

ECOLOGICAL ASSESSMENT REPORT

25th October 2023

17 Danecourt Road, Poole, Dorset, BH14
0PQ

On behalf of: Beechvale Construction Ltd

Agent/planner: Darryl Howells Planning
Consultancy

REPORT ISSUE SHEET:

Draft/Final:	Draft (no further survey recommendations however plans have not been issued)
Version no:	1.0
Previous report version(s) and date(s):	n/a
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Local Planning Authority:	BCP (Poole area)
Planning application number (if known):	Unknown

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Survey data lifespan


Information and data provided within this report is considered accurate at the time of writing. Bat survey data is considered valid for 18 months from the survey date for planning purposes only. However, as protected species are highly mobile, update survey(s) will likely be required if (but not limited to):

- a) The condition of the building(s) and/or general site changes; and/or*
- b) If the nature and/or extent of the proposed works change.*

If a Natural England licence is required, update survey(s) will likely be required for the licence application. Preliminary Roost Appraisal (PRA) (i.e., building inspections) data is considered valid for 3 months prior to a bat licence application; and bat activity survey data (emergence/re-entry surveys) is considered valid within the then 'current' bat survey season.

Reporting and data validity

This report has been produced using all reasonable skill and care, and a Quality Assurance (QA) review process has been conducted prior to issue of this report. However, ABR Ecology Ltd cannot accept responsibility for any inaccuracies and/or discrepancies with third-party data supplied within this report.

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Executive summary

- ABR Ecology Ltd were commissioned by Darryl Howells Planning Consultancy on behalf of Beechvale Construction Ltd to produce an Ecological Assessment informed by a Preliminary Ecological Appraisal (PEA) at 17 Danecourt Road, Poole, Dorset, BH14 0PG. This survey was conducted to identify any ecological constraints associated with the prospective development of the site. This report was requested to support a planning application for a block of two flats and three houses with landscaping and parking.
- The PEA was undertaken on the 1st August 2023 by experienced ecologist Russell Hoyle.

Habitats, protected sites and invasive species:

- The habitat within the application site boundary is bare ground in its current state, the building has been demolished and some small amount of encroaching ruderal plants and the cherry laurel hedge at the eastern and western boundaries. Prior to the site clearance, the habitats on site appear to support grassland in smaller quantities, garden shrubs and trees with a large number of trees and hedgerows at each boundary. No baseline habitats have been identified on site and as such aerial maps were used to identify the habitats pre-clearance to provide replacement compensation planting.
- The application site falls within 2.75km of the Dorset Heaths SAC and within 3km of the Dorset Heathlands SPA/Ramsar. Financial contributions, in the form of £394 per house or £269 per flat will be required to offset the increase of recreational pressures upon these sites as the development is residential in nature. Further information is provided in Section 5 of this report.
- The application site lies within the recreation zone of Poole Harbour. Community Infrastructure Levy (CIL) contributions will be required as part of the application to mitigate for increases in recreational impacts on the Harbour. Further information is provided in Section 5.
- The application site falls within the catchment of Poole Harbour. The development will need to demonstrate nutrient neutrality for both nitrogen and phosphorous using a Poole Harbour nutrient calculation. Further information is provided in Section 5.
- No 'Existing Ecological Networks' or 'Higher Potential Ecological Networks' were recorded on site or directly adjacent to the site.
- Replacement tree planting will be required as detailed in Section 5 of this report.

Badgers:

- The previous habitats on site were noted to be suitable for badger foraging and possibly for badger setts as the site was noted to be overgrown. In its current condition, badgers are not considered to be impacted by the proposals and no further action is recommended for this species. As habitats have been lost from the site, replacement foraging habitat will be provided in the final plans.

Bats:

- The building has been demolished and no trees remain within the site, as such no PRA has been undertaken. As a loss of Potential Roosting Features (PRFs) could have been lost from the building and the trees, a number of bat roosting replacement compensation features will be required.
- There are bat records within 1km of the site, and habitat previously recorded on site were noted as suitable for foraging/commuting bats. A 'bat-friendly' lighting strategy is detailed in Section 5 to ensure the proposed works do not impede foraging and commuting bats which may be using the gardens and general surrounding area.

Dormice:

- The site in its current state does not support habitats which would be utilised by dormice, however the habitats prior to clearance were noted to be trees, shrub and hedgerows. The location however is isolated from suitable dormouse habitat and as the site is located within the urban area of Poole, it is not considered that this species was on site previously. Dormice are not considered to be impacted by the proposals and no further action is recommended for this species.

Great crested newts:

- Two ponds are present within 250m of the site, both with Habitat Suitability Scores (HSI) of >0.5 and the site is isolated from suitable habitats to support great crested newts, an additional pond is noted 10m to the north in the neighbouring garden but was not accessible. However, the habitats previously on site looked to be suitable for newts/reptiles prior to the site clearance. It is unlikely GCNs were present however a replacement pond and foraging grounds will be provided to allow for replacement habitats for this species.

Nesting birds:

- No evidence of nesting birds was identified within the site in its current condition, however, the site was noted as highly suitable for nesting birds and a single bird box was left on a tree stump in the western side of the site. As a loss of bird nesting

habitats has been recorded, replacement planting and nest box features will be required in the new development.

Reptiles:

- In its current state the site does not support any habitats suitable for reptiles such as slow worms and common lizards, however the previous habitats on site appear to be overgrown garden habitats, unmanaged grassland, ornamental planting, scrubby areas with hedgerow bases. The site previously could have supported a low population of slow worms. The site does adjoin to neighbouring overgrown gardens which would allow an island population (small in number) to thrive. The replacement development will allow for grassland replacement planting and provide areas of refugia to allow the specie to return as the data search notes the presence of slow worms 370m to the northeast.

Other species - hedgehogs:

- Hedgehogs have been recorded as close as 70m from the site and there are a good number of records locally, in its current state, the site is too open and unlikely to support good foraging habitats for this species. The replacement planting will allow for foraging grounds for hedgehogs and a hedgehog box will be provided.

Biodiversity enhancements:

- To ensure the proposed development is compliant with the National Planning Policy Framework (NPPF) and the BCP Council Biodiversity Net Gain Guidance Note (BCP Council, 2022), biodiversity enhancements are detailed in Section 5 of this report.

1. Introduction

ABR Ecology Ltd were commissioned by Darryl Howells Planning Consultancy on behalf of Beechvale Construction Ltd to produce an Ecological Assessment informed by a Preliminary Ecological Appraisal (PEA) at 17 Danecourt Road, Poole, Dorset, BH14 0PG (central grid reference: SZ 02885 91915). These surveys were conducted to identify any ecological constraints associated with the prospective development of the site. This report was requested to support a planning application for a block of two flats and three houses with landscaping and parking.

The PEA was undertaken on the 1st August 2023 by experienced ecologist Russell Hoyle. The proposed plans are provided in Appendix 1.

Site context

The application site is situated within an urban area of Poole, Dorset. In its existing state, the site is just bare ground as it has been recently cleared (sales particulars were found online which shows the site was intact in March 2023), with residential buildings directly adjacent the site with their associated gardens and mature trees. The wider landscape comprises the urban town of Poole, with houses and gardens in all directions with larger overgrown gardens with scattered trees and ornamental hedgerows. The surrounding areas offer good potential for urban wildlife.

Aims and scope of this report

This report is based on the results of the PEA and data search supplied by Dorset Environmental Records Centre (DERC, 2023), which were principally aimed at determining the ecological value of the site and any constraints associated with the development. As the PEA did not reveal any remaining habitats on site, online resources including Google maps and the sales particulars (Savills, 2023) for the property were accessed to assess the site habitats prior to clearance.

This report aims to establish whether the proposed works hold the potential to impact on protected or vulnerable species and/or habitats, which may inform the need for mitigation, compensation or a European Protected Species (EPS) licence(s) to allow the works to proceed lawfully following planning approval.

2. Legislation and planning policy

Legislation and UK BAP priority habitats/species

Legislation

In England, all bats, dormice (*Muscardinus avellanarius*) and great crested newts (*Triturus cristatus*) are legally protected under Annex IV of the EC Habitats and Species Directive (1992), which is transposed into domestic law via the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019.

A number of species are also listed under Annex II of the EC Habitats and Species Directive (1992), including barbastelle (*Barbastella barbastellus*), Bechstein's bat (*Myotis bechsteinii*), greater horseshoe (*Rhinolophus ferrumequinum*), lesser horseshoe (*Rhinolophus hipposideros*), great crested newt, and stag beetle (*Lucanus cervus*).

The above named species and adders (*Vipera berus*), slow worms (*Anguis fragilis*), grass snakes (*Natrix natrix*), common lizards (*Zootoca vivipara*), water voles (*Arvicola amphibious*), common frog (*Rana temporaria*), palmate newt (*Lissotriton helveticus*), smooth newt (*Lissotriton vulgaris*) and several invertebrate species are also protected under Schedule 5 of The Wildlife and Countryside Act (WCA) (1981) (as amended). Schedule 9 of The WCA (1981) (as amended) also includes non-native, invasive species including (but not limited to) Himalayan balsam (*Impatiens glandulifera*) and Japanese knotweed (*Fallopia japonica*). Badgers (*Meles meles*) are legally protected under The Protection of Badgers Act (1992).

All birds, their nests and eggs are protected under Section 1 of The WCA (1981) (as amended) and it is thus an offence, to intentionally kill, injure or take any wild bird; intentionally take, and damage or destroy the nest of any wild bird while it is in use or being built. Barn owls are also afforded additional protection under Part 1 of The WCA (as amended) from disturbance.

A number of sites designated for nature conservation are afforded legal protection due to being of European importance. These include Special Areas of Conservation (SACs) (protected under the EC Habitats and Species Directive (1992), Special Protection Areas (SPAs) for birds (protected under the EC Birds Directive) and Ramsar (Ramsar Convention, 1975). Other protected sites include Sites of Special Scientific Interest (SSSIs), National Nature Reserves (NNRs) Local Nature Reserves (LNRs) and Protected Road Verges which are designated under the WCA (1981) and strengthened by The Natural Environment and Rural Communities Act (NERC) (2006).

SPAs and SACs were previously included in the Natura 2000 sites and following amendments to the legislation, are now included under the 'National Site Network'. Ramsar sites do not form part of the 'National Site Network' however, are afforded the same protection. These changes allow the Government to continue commitment

to the protection of the environment along with fulfilling the international commitments under the Bern Convention, the Oslo and Paris Conventions (OSPAR), Bonn and Ramsar Conventions.

'Important' hedgerows are legally protected under The Hedgerow Regulations (1997).

UK BAP priority species and habitats

Several species and habitats are listed under the UK Biodiversity Action Plan (UK BAP) (JNCC, 2016) as priority habitats/species due to their vulnerability or rarity as listed under Section 41 of the Natural Environment and Rural Communities (NERC) Act (2006) and Section 40 places a duty on all public authorities to conserve biodiversity.

These include several terrestrial and freshwater habitats, including some hedgerows and streams, and several species such as hedgehogs (*Erinaceus europaeus*), barbastelle, Bechstein's bat, both species of horseshoe bat, brown long-eared bat (*Plecotus auritus*), soprano pipistrelle (*Pipistrellus pygmaeus*), and noctule (*Nyctalus noctula*).

National and local planning policy

NPPF – The National Planning Policy Framework

The National Planning Policy Framework (NPPF) (Ministry of Housing, Communities & Local Government, 2021) sets out the Government's planning policies for England and how these should be applied. In the context of this report, Section 15 of NPPF is relevant and applicable, Section 15 states:

'Planning policies and decisions should contribute to and enhance the natural environment by, minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures.'

New developments and projects are supported where plans promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species; and identify and pursue measurable net gains for biodiversity.

To ensure this application is compliant with Section 15 of NPPF, wildlife/habitat enhancements will be required to demonstrate a biodiversity net gain as an outcome of the project/development.

Section 15 of NPPF also gives consideration to sites with potential to impact on irreplaceable habitats, and states:

'Development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons and a suitable compensation strategy exists'

To ensure this application is compliant with Section 15, this application should be accompanied by a suitable arboricultural report to assess the presence of potential ancient or veteran trees, where appropriate.

The Poole Local Plan (2018)

The Poole Local Plan (Poole Borough Council, 2018) Policy PP33 'Biodiversity and geodiversity' states:

'Proposals for development that affects biodiversity, and any sites containing species and habitats of local importance, including Sites of Nature Conservation Interest (SNCI), Local Nature Reserves (LNR), ancient woodland, veteran trees and species and habitats of principal importance must a) demonstrate how any features of nature conservation and biodiversity interest are to be protected and managed to prevent any adverse impact; b) incorporate measures to avoid, reduce or mitigate disturbance of sensitive wildlife habitats throughout the lifetime of the development; and c) seek opportunities to enhance biodiversity through the restoration, improvement or creation of habitats and/or ecological networks'.

BCP Council's Biodiversity Net Gain Guidance Note

BCP Council's Biodiversity Net Gain Guidance Note (BCP Council, 2022) provides detailed guidance for developments to meet the requirements of biodiversity policies. Mitigation and on-site biodiversity enhancements include the following:

- Grass and shrub planting using native species and seed mixtures, and in particular planting for pollinators.
- Tree/hedge planting using mainly if not wholly native species. Replacement tree planting is also required for any net tree losses and is not like-for-like.
- Swift bricks within the fabric of new buildings.
- Built-in provision for bats including bricks/tubes/tiles.
- Hedgehog fencing and hedgehog homes/hotels.
- Reptile hibernacula and ponds for amphibians.
- Log piles and/or breeding boxes for stag beetles.
- Green walls and roofs for invertebrates.

It is the developer/landowner's responsibility to ensure that the proposed development proceeds in full compliance with this report and/or any update version report thereafter, that works are undertaken lawfully, in compliance with national and local policy, and in accordance with all conditions of the obtained planning consent.

3. Methodology

Desktop data search

Internationally protected sites including Ramsar, SPAs and SACs were identified within a 7.5 kilometre (km) radius and nationally/locally protected sites including SSSIs, NNRs and LNRs were identified within a 2 kilometre (km) radius of the application site using the Multi-Agency Geographical Information for the Countryside (MAGIC, 2023) website. The Dorset Explorer website (Dorset Council, 2023¹) was accessed to determine if any 'Existing Ecological Networks' or 'Higher Potential Ecological Networks' are present on site. A search was also conducted on MAGIC (MAGIC, 2023), looking for the presence of nearby priority habitats.

This information was used to inform the assessment of the site and its potential to support protected/vulnerable species and habitats and to assess whether the proposed works hold potential to impact on protected sites designated for nature conservation.

Botanical survey (UKHab)

A botanical survey of the site was conducted on 1st August 2023 by experienced botanist Russell Hoyle ACIEEM.

Prior to the site visit, a geopackage was created in QGIS version 3.22.1-Białowieża (QGIS.org, 2022) for export into QField (The QField Project, 2022) for remote mapping in the field. A red line boundary for the site was created based on a georeferenced site plan (Site Location Plan provided by ARC Architecture Ltd drawing no 9642/100 October 2022), and relevant vector and raster layers added.

The survey involved a detailed flora survey of habitats, and each flora species was allocated an abundance in accordance with the DAFOR scale, using local (L) as a prefix where a species was restricted in distribution across the habitat:

- D – Dominant
- A – Abundant
- F – Frequent
- O – Occasional
- R – Rare

Habitats on site were classified and coded in accordance with the UKHab Classification System, using the Habitat Definitions Version 1.1 document and UKHab Field Key Version 2.1 (UKHab Working Group, 2020). Other features of ecological interest were identified using 'target notes'.

All mapping was undertaken digitally within the QField app and the geopackage was then imported back into QGIS using the QField sync function.

As the PEA did not reveal any remaining habitats on site, online resources including Google maps and the sales particulars for the property were accessed to assess the site habitats prior to clearance.

Badgers

A direct search was conducted looking for signs of badgers and their setts. Any setts encountered were classed as main, annexe, subsidiary or outlier, dependent upon the number of holes and apparent extent of their use. A search was also conducted for any other evidence of badger including faeces or latrines, pathways, scratching posts at the base of trees, snuffle holes, day nests, hair or footprints.

Bats

Preliminary Roost Appraisal (PRA)

No trees or buildings remain on site and so no PRA was undertaken.

Assessment of bat commuting and foraging habitats

The habitats on site and immediately adjacent to the site were assessed for their suitability for foraging and commuting bats on the 1st August 2023.

General habitats used by bats include are those that generally support good assemblages of invertebrates and thus offer ample bat foraging opportunities. Linear features such as treelines/hedgerows, rivers, banks and woodland edges provide good commuting corridors for bats navigating the landscape.

The results of the data search were also used to inform the assessment of the site for its potential to support commuting and foraging bats.

Dormice

Dormice are small, nocturnal mammals which occupy habitats such as hedgerows, woodland and scrub. The dormouse requires good arboreal connectivity with a good range of food sources such as fruit, nuts, flowers or insects. Plant species such as hazel, oak, bramble and honeysuckle are favoured in particular, as well as hornbeam, blackthorn, sweet chestnut and sycamore supporting dormice within woody connective habitat. The habitats on site and immediately adjacent to the site was assessed for the potential to support dormice.

Great crested newts

Great crested newts occupy both aquatic and terrestrial habitats throughout their life cycle, spending a short period of the year breeding and egg-laying in waterbodies such as ponds, standing water and ditches. Throughout the remainder of the year, newts will spend their time foraging and commuting within terrestrial habitats such as longer grassland, woodland, hedgerow bases and scrub. Newts will hibernate within features such as log piles, tree roots and rubble piles. Great crested newts are known to forage up to 500 metres (m) from their breeding sites.

An aerial assessment was made prior to the site visit to determine if any waterbodies such as ponds were present within 250m of the site. Any accessible waterbodies were assessed under the Habitat Suitability Index (HSI) (Oldham et al, 2000, 2008) to determine the suitability of the waterbody to support great crested newts.

Nesting birds

A search for evidence of nesting birds was conducted on the 1st August 2023. Birds will nest in buildings, hedgerows, scattered trees, scrub and planting and forage amongst these habitats.

Reptiles

A habitat suitability assessment was undertaken on the habitats on site to determine their likelihood in supporting reptiles. Reptiles occupy habitats with a varied vegetative structure, offering opportunities for foraging and basking, such as areas of unmanaged grassland with shorter vegetation margins, heathland and woodland. An assessment was also made of potential sites suitable for hibernation such as log and brash piles, rubble, rockery or tree roots.

Survey limitations

PEA and PRA

The site was cleared prior to the survey and so mapping and species lists have been compiled for the site in its current state, however using aerial mapping sources and online information, the ecologist has tried to provide information regarding the habitats pre-clearance. This is considered to be an extensive survey limitation and will impact the outcome of the survey results.

An aerial search for waterbodies is constrained by the accuracy of online mapping resources. Several maps were accessed to minimize the changes of missing waterbodies which may support great crested newts however, garden ponds and waterbodies within residential properties are often unmapped and it is possible that waterbodies have been missed as part of this assessment.

The site visit provides a 'snapshot' of the site and does not take into account seasonal variation. Species may have been overlooked due to the constraints of the season and time in which the survey was undertaken. A lack of evidence of a species does not confirm its absence from site, rather there was no indication of its presence at the time of survey.

Data validity and survey data lifespan

The data within this report should not be seen as comprehensive. Data obtained from the DERC (DERC, 2023) data search is unlikely to provide a complete record of species within the search area. It is therefore possible that a species may occur within the vicinity that has not previously been identified within the data search.

This report is considered valid for 18 months from the survey date for planning purposes only; and is only intended for the proposed plans outlined within this report. If any material changes to the building(s)/site occur or if the nature and/or extent of the proposed development changes, an update visit to reassess the buildings will be required, as any conclusions provided herein may not be valid.

4. Results

Internationally, nationally and regionally protected (statutory) sites

MAGIC (MAGIC, 2023) was used to identify any internationally protected statutory sites located within 7.5km and nationally protected/local sites within 2km of the application site and the results of which are provided in the table below:

Site name	Distance from site	Designation	Size (ha)	Site description
Poole Harbour	1.2km south	SPA	4157.52	During the breeding season the SPA regularly supports at least 38.5% of the Mediterranean gull population and 1.3% of the common tern population, over winter the area regularly supports 36.1% of the avocet population, 2.4% of the black-tailed godwit and 1.2% of the shelduck population count.
Poole Harbour	1.2km south	Ramsar	2485.85	The site is described as the best and largest example in Britain of a bar-built estuary with lagoon characteristics. It is composed of salt marshes, peatland mires, swamps, and fens. The site supports two species of nationally rare plants and one nationally rare alga, as well as at least three Red Data Book species of invertebrate. There are also internationally important numbers of waterfowl, including <i>Sterna hirundo</i> and <i>Larus melanocephalus</i> .
Poole Harbour	1.2km south	SSSI	4111.5	One of the largest natural harbours in the world it is made up of mainly intertidal mudflats and marshes. Notable species present include black-tailed godwit, common shelduck, Starlet Sea Anemone.
Dorset Heaths	2.75km north	SAC	5711.25	Primary Annex I habitats including Northern Atlantic wet heaths with <i>Erica tetralix</i> , European dry heaths, depressions on peat substrates of the Rhynchosporion and primary Annex II species Southern Damselfly.

Dorset Heathlands	3km northeast	SPA	8166.97	During the breeding season the SPA regularly supports at least 12.8% of the nightjar population, at least 6.8% of the woodlark breeding population, at least 26.1% of the Dartford warbler breeding population, over winter the area regularly supports 2.7% of the hen harrier population and 1.2% of the Merlin population count.
Dorset Heathlands	3km northeast	Ramsar	6674.82	Ramsar criterion include good examples of northern Atlantic wet heaths, 1 nationally rare and 13 nationally scarce wetland plants and 28 nationally rare wetland invertebrate species and a high richness and high ecological diversity of wetland habitat types and transactions.
Dorset Heaths (Purbeck & Wareham) & Studland Dunes	5.1km south	SAC	2230.73	Primary Annex I habitats including embryonic shifting dunes, shifting dunes along the shoreline with <i>Ammophila arenaria</i> (white dunes), Atlantic decalcified fixed dunes (<i>Calluno-Ulicetea</i>), humid dune slacks, Oligotrophic waters containing very few minerals of sandy plains (<i>Littorelletalia uniflorae</i>), northern Atlantic wet heaths with <i>Erica tetralix</i> , temperate Atlantic wet heaths with <i>Erica ciliaris</i> and <i>Erica tetralix</i> , European dry heaths, depressions on peat substrates of the Rhynchosporion and bog woodland and primary Annex II species Southern Damselfly.

The application site falls within 2.75km of the Dorset Heaths SAC and within 3km of the Dorset Heathlands SPA/Ramsar. Under the Dorset Heathlands Planning Framework (Dorset Council, 2020), financial contribution under Strategic Access, Management and Monitoring (SAMM) will be required to offset the increase of recreational pressures upon these sites as the development is residential in nature. Further information is provided in Section 5 of this report.

The application site lies within the recreation zone of Poole Harbour. Community Infrastructure Levy (CIL) contributions will be required as part of the application to

mitigate for increases in recreational impacts on the Harbour. Further information is provided in Section 5.

The application site falls within the catchment of Poole Harbour. The development will need to demonstrate nutrient neutrality for both nitrogen and phosphorous using a Poole Harbour nutrient calculation. Further information is provided in Section 5.

Locally designated (non-statutory) sites

DERC (DERC, 2023) were consulted to provide results of any locally designated sites within 1km of the site and none were present.

Priority habitats

No UK BAP priority habitats were identified on site (MAGIC, 2023) or nearby to the site.

Ecological Networks

The site was assessed using the Dorset Explorer website (Dorset Council, 2023¹) to determine whether an ‘Existing Ecological Network’ or ‘Higher Potential Ecological Network’ is present or adjacent to the site. No networks were identified on site or directly adjacent to the site.

Protected, rare and vulnerable species of interest

DERC (DERC, 2023) was consulted to provide any records of protected/vulnerable species of interest and the results of which are presented in the table below:

Species	Number of records	Most recent record	Closest record to site
<i>Plants</i>			
Bluebell	1	2013	Within 1km of the site
<i>Amphibians and reptiles</i>			
Common frog	6	2017	535m southwest
Common toad	3	2011	610m northeast
Palmate newt	2	2015	775m west
Slow worm	3	2020	370m northeast
<i>Mammals</i>			
Brown long-eared bat	4	2010	370m east
Common pipistrelle	23	2020	370m east
Daubenton’s bat	1	2010	605m southwest
Eurasian badger	16	2020	125m northeast
Myotis sp.	1	2012	Within 1km of the site
Noctule	1	2014	590m northeast
Pipistrelle sp.	6	2016	270m west
Serotine	10	2018	370m east
Soprano pipistrelle	10	2020	400m northwest
Western European hedgehog	29	2021	70m north
Whiskered bat	1	2017	690m north
<i>Birds</i>			

Collared dove	2	2013	Within 1km of the site.
Dunnock	8	2016	495m south
Fieldfare	1	2018	Within 1km of the site
Greenfinch	3	2013	Within 1km of the site
House martin	4	2013	Within 1km of the site.
House sparrow	9	2017	850m southwest
Mistle thrush	1	2015	310m east
Red kite	1	2010	Within 1km of the site
Redwing	1	2017	Within 1km of the site.
Sparrowhawk	2	2016	490m south
Starling	5	2017	Within 1km of the site.
Swift	30	2018	490m south
Tawny owl	3	2017	Within 1km of the site.
Wood pigeon	20	2015	310m northeast
Wren	7	2017	490m south
Invertebrates			
Cinnabar	1	2018	Within 1km of the site.
Grayling	2	2019	550m southwest
Knot grass	1	2019	Within 1km of the site.
Long-legged tabby	4	2019	Within 1km of the site.
Pied grey	1	2019	Within 1km of the site.
Small heath	1	2013	Within 1km of the site
Stag beetle	90	2019	80m south
Wall	1	2012	505m north

The above protected and vulnerable species records will be used to inform the assessment of the site. Brown long-eared bats have been recorded as close as 370m, Daubenton's bats (*Myotis daubentonii*) within 605m and whiskered bats (*Myotis mystacinus*) have been recorded within 690m from the property (DERC, 2023). These bats are extremely light-sensitive; therefore a 'bat-friendly' lighting strategy is provided in Section 5.

Botanical survey (UKHab)

As the PEA did not reveal any remaining habitats on site, online resources including Google maps and the sales particulars for the property were accessed to assess the site habitats prior to clearance. Screenshots of the aerial map and sales particulars have been provided in Appendix 4.

Habitats recorded on site

The following habitats were recorded within the site (a habitat map with full species lists for each habitat are provided in Appendix 2 and photographs provided in Appendix 3 of this report):

Habitat	UKHab primary code	Description and UKHAB secondary code(s)	Location within site
<i>Urban</i>	u1f	The site comprises an overgrown garden which likely used to support grassland, ornamental planting, trees and scrubby	Across the entire site.

	area, however prior to the site survey was cleared (517). The site is currently bare ground (510) and small amount of dog's mercury and bird cherry was recorded in the west and north of the site.	
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The remains of an ornamental hedgerow are present in the east of the site at the boundary. The hedge was noted to support garden privet, comfrey and cherry laurel.

The hedgerow does not qualify as a Section 41: Priority habitat.

Habitats likely on site prior to clearance

The aerial map and the sales particulars found for March 2023, show the site supported a large number of trees, street viewing of the mapping features (Google maps, 2023). Species identified from the street view include holm oak, sycamore and holly, this is along the roadside (south) wall, other non-native species are present however identification is not possible.

Maps show at least two areas of grassland to the front and rear of the property, the condition of the grassland is not clear however the rest of the garden appears to be overgrown and so the grassland is assumed to be tussocky prior to the clearance.

Many of the trees appear to be evergreens/non-natives, such as leylandii/macra carpa, with what appears to be small shrubs around the grassland areas.

Badgers

There are 16 records for badgers within a 1km radius of the site with the nearest record approximately 125m of the site (DERC, 2023). In its current state the site did not reveal any evidence of badgers such as setts, entrance holes, foraging signs, latrines, hair or footprints however the habitats on site prior to the clearance appeared to be suitable for badger foraging, due to the presence of grassland, ornamental planting and hedgerows. Due to a lack of evidence, it is considered unlikely that badgers would be impacted by proposed work however the replacement development will allow for habitats to be created on site for badger foraging including tussocky grassland.

Bats

Preliminary Roost Appraisal (PRA)

The building as seen from aerial mapping, appears to have been a slate roof, with several chimneys and clay ridge tiles. The house appears to have been an older property, possibly 80+ years old. It is noted that older properties with original slate roofs are considered likely to hold the potential for roosting bats. The building has been demolished, some time after the March 2023 sale of the property however it

is not known when and as Potential Roosting Features (PRFs) may have been lost during the demolition works, replacement bat roosting feature swill be installed into the replacement development.

Roosting bats in trees

A number of trees were present on site, many appear to be non-native evergreens which appeared to be too dense to provide access to the stem/branches, however there is also evidence to suggest that native broadleaved trees were present prior to the clearance. Sycamore trees were recorded on the front boundary from street view, which were noted to be mature, but not ancient/veteran.

It is unknown whether the trees could have held the potential for roosting bats or if any Potential Roost Features (PRFs) were present, however replacement mature tee planting will be provided in the replacement development.

Foraging and commuting habitats

The site prior to the clearance appeared to support shrubs/trees and a single older property was present on site, the site was therefore likely to have some level of lighting around the dwelling, with very little around the densely vegetated boundaries. The presence of mature vegetation with little lighting would make the site desirable as a foraging habitat, specifically due to the larger accumulations usually recorded around trees/shrubs. Tree, shrub and grassland planting will be replaced back into the proposed development to provide an area of foraging/commuting (an unlit corridor to the north of the site) to allow bats to still utilise the site.

Dormice

The site in its current form, is considered to provide no habitat for dormice, however, prior to the site clearance there was mature trees and scrub which would have been suitable for this species. The site is located in the centre of Poole however and it is not considered likely that this species would be within the local area and therefore it is not considered that the site could have supported dormice due to the built-up nature of the surrounding environment.

There are no known records for dormice within the local area (DERC, 2023) and the closest European Protected Species (EPS) licence for dormice is located approximately 14km northeast of the site (MAGIC, 2023). Therefore, no further action is recommended for dormice.

Great crested newts

Prior to the site clearance, the site appeared to support two areas of grassland to the north and south of the property, from the aerial images no pond was present on the site however this could have been hidden by the trees/dense vegetation. Additionally, it is unknown whether any refugia for newts was present prior to the site clearance which may have provided shelter for any newts within the site.

Ponds offsite include, a pond noted from aerial mapping in the northern private garden (approximately 10m north) which was inaccessible and two ornamental ponds are located within the gardens in 'Poole's Secret Garden' 90m and 115m to the southeast.

Pond 1 (90m to the southeast of the site)

Pond 1 is a small ornamental pond located within the adjacent garden to the west of the site. The pond measures approximately 1x1m in length and width and approximately 0.5m deep, is hard-landscaped and is lined.

Pond 2 (115m to the southeast of the site)

Pond 2 is a large ornamental pond located within the adjacent gardens in the west of the site. The pond measures approximately 10m² and approximately 0.5-1m deep, is soft landscaped and is not lined.

Habitat Suitability Index (HSI) assessments

Habitat Suitability Index (HSI) assessments were conducted on the above accessible ponds and the results of which are provided in the table below.

Variable	Pond 1	Pond 2
SI1 – Location	1	1
SI2 - Pond area	0.05	0.2
SI3 - Pond drying	0.9	0.9
SI4 - Water quality	1	1
SI4 – Shade	0.2	0.7
SI6 – Fowl	1	1
SI7 – Fish	1	1
SI8 - Ponds	0.65	0.65
SI9 – Terrestrial habitat	0.67	0.65
SI10 - Macrophytes	0.6	1
HSI SCORE =	0.5459	0.7481

Pond 1 scored 'below average' suitability for GCN; and Pond 2 scored 'good' suitability for GCN. The pond to the north was noted to be inaccessible and so no HSI was undertaken on this pond.

Great crested newts are not considered likely to be present due to the built-up nature of the locale and the lack of connective habitats required, however there is a record for palmate newt within the data search which notes that within the urban habitats of Poole, a palmate newt population is surviving.

As such, to ensure appropriate replacement habitat is provided, a pond will be provided in the proposed development site.

Nesting birds

The habitats on site currently include the remains of a cut back ornamental hedgerow which supports some cherry laurel and garden privet. In its current state the hedge does not provide suitable habitat for nesting birds however if a significant timeframe occurs between the ecological survey and the development there is a possibility that the hedge will grow sufficiently to support nesting birds again.

The site prior to clearance was noted to provide many suitable bird nesting features such as dense canopy trees, the building could have provided small cracks and crevices suitable for birds which nest within buildings such as house sparrows (*Passer domesticus*) and house martin (*Delichon urbicum*) and mature trees. The development site will provide a number of large tree species and nesting features which will be installed into the buildings to provide for nesting birds.

Common reptiles

In its current state the site does not support any habitats suitable for reptiles such as slow worms and common lizards, however the previous habitats on site appear to be overgrown garden habitats, unmanaged grassland, ornamental planting, scrubby areas with hedgerow bases. The site previously could have supported a low population of slow worms. The site does adjoin to neighbouring overgrown gardens which would allow an island population (small in number) to thrive. The replacement development will allow for grassland replacement planting and provide areas of refugia to allow the species to return as the data search notes the presence of slow worms 370m to the northeast.

Other species – hedgehogs

Hedgehogs have been recorded as close as 70m from the site and there are a good number of records locally, in its current state, the site is too open and unlikely to support good foraging habitats for this species. As hedgehogs are a UK BAP priority

species (JNCC, 2016) and a 'Species of Principal Importance' under the NERC Act (2006), the replacement planting will allow for foraging grounds for hedgehogs and a hedgehog box will be provided.

5. Biodiversity mitigation and enhancement strategy

Dorset Heathlands SPA/Ramsar and Dorset Heaths SAC

The application site falls within 2.75km of the Dorset Heaths SAC and within 3km of the Dorset Heathlands SPA/Ramsar. The application site therefore falls between 400m-5km and within the Consultation Area for these sites, as defined in The Dorset Heathlands Planning Framework 2020-2025 SPD (Dorset Council, 2020). Financial contribution for Strategic Management and Monitoring (SAMM) will be required for the planning permission for any increase in residential units; for all areas in Dorset outside of the Bournemouth, Christchurch and Poole (BCP) and North Dorset areas, financial contribution will be secured via Community Infrastructure Levy (CIL) and will be similar to a fee of £485 per house or £331 per flat (based on the current fee for the BCP area). This funding is used to manage and monitor any additional pressures on the Dorset Heathlands sites through increased visitation and recreational activities.

Poole Harbour SPA/Ramsar

Nitrates & phosphates

The application site falls within the catchment for Poole Harbour, as identified using the Poole Harbour catchment map (DEFRA, 2021). There are currently unacceptably high levels of phosphorous and nitrogen within the harbour's water environment, which is causing eutrophication (algal blooms) and is having detrimental impacts on water quality and rare species, in particular on feeding availability for rare waterfowl and waders, which are citation features of the SPA. These high nutrient loads are currently affecting the integrity of the internationally protected habitats sites.

New plans and projects within the catchment, including residential development and overnight accommodation, are resulting in additional sewage discharges into the catchment which cannot currently be accommodated by the Sewage Treatment Works (STWs). Therefore, the applicant will need to demonstrate nutrient neutrality for both nitrogen and phosphorous using a Poole Harbour nutrient budget calculation (the calculator can be sourced from <https://www.dorsetcouncil.gov.uk/nutrient-neutrality-1>). The development must also comply with Part G of Schedule 1 and regulation 36 to the Building Regulations 2010 in relation to water efficiency and usage restrictions. This is costed at £1,705 per house and £1,164 per flat.

Poole Harbour SPA/Ramsar – SAMMs costs

The application lies within the 'Recreation Zone' as identified within the Poole Harbour Recreation 2019-2024 SPD (BCP and Dorset Councils, 2020) and is

approximately 100m from the harbour. Community Infrastructure Levy (CIL) contributions for Strategic Management and Monitoring (SAMM) will be required for the provision of each new dwelling and will be similar to the BCP Council fee of £172 per house and £118 per flat.

Replacement planting

Pond creation

As the neighbouring property to the north supports a pond and palmate newts were recorded in the local area there was a possibility that the site prior to clearance could have supported newts terrestrially, and possibly if a pond was present aquatically.

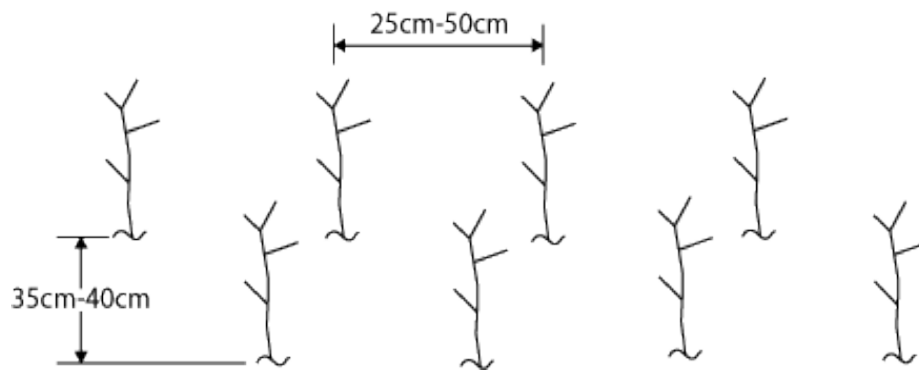
The northern strip of land will be set aside for wildlife, this area will measure 7.3m by 39m and will be separated from the residential ownership by a hedgerow, ensuring no interference by the residents. The pond will be created following this method:

- In the centre of the northern wildlife area, a pond will be dug which will measure a minimum of 12m², it must be lined to prevent drying in the summer months and will be dug with undulating pond margins and shallow sloping sides. The central depth of the pond will be 1m, with at least two different platforms sloping down the side to base at 0.2m and 0.5m to allow a variety of water plants to grow.
- The new pond will be planted with a mixture of submerged, emergent and floating plants to provide suitable newt egg-laying substrates, as well as rockeries to provide cover from predation. Plants must be native and a suitable list of plants is provided in Appendix 6.
- A log pile will be installed within 1m of the pond boundary to allow for shelter of both newts and reptiles.
- The land immediately surrounding the pond will be planted with tussocky grassland as detailed below.

Hedgerow planting

- A new species-rich native hedgerow measuring 39m will be planted along the southern boundary of the wildlife site, a 1m gap must be left for access for any long-term management. The species-rich hedgerow will comprise native, woody species and will have the following planting specifications:
- The new hedgerow will comprise a mixture of six native, woody species to provide nesting and foraging habitat for wildlife. The hedgerow will comprise a diverse mixture of at least 10% of six different native species from the following list:
 - Blackthorn (*Prunus spinosa*)

- Hawthorn (*Crataegus monogyna*)
 - Spindle (*Euonymus europaeus*)
 - Field maple (*Acer campestre*)
 - Dogwood (*Cornus sanguinea*)
 - Oak (*Quercus sp.*)
 - Elm (*Ulmus procera*)
 - Hazel (*Corylus avellana*)
 - Elder (*Sambucus nigra*)
 - Crab apple (*Malus sylvestris*)
 - Guelder-rose (*Viburnum opulus*)
- The new hedgerow whips will be sourced from British-grown stock and will be planted between November and March. The whips will be planted in two rows at a density of six plants per 1m feature approximately 35cm apart. The roots must be kept damp throughout the planting process.



- Spiral guards will be required to protect the whips and canes will be used to support the whips and will be removed after 3 years. Any new whips will be replaced where they become diseased/die and replaced with plants of the same species and size.
- To ensure the hedgerow and woodland management is implemented and is working a Management Plan will be required, this Management Plan will be produced by an ecological consultant and will include the details of the habitat creation, management and monitoring, including two years monitoring in a six year period to monitor initial creation and long-term habitat function. The Management Plan will be submitted to the LPA prior to implementation. This will include watering where necessary, particularly during drought periods. Once the hedgerow has become established, hedgerow laying and cutting will be required to result in good hedge structure.

Grassland creation

It is assumed that the site prior to clearance supported grassland habitat as the aerial mapping service shows two garden grass areas to the north and south of the old

house. The site appears to have supported a matrix of trees and grassland providing shelter in the root systems for mammal/reptiles/newts and foraging within the grassland. The area of land set aside for wildlife in the north will measure 7.3m by 39m and the majority of this area will be left to support tussocky grassland. The following habitat creation will be installed:

- An area of tussocky grassland measuring C. 240m² (the remaining 35m² will be planted with scrub as below) will be created across the site and this will serve as a permanent reptile habitat.
- The soil will be raked/harrowed and rolled to produce a fine, firm surface. Once the soil has been prepared, the entire area will be sown with 'EM10 Tussock Mixture' at a rate of 4g/m² (seed can be purchased from www.wildseed.co.uk). The seed is best sown in the autumn or spring but can be sown at other times of the year if there is sufficient warmth and moisture. The seed must be surface sown and can be applied by machine or broadcast by hand. The seed must not be incorporated or covered, but firmed in with a roll, or by treading, to give good soil/seed contact.
- Weed control will be required to ensure the grassland establishment is successful. This will require regularly digging out or spot treating any residual perennial weeds such as docks/thistles.

Scrub planting

It is unknown whether any scrub habitat was on site prior to the clearance however, due to the appearance of dense vegetation from aerial maps, it is considered likely that either dense ornamental planting or scrub was present within the areas which support trees. As reptiles and newts, in addition to birds, invertebrates and small mammals all shelter and forage within scrub a 1m line will be planted along the northern fence which will measure 35m in length. Scrub habitat should be created following this method:

- At least three species of scrub plants would be installed within the area, including bramble, hawthorn, blackthorn, hazel or gorse.
- The whips of trees will be planted as above in the hedgerow section.
- Bramble will be planted in amongst the whips at a rate of three plants per 1m².
- Short-term management will comprise the same as the hedgerow section above and long-term management will include the management of the scrub to ensure it does not encroach into the grassland habitat.

Replacement tree planting

It is unknown how many trees were lost following the clearance of the site and no tree report was undertaken prior to the site clearance. The aerial mapping service shows the majority of the site supports a mixture of non-native evergreens such as

macra carpa and leylandii along with natives such as holly and sycamore seen from the street view.

Under the BCP Council's Biodiversity Net Gain Note (BCP Council, 2022), replacement tree planting is required to offset the loss of trees through development. As a total number of trees cannot be calculated the following will be planted both in the northern wildlife area and in the soft landscaping across the site (detailed below in landscaping).

Replacement tree planting in the northern wildlife area will include a total of two fruit trees, four mature trees (large natives such as oak, lime, ash) and two small native/sycamore trees as illustrated in Appendix 6. The following specifications and management will be adhered to for new tree planting; a mixture of British native species must be planted to mitigate for the loss of trees:

Short-term management and planting

- 50% of replacement or new trees will be large canopy trees such as oak, lime and beech.
- Replacement and new tree planting will include a combination of at least 75% British native including both larger and smaller canopy trees (smaller canopy includes hawthorn, field maple, rowan, whitebeam, silver birch, crab apple, willow) and 25% non-native such as fruit trees and sycamore to ensure ecological value and resilience.
- The trees roots must be soaked in water prior to planting, which will take place from September and early May only during a mild spell. The holes must be generous and at least one third larger than the roots of the whips and will be dug-in with well-rotted manure/compost prior to planting.
- The whips will be placed in the holes and supported with ties and a stake to ensure they are in an upright position. A plastic water channel will then be installed for each whip starting at the base of the roots to surface level to direct waters into the root system.
- Once the stakes, ties and channels are in place, enriched compost will be backfilled over the roots and bedded in to ensure the whips are stable and upright. Immediately after planting the whips must be kept well-watered to ensure establishment.

Long-term management plan

- Once planted, the trees must be maintained in line with the Management Plan. This will include watering of the trees where required during drought periods and annual pruning to maintain the health of the trees.

Landscaping within the development

Trees

Several garden grasslands are being created around the flats and the houses, in addition to shrub planting and tree planting. As detailed above the tree planting will be undertaken in line with the replacement tree planting and a total of 11 trees will be planted in the main development site and will comprise a mix of large native, small native and fruit/sycamore for diversity as above.

Shrub planting

Any new landscaping/ shrub planting will comprise a mixture of native British species and sourced from British-grown stock to benefit local biodiversity. Shorter vegetation to be provided around the carpark area will comprises species such as hazel, beech, dogwood, spindle or hornbeam which all do well cut short under management.

Grassland

The grassland within the gardens and around the blocks of flats will be over sown with EL1 flowering lawn mixture to allow for flora which produces pollen to return to the site. The following habitat creation will be installed:

- The soil will be raked/harrowed and rolled to produce a fine, firm surface. Once the soil has been prepared, the entire area will be sown with 'EL1 Flowering Lawn Mixture' at a rate of 4g/m² (seed can be purchased from www.wildseed.co.uk). The seed is best sown in the autumn or spring but can be sown at other times of the year if there is sufficient warmth and moisture. The seed must be surface sown and can be applied by machine or broadcast by hand. The seed must not be incorporated or covered, but firmed in with a roll, or by treading, to give good soil/seed contact.
- Weed control will be required to ensure the grassland establishment is successful. This will require regularly digging out or spot treating any residual perennial weeds such as docks/thistles.

Badgers

No badger setts were recorded on site however, prior to the site clearance the site was overgrown and likely to support some foraging habitat for badgers such as bramble/elder, grassland etc. The grassland creation and scrub planting detailed above will provide suitable foraging habitats for badgers should they use the site. To safeguard badgers during the works the following method statement will be fully adhered to:

- Any trenches/excavation holes will be boarded over or will have a ramp installed in order to prevent any wildlife becoming trapped overnight.

- Two additional fruit trees and an elder tree will be planted in the northern wildlife area to provide suitable foraging habitat for badgers, in addition to the grassland creation.

Bats

Loss of roosting features

The site features an old slate roofed house prior to its removal and many mature trees. It is assumed that Potential Roosting Features (PRFs) were likely present within both trees/the house. To replace the lost features suitable for bats the following will be installed:

- Four integrated bat tubes such as the Schwegler 1FR bat tube will be installed on the western elevation of each block of flats as close to the eaves as possible, away from windows. These bat tubes are self-contained, do not enter into the cavity and as they are open at the base, they are self-cleaning.
- One 1WI Schwegler summer and winter bat box will be installed on the southern elevation of each block of flats as close to the eaves as possible.

Foraging and commuting bats

There are records of bats within the locale however the site is not adjacent to any dark corridors or rural habitats and so the 'Bats and Artificial Lighting At Night' Guidance Note BN08/23 (BCT & ILP, 2023) document is not deemed required in the already lit area of Poole. However, lighting will be considered as part of the development and where appropriate external lighting will be kept to a minimum and only used where safety requirements call for it.

The northern wildlife corridor will be unlit and provide a dark corridor along the northern fenceline however as every property on the street exhibits some external light and street lighting is present there is no feasible way to install a 0.5lux policy which is only required where Annex II important commuting routes are present/high levels of light sensitive bats. The following strategy will be adhered to:

- Preferably, no external light fixtures will be installed. If external lighting is required, this will be limited and only installed where required for safety purposes. Light fixtures will be installed a doorways/at the site entrance etc to allow visibility.
- All luminaires will lack UV elements when manufactured. Metal halide, compact fluorescent sources will not be used.
- LED luminaires only will be used due to their sharp cut-off, lower intensity, good colour rendition and dimming capability.
- A warm white light source (2700Kelvin or lower) will be adopted to reduce blue light component.

- Light sources will feature peak wavelengths higher than 550nm to avoid the component of light most disturbing to bats (Stone, 2012).

Nesting birds

Following the loss of bird nesting habitats, the replacement development will see a mixture of nest boxes installed within the properties and vegetation planting to ensure the site supports future nesting habitat and also foraging sources for birds. The vegetation planting has been discussed above while the following nest boxes will be installed as compensation for the loss of potential nest sites and should the eastern hedgerow boundary be left to grow bushy, advice has been provided for removal of any planting during the bird nesting season:

- Should the eastern hedgerow grow, preferably, any proposed vegetation clearance will be undertaken outside of the nesting bird season. This is considered to run between 1st September and 28th February when birds are least likely to be nesting.
- Works undertaken within the nesting season will be conducted under the supervision of a suitably experienced ecologist (due to the known presence of reptiles). If an active nest is encountered all clearance works must cease until the fledglings have left the nest, a minimum 5m buffer will be instated around the nest and the nest will be left undisturbed. Once the nest is no longer occupied; in this case a secondary check by the ecologist will be required to determine the nest is no longer active before works continue.
- **If a bird's nest is encountered at any other unsupervised time, all works in the area must cease immediately the ecologist must be contacted immediately to provide further advice.**
- Replacement bird nesting opportunities will be provided within the buildings in the form of swift bricks, sparrow terraces, starling boxes and general bird nesting boxes. The boxes will be installed as close to the eaves as possible and set away from the lights to prevent any deterrents to the birds.
- Four bird blocks will be installed on the eastern elevation of both block of flats.
- Six Pino build-in swift boxes will be installed on the western elevation of both block of flats.
- Two startling boxes will be installed on the northern elevation of both block of flats.
- Two 1SP Schwegler sparrow terrace will be installed on the eastern elevation of both block of flats.

Common reptiles and amphibians

The development is considered likely to have resulted in the loss of reptile habitat, considered likely to be a small population of slow worms based upon the assumed habitats on site prior to the clearance and the data search. Habitat creation for reptiles/newts have been detailed above in grassland/pond creation and the following additional features will be installed to provide shelter for reptiles and newts:

- Around the pond in the northern wildlife area, a small rockery will be created which allows for a small depression to be dug adjacent to the pond (30cm) and rocks layered within and extending to a height of 30cm above ground.
- A total of two hibernacula will be installed in the northeast and northwest of the site, along the edge of the newly planted scrub planting. Appendix 6 details the methodology for hibernacula creation and the location of the log piles to be created.

Other species – hedgehogs

Hedgehogs were considered likely to be foraging on site prior to the site clearance and records are noted within 70m of the site. Therefore, to ensure the long-term viability of the local hedgehog population, the following mitigation strategy will be fully implemented:

- To prevent hedgehogs from becoming entrapped, any trenches must have a ramp installed / covered over in order to prevent overnight entrapment.
- To ensure hedgehogs may continue to access the site, any new fencing on-site will feature hedgehog 'gravel boards' (holes) within every boundary that will measure 13cm x 13cm.
- The above habitat creation detailed in the northern wildlife area will allow for foraging to continue on site, specifically the grassland creation and the pond creation which will encourage slugs and other invertebrates to recolonise the site.
- One hedgehog house will be installed in the northern wildlife area which will not have any human interference except for the management required under the management plan. The house will face into planted vegetation to provide shelter at the door and the door will be sited away from the pond.

Biodiversity enhancements

To ensure the proposed development is compliant with NPPF and local planning policy the following enhancements will be included as part of the scheme to support local biodiversity (see Appendix 7 for locations and designs):

- One 'Woodstone Build-In Bat Roosting Tube' (<https://www.nhbs.com/ib-vl-05-vivara-pro-build-in-woodstone-batbox>) will be installed in the south elevation of each new house; the tubes will be installed on the southern elevations to provide opportunities

for crevice-dwelling bat species, such as pipistrelle (*Pipistrellus sp.*) bats. The tube is completely self-contained/self-cleaning and must be incorporated into the masonry of the building and faced with matching materials to leave an inconspicuous finish. The materials directly below the entrance to the tube must not be glossy/shiny.

- One additional new fruit tree (in addition to the required replacement trees above) will be planted and must be from British sourced stock, such as apple (*Malus spp.*), crab apple (*Malus sylvestris*), plum (*Prunus domestica*) or pear (*Pyrus spp.*). The fruit tree will provide foraging opportunities for local birds and support invertebrates.
- Any remaining landscaping and planting will comprise native British species only and sourced from British-grown stock. Species such as hazel, rowan, elder, hawthorn, blackthorn, beech and hornbeam will be used.
- A total of two 'Bee Bricks' (<https://www.nhbs.com/bee-brick>) will be installed within each new dwelling and on both blocks of flats on the south elevations. The bricks are designed to accommodate solitary bees (non-stinging/non-swarming types) and must be erected at a minimum height of 1m from ground level with no upwards height limit, in a sunny location.
- One 'PRO UK Rendered Build-In Swift Box' (<https://www.nhbs.com/vivara-pro-rendered-build-in-swift-box-uk-brick>) will be installed in each new dwelling. The nest boxes will be installed in the north elevations and must be installed as close to eaves level as possible and are maintenance-free with an integrated design, ensuring the boxes are secure in the long-term. These boxes will benefit species such as swifts (and have been shown to be used by other species such as house sparrows).

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Appendix 1: Proposed plans



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01202 604392 office@tgsurveying.net

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CHARTERED SURVEYORS & DESIGNERS

Beechvale Construction Ltd.
17 Danecourt Road, Poole, BH14 0PG
TGS0031 - 001F RJT - Oct. 2023

Proposed Block Plan
Development of Flats & Houses

1:500 @ A3





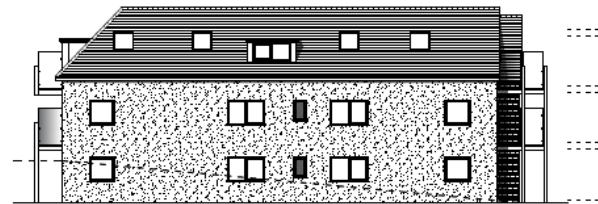
Front Elevation (S)



Side Elevation (E)



Rear Elevation (N)



Side Elevation (W)



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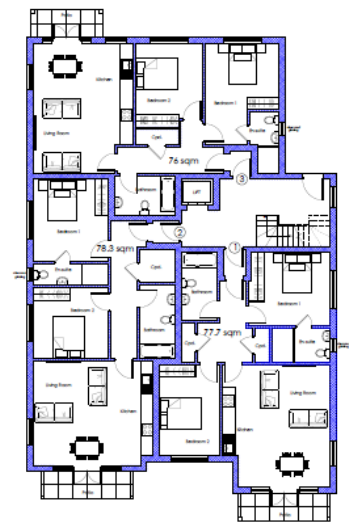
Beechvale Construction Ltd.
17 Danecourt Road, Poole, BH14 0PG
TGS0031 - 003B RJT - August 2023

Proposed Elevations - Flats - Block A
Development of Flats & Houses 1:100 @ A1

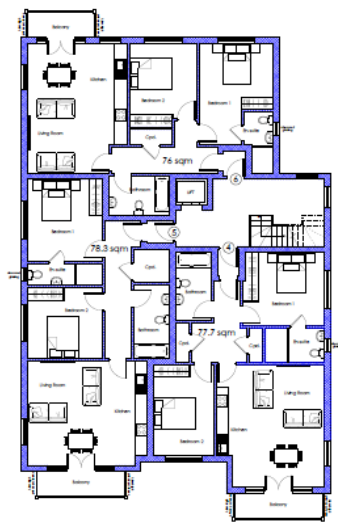


BLOCK A - FLATS
8 NO. 2-BED FLATS

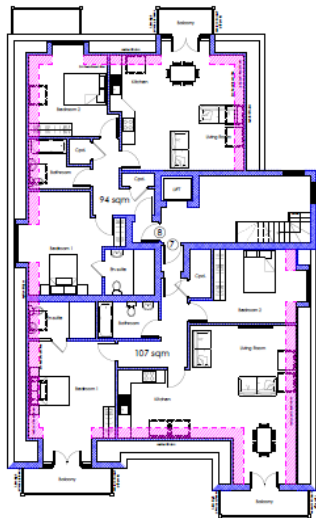
Existing construction
New construction
Walls removed



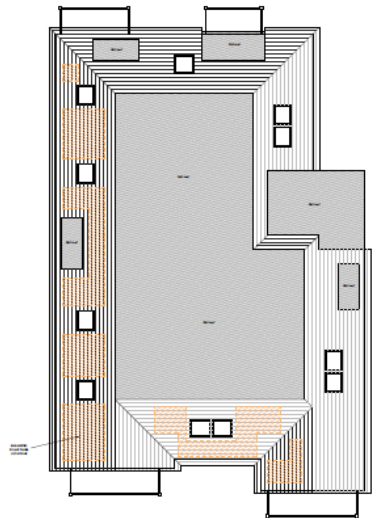
Ground Floor



First Floor



Second Floor



Roof Plan

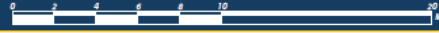


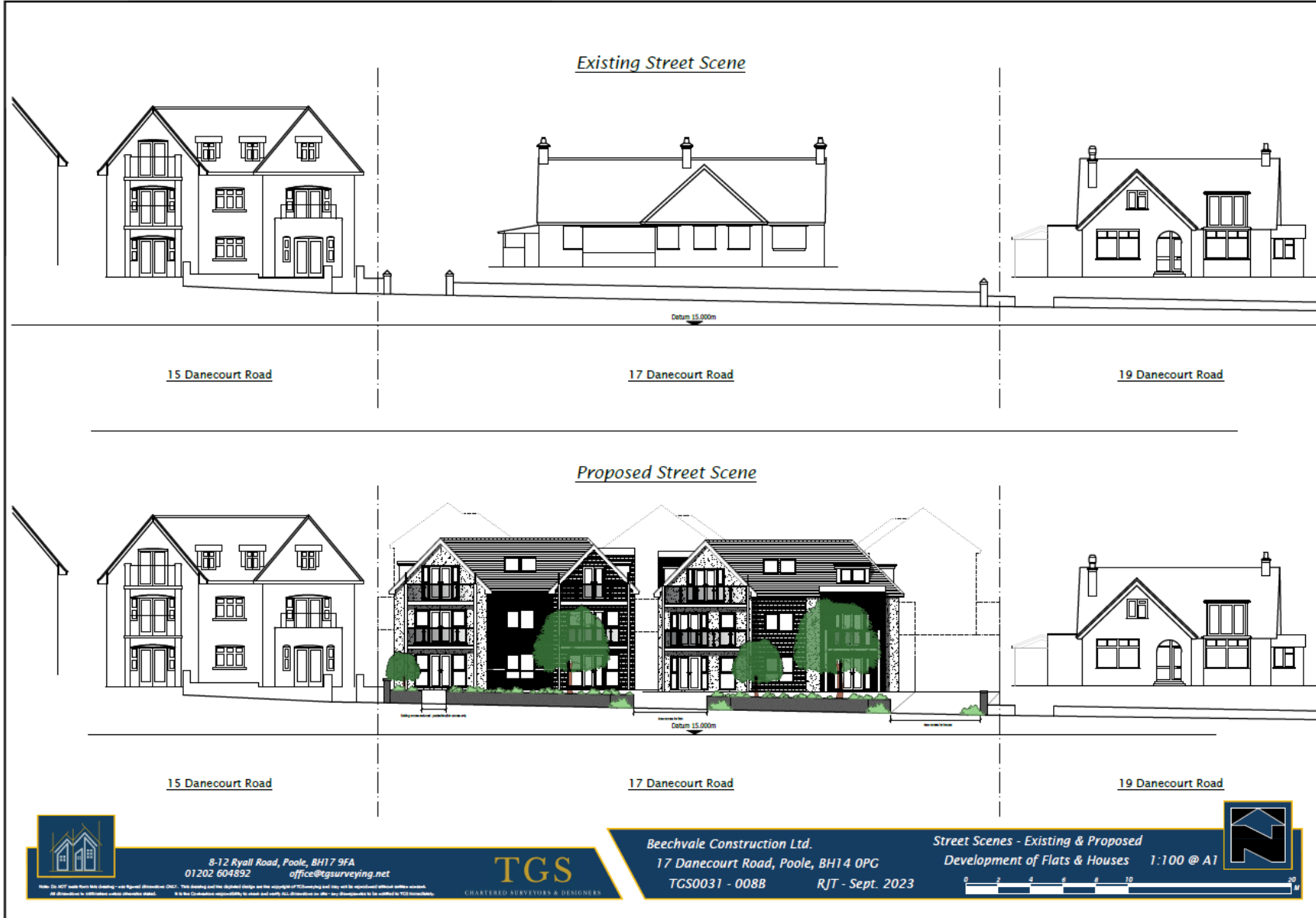
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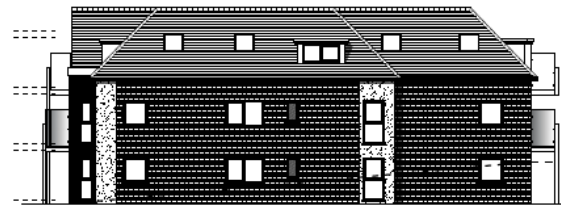
Proposed Floor Plans - Flats - Block A
Development of Flats & Houses 1:100 @ A1







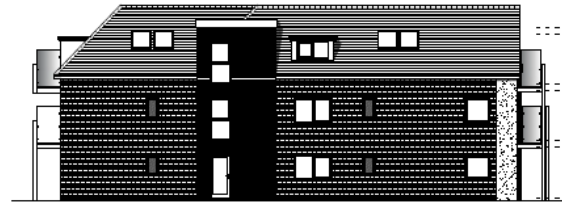
Front Elevation (S)



Side Elevation (E)



Rear Elevation (N)



Side Elevation (W)



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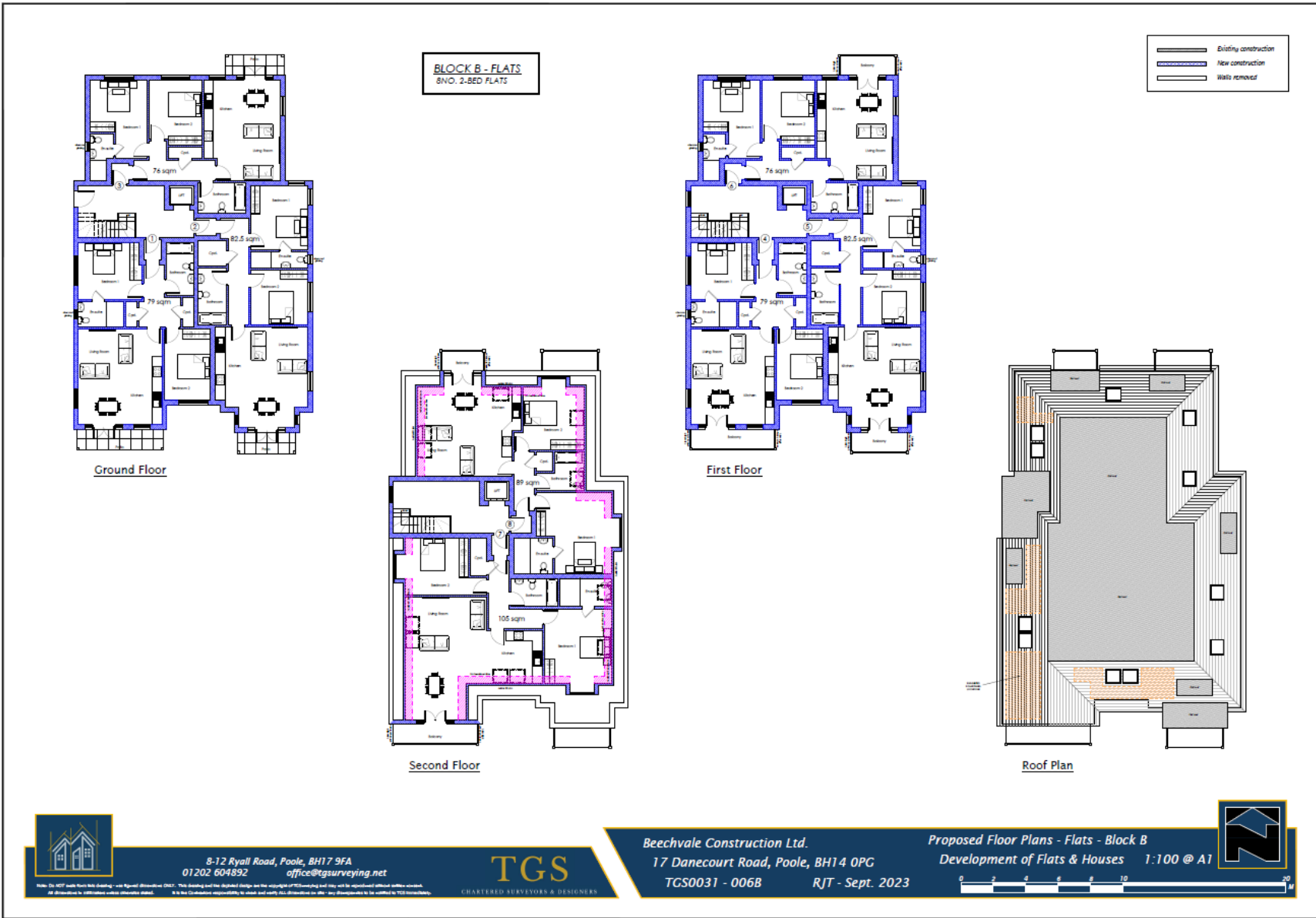
TGS

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Proposed Elevations - Flats - Block B
Development of Flats & Houses 1:100 @ A1







Front Elevation (S)



Side Elevation (E)



Rear Elevation (N)



Side Elevation (W)



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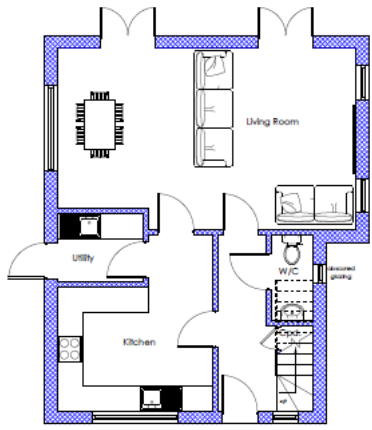
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17 Danecourt Road, Poole, BH14 0PG
TGS0031 - 005A
RJT - August 2023

Proposed Elevations - Houses 1:100 @ A3
Development of Flats & Houses

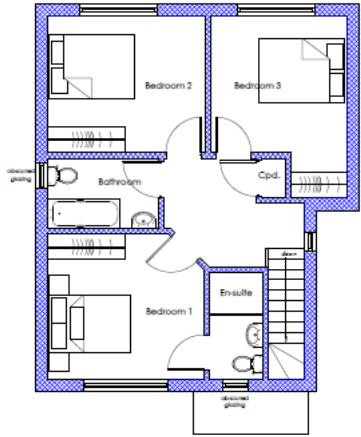


TYPICAL HOUSE DESIGN
3NO. 3-BED HOUSES

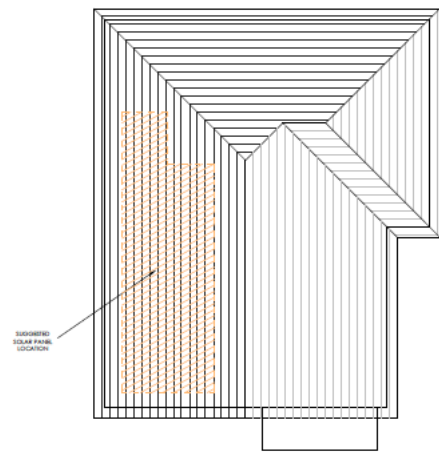
	Existing construction
	New construction
	Walls removed



Ground Floor



First Floor



Roof Plan



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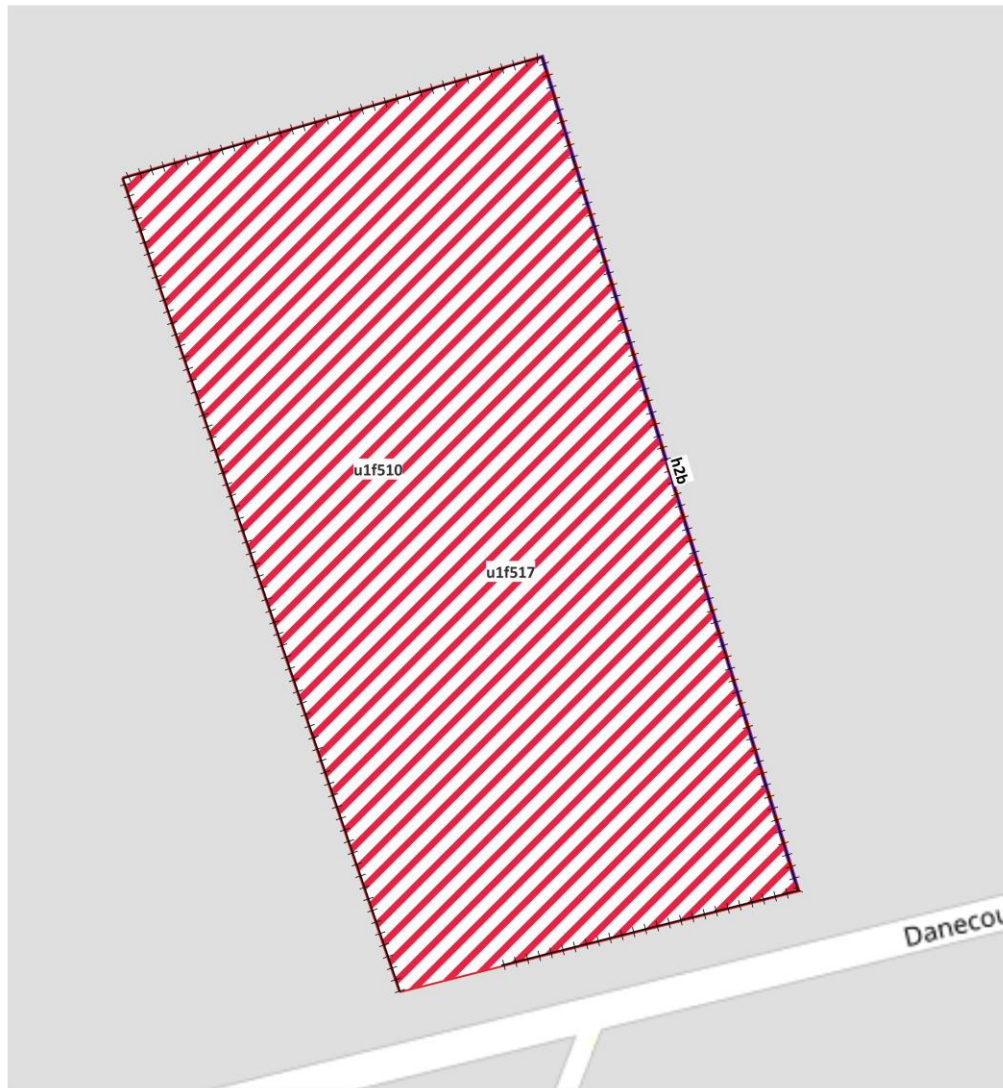
Beechvale Construction Ltd.
17 Danecourt Road, Poole, BH14 0PG
TGS0031 - 004B

Proposed Floor Plans - Houses 1:100 @ A3
Development of Flats & Houses

RJT - Sept. 2023



Appendix 2: Phase 1 habitat map



Legend

--- Fence

Hedgerow

— h2b- hedge ornamental non native

Habitats

▨ u1- built-up areas and gardens

▭ Red line boundary

Code	Notes
u1f510	Bare ground
u1f517	Recent management

Project name:	17 Danecourt Road
Client:	Daryll Howells
Produced by:	LC
Scale:	1:350 @ A3
Date produced:	23/10/2023
Drawing no:	001-121022F
Revision no:	00



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 Registered company in England and Wales no: 11266688



Appendix 3: Photographs



Photo 1: Cleared site showing bare ground.



Photo 2: Southern access to the site.



Photo 3: Eastern boundary of the site showing a large, felled tree.



Photo 4: Southern boundary of the site.



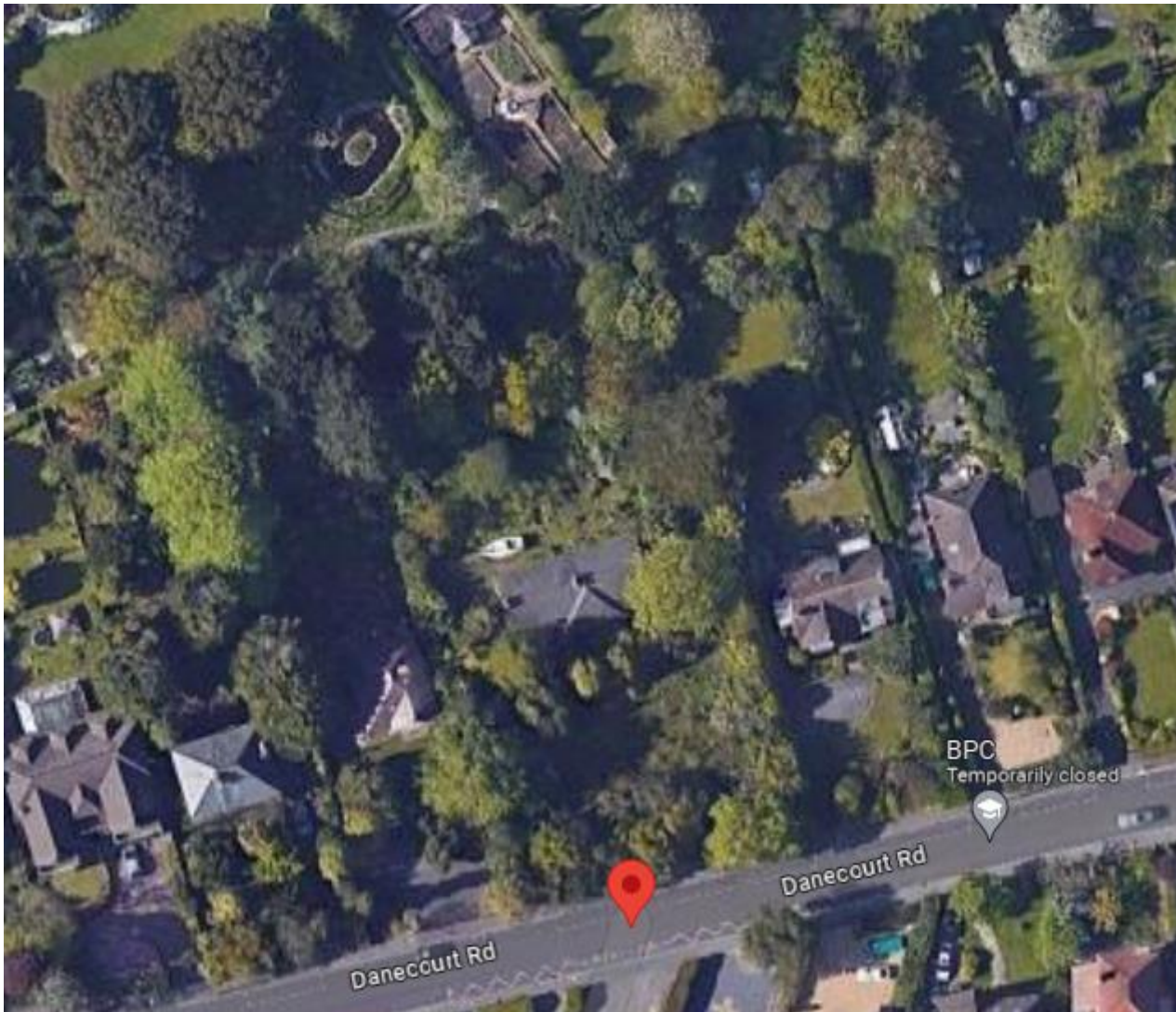
Photo 5: Bird box atop a felled tree on site.



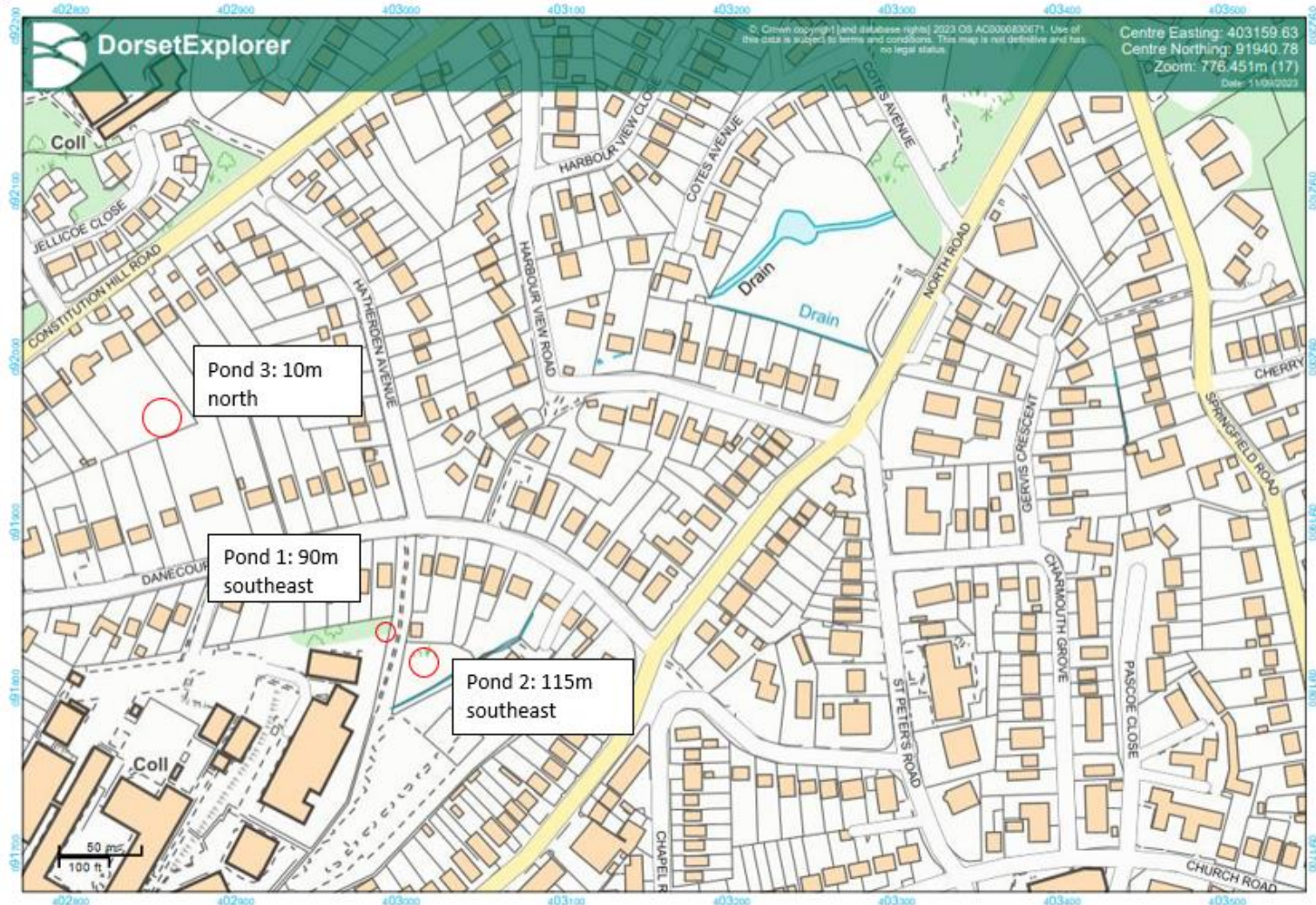
Photo 6: Internal of bird box.

Appendix 4: Screen shots of aerial map and sales particulars



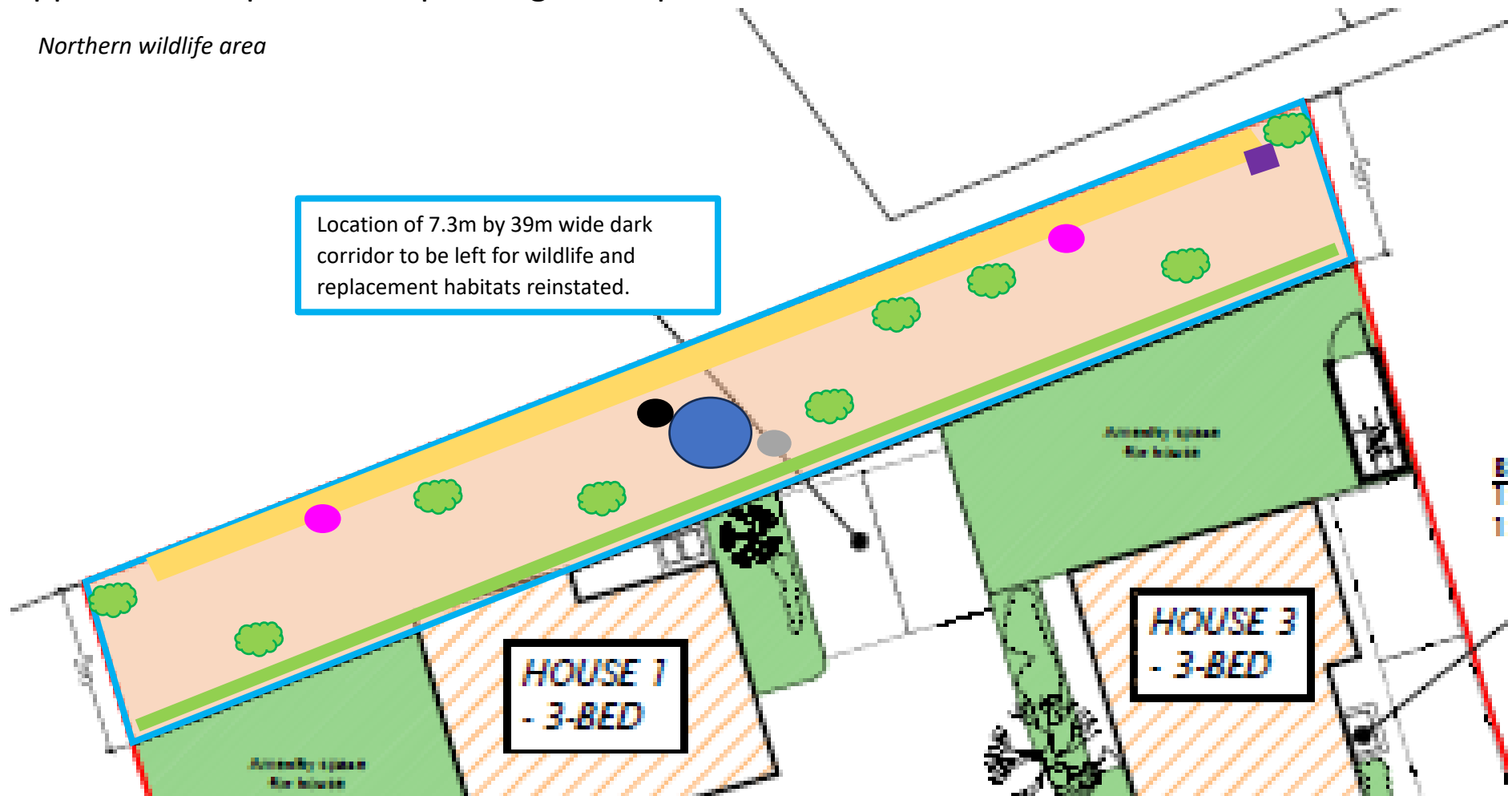


Appendix 5: Location of ponds



Appendix 6: Replacement planting and replacement assumed features for wildlife

Northern wildlife area



Key



Replacement trees and badger foraging trees, four mature, two small native/sycamore and two fruit.

'Vivara Pro Build-in Woodstone Bat Box'.



Pond.



35m² of scrub planting.



Log pile.



Hedgehog house.



Tussocky grassland c. 240m².



Reptile hibernaculum.



Native species rich hedgerow planting 39m.

Around the pond in the northern wildlife area, a small rockery will be created which allows for a small depression to be dug adjacent to the pond (30cm) and rocks layered within and extending to a height of 30cm above ground.



A log pile will be installed within 1m of the pond boundary to allow for shelter of both newts and reptiles.

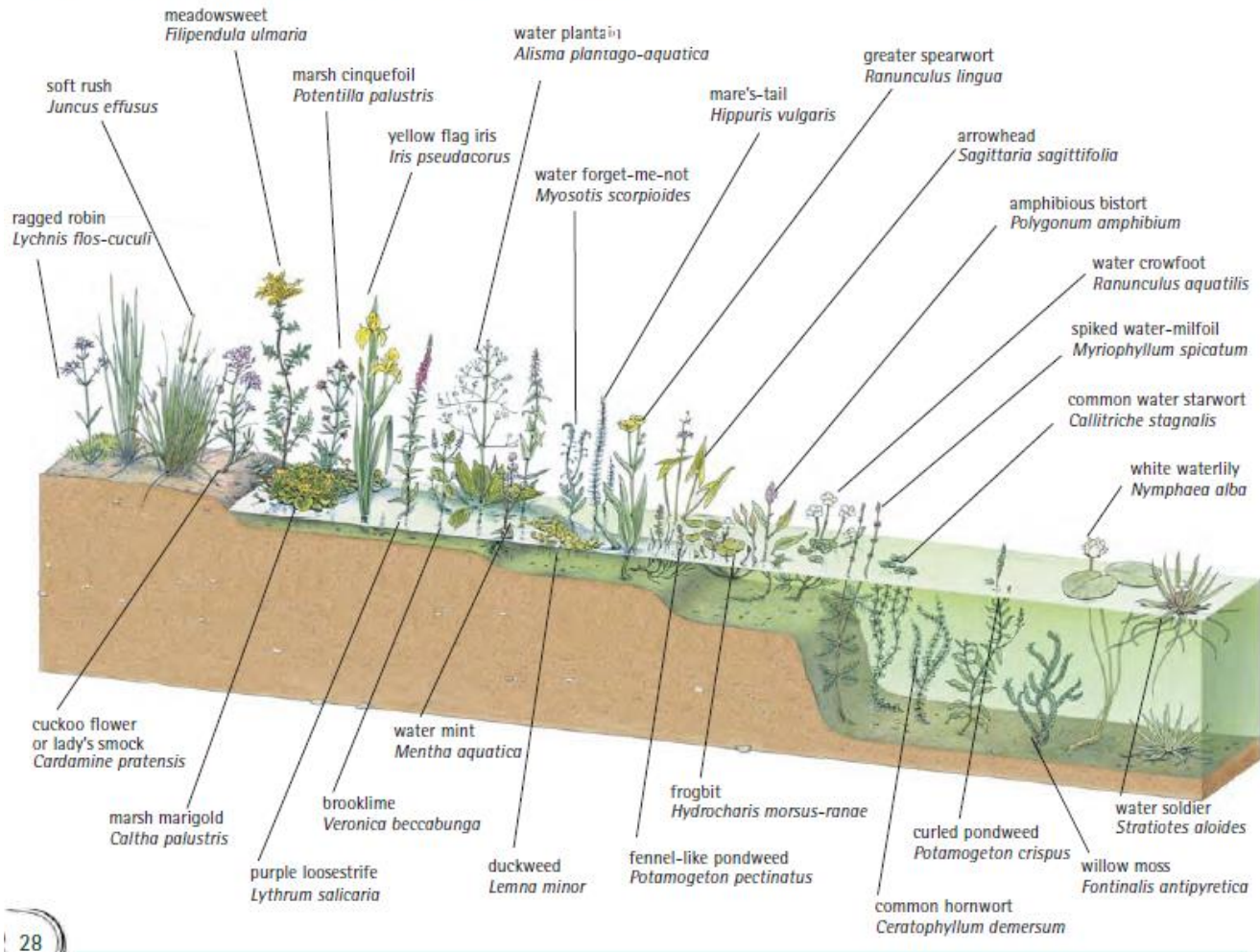


One hedgehog house will be installed in the northern wildlife area which will not have any human interference except for the management required under the management plan. The house will face into planted vegetation to provide shelter at the door and the door will be sited away from the pond.

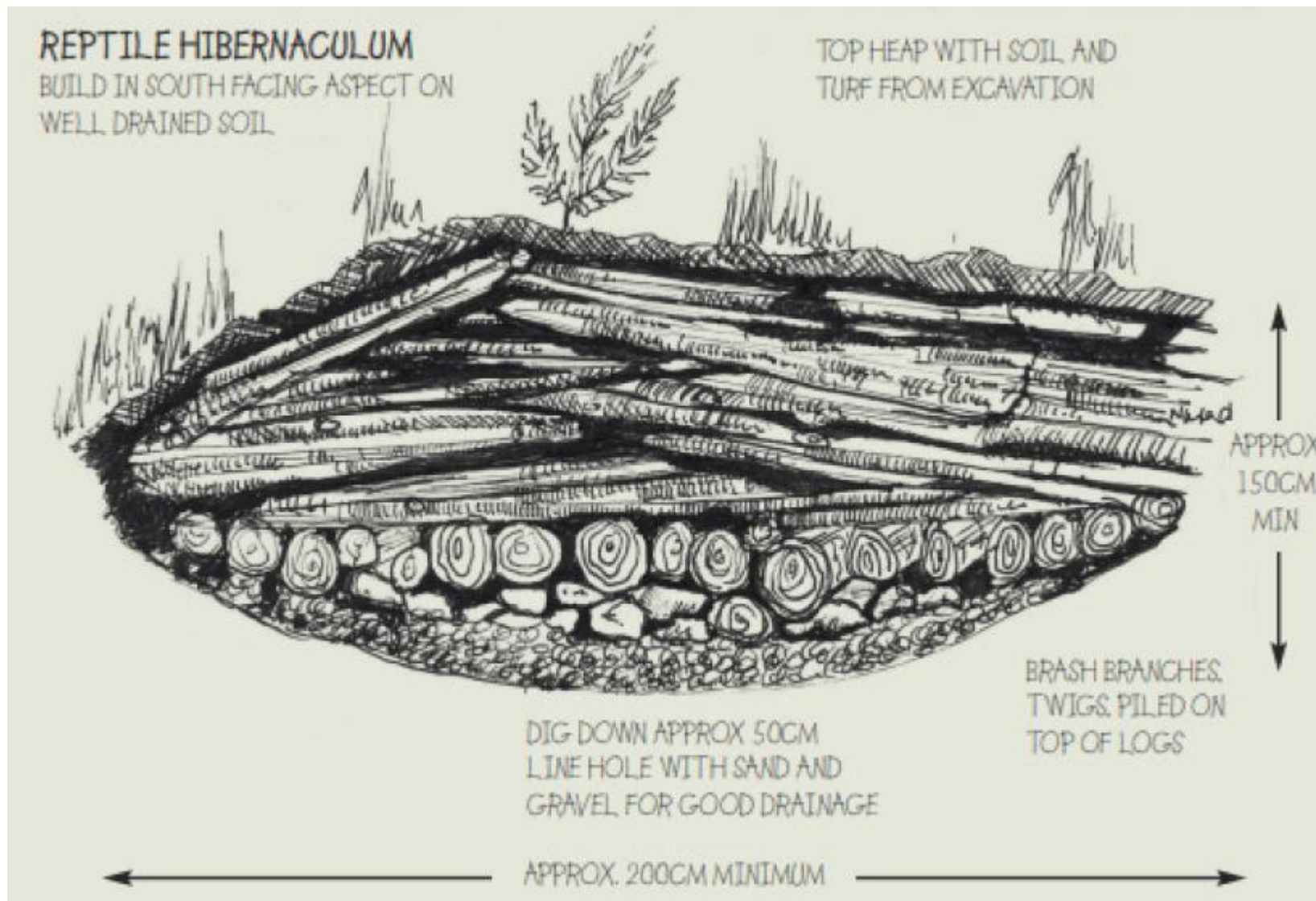


Example of pond shelves and species to plant within the pond

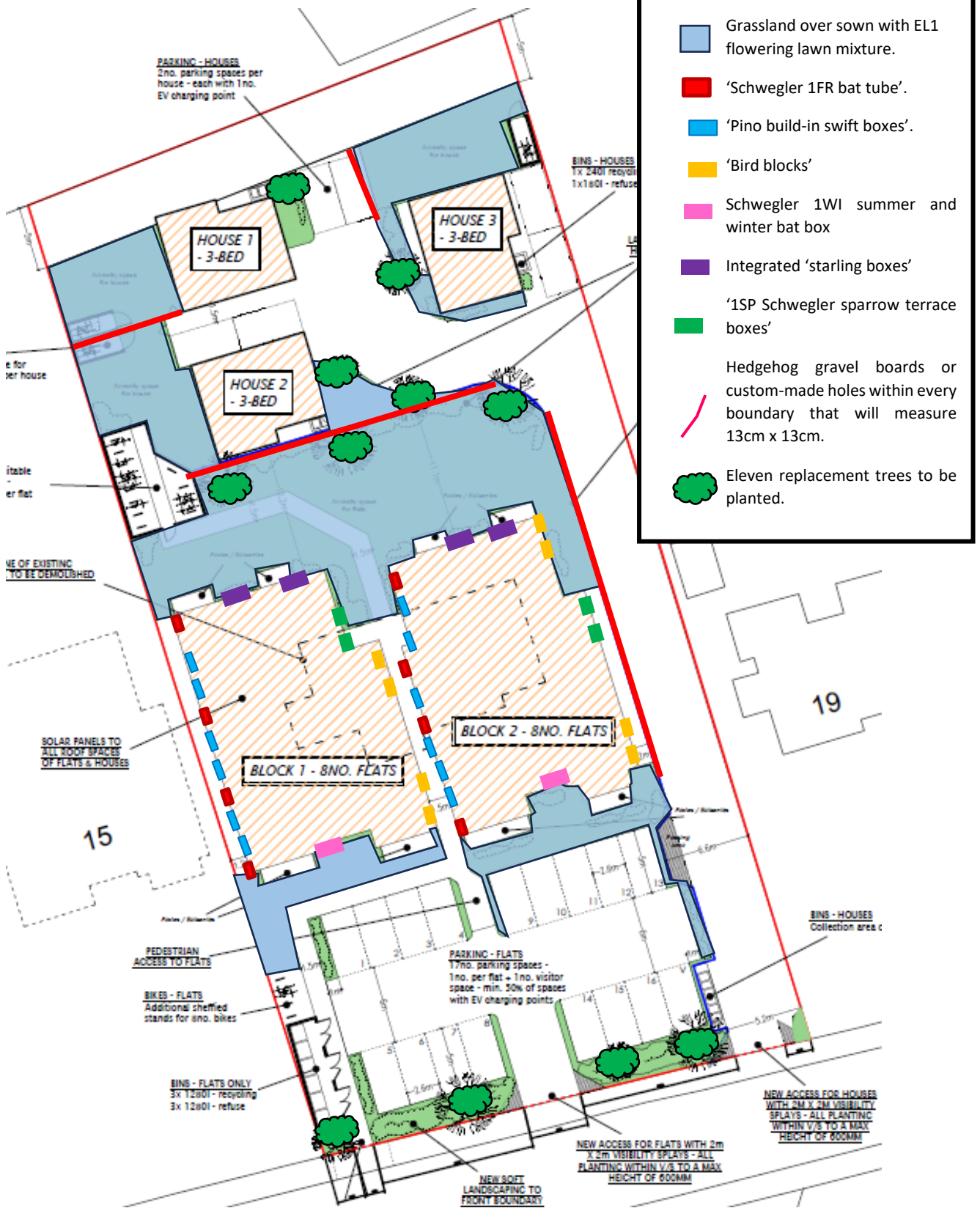
Typical aquatic plant species at great crested newt ponds



Example of reptile hibernacula



Replacement wildlife features within the development site



Four integrated bat tubes such as the 'Schwegler 1FR bat tube' will be installed on the western elevation of each block of flats as close to the eaves as possible, away from windows.



Four 'bird blocks' or similar will be installed in the east elevation of both blocks of flats.



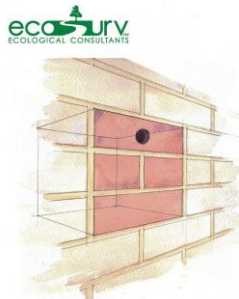
Six 'Pino build-in swift boxes' or similar will be installed in the west elevation of both blocks of flats.



Two integrated '1SP Schwegler sparrow terrace boxes' or similar will be installed in the east elevation of both blocks of flats.



Two integrated 'starling boxes' or similar will be installed in the north elevation of both blocks of flats.



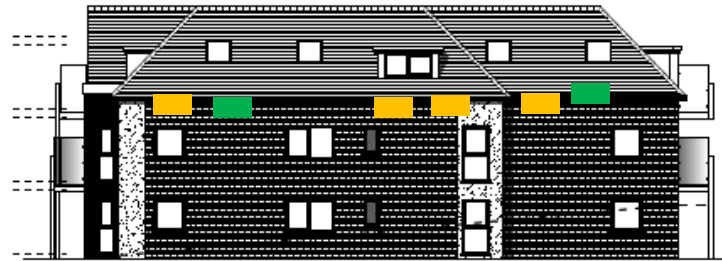
One Schwegler 1WI summer and winter bat box will be installed on the southern elevation of each block of flats as close to the eaves as possible.



Block B



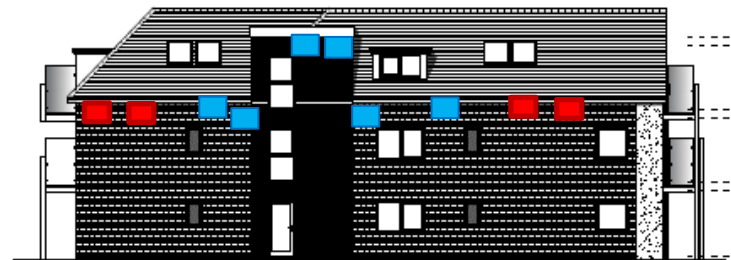
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Side Elevation (E)

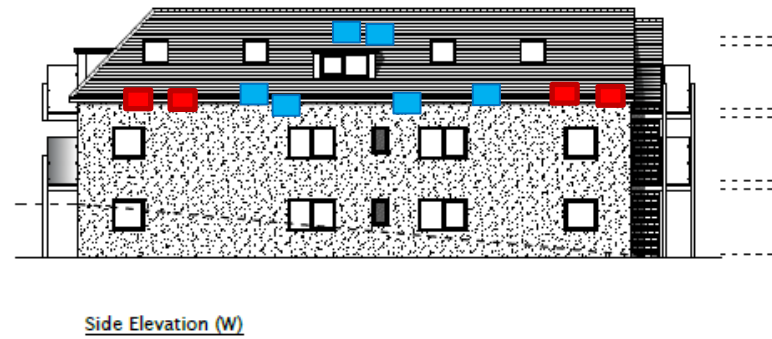
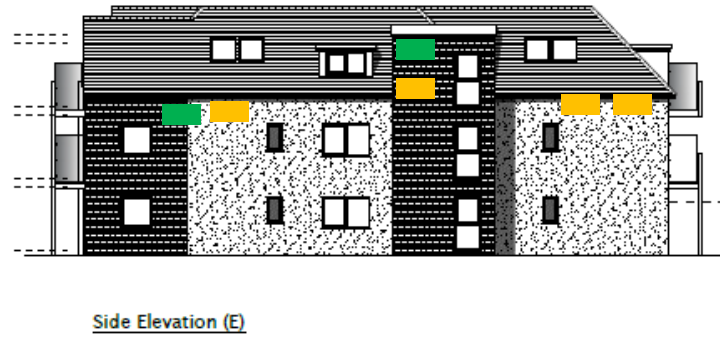
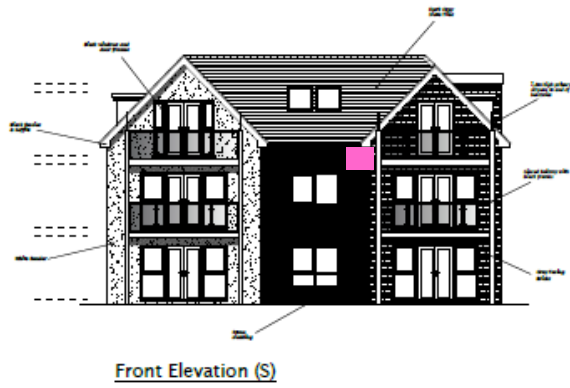


Rear Elevation (N)



Side Elevation (W)






Block A



Appendix 7: Biodiversity enhancement plan



Key

-  One enhancement fruit tree.
-  'Vivara Pro Build-in Woodstone Bat Box'.
-  Two 'Solitary Bee Bricks'.
-  Integrated 'PRO UK Rendered Build-In Swift Box'.
-  Hedgehog gravel boards or custom-made holes within every boundary that will measure 13cm x 13cm.



Front Elevation (S)



Side Elevation (E)



Rear Elevation (N)



Side Elevation (W)

One 'Vivara Pro Build-in Woodstone Bat Box' will be installed in each new dwelling (3) at eaves level in the southern elevations and away from external light sources.



Two 'Solitary Bee Bricks' will be installed in the new dwelling and each new block of flats in the southern elevation (10). The bricks are designed to accommodate solitary bees (non-stinging/swarming types) and must be erected at least 1m from ground level.



One integrated 'PRO UK Rendered Build-In Swift Boxes' or similar will be installed in the north elevation of each new dwelling (3).



One fruit tree will be planted and must be from British sourced stock, such as apple (*Malus spp.*), crab apple (*Malus sylvestris*), plum (*Prunus domestica*) or pear (*Pyrus spp.*). The fruit tree will provide foraging opportunities for local birds and support invertebrates.



Any new fencing on-site will feature hedgehog gravel boards or custom-made holes within every boundary that will measure 13cm x 13cm.

