard 4m telescopic surveying ladder).
- Endoscope where holes, cracks and crevices are accessible.
- Mirrors (extendable and movable mirror face).
- Binoculars (Pentax close focus).
- Thermometer/hygrometer.
- Camera.
- Sample bags for collecting dropping and feeding evidence.
- Quadrat for vegetation sampling.

The survey can be conducted year-round with the optimal period between mid-March and mid-October (south)/1st April and 30th September (north). However, it can be limited due to bad weather and in the winter, when some species are not as active, thus evidence and species are often not found. During these periods, habitat value (likely presence) becomes more important to the assessment of the site.

Trees and building exteriors are checked from ground level only. Buildings are checked internally where access is available.

Ponds are checked in person where access is available. If access is not available, for example the pond is situated on private land, ponds are assessed as far as is possible from satellite imagery.

Target notes are made when appropriate to highlight, for example, protected species evidence or other feature(s) of ecological note.

A summary of the condition assessments for BNG are included (where required) within Table 7 of Section 3.2.1. The excel sheets for these are released separately.

If a deviation from the guidelines has been made the reason and justification will be explained below:

Great Crested Newt District Level License Zones explained, these criteria are from the two schemes -

Natural England Scheme -

- Red zones contain key populations of GCN, which are important on a regional, national or international scale and include designated Sites of Special Scientific Interest for GCN. *If in a red zone traditional surveys methods will have to be used going forward.*
- Amber zones contain main population centres for GCN and comprise important connecting habitat that aids natural dispersal.
- Green zones contain sparsely distributed GCN and are less likely to contain important pathways of connecting habitat for this species.
- White zones contain no GCN. However, as most of England forms the natural range of GCN, white zones are rare and will only be used when it is certain that there are no GCN.

Nature Space Scheme-

- **Black** - nationally or regionally important site for great crested newt - excluded from development impacts under the District Licence Scheme.
- **Red** - highly suitable habitat - the most important areas for great crested newts.
- **Amber** - suitable habitat - great crested newts are likely to be present.
- **Green** - moderate habitat suitability - great crested newts may be present.

- **White** - low habitat suitability - low probability of great crested newt presence.

No deviation from the standard guidelines has been made for this survey.

Table 1: Habitat value (likelihood) of protected species presence assessed against Collins (2023), Edgar *et al.* (2010) and Natural England (2007) etc.

Likelihood of species presence (Habitat Value)	Features that species can use, regardless of evidence being present.
Confirmed Presence	Species are found to be present during the survey. Evidence of species is found to be present during the survey.
Higher likelihood of presence	Buildings, trees or other structures or habitat features of particular significance for use by protected species e.g. nesting habitat, roosting opportunities, and ponds. Habitat of high quality for foraging e.g. broadleaved woodland, tree-lined watercourses and grazed parkland. Site is connected with the wider landscape by strong linear features that would be used by commuting species e.g. river and or stream valleys and hedgerows. Site is close to known locations of records for protected species.
Moderate and Lower likelihood of species presence	Several potential habitat opportunities in buildings, trees or other habitats. Habitat could be used for foraging e.g. trees, shrub, grassland or water. Site is connected with the wider landscape by linear features that could be used by commuting species e.g. lines of trees and scrub or linked back gardens. A small number of less significant habitat opportunities. Isolated habitat for foraging e.g. a lone tree or patch of scrub. An isolated site not connected by prominent linear landscape features.
Negligible likelihood of species presence	No features suitable for roosting, minor foraging or commuting.

2.1 Limitations

This survey provides a snapshot of the site at the time of the survey only. Species are highly mobile and can turn up from time to time unexpectedly. All care has been taken to ensure the results and recommendations are suitable to the context of the development and the information gathered on surveys.

3.0 Results

The following section details the results of the desk study, inspection and survey; it includes MAGIC information, biological records data and map/aerial photo information. The results detail the building, structure or tree (numbered for reference) description of any evidence found and habitat value if no evidence has been located.

3.1 Desk Study

The desk study is centred on Grid Reference -SU 72115 72172 and Postcode -RG2 7AG.

3.1.1 MAGIC

The following statutory sites and Natural England Protected Species (NEPS) have been located within the 2km search area (Figure 1).

Table 2: Magic search results

Receptor	Distance and Direction to Nearest (m/km)	Description
Statutory sites	N/A	N/A
Granted protected species licenses	~575m east	Common pipistrelle, <i>Pipistrellus pipistrellus</i> , & soprano pipistrelle, <i>Pipistrellus pygmaeus</i> (2014-3941-2, 2014-500, 2019-44194)
	~780m north	Common pipistrelle (2010-2126, 2016-22301, 2013-6155, 2017-32379)
	~1.3km east	Common pipistrelle & brown long-eared bat, <i>Plecotus auritus</i> (2010-2266)
	~1.8km north	Daubenton's bat, <i>Myotis daubentonii</i> (2017-28045)
	~1.4km south	Great crested newt, <i>Triturus cristatus</i> (2010-1708)
Priority habitat	~350m south	Deciduous Woodland
	~723m west	High Certainty Chalk River
	~1km east	Woodpasture and Parkland
	~1.8km southeast	Traditional Orchards

MAGiC

Magic Map

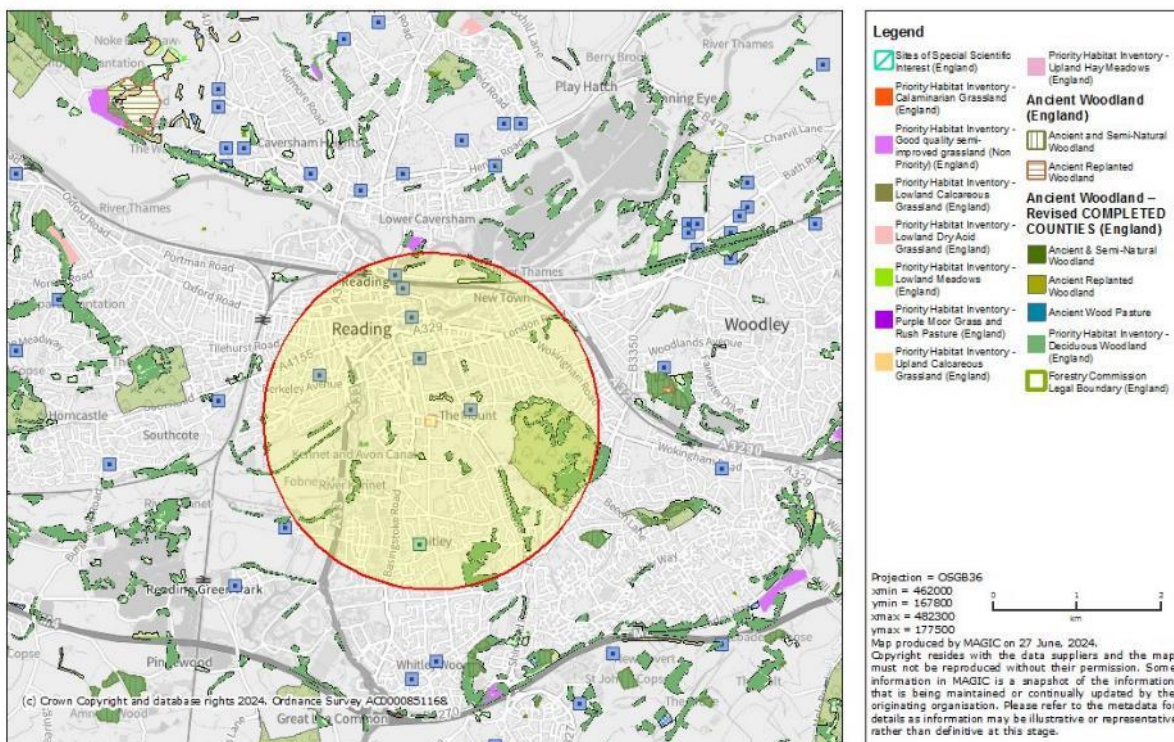


Figure 1: Magic Map Search

3.1.2 GCN DLL Zone

Nature Space - The site resides in a GREEN zone.



Figure 2: Nature Space Plan

3.1.3 Biological Records Data

A standard data search of existing records for protected species and nature reserves has been commissioned, below details the results and site context. *Data older than 10 years old will not be included.*

Biological records were obtained from Thames Valley Environmental Records Centre (2024).

Table 3: Biological Records

Species	Number of Records	Closest Record (accuracy)	Most Recent Record (year)
Amphibians			
Common Frog <i>Rana temporaria</i>	4	596m (100m)	2018
Common Toad <i>Bufo bufo</i>	1	1,399m (1km)	2014
Great Crested Newt <i>Triturus cristatus</i>	0	-	-
Palmate newt <i>Lissotriton helveticus</i>	0	-	-
Smooth newt <i>Lissotriton vulgaris</i>	2	493m (1m)	2016
Bats			
Barbastelle <i>Barbastella barbastellus</i>	0	-	-
Brown Long-Eared <i>Plecotus auritus</i>	5	660m (100m)	2018
Common Pipistrelle <i>Pipistrellus pipistrellus</i>	85	19m (1m)	2022
Daubenton's <i>Myotis daubentonii</i>	13	844m (1km)	2019
Leisler's <i>Nyctalus leisleri</i>	0	-	-
Nathusius' Pipistrelle <i>Pipistrellus nathusii</i>	4	203m (1km)	2018
Natterer's <i>Myotis nattereri</i>	0	-	-
Noctule <i>Nyctalus noctula</i>	32	19m (1m)	2022
Serotine <i>Eptesicus serotinus</i>	5	660 (100m)	2018
Soprano Pipistrelle <i>Pipistrellus pygmaeus</i>	47	19m (1m)	2022
Unidentified Bat <i>Chiroptera sp.</i>	3	471m (100m)	2020
Unidentified Long-Eared <i>Plecotus sp.</i>	0	-	-
Unidentified Myotis <i>Myotis sp.</i>	5	574m (1m)	2018
Unidentified Pipistrelle <i>Pipistrellus sp.</i>	6	600m (10m)	2020
Unidentified Vesper <i>Vespertilionidae</i>	1	1,399m (1km)	2014
Whiskered <i>Myotis mystacinus</i>	0	-	-
Mammals (exc. Bats)			
Badger <i>Meles meles</i>	19	Withheld	2022

Hazel Dormouse <i>Muscardinus avellanarius</i>	0	-	-
Otter <i>Lutra lutra</i>	0	-	-
Water Vole <i>Arvicola amphibius</i>	1	895m (1m)	2020
West European Hedgehog <i>Erinaceus europaeus</i>	9	57m (1m)	2022
Reptiles			
Adder <i>Vipera berus</i>	0	-	-
Common Lizard <i>Zootoca vivipara</i>	0	-	-
Grass Snake <i>Natrix helvetica</i>	0	-	-
Slow-Worm <i>Anguis fragilis</i>	1	1,144m (100m)	2020
Other			
Birds, Invertebrates, Plants etc.	Numerous	-	-

3.1.4 Site Location and Surrounds

The site is located in Reading and is surrounded by high-density residential housing in the immediate locale. Table 4 details the commuting, feeding and habitat features in a 1km radius of the site.

Table 4: Habitat features suitable for use by protected species.

Feature	Description
Watercourses	The River Kennet is located ~720m to the west.
Waterbodies	A small pond with the University of Reading grounds is located ~480m to the southeast, with a further small pond located ~680m to the southeast.
Woodland	There are no large areas of woodland within the search area, small copses and areas of priority deciduous woodland are present throughout.
Linear e.g. hedgerows	The search area is dominated by urban hedgerows.
Pasture/arable/grassland	Amenity space is found in Cintra Park ~280m to the southeast, with school grounds and sports fields throughout the search area.
Other	A graveyard adjoined to Christ Church is located ~65m to the northeast.

3.2 Habitat, Building, Tree or Other Structure

This section details the structures/habitat reference and descriptions (see Figure 18 for Site Plan).

Table 5: Weather Records

Parameter	Unit/value
Temperature	18°C
Cloud cover	85%
Precipitation	None
Wind	2/12

3.2.1 Habitats

Habitats found on site are mapped using UK Habs (UK Habs, 2023).

Table 6: Habitat features found on site.

Habitat Features		
UKHab Habitat Type (to the appropriate level)	UK Hab Essential & Additional Secondary Codes (where relevant)	Description
Developed Land; Sealed Surface (Buildings)		B1 is a detached three-storey commercial building. The roof has a cross-gable structure and is covered with concrete tiles. There is a pitched roof dormer on the north elevation of the roof and two brick chimneys with lead flashing. The soffits are constructed from timber. On the north elevation is a single storey, flat roof extension with bitumen felt.



Figure 3: Front of B1.



Figure 4: Rear of B1.

Internally, B1 has two loft voids (L1 and L2). L1 and L2 are both insulated and partially boarded at floor level. The roof is lined with timber in both L1 and L2. Both voids have a purlin roof support structure, with L1 having additional support beams.



Figure 5: Example of L1.



Figure 6: Example of L2.

B2 is a timber-built shed with a pitched roof, covered in bitumen felt.



Figure 7: Example of B2.

B3 is a timber-built shed with a pitched roof, covered in bitumen felt.



Figure 8: Example of B3.

Developed Land; Sealed Surface	The west of the site is dominated by hard standing which is used as a carpark.
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		 Figure 9: Example of hard standing carpark.
Artificially Unvegetated, Unsealed Land		The carpark towards the southwest and the playground are both artificially unvegetated, unsealed surface. The carpark consists of gravel whereas the playground is a variety of substrates including sand.  Figure 10: Example of gravel carpark.

		 Figure 11: Example of playground.
Modified Grassland		To the rear of B1 and the playground is a small area of lawn with introduced shrubs. The grass is dominated by creeping bent <i>Agrostis stolonifera</i>, and perennial rye <i>Lolium perenne</i>, with few forbs species.  Figure 12: Example of modified grassland.
Introduced Shrubs		There are a few small areas of introduced shrubs. Within the shrub beds are three individual yew trees <i>Taxus baccata</i>.



Figure 13: Example of introduced shrubs.



Figure 14: Example of individual yew with the shrub beds.

Other Woodland; Broadleaved	The woodland on site has a mixed of native and non-native broadleaved species. The understorey is dominated by ivy and has few ground flora species.
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Figure 15: Example of broadleaved woodland.



Figure 16: Example of woodland.

The following table provides a summary of the condition assessments for all sites meeting the Statutory Metric criteria. Please see the separate excel sheets for full details. If the site meets the small-scale metric criteria condition assessments are not required.

Table 7: Biodiversity Net Gain Condition Assessments/Scores

Habitat	Condition Score
Buildings/Developed Land Sealed Surface	Set score
Introduced Shrub	Set score
Artificially, Unvegetated, Unsealed Surface	Set score
Modified Grassland	Good - six criteria including the essential criterion passed.
Other Woodland; Broadleaved	Moderate - 27 points scored.
Individual Tree	A, B, C - Good D - Moderate

Table 8: Target Notes

Target Note	Description
T1	There is a cotoneaster, <i>Cotoneaster</i> sp., on the western boundary of the woodland.  1 Jul 2024 11:10:18 Figure 17: Example of cotoneaster on woodland edge.

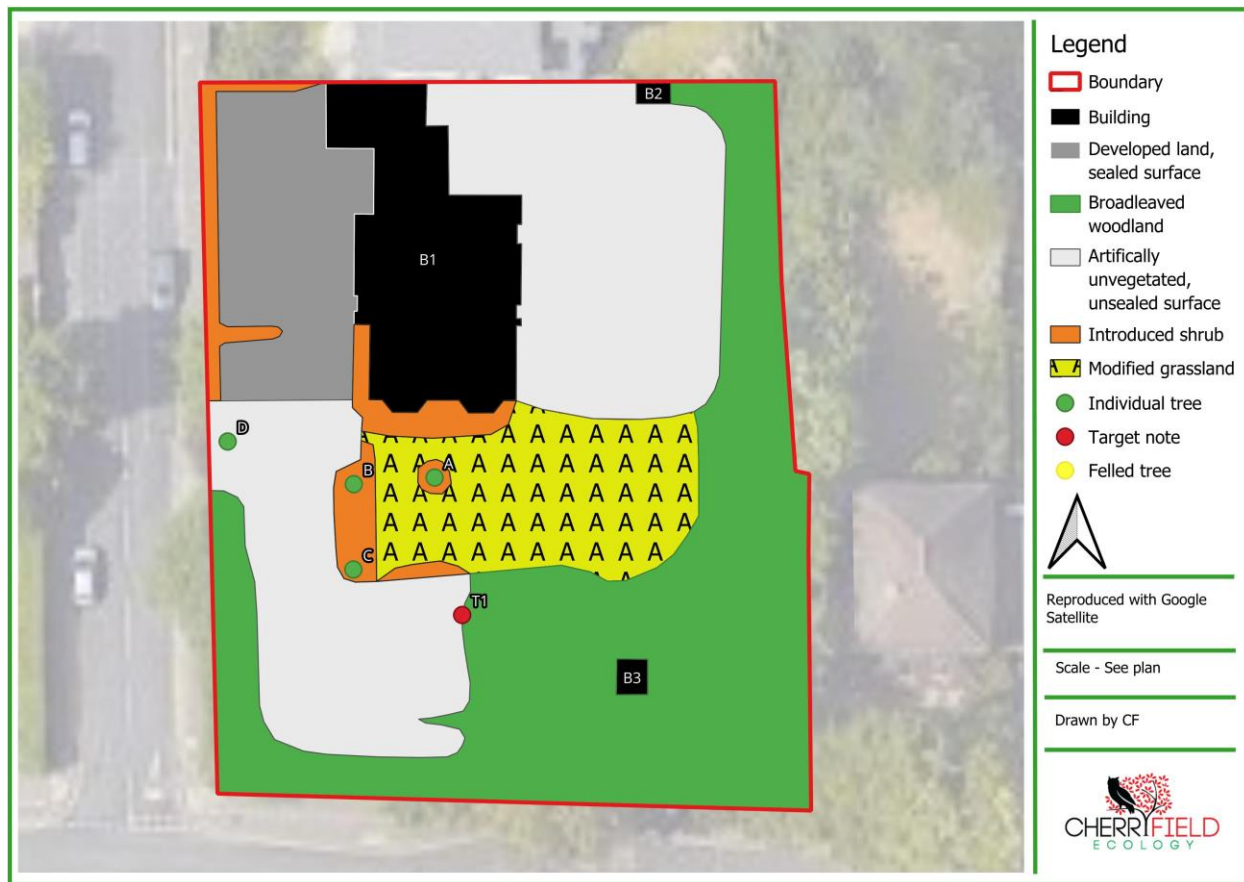


Figure 18: Site Plan

3.2.2 Species List

Table 9: Species found on site with relevant *DAFOR abundance.

Common Name	Scientific Name	*DAFOR Scale	Habitat
Annual Meadow-Grass	<i>Poa annua</i>	F	Modified Grassland
Beech	<i>Fagus sylvatica</i>	O	Other Woodland; Broadleaved
Bluebell	<i>Hyacinthoides non-scripta</i>	R	Other Woodland; Broadleaved
Bramble	<i>Rubus fruticosus agg</i>	F	Other Woodland; Broadleaved
Buddleia	<i>Buddleja davidii</i>	R	Other Woodland; Broadleaved
Cat's-Ear	<i>Hypochaeris sp.</i>	O	Modified Grassland
Cherry Laurel	<i>Prunus laurocerasus</i>	F	Other Woodland; Broadleaved
Creeping Bent	<i>Agrostis stolonifera</i>	A	Modified Grassland
Common Mallow	<i>Malva sylvestris</i>	O	Introduced Shrub
Cotoneaster	<i>Cotoneaster sp.</i>	R	Other Woodland; Broadleaved
Cow Parsley	<i>Anthriscus sylvestris</i>	R	Modified Grassland
Crane's-bill	<i>Geranium sp.</i>	O	Introduced Shrub
Creeping Thistle	<i>Cirsium arvense</i>	R	Modified Grassland
Cretan Bryony	<i>Bryonia dioica</i>	R	Introduced Shrub
Dock	<i>Rumex sp.</i>	O	Other Woodland; Broadleaved
Dove's Foot Crane's-Bill	<i>Geranium molle</i>	O	Modified Grassland
False Oat-Grass	<i>Arrhenatherum elatius</i>	F	Modified Grassland
Forget me not	<i>Myosotis sp.</i>	O	Other Woodland; Broadleaved
Golden Rod	<i>Solidago sp.</i>	O	Introduced Shrub
Greater Plantain	<i>Plantago major</i>	O	Modified Grassland
Hawkbit	<i>Leontodon sp.</i>	R	Modified Grassland
Herb-Robert	<i>Geranium robertianum</i>	O	Modified Grassland
Holly	<i>Ilex aquifolium</i>	F	Other Woodland; Broadleaved
Holm Oak	<i>Quercus ilex</i>	O	Other Woodland; Broadleaved
Horse-Chestnut	<i>Aesculus hippocastanum</i>	R	Other Woodland; Broadleaved
Indian Bean Tree	<i>Catalpa bignonioides</i>	O	Other Woodland; Broadleaved
Ivy	<i>Hedera helix</i>	A	Other Woodland; Broadleaved
Lamb's Lettuce	<i>Valerianella locusta</i>	R	Introduced Shrub

Lavender	<i>Lavandula sp.</i>	O	Introduced Shrub
Locust Tree	<i>Robinia pseudoacacia</i>	F	Other Woodland; Broadleaved
Maple	<i>Acer sp.</i>	O	Other Woodland; Broadleaved
Meadow Buttercup	<i>Ranunculus acris</i>	O	Modified Grassland
Meadow Crane's-Bill	<i>Geranium pratense</i>	R	Modified Grassland
Nettle	<i>Urtica dioica</i>	F	Other Woodland; Broadleaved
Nipplewort	<i>Lapsana communis</i>	O	Modified Grassland
Oak	<i>Quercus sp.</i>	O	Other Woodland; Broadleaved
Perennial Rye-Grass	<i>Lolium perenne</i>	D	Modified Grassland
Petty Spurge	<i>Euphorbia peplus</i>	O	Modified Grassland
Primrose	<i>Primula sp.</i>	R	Other Woodland; Broadleaved
Ragwort	<i>Senecio jacobaea</i>	F	Modified Grassland
Ribwort Plantain	<i>Plantago lanceolata</i>	R	Modified Grassland
Smooth Sow-Thistle	<i>Sonchus oleraceus</i>	O	Modified Grassland
St John's Wort	<i>Hypericum perforatum</i>	O	Introduced Shrub
Timothy	<i>Phleum pratense</i>	O	Modified Grassland
Viburnum	<i>Viburnum sp.</i>	R	Introduced Shrub
Willowherb	<i>Epilobium sp.</i>	R	Modified Grassland
Wood Avens	<i>Geum urbanum</i>	O	Other Woodland; Broadleaved
Wood Sorrel	<i>Oxalis acetosella</i>	O	Other Woodland; Broadleaved
Yarrow	<i>Achillea millefolium</i>	F	Modified Grassland
Yew	<i>Taxus baccata</i>	F	Other Woodland; Broadleaved
Yorkshire Fog	<i>Holcus lanatus</i>	A	Modified Grassland

*DAFOR - Dominant, Abundant, Frequent, Occasional and Rare

3.3 Evidence or Likelihood of Species Presence

This section details the evidence located and likelihood of species presence.

3.3.1 Bats

Table 10: Bats, evidence or the potential for the species.

Bats found	No bats were found at the time of the survey.
Evidence of bat use	No evidence of bats was found at the time of the survey.
Potential for bat use	Level of likelihood of presence - B1 - low B2 - Negligible B2 - Negligible B1 provides low potential for roosting bats due to the limited roosting features throughout the building. The loft voids have no obvious access points, reducing the likelihood of bats roosting internally. Externally, the eaves are tight fitting with no obvious entry points of roosting features. However, due to the presence of missing and lifted roof tiles across B1, there is potential for these to be utilised by crevice dwelling species.  Figure 19: Example of lifted roof tiles.



Figure 20: Example of missing tiles.



Figure 21: Example of missing roof tile.



Figure 22: Example of tight timber lining in loft voids.



Figure 23: Example of tight timber eaves.



Figure 24: Example of tight lead flashing around chimney.

B2 and B3 provide negligible potential for roosting bats due to the lack of access points and absence of suitable roosting features.

3.3.2 Badgers

Table 11: Badgers, evidence or the potential for the species

Badgers found	No badgers were found at the time of the survey.
Evidence of badger use	No evidence of badger use was found at the time of the survey.
Potential for badger use	Level of likelihood of presence - Negligible The site provides negligible potential of badgers due to the limited sett building habitat on site and poor connectivity to other suitable sett building and foraging habitat.

3.3.3 Breeding Birds

Table 12: Breeding birds, evidence or potential for the species

Breeding birds found	No breeding birds were found at the time of the survey.
Evidence of breeding bird use	No evidence of breeding birds was found at the time of the survey.
Potential for breeding bird use	Level of likelihood of presence - High The trees and shrubs provide moderate potential and suitable habitat for breeding birds.

3.3.4 Amphibian

Table 13: Amphibians, evidence or potential for species use.

Amphibians found	No Great Crested Newt (GCN) were found at the time of the survey.
Evidence of amphibian use	No evidence of GCN was found at the time of the survey.
Potential for amphibian use	Level of likelihood of presence - Negligible The site provides negligible potential of GCN due to the limited terrestrial habitat and absence of aquatic habitat on site. The site is isolated from other suitable habitat due to residing within a developed area, surrounded by residential housing, commercial buildings and roads. There is limited access to the site and poor connectivity to other suitable habitat. The site resides in a green DLL zone and the closest waterbody is ~480m southeast.

3.3.5 Reptile

Table 14: Reptiles, evidence or potential for species use.

Reptiles found	No reptiles were found at the time of the survey.
Evidence of reptile use	No evidence of reptiles was found at the time of the survey.
Potential for reptile use	Level of likelihood of presence - Negligible The site provides negligible potential of reptiles due to the poor connectivity to other suitable habitat. The modified grassland on site provides limited suitable habitat, however is small in area. Access to the site is limited due to the site being isolated from other suitable habitat as it resides within a developed area, surrounded by residential housing, commercial buildings and roads.

3.3.6 Other Species e.g. Hazel Dormouse / Otter / Water Vole

Table 15: Other protected species, evidence or potential for species use.

Species found	No other protected species were found at the time of the survey.
Evidence of species use	No evidence of other protected species was found at the time of the survey.
Potential for species use	Level of likelihood of presence - Negligible There is no suitable habitat on site for any other protected species.

3.3.7 Invasive Non-Native (Schedule 9 Species)

Species found	The invasive non-native species, cotoneaster, was found at the time of the survey (See figure 17).
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4.0 Conclusions, Discussion, Impacts and Recommendations

The following section details the conclusions, discussion, impacts and recommendations in the context of the proposed works.

4.1 Conclusion and Discussion

The proposals include for converting the existing building into residential flats including a side extension on the north elevation, the construction of a two-storey detached dwelling, and associated landscaping and access.

The site consists of one detached, three-storey, commercial building with a single-storey flat roof extension, developed land; sealed surface, artificially unvegetated: unsealed surface, modified grassland, introduced shrubs and broadleaved woodland.

No protected species or evidence of protected species were found on site at the time of the survey.

The site provides **negligible** potential for badger and reptiles due to the limited suitable habitat on site and poor connectivity to more suitable habitats.

The site provides **negligible** potential for Great Crested Newt (GCN) due to the absence of suitable aquatic habitat, limited suitable terrestrial habitat and poor connectivity to other suitable habitat. The closest pond is ~480m southeast and the site resides in a green DLL zone.

The building (B1) provides **low** potential for roosting bats due to the presence of roosting features in the form of lifted and missing roof tiles.

The buildings (B2 and B3) provide **negligible** potential for roosting bats due to the lack of roosting features and access points throughout the building.

The introduced shrubs and broadleaved woodland habitats provide **high** potential for breeding birds.

The site provides **negligible** potential for other protected species due to the lack of suitable habitat onsite.

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Recommended surveys are found in section 4.3.

4.2 Potential Impacts

Impact assessments must be proportionate to the scale of the development (CIEEM, 2018) and Table 16 details a proportionate impact assessment based on current information.

Table 16: Impact Assessment

Impact	Bats - A bat roost may be lost in the development on B1. Breeding Birds - Active nests may be lost in the development.
Characterisation of unmitigated impact on the feature	Bats - A low-level loss/impact at a local level. Breeding Birds - A low-level loss/impact at a local level.
Effect without mitigation	Without mitigation, individual bats and birds could be killed, injured or trapped during the works.
Mitigation and/or potential enhancement	See Table 17 and Table 18
Significance of effects of residual impacts (after mitigation)	Bats - If lost roosts are replaced by bat boxes, the effects would be negligible. Breeding Birds - If lost habitat is replaced by bird boxes and mitigation is followed, the effects would be negligible.

4.3 Recommendations

Badger - No further surveys are necessary; however, if any badger setts are found throughout works, all works must stop, and advice sought.

Bats - **B1: Presence/likely absence survey (low)** will be required (one survey), with four surveyors to cover the building B1; this must be undertaken between May to August. If bats are found to be present, two further survey will be required (a minimum of three weeks apart), one of which can be undertaken in September if required.

B2 & B3: No further surveys are necessary; however, if bats are found throughout works, all works must stop, and advice sought.

Breeding Birds - No further surveys are recommended; however, the development should take place outside the nesting season (March to August). If this is not possible, it is recommended that a qualified ecologist is on-site to ensure the building/vegetation is not occupied by breeding birds, prior to demolition/clearance. Should an occupied nest be found, a buffer zone would need to be created until the nest is no longer in use.

Great Crested Newt (GCN) - No further surveys are necessary; however, if GCN are found on site, all works must stop, and advice sought.

Reptiles - No further survey is necessary; however, if reptiles are found on-site, all works must stop, and advice sought.

Other protected species - No further survey is necessary; however, if any other protected species are found on site, all works must stop, and advice sought.

Habitats - All habitats found are common and widespread, no impacts are foreseen.

The findings outlined in this report are valid for one year, after which updated surveys will be required.

Enhancements and mitigation are recommended (please see Section 4.4 for further details).

4.4 Additional Recommendations

Table 17: Additional Recommendations

Work	Specification
General information	The following must be undertaken: - All works must be undertaken within 12 months of this report, thereafter a material change check will be required to check for changes that could affect potential protected species habitat. - If any protected species are found at any point whatsoever during works, works will stop and further advice will be sought.
General Precautions	- Trenches and open holes - All trenches and open holes should be covered overnight, or if the hole or trench can't be covered it should be filled in or a rough sawn timber plank installed as an escape route for any species. - General maintenance - If grassland and vegetation is kept in a mown/cut state this should be maintained for the duration of the works. - Store all material on hardstanding or in buildings to prevent artificial refuges from being created.
General bat Information	No development will occur until bat surveys consistent with the Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th edition) (Collins, 2023) have been undertaken in the appropriate survey season, May to September (Mid-May to August optimal). The Three Tests to be answered before planning can be granted (NE, 2017): <i>Test 1:</i> Regulation 53(2)(e) states: a licence can be granted for the purposes of “preserving public health or public safety or other imperative reasons of overriding public interest including those of a social or economic nature and beneficial consequences of primary importance for the environment”. Test 1 can be achieved via the ‘imperative reasons of overriding public interest’. Although not for the ecologist to determine the planning officer will on grant of consent. <i>Test 2:</i> Regulation 53(9)(a) states: the appropriate authority shall not grant a licence unless they are satisfied “that there is no satisfactory alternative” Test 2 would be achieved on the grant of consent as no other sites have been considered for the development. <i>Test 3:</i> Regulation 53(9) (b) states: the appropriate authority shall not grant a licence unless they are satisfied “that the action authorised will not be

	detrimental to the maintenance of the population of the species concerned at a favourable conservation status in their natural range.” Test 3 will be achieved once full emergence/re-entry surveys are conducted and full mitigation appropriate to species and population has been designed and implemented via an NEPS licence issued from the statutory authority (Natural England) if this becomes necessary following a dusk and pre-dawn survey.
Lighting	Any lighting near or shining onto any trees/buildings etc, will be designed to minimise the impact it has on potential species and commuting. Lighting will be in line with the BCT lighting guidelines (Bats and Lighting in the UK (Bat Conservation Trust, 2023) https://www.theilp.org.uk/documents/guidance-note-8-bats-and-artificial-lighting/ This lighting, where possible, will be of low level, be on downward deflectors and be on PIR sensors. Using LED directional lighting can also be a way of minimising the light spill affecting the habitat. No up-lighting should be used. Light spill must be minimised to as low as possible. This will ensure that the foraging and commuting resources that the protected species are likely to be using is maintained.

Table 18: The local authority has a duty to enhance biodiversity in its day-to-day duties; the following are suggested enhancements that are easily installed into a development and can be cost-effective whilst ensuring a gain for local wildlife.

Work	Specification
Bat, bird and insect box enhancement.	Bat tubes can be installed in the new dwellings (Figure 25). These require no maintenance, can be installed on a gable end/under an eave (no less than 3m above ground level), face south or north and can be faced in any material to provide an aesthetic matching the reminding building.  Figure 25: Example of bat tube Bird boxes for a variety of different species can also be installed. A selection of open-fronted boxes and songbird boxes can be installed (Figure 26 and Figure 27); it is recommended that a minimum of two of each of the boxes are installed. These will be installed at a minimum of 2m high and ideally face north to east.  Figure 26: Robin box



Figure 27: Songbird box

A variety of insect boxes can be installed in the area; a minimum of one box is recommended (Figure 28 and Figure 29).



Figure 28: Urban bee nesting box, used for solitary bees and wasps.



Figure 29: Bug biome, ideal for ladybirds, lacewings and bees

Hedgehog highways and small mammal connectivity.	Hedgehog highways can be installed in order to allow hedgehogs and other small mammals a continuous corridor across the site, thus linking the garden/site etc. and green spaces in the area. ▪ A 13cm-by-13cm is sufficient for any hedgehog to pass through. This will be too small for nearly all pets (Figure 30). ▪ Remove a brick from the bottom of the wall, creating a 13cm-by-13cm hole. ▪ Cut a small hole in your fence if there are no gaps. ▪ Dig a channel underneath your wall, fence or gate. ▪ Ideally, rather than walls or fences, a hedge will provide foraging, shelter and a route along as well as through the site. Figure 30: Hedgehog Highway, Source - Wildlife Trust - http://7474fab53f1b6ee92458-8f3ac932bad207a00c83e77eae8d15c.r12.cf1.rackcdn.com/Hedgehog%20Highway.jpg
Swifts <i>Apus apus</i>	Swift nest bricks are recommended due to the increased lack of nesting opportunities swifts are finding in modern-built dwelling homes. Information is adapted from the RSPB https://www.rspb.org.uk/our-work/rspb-news/news/stories/swift-advice-for-ecologists/ and http://actionforswifts.blogspot.com The following will be undertaken:

- Wherever possible, swift bricks will be installed into new or restored buildings to increase the overall availability of nest sites for swifts and other species. Birds such as house sparrows can use swift bricks, but swifts cannot use house sparrow nest bricks.
- Integral swift bricks are the preferred option for new housing developments. These should be fitted in clusters of 2 to 4 on gable ends and near the roofline where swifts would naturally look for a potential nest site.
- Try to ensure swift bricks have a minimum of 5m clearance beneath and in front. Always avoid locating them above doors and windows to help prevent a disturbance issue to both the birds and human owners.
- Alternatively, swift boxes can be placed on the external walls of a building where the installation of swift bricks is not possible.



Figure 31: Example of swift bricks, that can be built into a dwelling, Source: <https://www.birdbrickhouses.co.uk/brick-nesting-boxes/>



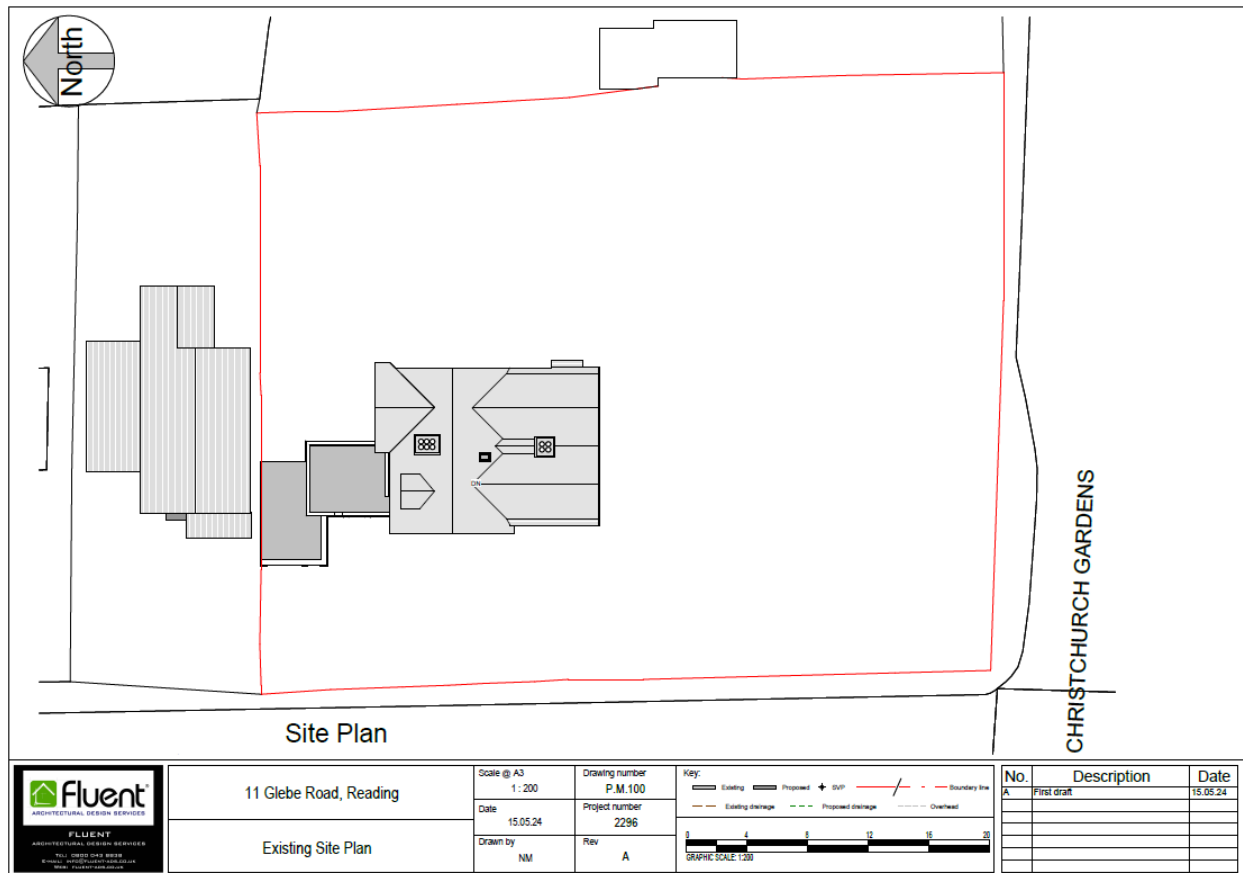
Figure 32: Swift box, source: <http://actionforswifts.blogspot.com/p/diy-swift-box-designs.html>

5.0 References

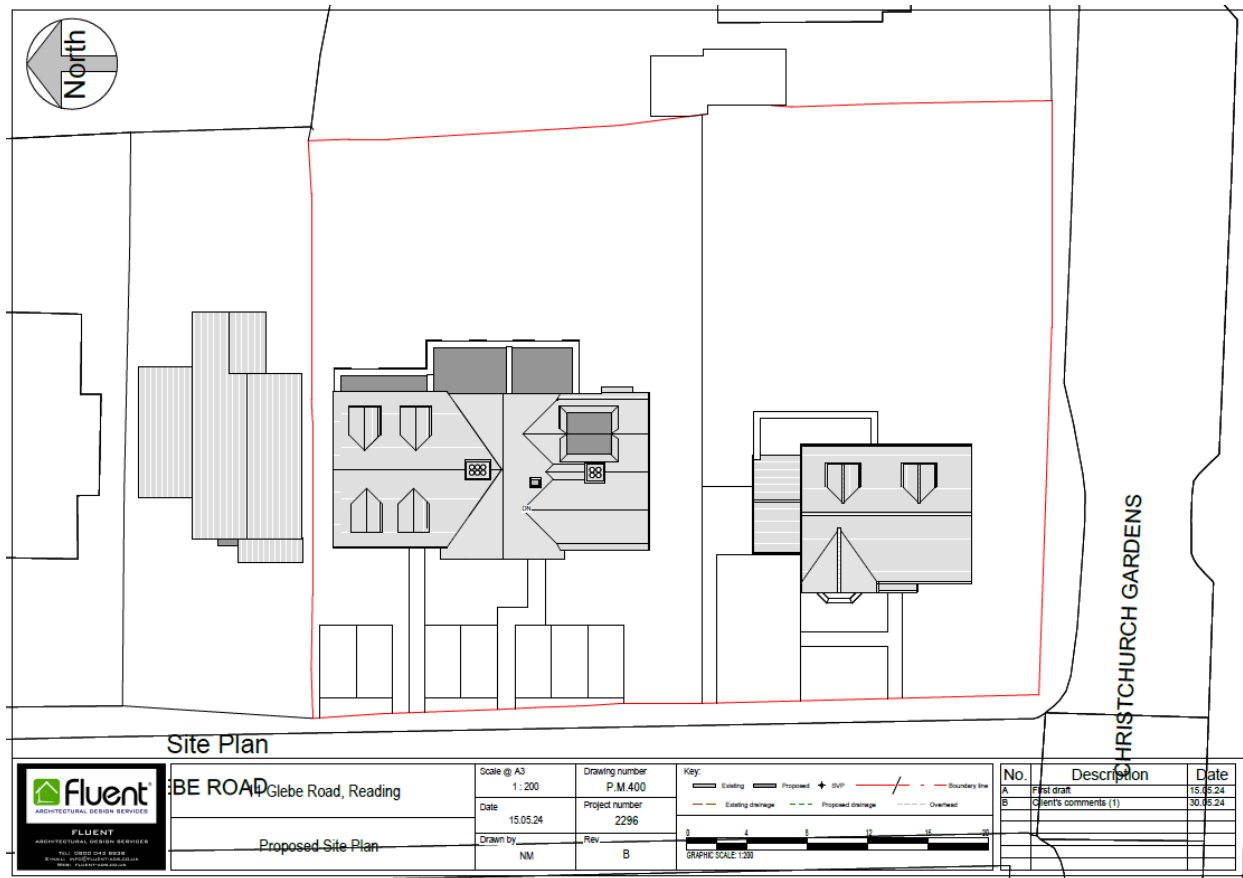
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Appendix I - Site Plans



Existing Site Plan (Fluent Architectural Design Services, 2024)



Proposed Site Plan (Fluent Architectural Design Services, 2024)