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Report prepared for: James Gran

For the Site of: The Generator Building, Hexton Manor, Hexton, Hitchin, Hertfordshire
SG5 3JH

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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 Hexton Manor, Hexton, Hitchin, Hertfordshire SG5 3JH.

The client commissioned Cherryfield Ecology to undertake an EA as the proposals include for the extension and conversion into a three bedroom dwelling.

Existing plans have been provided (Appendix I)

0.2 Results and Findings

The site consists of one detached outbuilding, amenity grassland and urban trees. 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 due to the lack of suitable habitat and limited connectivity to more suitable habitats.

The site provides **low** potential for reptiles and Great Crested Newt (GCN) due to the small amount of suitable habitat on site, and proximity to a pond for GCN.

The building (B1) provides **low** potential for roosting bats due to the small number of roosting features and access points throughout the building.

The building contains a swallows nest and owl pellets, providing **confirmed** 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 - **Presence/likely absence surveys (low)** will be required (one survey), with two 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), with at least one undertaken within the May to August window and one in September if required.

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.

A **bird owl and breeding bird mitigation plan** is required prior to planning permission being granted.

Great Crested Newt (GCN) - **Unlicensed Method Statement**

Habitat that is being affected is not suitable for GCN, although habitat in the surrounding area is, therefore an unlicensed method statement will be required, please refer to section 4.

Reptiles - No further survey is necessary; however, a qualified ecologist will need to supervise the clearance of any grassland/scrub vegetation on site via a destructive search, 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, James Gran, has commissioned Cherryfield Ecology to undertake an EA for the site of Hexton Manor, Hexton, Hitchin, Hertfordshire SG5 3JH. Planning permission is being sought for the extension and conversion into a three bedroom dwelling.

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 05/01/2024.

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.

If a statutory site, non-statutory site or UK priority habitat is to be affected by proposed development, details will be outlined below:

There are no protected sites or priority habitats located within the site boundary.

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

Condition Assessments for BNG are included (where required) within the table in the results section, the excel sheets for these are released separately.

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

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

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

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.

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.

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 - TL 10819 30491 and Postcode - SG5 3JH.

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	~1,893.2m, SW	Barton Hills (NNR, SSSI)
	~1,322.0m, SE	Deacon Hill (SSSI)
Granted protected species licenses	N/A	N/A
Priority habitat	~595.2m, S & SE	Good quality semi-improved grassland
	~620.4m, S & SE	Lowland calcareous grassland
	On site	Deciduous woodland
	~272.3m	Traditional orchards
	On site	Woodpasture and parkland BAP priority habitat

MAGiC

Magic Map

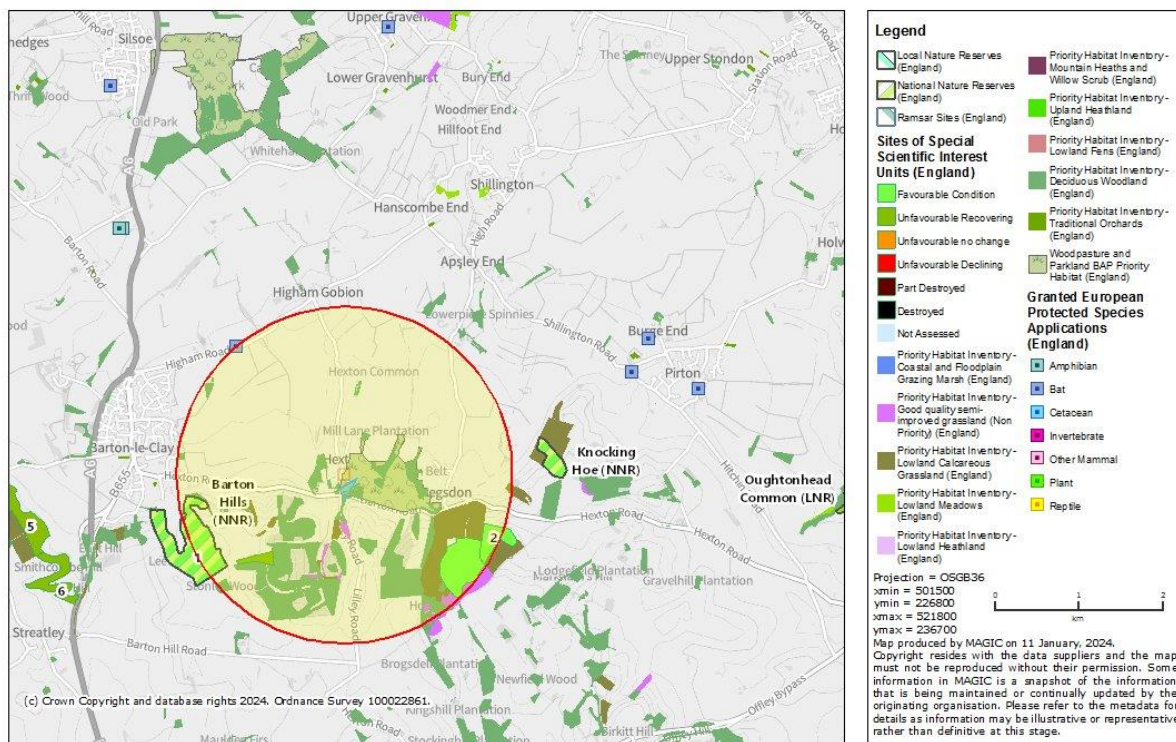


Figure 1: Magic Map Search

3.1.2 GCN DLL Zone

The site is located in Hertfordshire which is not a part of the DLL scheme.

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 over 10 years old is not included.*

Biological records were obtained from Hertfordshire 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>	-	-	-
Common Toad <i>Bufo bufo</i>	-	-	-
Great Crested Newt <i>Triturus cristatus</i>	-	-	-
Palmate newt <i>Lissotriton helveticus</i>	-	-	-
Smooth newt <i>Lissotriton vulgaris</i>	-	-	-
Bats			
Barbastelle <i>Barbastella barbastellus</i>	-	-	-
Brown Long-Eared <i>Plecotus auritus</i>	5	0m (1km)	N/A
Common Pipistrelle <i>Pipistrellus pipistrellus</i>	9	450m (100m)	2013
Daubenton's <i>Myotis daubentonii</i>	28	0m (1km)	N/A
Leisler's <i>Nyctalus leisleri</i>	-	-	-
Nathusius' Pipistrelle <i>Pipistrellus nathusii</i>	-	-	-
Natterer's <i>Myotis nattereri</i>	34	0m (1km)	N/A
Noctule <i>Nyctalus noctula</i>	2	0m (1km)	N/A
Serotine <i>Eptesicus serotinus</i>	2	0m (1km)	N/A
Soprano Pipistrelle <i>Pipistrellus pygmaeus</i>	5	0m (1km)	N/A
Unidentified Bat <i>Chiroptera sp.</i>	8	0m (1km)	N/A
Unidentified Long-Eared <i>Plecotus sp.</i>	1	0m (1km)	N/A
Unidentified Myotis <i>Myotis sp.</i>	4	250m (1km)	N/A
Unidentified Pipistrelle <i>Pipistrellus sp.</i>	4	0m (1km)	N/A
Unidentified Vesper <i>Vespertilionidae</i>	-	-	-
Whiskered <i>Myotis mystacinus</i>	-	-	-
Mammals (exc. Bats)			
Badger <i>Meles meles</i>	7	350m (10km)	2018
Hazel Dormouse <i>Muscardinus avellanarius</i>	-	-	-
Otter <i>Lutra lutra</i>	-	-	-
Water Vole <i>Arvicola amphibius</i>	-	-	-
West European Hedgehog <i>Erinaceus europaeus</i>	-	-	-
Reptiles			
Adder <i>Vipera berus</i>	-	-	-
Common Lizard <i>Zootoca vivipara</i>	2	470m (10m)	2020
Grass Snake <i>Natrix helvetica</i>	-	-	-

Slow-Worm <i>Anguis fragilis</i>	-	-	-
Other Birds, Invertebrates, Plants etc.			

3.1.4 Site Location and Surrounds

The site is located in Hexton, Hertfordshire and is surrounded by arable fields, pasture, and to a lesser extent woodland, in the immediate local area. Table 5 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	There is a small flowing brook connecting Spring head and another pond is located ~29.37m southeast. There is a network of brooks ~206.06m northwest. There is a small waterway connect Spring Head to another large pond ~388.84m east. There is another brook ~814.23m, northeast, leading off of a pond.
Waterbodies	Spring Head is ~206.96m east. There are two ponds ~305.54m and ~372.70m west. There is a small waterbody ~424.49m South. There is another pond ~954.57m northeast.
Woodland	There is a copse ~158.34m southeast. To the east there is a woodland ~355.02m away. There is a copse ~249.09m west. There is a large woodland ~570.61m southwest. There is a copse ~761.29m south. A large woodland is ~783.68m southeast.
Linear e.g. hedgerows	Field margin hedgerows dominate the search area.
Pasture/arable/grassland	Arable land and, to a lesser extent, pasture dominate the search area.
Other	A graveyard forming part of St Faith's Church is located ~323.59m southwest.

3.2 Habitat, Building, Tree or Other Structure

This section details the structures/habitat reference and descriptions (see Figure 7 for Site Plan).

Table 5: Weather Records

Parameter	Unit/value
Temperature	6°C
Cloud cover	100%
Precipitation	None
Wind	1/12

3.2.1 Habitats

Habitats found on site are mapped using the Phase 1 Habitat (JNCC, 2010) and UK Habs (UK Habs, 2023). When the UK Habs has a subset type, this has been used to match as best as possible to the Phase 1 Habitat.

Table 6: Habitat features found on site, this includes for the Phase 1 Habitat type and the nearest UK Habs type. UK Habs may be broken down to subsets when required and if the habitat meets the criteria.

Habitat Features		
Phase 1 Habitat Type	UKHab Habitat Type	Description
Buildings	Developed Land; Sealed Surface	B1 is a detached, single storey, brick built building with a gable ended roof. The tiles are made of slate. The doors made of and lined with timber, the windows are also lined with timber. Internally, the building is framed with timber and metal. The tiles are lined with felt.



Figure 2: Exterior of B1



Figure 3: Interior of B1

Amenity
Grassland/Introduced
Shrub

Vegetated Garden

The site is dominated by amenity grassland, primarily consisting of Perennial Rye-Grass *Lolium perenne* and Annual Meadow-Grass *Poa annua*.



Figure 4: Example of amenity grassland

Scattered Trees	Urban Tree/Rural Tree	Scattered trees, including Ash <i>Fraxinus excelsior</i> and Sycamore <i>Acer pseudoplatanus</i> are scattered around the site.  Figure 5: Example of scattered tree (Ash)
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The following table details the condition assessments for all sites meeting the DEFRA Metric 4.0 criteria, if the site meets the small-scale metric criteria condition assessments are not required (see separate excel sheets).

Table 7: Biodiversity Net Gain Condition Assessments/Scores (see separate excel sheets)

Habitat (UKHabs)	Condition Score
Buildings/Developed Land Sealed Surface	Set score
Vegetated Garden/Introduced Scrub	Set score
Trees with Ecological Features	Good - Native, mature trees. Little to no evidence of adverse impact on tree health by human activity or regular pruning regime. 80%-100% of tree canopy area over sails vegetation beneath. The tree canopy is predominately continuous and natural ecological niches exist in the form of ivy.
Trees without Ecological Features	Good - Native, mature trees. Little to no evidence of adverse impact on tree health by human activity or regular pruning regime. 80%-100% of tree canopy area over sails vegetation beneath. The tree canopy is predominately continuous.

Table 8: Target Notes

Target Note	Description
TN1: Branch Pile	A pile of branches are found in the southeast of the site.  Figure 6: Example of branch pile

3.2.2 Species List

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

Common Name	Scientific Name	*DAFOR Scale
Annual Meadow-Grass	<i>Poa annua</i>	D
Ash	<i>Fraxinus excelsior</i>	R
Bristly Oxtongue	<i>Picris echioides</i>	O
Cleavers	<i>Galium aparine</i>	O
Cock's-foot	<i>Dactylis glomerata</i>	A
Cotoneaster	<i>Cotoneaster</i> sp.	R
Cow Parsley	<i>Anthriscus sylvestris</i>	O
Creeping Buttercup	<i>Ranunculus repens</i>	O
Creeping Thistle	<i>Cirsium arvense</i>	O
Dandelion	<i>Taraxacum officinale</i> agg.	O
Dead-Nettle sp.	<i>Lamium</i> sp.	O
Dock	<i>Rumex</i> sp.	O
Elm	<i>Ulmus</i> sp.	R
Green Alkanet	<i>Pentaglottis sempervirens</i>	O
Ground-Ivy	<i>Glechoma hederacea</i>	O
Herb-Robert	<i>Geranium robertianum</i>	O
Nettle	<i>Urtica dioica</i>	O
Perennial Rye-Grass	<i>Lolium perenne</i>	D
Ragwort	<i>Senecio jacobaea</i>	R

Spear Thistle	<i>Cirsium vulgare</i>	O
Speedwell	<i>Veronica sp.</i>	O
Sycamore	<i>Acer pseudoplatanus</i>	R
White Clover	<i>Trifolium repens</i>	F
Wood Aven	<i>Geum urbanum</i>	O

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

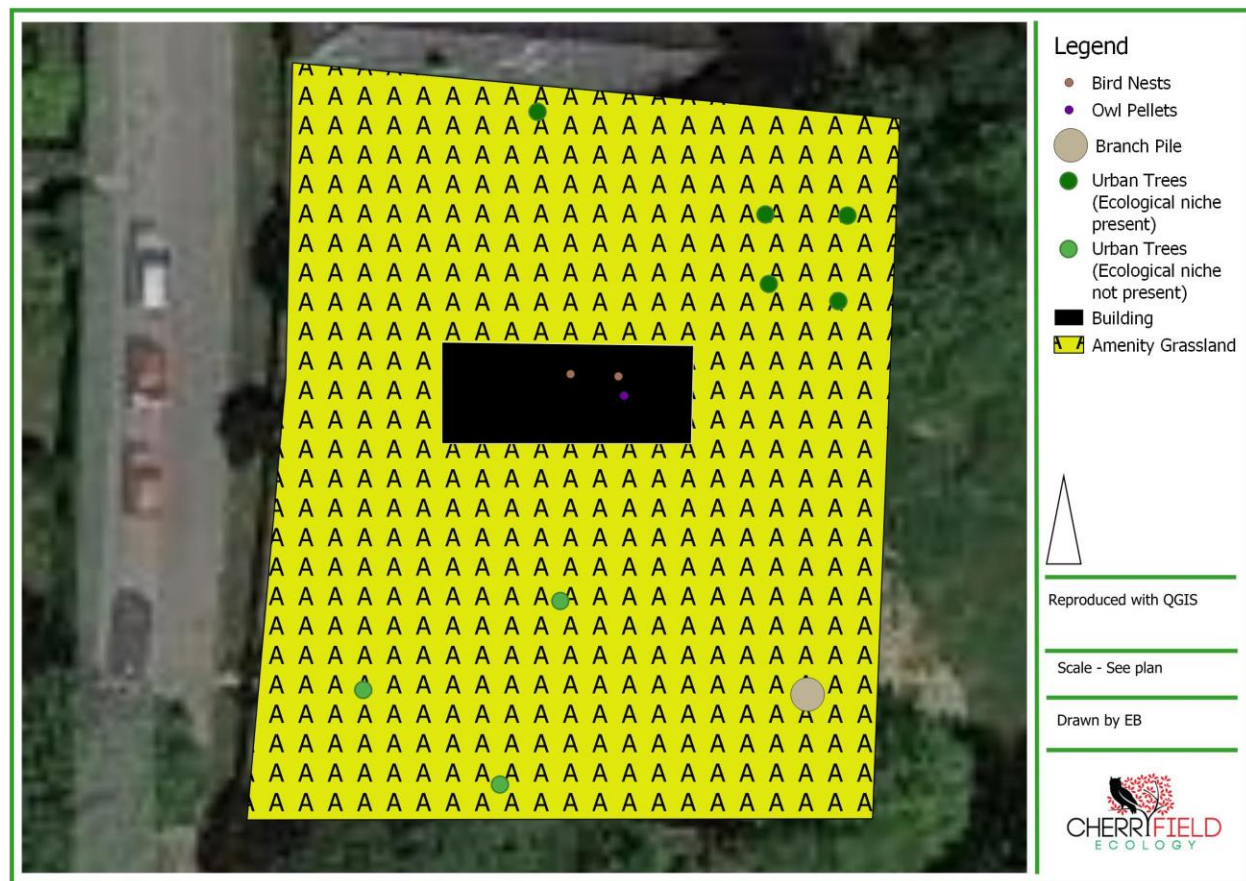


Figure 7: Site Plan

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 B1 has an easily accessible interior, through broken windows or holes in doorways. The roof is partially framed with timber, providing opportunities for roosting features although these are limited. Where the brick is exposed externally, no potential roosting features are present.  Cherryfield Ecology 05/01/2024 10:40:41 Figure 8: Example of framing
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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 for badgers due to the lack of suitable habitat onsite and the limited connectivity with more suitable 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	A swallows nest, birds nest and owl pellets were found within B1.



Figure 9: Example of owl pellets



Figure 10: Example of swallows nest



Figure 11: Example of birds nest

Potential for breeding bird use	Level of likelihood of presence - High/Confirmed The site provides high potential for breeding birds due to the trees and building onsite.
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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 - low The site provides low potential for GCN due to the limited suitable habitat onsite, such as the branch pile. The closest waterbody is located approx. 206.96m east, without any major barriers for GCN in between. Due to the nature of the works (Extension and conversion of building) the impact on GCN is limited.

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 - low The site provides negligible potential for reptiles due to the small amount of suitable habitat onsite e.g. branch pile for foraging, refuge etc. additionally, the site lacks connectivity with more suitable habitats.

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 The site provides negligible potential for other protected species due to no suitable habitat found on site e.g. watercourses for otter <i>Lutra lutra</i> .

3.3.7 Invasive Non-Native (Schedule 9 Species)

Species found	Cottoneaster, a Schedule 9 species under the Wildlife and Countryside Act 1981 (amended), was found onsite.
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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 the extension and conversion into a three bedroom dwelling. The site consists of one detached outbuilding, amenity grassland and urban trees. No protected species or evidence of protected species were found on site at the time of the survey.

The site consists of one detached outbuilding, amenity grassland and urban trees. 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 due to the lack of suitable habitat and limited connectivity to more suitable habitats.

The site provides **low** potential for reptiles and Great Crested Newt (GCN) due to the small amount of suitable habitat on site, and proximity to a pond for GCN.

The building (B1) provides **low** potential for roosting bats due to the small number of roosting features and access points throughout the building.

The building contains a swallows nest and owl pellets, providing **confirmed** potential for breeding birds.

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

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. Breeding Birds - Active nests may be lost in the development. Barn Owl - Loss of habitat. GCN - Loss of habitat. Reptiles - Loss of habitat.
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. Barn Owl - A low-level loss/impact at a local level. GCN - A low-level loss/impact at a local level. Reptiles - A low-level loss/impact at a local level.
Effect without mitigation	Without mitigation, individual bats, barn owl, breeding birds GCN and reptiles 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. Barn Owl - If mitigation is followed, the effects would be negligible. GCN - If mitigation is followed, the effects would be negligible. Reptiles - If 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 - **Presence/likely absence surveys (low)** will be required (one survey), with two 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), with at least one undertaken within the May to August window and one in September if required.

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.

A **bird owl and breeding bird mitigation plan** is required prior to planning permission being granted.

Great Crested Newt (GCN) - **Unlicensed Method Statement**

Habitat that is being affected is not suitable for GCN, although habitat in the surrounding area is, therefore an unlicensed method statement will be required, please refer to section 4.

Reptiles - No further survey is necessary; however, a qualified ecologist will need to supervise the clearance of any grassland/scrub vegetation on site via a destructive search, 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 dwelling (Figure 12). 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 12: 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 13 and Figure 14); 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 13: Robin box



Figure 14: Songbird box

A variety of insect boxes can be installed in the area; a minimum of one box is recommended (Figure 15 and Figure 16).



Figure 15: Urban bee nesting box, used for solitary bees and wasps.



Figure 16: Bug biome, ideal for ladybirds, lacewings and bees

Hedgehog
highways and
small mammal
connectivity.

Hedgehog highways can or will 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 17).
- 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.

	How to make a hedgehog highway  www.wildlifewatch.org.uk Figure 17: 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 when a restoration or opportunities don't exist to build in the boxes.



Figure 18: Example of swift bricks, that can be built into a dwelling, Source: <https://www.birdbrickhouses.co.uk/brick-nesting-boxes/>

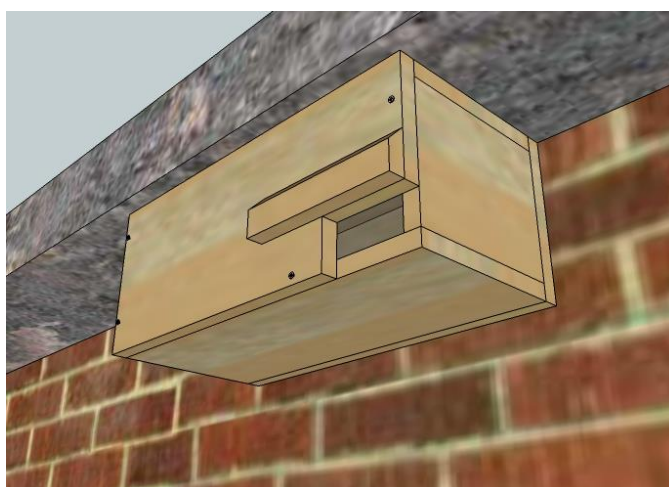


Figure 19: Swift box, source: <http://actionforswifts.blogspot.com/p/diy-swift-box-designs.html>

Hedgerows

Hedgerows provide excellent corridors for wildlife and are extremely important to many species of wildlife. A hedgerow could be included in development plans to assist a range of species (Figure 20).

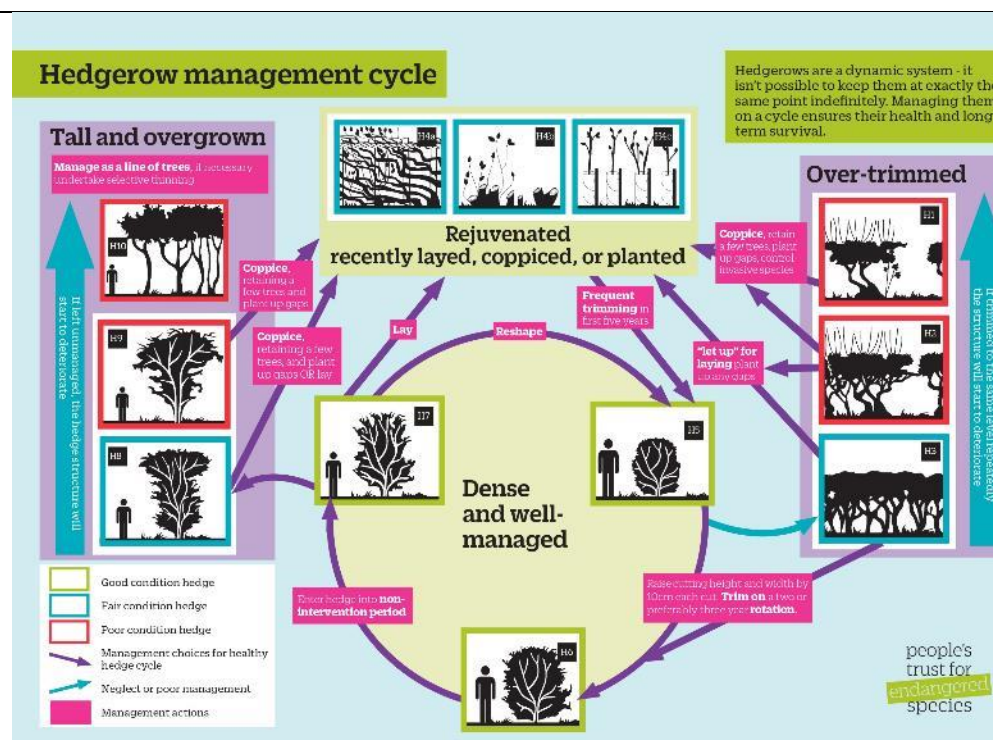


Figure 20: Hedgerow management cycle (<https://hedgerowsurvey.ptes.org/>)

It is recommended that a diversity of hedgerow species is included in the proposed hedgerows on site. Suitable hedgerow species include:

- Hawthorn (*Crateagus monogyna*)
- Hazel (*Corylus avellana*)
- Wild Privet (*Ligustrum vulgare*)
- Field Maple (*Acer campestre*)
- Blackthorn (*Prunus spinosa*)
- Guelder Rose (*Viburnum opulus*)
- Wayfaring Tree (*Viburnum lantana*)
- Dog Rose (*Rosa canina*)
- Spindle (*Euonymus europaea*)
- Holly (*Ilex europaeus*)

The hedgerow should include 5 or more woody species within a 30m length in order to be classified as species-rich.

Where possible, no cutting will take place during peak bird nesting season, which runs from March to September. Where possible, shrubs and hedgerows will not be cut back annually, as flower buds often form on second-year growth. Trimming

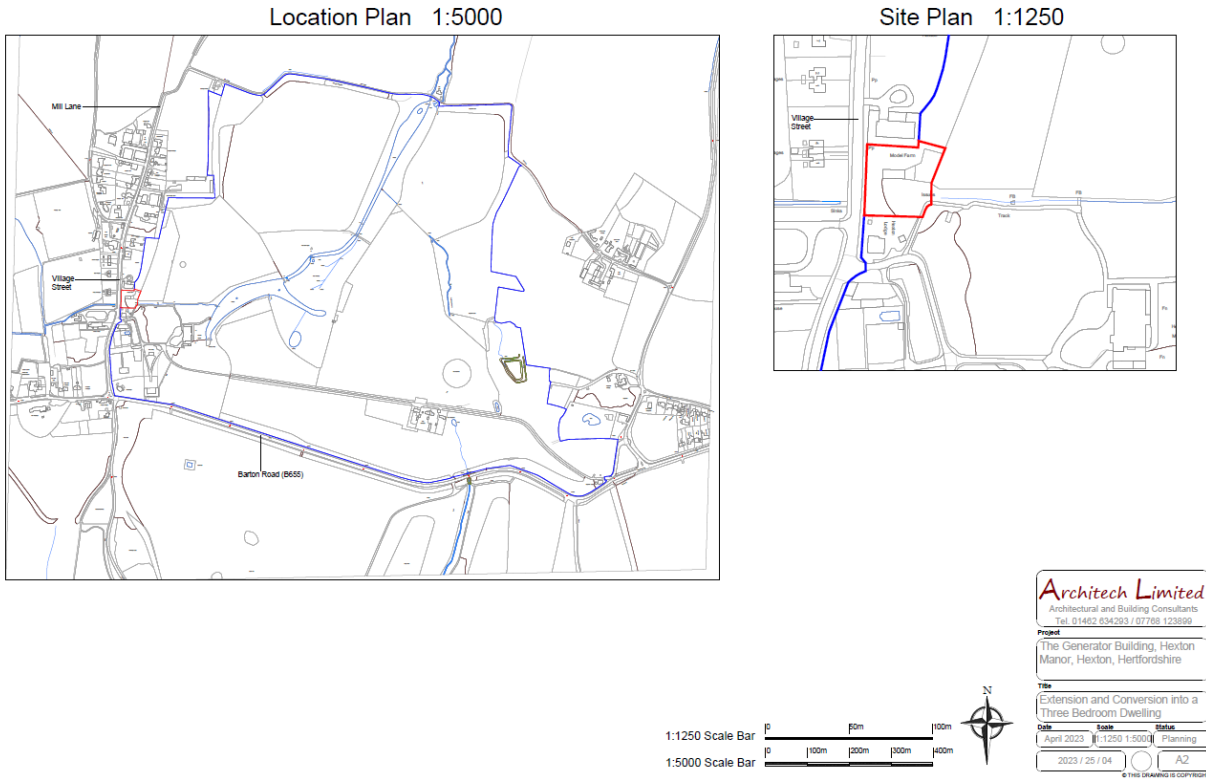
	hedges on a two-year or three-year rotation, targeting different sections each year, will make sure there are always flowers for pollinators in spring and berries for birds in autumn. Hedges cut every three years can produce two and a half times as many blossoms as those cut annually. Rotational cutting can also save time and money that would be invested in annual cutting.
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5.0 References

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[20/10/2022](#)

Appendix I - Site Plans



Existing Site Plan (Architect Limited, 2023)