native ecology
PROMOTING BIODIVERSITY INTEGRATION

Ecological impact assEssmEnt (Ecia)

34 PILGRIMS WAY EAST - SITE B

SEVENOAKS, KENT

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CONTENTS

1. SUMMARY

S.1 This report details an Ecological Impact Assessment (EcIA) undertaken in respect of proposed development at site B of 34 Pilgrims Way East, Otford, Sevenoaks, Kent, TN14 5QW.

S.2 Proposals include the demolition of existing buildings within the application site, with the development of a replacement dwelling and outbuildings to include an area of ecologically enhanced habitat located to the south of the site, within the applicant's ownership.

S.3 A PEA site visit was undertaken by Native Ecology on 16th March 2023.

S.4 [redacted]

S.5 further survey work was undertaken by Native Ecology in 2023 for roosting bats, hazel dormice, reptiles and Roman snails to determine presence / likely absence within the application site and connected habitats.

S.6 full results of the survey work is provided in the Protected Species Survey Report (see Addendum). Table 1 below gives a summary of survey results.

Table 1. Summary of survey results and recommendations

Survey	Results
Bats	Three dusk emergence surveys were undertaken for Building B1 between May and June 2023, which recorded no roosting bats associated with the building. One dusk emergence survey was undertaken for Buildings B2, B3, B4, B6, B7 and B9 between May and June 2023, which recorded no roosting bats associated with these buildings. Low to moderate levels of bat activity was recorded, predominantly comprising common pipistrelle, soprano pipistrelle and serotine bats passing through and foraging within the application site, with occasional passes of other bat species including brown long-eared bat. Based on these surveys, no further survey work or mitigation is required for roosting bats in buildings.
Hazel dormice	A presence/likely absence survey was undertaken between May and June 2023, which found evidence of hazel dormice, including summer nests and 1no. active adult within suitable habitats directly connected to the application site. Suitable habitats immediately south of the application site will be created to compensate for the loss of any suitable dormouse habitat lost as a result of development. A European Protected Species Mitigation (EPSM) Licence for dormice will be required to legally remove dormouse habitat within the application site. The EPSM Licence will be supported with a suitable mitigation and compensation strategy.

Reptiles	During the PEA an adult male slow worm was recorded, basking along the western boundary of the application site. A reptile presence / likely absence survey was undertaken between April and May 2023, which confirmed the presence of a low population assemblage of common lizard and slow worm. A reptile mitigation strategy, to include a translocation into an area of suitably enhanced adjacent habitat to the south, will be undertaken.
Roman snail	During the PEA an adult Roman snail shell was recorded along the western boundary of the application site. Roman snail presence / likely absence surveys were undertaken between June and August 2023, which confirmed the presence of live Roman snails within the application site and surrounding habitats (peak count of 14). Relocation of Roman snails under a Natural England conservation licence into a suitably enhanced mitigation area to the south of the application site will be undertaken.

S.7 Appendix 1 provides an Ecological Mitigation and Enhancement Strategy. Mitigation will be implemented to minimise potential impacts to foraging and commuting bats, hazel dormice, [redacted] edgehog, common mammals, nesting birds, reptiles and invertebrates during and post-construction.

S.8 Appendix 2 gives an overview of relevant legislation, which should be read in conjunction with this report.

S.9 Appendix 3 provides a summary of the suitability assessment for roosting bats.

S.10 Appendix 4 provides a Habitat Plan.

S.11 Appendix 5 provides the location plan for the off-site ecologically enhanced compensation site.

S.12 The full protected species survey report is included as Addendum 1.

2. INTRODUCTION

2.1 This report details a Ecological Impact Assessment (EcIA) undertaken in respect of proposed development at Site B of 34 Pilgrims Way East, Otford, Sevenoaks, Kent, TN14 5QW (site centred TQ 53756 59161).

2.2 figure 1, Section 3 provides a site location plan.

COMMISSION

2.3 Native Ecology was commissioned by Gary Larkin in August 2023 to produce an Ecological Impact Assessment and Mitigation Strategy for proposed development within the application site.

APPLICATION SITE

2.4 The application site, hereafter referred to as 'the Site', comprises nine outbuildings with associated access to Pilgrims Way East. The Site includes a number of derelict farm buildings, areas of grassland, a mix of mature trees, shrubs and scrub. The Site extends to approximately 0.7ha.

2.5 figure 2, Section 4 provides an existing site plan.

PROPOSED WORKS

2.6 Proposals include the demolition of several existing buildings within the Site, with the development of a replacement dwelling and outbuildings to include an area of ecologically enhanced habitat located to the south of the site, within the applicant's ownership.

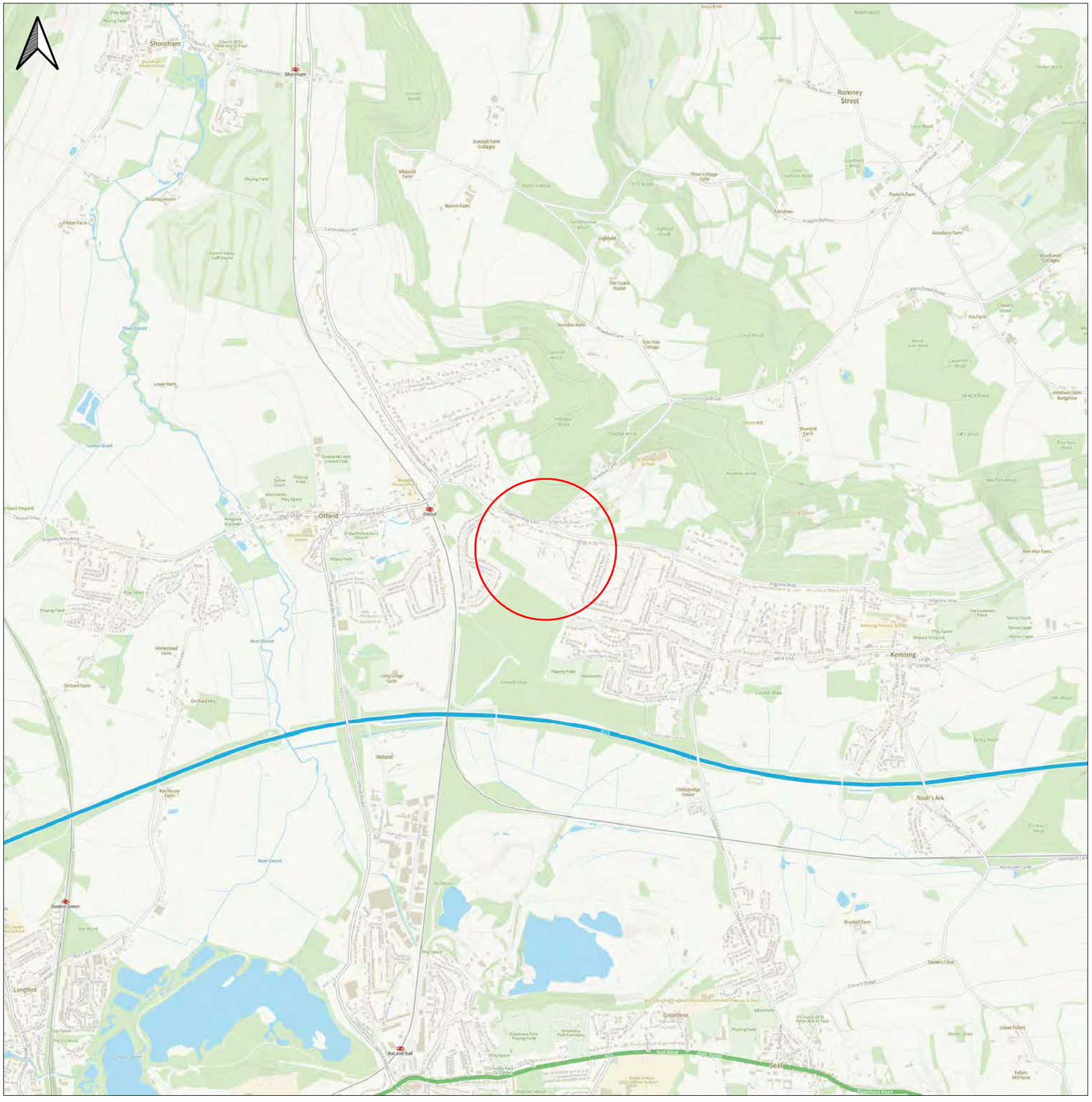
2.7 figure 3, Section 5 provides a proposed site layout plan.

PURPOSE OF REPORT

2.8 This report aims to provide general advice on ecological constraints associated with proposed development within the Site and includes recommendations for mitigation and further survey work, where required.

2.9 The objectives of the report are to:

- Describe the current ecological conditions present within the Site.
- Identify any key ecological constraints to the proposed development both with regards protected species and sites.
- Identify where mitigation will allow significant ecological effects to be avoided or minimised wherever possible.
- Identify the possible impacts on protected and important / notable species.
- Detail ecological enhancements to be incorporated into the development proposals.



0 1 2 3 km

0 20 40 60 80 100 m

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Site location plan

34 Pilgrims Way East
Otford, Kent
Site B

Drawing ref:	1100_DR01
Revision:	-
Date:	28/02/2023
Scale:	1:20,000 (Main canvass)
Paper size:	A3

4. EXISTING SITE PLAN

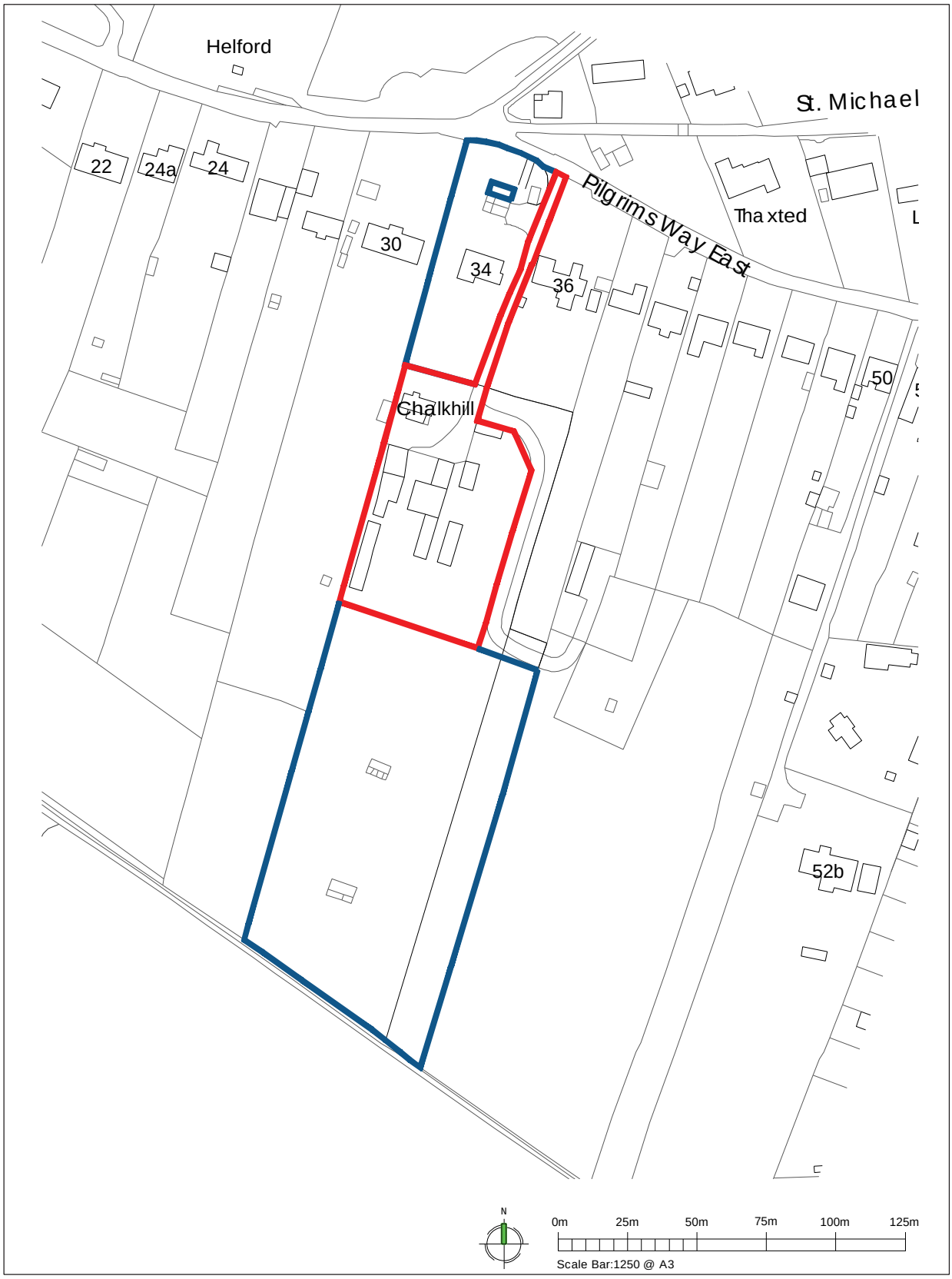

Figure 2. Existing site plan (provided by Offset Architects, April 2023).

5. PROPOSED SITE LAYOUT

Figure 3. Proposed site layout plan (Offset Architects, Drawing No. 8158-SK-34, July 2023).

6. METHODOLOGY

DESK STUDY

Zone of Influence

6.1 The 'zone of influence' for a project is the area over which ecological features may be subject to significant effects as a result of the proposed project and associated activities (cIEEM, 2017a). This report provides an assessment of the effects of a proposed development on protected or ecologically valuable sites, habitats or species where these effects extend beyond the development boundary of the site.

Designated sites

6.2 Potential impacts to designated sites, including National Site Network (NSN) and Sites of Special Scientific Interest (SSSI), have been considered.

6.3 The Multi Agency Geographic Information for the countryside (MAGIc) website was used to obtain information about statutory designated sites of international importance such as Special Protection Areas (SPA) within 7.2km of the Site.

6.4 Information was obtained about statutory designated sites of national importance such as SSSI and National Nature Reserves (NNR) within 2km of the Site and ancient woodland within 500m of the Site.

6.5 Kent Landscape Information System (KLIS) was used to identify Local Sites, such as Local Wildlife Sites (LWS), located within 1km of the Site.

Data search

6.6 Records were obtained from the Kent Reptile and Amphibian Group (KRAG) within 1km of the Site in March 2023.

6.7 Ordnance survey maps, the Multi Agency Geographic Information for the countryside (MAGIc) website and aerial images were used to identify waterbodies within 250m of the Site boundary. MAGIc Map was also used to obtain information on locations where European Protected Species Mitigation (EPSM) Licences for great crested newt have been issued by Natural England within 1km of the Site.

FIELD STUDY

6.8 A Preliminary Ecological Appraisal site visit was undertaken by Tara Hall BSc (Hons) AcIEEM and Thomas Hurst BSc (Hons) of Native Ecology on 16th March 2023.

6.9 Site visit details are provided in Table 2, overleaf.

Table 2. Survey details

Survey date	16th March 2023
Surveyor	Tara Hall BSc (Hons) AcIEEM and Thomas Hurst BSc (Hons)
Time on site	10:30 - 12:30
Weather	9°c, 50% cloud cover, light air, no rain, ground wet

UK Habitat classification

6.10 Habitats within the Site were mapped and classified in accordance with the The Professional Edition of the UK Habitat classification.

6.11 There are 5 levels of hierarchy, which provide an increasing level of detail. for the purpose of this assessment, habitats have been mapped for Primary Habitats up to Level 4.

6.12 Secondary codes have been assigned, where appropriate. These Secondary codes allow recording of additional information, linked to the Primary Habitats. In some cases, habitat types are defined by a Secondary code only, where Primary Habitats do not sufficiently represent the habitat present.

Protected species and habitats

6.13 During the survey the species and habitats identified within the Site were recorded. An assessment was also made as to the presence or potential presence of protected, important or Nationally Rare species.

6.14 Protected species and habitats considered include those listed under the Schedules of the conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 and of the Wildlife and countryside Act 1981.

6.15 In addition, an assessment has been made as to the possible impacts of the proposed development on nature conservation interests, in accordance with information relevant to the National Planning Policy framework and Local Planning Policy.

Bats

Preliminary Roost Assessment (bats)

6.16 A systematic search of the exterior and interior of buildings within the site was undertaken to identify potential bat access points and roosting places and to locate any evidence of bats such as bat droppings, urine staining and fur-oil staining. The inspection included exterior features of the buildings, such as sills, window panes, walls and the ground beneath potential access points to look for signs of bats, such as droppings.

6.17 A preliminary ground level roost assessment of trees within the Site was undertaken to determine whether trees possessed Potential Roost features (PRFs) for bats. Where possible, trees were assessed as providing either negligible, low, moderate or high suitability for roosting bats.

6.18 The suitability of roosting habitat and foraging and commuting habitat within the site was assessed following recommendations provided within Bat Surveys for Professional Ecologists: Good Practice Guidelines, 3rd edition, Bat Conservation Trust (Collins, 2016) (see Appendix 2 for suitability assessment and survey effort required for structures and trees).

[redacted]

Reptiles

6.20 The suitability of habitats within the Site to support reptiles was assessed during the Preliminary Ecological Appraisal site visit. Any incidental sightings were recorded.

Hazel dormice

6.21 The suitability of habitats within the Site to support hazel dormice was assessed during the Preliminary Ecological Appraisal site visit. Any incidental sightings or field signs, such as natural nests, were recorded.

Great crested newt

6.22 The level of survey effort and data collection required to support a Planning Application or European Protected Species Mitigation (EPSM) Licence for great crested newts is relative to the potential impact. For EPSM Licence applications, typically ponds within 250m of the construction zone are surveyed for the presence (and population assessment) of great crested newts.

6.23 following the guidance of Natural England (2021) waterbodies located beyond 250m from the development are only surveyed if all of the following conditions are met:

- ponds have potential to support a large great crested newt population;
- the development footprint contains particularly favourable habitat, especially if it constitutes the majority available locally;
- the development would have a substantial negative effect on that habitat; and
- there is an absence of dispersal barriers.

6.24 Based on the listed criteria above, a proportionate survey area for the Site includes the assessment of any ponds within 250m of the construction zone.

Habitats and Species of Principal Importance

6.25 An assessment was made as to the likely presence of Habitats and Species of Principal Importance under Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006 and birds on the Red and Amber lists of birds of conservation concern.

PROTECTED SPECIES SURVEYS

6.26 full methodology for the protected species survey work is included within Addendum 1.

LIMITATIONS

6.27 In accordance with cIEEM guidance, consideration should be given to the validity of survey data after a period of 12 month from the date of the survey. This may require a site visit to assess whether ecological conditions within the site have changed and may require further ecological survey work due to the transient nature of some protected species.

7. CURRENT ECOLOGICAL CONDITIONS

DESIGNATED SITES

Statutory Sites of International Importance

7.1 There are no Statutory Sites of International Importance located within 7.2km of the Site. Therefore, no further survey work or mitigation is required.

Statutory Sites of National Importance

7.2 There are three Sites of Special Scientific Interest (SSSIs) located within 2km of the survey area.

Table 3. Details of Statutory Sites of National Importance within 2km of the site boundary.

Designation	Site name	Distance and direction from site	Qualifying features
SSSI	Otford to Shoreham Downs	380m north west	This site comprises of species-rich chalk grassland, chalk scrub, and woodlands on a variety of soils. It supports a range of scarce and rare invertebrates and plants including man orchid (Acerus anthropophorum), chalk milkwort (Polygala calcarea) and a scarce hoverfly, Cheilosia soror (Natural England, 2023a).
SSSI	Greatness Brickworks	1.2km north east	Designated for its geological value (Natural England, 2023c).
SSSI	Magpie Bottom	1.4km south	The principal interest of this site is the chalk grassland on the steep slopes which supports a herb-rich plant community, including the nationally rare Kentish milkwort Polygala amarella. The site also incorporates neutral grassland, scrub and a variety of woodland. The fauna of this site is not well known. However, two locally distributed butterflies are found here, the chalkhill blue Lysandra coridon and the brown argus Aricia agestis (Natural England, 2023b).

7.3 According to the Impact Risk Zones for Ramsar Sites, Special Areas of Protection (SPA), SACs and SSSIs shown on Natural England's MAGIc map application, the planning application type means there is no requirement for the Local Planning Authority to consult with Natural England during the planning process regarding statutory designated sites.

7.4 Given the nature of proposals and distance between the sites, it is unlikely that the proposed development will impact the SSSIs either directly or indirectly. No further survey work or mitigation is proposed for SSSIs.

Non-statutory sites

Local Sites

7.5 There is one Local Wildlife Site (LWS) located within 1km of the Site:

- Woods and Downs above Kemsing LWS lies approximately 90m to the north.

7.6 It is unlikely that the proposed development will impact the LWS either directly or indirectly due to the small scale and nature of proposals and the distance between sites.

7.7 No further assessment or mitigation is proposed for Local Sites.

Ancient Woodland

7.8 There is one area of ancient woodland located within the 500m of the Site:

- Greenhill / Hillydeal Woods ancient woodland lies approximately 300m to the north.

7.9 It is unlikely that the proposed development will impact the ancient woodland either directly or indirectly due to the small scale and nature of proposals and the distance between sites.

7.10 No further assessment or mitigation is proposed in relation to ancient woodland.

HABITATS WITHIN THE SITE

Other habitats

Buildings

7.11 There are nine buildings present within the Site. Table 4 below provides photographs and building descriptions.

Table 4. Description of buildings within the Site (continued overleaf).

Building no. & name	Description	Photograph
B1	Derelict brick barn with concrete rendered elevations and rough sawn weatherboarding with a bitumen felt lining. The building supports a pitched unlined clay tile roof with open eaves. There is a rotten timber fascia, open windows, and ivy covers part of the roof. Unable to access internally.	

Building no. & name	Description	Photograph
B2	Derelict barn previously used as animal housing comprised of ship-lap weatherboarding with a pitched corrugated metal roof. Roof includes wooden sarking with bitumen felt liner. Internal aspects are exposed due to open windows and broken wall, areas of the ridge line are also missing.	
B3	Asbestos barn used for storage comprised of single skinned asbestos sheeting with a pitched roof. Internal aspects are not exposed, however, one window is open, giving internal access.	
B4	Asbestos shed used for storage comprised of single skinned sheeting with a mono-pitched roof. There is an open lean to attached with exposed elevations. Internal aspects are not exposed.	
B5	Ship-lap timber shed in poor condition used for storage.	
B6 & B7	Unused brick built pigsty comprised of breeze blocks with a mono pitched asbestos roof and wooden sarking. Internal aspects are exposed with compartments open both at ends.	

Building no. & name	Description	Photograph
B8	Breeze block structure with a mono-pitched roof. formally used as animal housing and now in a poor state of repair. Internal aspects are exposed.	
B9	Barn with three open elevations and a steel pitched roof used for storage. Dense ivy growth is present on one side.	

7.12 Table 5 below describes the habitats present within the Site in accordance with UK Habitat classification.

Table 5. Habitat types present within the Site, including level (UKHab), size and description (continued overleaf).

Habitat TypE				DEscription
Level 2 label	Level 3 label	Level 4 label	Level 5 label / Secondary codes	
Urban (u)	Built-up areas and gardens (u1)	Developed land; sealed surface (u1b)	Buildings (u1b5)	See Table 4 above for descriptions.
			Other developed land (u1b6)	concrete and hard standing driveway and forecourts are present.
		Artificial unvegetated, unsealed surface (u1c)		Small strips of land previously used for transport or storage.

Habitat TypE				DEscr iption
Level 2 label	Level 3 label	Level 4 label	Level 5 label / Secondary codes	
Grassland (g)	Neutral grassland (g3)	Other neutral grassland (g3c)		Area of grassland previously managed. Species include Yorkshire fog (Holcus lanatus) (Dominant), nettle (Urtica dioica), low-lying bramble sp. (Rubus sp.), cleavers sp. (Galium aparine), dandelion (Taraxacum sp.), hogweed sp. (Heracleum sp.), cow parsley sp. (Anthriscus sylvestris), thistle spp. (Cirsium spp.), spear thistle (Cirsium vulgare), pendulus sedge (Carex pendula), cats ear (Hypochaeris radicata), broad leaved dock (Rumex obtusifolius), green alkanet (Pentaglottis sempervirens) and purple dead nettle (Lamium purpureum).
Heathland and shrub (h)	Hedgerows (h2)	Other hedgerows (h2b)		Two hedgerows present, one ornamental and the other newly planted. Species include privet sp. (Ligustrum sp.) and cherry laurel (Prunus laurocerasus).
	Dense scrub (h3)	Mixed scrub (h3h)	Scattered trees (h3h 11)	Area of mixed scrub with some trees comprising cherry sp. (Prunus sp.), elder (Sambucus), bramble sp. (rubus sp.) and goat willow (Salix caprea).
Woodland and forest (w)	Broadleaved mixed and yew woodland (w1)	Other woodland; broadleaved (w1g)	Other broadleaved woodland types (w1g7)	Small area of woodland species including elder, buddleja sp. (buddleja sp.), prunus (prunus sp.) and goat willow (Salix caprea). Understory comprised of low lying bramble, cleavers, nettles and lords and ladies (Arum maculatum).

SURROUNDING HABITATS

7.13 The Site is relatively rural and located on the edge of the village of Otford. The surrounding area comprises residential garden spaces, a mosaic of arable and pastoral farmland, ancient woodland, priority woodland and hedgerows.

PROTECTED AND NOTABLE SPECIES

Bats - Roosting habitat

7.14 According to the MAGIc map application there are two EPSM licences for bat roosts located within 1km of the Site:

- A licence (EPSM2011-3117) 330m north east was obtained in 2011 for the destruction of a brown long-eared resting place; and
- A licence (2018-38013-EPS-MIT) 510m east was obtained in 2018 for the destruction of a soprano pipistrelle resting place.

Buildings - Preliminary Roost Assessment

Table 6. Results of Preliminary Roost Assessment

Building	Potential roost features	Suitability for roosting bats
B1	Multiple gaps between missing and raised tiles could provide opportunities for crevice dwelling bats, or provide access to the internal loft space for species such as brown long-eared bat. Gaps in the eaves, crevices between brickwork and concrete cladding and around window fixtures could provide opportunities for crevice dwelling bats. Access to internal space could provide suitable habitat for brown long-eared bats.	High
B2	Gaps between metal roofing and lined wooden sarking could provide suitable habitat for crevice dwelling bats	Low
B3	The accessible internal structure could provide roosting opportunities for brown long-eared bats.	Low
B4	The accessible internal structure could provide roosting opportunities for brown long-eared bats.	Low
B5	There is no suitable roost features associated with this building at the time of the survey.	Negligible
B6 & B7	There are gaps within the brickwork and access between the roofing and sarking that could provide suitable roosting opportunities for crevice dwelling bats.	Low
B8	Due to the condition of the building there are no potential roost features present at the time of the survey.	Negligible
B9	The open elevation giving access to the internal structure provides foraging and roosting opportunities for bats.	Low

7.15 At the time of the survey no bats or evidence of bat presence was identified within the accessible buildings. However, B1, B2, B3, B4, B6, B7, and B9 all offer suitable roosting opportunities.

7.16 The further emergence survey work undertaken in 2023 confirmed likely absence of roosting bats within all surveyed buildings (see Addendum for full survey results).

7.17 No mitigation is required for roosting bats in buildings.

Roosting bats - Trees

7.18 No visible potential roost features were recorded in the trees within the Site. No further survey work or mitigation is required for bat roosts in trees.

Foraging and commuting habitat

7.19 features within the Site, including grassland, hedgerows, dense scrub and woodland offer suitable foraging habitat for bats.

7.20 The hedgerows, dense scrub and woodland offer suitable commuting habitat for bats within the locality, providing connectivity to the wider surrounding habitat.

7.21 foraging and commuting bats are considered further in Section 9.

Hazel dormice

7.22 The hedgerows, tree lines and woodland that line the Site boundaries provide suitable habitat for dormice. These habitat features have some connectivity to additional hedgerows and larger areas of woodland.

7.23 further survey work completed in 2023 confirmed the presence of dormice within habitats immediately south of the Site. Presence is therefore assumed in all suitably connected habitats within the Site (see Addendum for full survey results).

Riparian Mammals

7.25 There is no habitat suitable for otter, beaver or water vole within, or in close proximity the Site. No further survey work or mitigation is required for riparian mammals.

Badger

[redacted]

Hedgehog

7.28 Habitats within the Site and surrounding area provide foraging opportunities for hedgehog, which may be present in the locality.

Other Mammals

7.30 During the survey, a fox den was recorded at the edge of an area of woodland on the western boundary. Tracks into the den were present, indicating recent occupation.

Birds

7.32 Due to the habitats present, and the lack of suitable ledges and/or internal access for barn owls within the buildings on Site, no Schedule 1 birds are expected to nest within the Site.

7.33 The mixed scrub within the Site and the tree line and woodland area located along the western boundary provide suitable nesting habitat for a number of common bird species as well as amber listed birds, such as wren.

7.34 The open access to the buildings internal structures could also provide nesting space within the buildings.

7.35 Birds are considered further in Section 9.

Reptiles

7.36 Data obtained from KRAG include recent records of slow worm, grass snake and common lizard:

- There are 36 recent records of slow worm. The closest located approximately 0.1km north of the Site in 2019, and the most recent located approximately 0.63km east in 2021;
- There are six recent records of grass snake. The closest located approximately 0.22km north west of the Site in 2009, and the most recent located approximately 0.36km south west of the Site in 2020; and
- There are nine recent records of common lizard. The closest located approximately 0.14km southwest of the Site in 1996, and the most recent located approximately 0.73km east of the Site in 2021.

7.37 During the preliminary ecological appraisal survey an adult male slow worm was recorded, basking along the western boundary of the Site.

7.38 The areas of other neutral grassland, south facing banks and numerous rubble piles located within the Site provide moderate to high suitability for reptiles.

7.39 further survey work completed in 2023 confirmed the presence of a low population assemblage of common lizard and slow worm within the Site (see Addendum for full results).

Great crested newt

7.41 Data obtained from KRAG include six recent records of great crested newt:

- The closest and most recent is located approximately 0.51km south of the Site in 2018.

7.42 The grassland, scrub and rubble piles provide areas of terrestrial habitat suitable for great crested newt.

7.43 There are no waterbodies present within the Site. According to OS maps, MAGIc map and aerial images, there are no waterbodies present within 250m of the Site boundary.

7.44 Due to the lack of waterbodies within the Site and surrounding landscape, great crested newt are unlikely to be present within the Site.

7.45 No further survey work or mitigation is recommended for great crested newt.

Invertebrates

7.46 features within the Site, such as the grassland and dense scrub, provide suitable habitat to support a range of common and widespread invertebrates.

7.47 The grassland-scrub mosaic on free draining soils associated with chalk downland within the Site offers suitable habitat for Roman snails, a Schedule 5 protected species.

7.48 further survey work completed in 2023 confirmed the presence of Roman snails within the Site, with a peak count of active 14 individuals (see Addendum for full results).

flora

7.50 Due to the past and present management of the Site, the areas of habitat are unlikely to support protected plant species. No evidence of Schedule 9 plants was found during the Site survey.

7.51 No further survey work or mitigation is recommended for flora.

8. PHOTOGRAPHS

Photograph 1. Hardstanding driveway adjacent to grassland and hedgerows.

Photograph 2. Grassland bounding concrete forecourt.

Photograph 3. Area of other neutral grassland, recently managed.

Photograph 4. Concrete area adjacent to grassland.

Photograph 5. Spoil heap containing rubble, soil and vegetation.

Photograph 6. Hedgerow and dense scrub separated by driveway.

Photograph 7. Dense scrub bounded by other neutral grassland.

Photograph 8. Storage area containing felt, rubble and metal providing suitable habitat for reptiles.

Photograph 9. Dense scrub dominated by bramble bounding grassland.

Photograph 10. Active fox den along the western boundary of the Site.

Photograph 11. Adult male slow worm identified during survey.

Photograph 12. Rubble pile overgrown with bramble providing suitable reptile habitat.

9. IMPACT ASSESSMENT

9.1 The potential impacts of the proposed development on those Ecological features that have not been scoped out in Section 7 are considered below.

PROTECTED AND NOTABLE SPECIES

Bats

Foraging and commuting bats

9.2 Development proposals will not impact on foraging and commuting bats and therefore, no further survey work has been completed.

9.3 Bats are nocturnal and rely on dark habitat corridors for foraging and commuting, therefore indirect impacts could occur through spillage of artificial lighting associated with parking and new buildings within the Site post-construction. This would result in a minor negative impact to bats at site level only.

9.4 Mitigation is detailed in Appendix 1 to minimise impacts to foraging bats through the design of external lighting, including the retention of dark corridors for bats and maintaining long-term foraging and commuting opportunities within the Site.

Hazel dormouse

9.5 further survey work confirmed the presence of hazel dormice within scrub and tree-line habitats immediately south of the Site. Presence therefore must be assumed within all suitably connected habitats within the Site i.e. tree lines and scrub.

9.6 The Site has suitable connectivity to areas of woodland to the north and south, which have further connectivity to suitable habitats within the wider landscape, however as the Site is small and as dormice live at low densities, the on-site population is considered to be small.

9.7 Areas of dense scrub will be removed to facilitate proposals, including an area of dense cherry, elder and bramble within the Site. Boundary habitats will be retained and therefore the proposals will not result in habitat fragmentation or isolation.

9.8 In the absence of mitigation, proposals may result in the death and injury of individual dormice and the loss of suitable dormouse habitat, which would result in a minor negative impact at a site and local level.

9.9 Mitigation is detailed in Appendix 1 to minimise impacts to hazel dormice and ensure the favourable conservation Status of the species is maintained throughout construction and post-development.

[redacted]

[redacted]

Hedgehog

9.13 Development proposals are unlikely to impact on local hedgehog populations and therefore no further survey work is required. However, in the absence of suitable mitigation, individual hedgehogs may be harmed during works.

9.14 Precautionary mitigation, detailed in Appendix 1, will ensure impacts to foraging and commuting hedgehog during the construction phase of the development are avoided.

common mammals - fox dens

9.15 The Wild Mammals (Protection) Act 1996 (as amended) affords protection to any wild mammals against actions undertaken with intent to inflict unnecessary suffering, including crushing and asphyxiation.

9.16 Due to the presence of a fox den within the Site, in the absence of suitable mitigation, individual fox may be harmed during works.

9.17 Precautionary mitigation to reduce the risk of inflicting unnecessary suffering to individual fox is detailed within Appendix 1.

Nesting birds

9.18 Given the small area of suitable bird nesting habitat that will be impacted within the Site, it is unlikely that development proposals will impact bird populations within the locality. No further survey work for nesting birds is recommended.

9.19 Mitigation measures, detailed in Appendix 1, will reduce direct impacts to nesting birds during vegetation clearance and building demolition work. Mitigation will also be implemented to retain bird nesting and foraging opportunities within the Site by integrating suitable habitat into the landscaping scheme.

Reptiles

9.20 The Site supports suitable reptile habitat in the form of a grassland/scrub mosaic and areas of brash and refugia.

9.21 further survey work confirmed the presence of a small population assemblage of slow worm and common lizard. The presence of juvenile slow worm also indicates a viable breeding population is present.

9.22 Proposals include the removal of the suitable reptile habitat. This may result in the killing or injury of reptiles, which would result in a minor negative impact at site level only.

9.23 Mitigation is detailed in Appendix 1, which will minimise impacts to individual slow worm and common lizard and ensure the favourable conservation Status of each species is maintained throughout construction and post development.

Roman snail

9.24 The free-draining, friable soils within the Site, combined with areas of grassland and scrub provide suitable habitat for Roman snails, which are locally distributed across the North Downs.

9.25 further survey work confirmed the Site supports a population of Roman snail, which have a small, localised distribution range (up to 30m) and as such, congregate in high numbers where habitat is suitable.

9.26 In the absence of mitigation, proposals may result in the death and/or injury of individual Roman snail, which would result in a moderate negative impact at site level and a minor negative impact at a local level.

9.27 Mitigation is detailed in Appendix 1, which will ensure impacts to Roman snail during construction are avoided and will ensure the favourable conservation Status is maintained post-development.

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11. APPENDIX 1: MITIGATION AND ENHANCEMENT STRATEGY

MITIGATION MEASURES

foraging and commuting bats

Careful lighting design

11.1 In order to reduce a low potential, indirect impact on foraging and commuting bats to negligible, mitigation to reduce any effects of artificial lighting will be implemented, as far as possible and where applicable, in accordance with guidance issued by the Bat conservation Trust and Institute of Lighting Professionals (ILP, 2023):

- All luminaires will lack UV elements when manufactured. Metal halide, compact fluorescent sources will not be used.
- LED luminaires will be used where possible 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.
- Internal luminaires will be recessed where installed in proximity to windows to reduce glare and light spill.
- column heights will be carefully considered to minimise light spill and glare visibility.
- Only luminaires with a negligible or zero Upward Light Ratio, and with good optical control, will be considered.
- Luminaires will always be mounted horizontally, with no light output above 90° and/or no upward tilt
- Where appropriate, external security lighting will be set on motion-sensors and set to as short a possible a timer as the risk assessment will allow. for most general residential purposes, a 1 or 2 minute timer is likely to be appropriate

Hazel dormouse

Existing on-site habitat

11.2 The site currently supports approximately 0.105ha of suitable dormouse habitat. The majority of this comprises bramble scrub located adjacent to mature trees. The boundary habitats will be retained throughout the development.

11.3 The bramble scrub has established within the Site during recent years and as such, is sparse and limited in structure, providing sub-optimal habitat.

11.4 Suitable habitats are largely confined in the southern and southwest portions of the Site, which have good connectivity to scrubby tree lines and woodland to the south.

11.5 The scrub is considered to offer suitable nest building opportunities, as well as foraging opportunities within the late summer and early autumn months. In addition, some limited areas suitable for hibernation, such as areas of artificial refugia and log/brash piles are present.

Habitat to be lost

11.6 Up to 0.06ha of suitable dormouse habitat will be lost to facilitate the development. The remaining suitable habitats (0.045ha) will be retained throughout the development.

Compensation and enhancement

11.7 The development provides opportunity to compensate for the loss of the bramble scrub and enhance the connected suitable habitats, ensuring the favourable conservation Status of hazel dormouse is maintained post development.

On-site

11.8 Approximately 150m of native species-rich hedgerows are being planted along the southern and eastern Site boundaries, providing additional foraging and nest building opportunities for dormice. Species will include (but not be limited to) hazel, dog rose, honeysuckle, hornbeam, hawthorn and blackthorn.

11.9 Tree planting, to include fruiting trees such as Prunus sp. and Sorbus sp. will be planted along the eastern boundary, adjacent to species-rich hedgerow. The fruiting trees will provide additional foraging habitat for dormice.

Off-site

11.10 Approximately 0.1ha of new native-species mixed scrub will be created within the adjacent compensation habitats located immediately south of the Site.

11.11 This scrub creation will provide connectivity to an isolated parcel of scrub immediately southeast of the Site, to the suitable dormouse habitats along the southern boundary of the compensation area.

11.12 In addition, five wooden dormouse nest boxes will be installed within the enhanced boundary habitats and adjacent compensation habitats.

European Protected Species Licence (EPSM Licence)

11.13 In order for the works to proceed lawfully, an EPSM Licence will need to be sought from Natural England. This will detail specific mitigation and compensation measures to maintain the favourable conservation Status of hazel dormice.

11.14 The licence application will be informed by the presence / absence surveys carried out by Native Ecology in 2023.

Timetable of Works

11.15 In order to reduce any potential impacts to dormice from low to negligible, the following mitigation measures will be implemented:

- 5no. dormouse boxes will be installed within suitable habitats in the site (or adjacent off-site compensation habitats) prior to works commencing.
- The vegetation that is to be retained as part of proposals will be protected by Heras fencing, or similar throughout the duration of construction works.
- A toolbox talk will be given to site contractors by a suitably experienced ecologist at the start of works within the Site.
- As the habitats within the Site offer both summer nesting and winter hibernation opportunities, the vegetation clearance shall be done in two phases.
- The initial vegetation cut to remove summer nesting habitat will be completed between November - March (inclusive), whilst the second phase to remove all suitable hibernating habitat will be completed between April - May (inclusive).
- Vegetation clearance will be carried out by hand and in a sensitive manner to minimise the potential harm to individual dormice and under supervision of a licenced dormouse ecologist (or their accredited agent).
- Any active dormice found will be allowed to naturally disperse into retained habitats. If this is not possible, the licensed dormouse ecologist will carefully relocate any dormice to the previously installed dormouse boxes.

11.16 To avoid potential post development impacts caused by lighting, the following mitigation will be implemented:

- Any external artificial lighting will be directed away from the retained boundary vegetation and new boundary hedgerows and trees that are to be created.

[redacted]

Hedgehog

11.19 The following mitigation will be implemented for hedgehog during the clearance of any vegetation or log/brash piles within the Site in order to avoid harm to individual animals:

- A toolbox talk to contractors prior to the start of works will be undertaken to inform site workers of the potential presence of hedgehog within the Site.
- care will be taken when clearing vegetation or log/brash piles to avoid harming hedgehog that may be sheltering within the Site.
- If a hedgehog is found (without young) within the Site between April and October inclusive then it will be carefully relocated to an area outside the development site that offers immediate shelter.
- If a nesting hedgehog with young is found between May and October inclusive (breeding season) then an ecologist will be contacted immediately for advice.
- If a hibernating hedgehog is found between November and March inclusive (hibernation season) then an ecologist will be contacted immediately for advice.

11.20 The following mitigation will be implemented for hedgehog during the construction phase:

- All holes and excavations will be covered over each night to prevent animals from being trapped or injured.
- If this is not possible, a structure/plank will be placed into the hole to enable animals to escape.
- Any removal of building materials or other debris, will be undertaken with care to prevent harm to hedgehog.
- If any hedgehogs are found during the construction phase they will be carefully relocated to an area outside the development site that offers immediate shelter.

11.21 The following mitigation will be implemented for hedgehog post-development:

- Any close board fencing to be used will be fitted with small openings within gravel boards to allow hedgehogs access throughout the site.

common mammals

11.22 Development proposals will result in impact to fox dens present within the Site.

[redacted]

Nesting Birds

Avoid impact to nesting birds

11.24 The following mitigation will be implemented to avoid impact to nesting birds:

- Works to any vegetation and buildings will be undertaken outside of the bird nesting season where ever possible.

11.25 If impacts to vegetation and buildings are unavoidable between March and September, then the following mitigation will be undertaken:

- A nesting bird survey will be undertaken by a suitably experienced ecologist within at least 48hours prior to any impacts.
- A watching brief will be carried out by a suitably experienced ecologist during any works that impact suitable vegetation within the site.
- If nesting/nest-building birds are found, no works will commence/continue that are likely to damage or significantly disturb a nest until the young have fully fledged.

11.26 Works undertaken during the bird nesting season may result in significant delays to the development programme if activities need to cease due the presence of an active nest. It is important to note that many bird species, such as blackbirds and robins are multiple brooders and may therefore nest within the Site for a number of months.

Reptiles

Receptor Site

11.27 The current proposals within the Site do not allow for the reptile population to remain in-situ and therefore reptiles will be translocated into the receptor site, located immediately south of the Site, within directly connected habitat.

11.28 The receptor site is within the applicant's ownership, approximately 0.21ha in size and comprises a mosaic of tussocky grassland and scrub with suitable connectivity to further reptile habitat to the north, east and west.

11.29 As the receptor site is considered to be part wider habitat associated with reptiles onsite, a receptor site presence/likely absence survey is not necessary. Once suitably enhanced through the installation of 4no. deciduous wood log piles, the receptor site will provide adequate habitats to support the on-site reptiles as well as the existing population (if present).

Installation of exclusion fencing

11.30 Prior to construction works commencing, reptile exclusion fencing will be installed at the Site boundaries.

11.31 The installation of reptile exclusion fencing is required to prevent reptiles from entering the Site during the capture and relocation programme and construction works. The fencing will be retained throughout the construction phase.

Capture and relocation

11.32 To facilitate relocation of reptiles, a high density of artificial cover objects (AcOs), comprising bitumen and corruline roofing felt will be deployed within the Site. The thermal properties of the AcOs encourage basking reptiles and therefore provide an appropriate method for the location and capture of individual reptiles present within the Site.

11.33 AcOs will be allowed to 'bed in' for at least 10 days prior to the first relocation visit. Additional AcOs will be placed within the Site to increase the capture rate if necessary.

11.34 The AcOs are checked for the presence of reptiles on a daily, or where possible, twice daily basis, depending on the prevailing weather conditions. Other potential refugia on site will also checked.

11.35 Any reptiles captured will be placed in a secure container with vegetation. Details including location of capture, sex and life stage will be recorded.

11.36 captured reptiles will be released within the receptor site as soon as possible, in areas considered to provide the best immediate habitat cover.

captured, affecting the overall rate of depletion within the site. It is however anticipated that a minimum of 30 capture visits will be required.

11.38 Reptiles will be captured and released within appropriate prevailing weather conditions between May - October. capture and relocation will not be undertaken during late October - february. In the event that reptiles continue to be captured in late October, it may be appropriate to cease capture over winter months and commence again when conditions are suitable in spring the following year.

Habitat manipulation

11.39 In order to maintain capture efficiency during the relocation period, habitat within the Site will be further reduced, if necessary. The aim of this vegetation management is to encourage any reptiles that have evaded capture to move out of the areas of reduced vegetation, concentrating in the remaining areas of suitable habitat, thus increasing the likelihood of capture.

Destructive search

11.40 If necessary, a destructive search of specific habitat features will be carried out under supervision of a suitably experienced ecologist. This will enable the relocation of any remaining reptiles that have evaded capture.

During and post construction works

11.41 The exclusion fencing will be maintained during the construction works. An Ecological clerk of Works (EcoW) will be appointed on site to ensure maintenance is undertaken when required.

11.42 If reptiles are found within the Site during construction works, an experienced ecologist will be contacted for advice.

11.43 On completion of construction works, the exclusion fencing will be carefully removed under the supervision of an experienced ecologist outside of the reptile hibernation season.

Roman snail

Receptor Site

11.44 The current proposals within the Site do not allow for the Roman snail population to remain in-situ and therefore Roman snails will be translocated into the receptor site, located immediately south of the Site, within directly connected habitat.

11.45 The receptor site is within the applicant's ownership, approximately 0.34ha in size and comprises a mosaic of tussocky grassland and scrub with suitable connectivity to further Roman snail habitat on all aspects.

11.46 Once suitably enhanced, the receptor site will result in an increase in suitable Roman snail habitat post-development.

Installation of exclusion fencing

11.47 Prior to construction works commencing, Roman snail exclusion fencing will be installed at the Site boundaries.

11.48 The installation of exclusion fencing is required to prevent Roman snails from entering the Site during the capture and relocation programme and construction works. The fencing will be retained throughout the construction phase.

11.49 The fencing shall comprise weather resistant polyethylene netting, supported by wire posts and will be dug into the ground to a depth of 20-40cm. The fencing shall be at least 1.2m in height and the top folded outwards to prevent snails from entering the construction zone.

Capture and relocation

Natural England conservation licence

11.50 In order for the works to proceed lawfully, once planning has been approved, a conservation licence will need to be sought from Natural England. The method statement produced as part of the conservation licence will fully detail the translocation methodology and will include the following stages:

- Habitat creation and enhancement within the receptor site (to include creation of multiple log and brash piles);
- Translocation of Roman snails from the Site into the receptor site;
- Vegetation clearance of all suitable Roman snail habitats within the Site;
- Management and maintenance of the receptor site; and
- Any requirement for post-development monitoring surveys.

ECOLOGICAL ENHANCEMENT MEASURES

11.51 The following ecological enhancement measures are included as part of the development proposals.

Native fruit tree planting

11.52 An area of fruit tree planting (Prunus sp. and Sorbus sp.) is proposed along the eastern Site boundary, which will benefit nesting birds and foraging bats, as well as foraging hazel dormice.

Native species-rich hedgerow creation

11.53 Native species-rich hedgerows will be created along the eastern and southern Site boundaries. Species will include (but not be limited to) hazel, dog rose, blackthorn, hawthorn, honeysuckle and hornbeam. f lowing species including hawthorn, honeysuckle and rose will provide opportunities for nectar feeding invertebrates such as bumblebees, solitary bees and butterflies.

SUDS pond

11.54 A SUDS pond is being created in the southeast corner of the Site. The centre of the pond will be at least 1m deep, in order to retain water throughout the year and provide aquatic habitat for amphibians, grass snake and aquatic invertebrates.

11.55 Marginal planting will include common sweetflag (Acorus calamis), flowering rush (Butomus umbellatus), tufted hairgrass (Deschampsia cespitosa), hard rush (Juncus inflexus), brooklime (Veronica beccabunga) and yellow loosestrife (Lysimachia vulgaris).

11.56 Planting of appropriate native species, natural colonisation and appropriate management will encourage a diverse botanical wetland community, which will in turn support a variety of fauna, including invertebrates, such as dragonflies and foraging birds and bats.

Enhancement of grassland

11.57 Appropriate management of the enhanced grassland within the southwest portion of the Site will encourage plants such as common knapweed, birdsfoot trefoil, oxeye daisy and field scabious to flower, providing valuable nectar rich foraging habitat for invertebrates, including bumblebees and butterflies. This will be supplemented with over seeding of a wild flower mix of species of local provenance to improve establishment.

11.58 The inclusion of a variety of native flowering bulbs will provide a pollen and nectar source for bumblebees from early spring onwards.

Native and nectar rich planting plan

11.59 The planting plans around new buildings shall include native, flower rich species, including those that flower in the late and early seasons to enhance the biodiversity value of the Site.

11.60 The inclusion of climbing plants will also add sheltering opportunities for invertebrates and birds. They will also produce nectar rich flowers for butterflies, bees and hover flies and fruit for birds and small mammals.

Bat boxes

11.61 Two integrated bat boxes, such as a 1f R Schwegler Bat Tube, or similar, will be installed on new buildings within the Site.

11.62 Integrated bat boxes will be primarily located on the south and west facing aspects located at least 3m above the ground.

11.63 2no. bat boxes, such as 2f Schwegler Bat Box (General Purpose) or similar, will be installed on mature trees within the Site. Boxes will be located at least 3m above ground level and preferably over 4m and in a variety of aspects.

Bird boxes

11.64 2no. bird boxes for house sparrow, will be integrated into new buildings. Boxes will be located 2-4m in height and arranged so that loose colonies of house sparrows are encouraged. Bird boxes will be located close to eaves and on the north or east elevations to avoid direct sunlight.

12. APPENDIX 1: SUMMARY OF PLANNING POLICY AND LEGISLATION

12.1 Species afforded protection under the conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 are also known as European Protected Species. European Protected Species include all species of bats, hazel dormice and great crested newt.

12.2 European Protected Species relate to those listed within the conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 and are afforded the highest level of protection. These species are also protected under the Wildlife and countryside Act 1981. Taken together this level of protection makes it an offence to:

- deliberately capture, injure or kill any wild animal of a European protected species,
- deliberately disturb wild animals of any such species
- deliberately take or destroy the eggs of such an animal
- damage or destroy a breeding site or resting place of such an animal

12.3 Disturbance of animals includes in particular any disturbance which is likely:

- to impair their ability to survive, to breed or reproduce, or to rear or nurture their young, or
- in the case of animals of a hibernating or migratory species, impair their ability to hibernate or migrate
- to affect significantly the local distribution or abundance of the species to which they belong

12.4 The legislation requires that any derogation be dealt with by licencing through an appropriate licencing body (Natural England in England). In determining whether a licence can be granted the licencing body must apply the requirements of Regulation 53, and in particular, the three tests:

1. Regulation 55(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".

2. Regulation 55(9) states: The relevant licensing body must not grant a licence under this regulation unless it is satisfied—

(a) that there is no satisfactory alternative; and

(b) 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.

PLANTS

12.5 A number of plant species are protected under Schedule 8 of the Wildlife and countryside Act 1981. This Schedule lists plant species that are protected under Section 13, which protects from picking and sale of plants or parts of plants listed in Schedule 8.

BIRDS

12.6 All nesting birds are protected under the Wildlife and countryside Act 1981. With certain exceptions, it is an offence to:

- Kill, injure or take wild birds;
- Take, damage or destroy the nest of wild birds while in use or being built;
- Take or destroy the eggs of wild birds;
- Intentionally or recklessly disturb any wild bird listed on Schedule 1 while it is nest building, or at a nest containing eggs or young, or disturb the dependent young of such a bird.

Birds of conservation concern

12.7 After reviewing the status of all bird species in the UK, the leading non-governmental bird conservation organisations agreed priorities for bird conservation. This lead to the publication of a list of Birds of conservation concern. Bird species are either listed as red, amber or green, depending on their status and conservation objectives. Birds listed as red require urgent, effective conservation action.

COMMON REPTILES

12.9 All common and widespread reptiles, which include viviparous lizard, slow worm, grass snake and adder are protected under the Wildlife and countryside Act 1981. This makes it an offence to:

- Intentionally or recklessly kill or injure reptiles
- Sell, offer for sale, possess or transport for the purpose of sale or publish advertisement to buy or sell any reptile.

INVERTEBRATES

12.10 A small number of invertebrates are protected under the conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019, relating to the designation of SAcs, including white-clawed crayfish and Desmoulin's whorl snail.

12.11 A number of invertebrate species also protected under the Wildlife and countryside Act, such as the heath fritillary and fairy shrimp. Species listed under Schedule 5 are protected from one, some or all of the following:

- Intentional killing, injuring, taking
- Possession or control (live or dead animal, part or derivative)
- Damage to, destruction of, obstruction of access to any structure or place used by a scheduled animal for shelter or protection
- Disturbance of animal occupying such a structure or place
- Offering for sale, possessing or transporting for the purpose of sale (live or dead animal, part or derivative)
- Advertising for buying or selling live or dead animal, part or derivative

STATUTORY PROTECTED SITES

12.12 Special Protection Areas and Special Areas of conservation are protected under the conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019.

12.13 Sites of special scientific interest (SSSIs) are protected under the Wildlife and countryside Act 1981. Natural England is responsible for notifying SSSIs, ensuring they are managed appropriately and assessing and monitoring their condition.

12.14 National Nature reserves are created to protect important wildlife habitats, while also providing a resource for scientific research and recreation. Declared under the National Parks and Access to the countryside and the Wildlife and countryside Act 1981.

NON-STATUTORY PROTECTED SITES

Ancient Woodland

12.15 Land with continuous woodland cover since at least 1600AD. Ancient woods are recognised in UK planning policy, but do not have statutory protection.

NATURAL ENVIRONMENT AND RURAL COMMUNITIES (NERC) ACT 2006

12.16 following consultation with Natural England, the Secretary of State identified species and habitats considered to be of principal importance for the conservation of biological diversity in England. These species and habitats are listed under Section 41 of the Act . The list is to be kept under review and revisions are made as necessary as part of the progress reports on the Biodiversity Strategy for England.

12.17 following the Biological Diversity in Japan, 2012, a new initiative in England, 'Biodiversity 2020', replaced the former UK Biodiversity Action Plan Species aiming to reinforce the protection of Section 41 habitats and species.

THE NATIONAL PLANNING POLICY FRAMEWORK

12.18 The National Planning Policy framework was revised in July 2021 and sets out the Government's planning policies for England and how these are expected to be applied. Within this document, chapter 15 is titled conserving and Enhancing the Natural Environment.

12.19 Of particular relevance within this chapter are the following statements:

Planning policies and decisions should contribute to and enhance the natural and local 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.

To protect and enhance biodiversity and geodiversity, plans should:

- promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species; and identify and pursue opportunities for securing measurable net gains for biodiversity.

When determining planning applications, local planning authorities should apply the following principles:

a) if significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused;

b) development on land within or outside a Site of Special Scientific Interest, and which is likely to have an adverse effect on it (either individually or in combination with other developments), should not normally be permitted. The only exception is where the benefits of the development in the location proposed clearly outweigh both its likely impact on the features of the site that make it of special scientific interest, and any broader impacts on the national network of Sites of Special Scientific Interest;

c) 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; and

d) development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to improve biodiversity in and around developments should be integrated as part of their design, especially where this can secure measurable net gains for biodiversity or enhance public access to nature where this is appropriate.

13. APPENDIX 2: SUITABILITY ASSESSMENT OF ROOSTING HABITAT

Table 7. Assessing potential suitability of roosting habitat (structures and trees) for bats and survey effort required. Adapted from Bat Surveys for Professional Ecologists, Good Practice Guidelines 3rd Edition (Collins, 2016).

Suitability	Description of roosting habitat	Survey effort* and timing
Negligible	Negligible habitat features on site likely to be used by roosting bats.	None required.
Low	A structure or tree with one or more potential roost sites that could be used by individual bats opportunistically. However, these potential roost sites do not provide enough space, shelter, protection, appropriate conditions and/ or suitable surrounding habitat to be used on a regular basis or by larger numbers of bats (i.e. unlikely to be suitable for maternity or hibernation).	Buildings/structures: One survey visit. One dusk emergence or dawn re-entry survey. Timing: May to August. Trees: None required.
Moderate	A structure or tree with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions and surrounding habitat but unlikely to support a roost of high conservation status (with respect to roost type only – the assessments in this table are made irrespective of species conservation status, which is established after presence is confirmed).	Two separate survey visits. One dusk emergence and a separate dawn re-entry survey. Surveys should be spaced a minimum of two weeks apart. Timing: May to September with at least one survey undertaken between May - August.
High	A structure or tree with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions and surrounding habitat.	Three separate survey visits. At least one dusk emergence and a separate dawn re-entry survey. The third visit could be either dusk or dawn. Surveys should be spaced a minimum of two weeks apart. Timing: May to September with at least two surveys undertaken between May - August.

* Recommended minimum number of survey visits for presence/absence surveys to give confidence in a negative result for structures and trees.

N

Chalkhill

B1

B2

B3

B4

B5

B6

B7

B8

B9

Ruin

Smallholding

1

2

3

0 10 20 30 40 50 m

Legend

- Application site boundary
- General Target Notes
- Hedge Ornamental Non Native
- Line of Trees
- Native Hedgerow
- Artificial unvegetated, unsealed surface
- Developed land; sealed surface: Buildings
- Mixed scrub
- Other neutral grassland
- Other woodland; mixed
- Developed land; sealed surface: Other

Note:

Habitats mapped based on UK Habitat Classification following Preliminary Ecological Appraisal site visit undertaken on 16/03/2023.

Target notes:

1. Fox den
2. Spoil heap
3. Storage area providing habitat suitable for reptiles

native ecology
PROMOTING BIODIVERSITY INTEGRATION

Habitat Plan

Site B
34 Pilgrims Way East
Otford

Drawing ref:	1100_DR02
Revision:	-
Date:	27/03/2023
Scale:	1:500
Paper size:	A3

N

Legend

- Dormouse nest box
- Deciduous wood log pile
- New mixed scrub planting to benefit dormice and Roman snails
- Existing suitable dormouse and Roman snail habitat. Edge habitat suitable for reptiles.
- Enhanced grassland to support reptile and Roman snail translocation.
- Site boundary
- Compensation area

0 20 40 60 80 100 m

native ecology
PROMOTING BIODIVERSITY INTEGRATION

Off-site Compensation and Enhancement Plan

34 Pilgrims Way East,
Otford

Drawing ref:	1100_DR10
Revision:	-
Date:	05/10/2023
Scale:	1:1000
Paper size:	A3

16. ADDENDUMS

- Adedendum 1 - Protected Species Survey Report.

native ecology
PROMOTING BIODIVERSITY INTEGRATION

protected species survey report

34 PILGRIMS WAY EAST - SITE B

SEVENOAKS, KENT

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Reference	Ref: 1100_R02_Protected Species Survey Report
Report status	Planning
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CONTENTS

1. SUMMARY

S.1 This report details the results of protected species surveys undertaken for roosting bats, dormice, Roman snails and reptiles in respect of the proposed development at Site B of 34 Pilgrims Way East, Otford, Sevenoaks, Kent, TN14 5QW.

S.2 Proposals include the demolition of all existing buildings within the Site, with the development of a replacement dwelling, outdoor swimming pool and outbuildings to include an area of ecologically enhanced habitat.

S.3 A Preliminary Ecological Appraisal (PEA) site visit was undertaken by Native Ecology on 16th March 2023. following the PEA, survey work for bats, dormice, reptiles and Roman snails was undertaken between April and August 2023.

S.4 Table 1 below gives a summary of survey results.

Table 1. Summary of survey results and recommendations

Survey	Results
Bats	Three dusk emergence surveys were undertaken for building B1 between May and June 2023, recorded no roosting bats associated with the building. One dusk emergence survey was undertaken for buildings B2, B3, B4, B6, B7 and B9 between May and June 2023, recorded no roosting bats associated with these buildings. Low to moderate levels of bat activity was recorded, predominantly comprising common pipistrelle, soprano pipistrelle and serotine bats passing through and foraging within the Site, with occasional passes of other bat species including brown long-eared. Based on these surveys, no further survey work or mitigation is required for roosting bats in buildings.
Hazel dormice	A presence/likely absence survey was undertaken between May and June 2023, which found evidence of hazel dormice, including summer nests and 1no. active adult within suitable habitats in the Site. A European Protected Species Mitigation (EPSM) Licence for dormice will be required to legally remove dormouse habitat within the Site. The EPSM Licence should be supported with a suitable mitigation and compensation strategy.
Reptiles	during the PEA an adult male slow worm was recorded, basking along the western boundary of the Site. A reptile presence / likely absence survey was undertaken between April and May 2023, which confirmed the presence of a low population assemblage of common lizard and slow worm within the Site. A reptile mitigation strategy, to include a translocation into an area of suitably enhanced adjacent habitat is recommended.

Roman snail	during the PEA an adult Roman snail shell was recorded, along the western boundary of the Site. Roman snail presence / likely absence surveys were undertaken between June and August 2023, which confirmed the presence of live Roman snails within the Site (peak count of 14). Relocation of Roman snails under Licence into a suitably enhanced mitigation area is required. A suitable mitigation strategy should be produced, to include details of the translocation and mitigation area.

S.5 An Ecological impact Assessment (EciA) report should be produced, to include an Ecological Mitigation Strategy. The EciA report will detail the mitigation that will be implemented for bats, dormice, Roman snails and reptiles, as well as other species groups, within the Site during the construction phase and post-development to ensure that potential ecological impacts of development are avoided or minimised. The EciA will also need to include measures proposed to enhance the biodiversity value of the Site.

S.6 Appendix 1 gives an overview of relevant legislation, which should be read in conjunction with this report.

2. INTRODUCTION

2.1 This report details the results of protected species surveys undertaken for roosting bats, dormice, Roman snails and reptiles in respect of proposed development at Site B of 34 Pilgrims Way East, Otford, Sevenoaks, Kent, TN14 5QW (site centred TQ 53756 59161).

COMMISSION

2.2 Native Ecology was commissioned by Gary Larkin in April 2023 to undertake presence / likely absence survey work for bats, hazel dormice, reptiles and Roman snails.

APPLICATION SITE

2.3 The application site, hereafter referred to as 'the Site', comprises nine outbuildings with associated access to Pilgrims Way East. The Site includes residential garden habitat, a mix of mature trees, grassland, shrubs and scrub. The Site extends to approximately 0.7ha.

2.4 figure 2, Section 4 provides a site location plan showing the application site boundary.

PROPOSED WORKS

2.5 Proposals include the demolition of existing buildings within the application site, with the development of a replacement dwelling, outdoor swimming pool and outbuildings to include an area of ecologically enhanced habitat.

2.6 Section 5, figure 3 provides a proposed site plan.

PURPOSE OF REPORT

2.7 The objectives of the report are to:

- describe the methodology and results of presence / likely absence survey work for roosting bats, hazel dormice, reptiles and Roman snails within the Site and provide an outline of the mitigation that will be required.

3. METHODOLOGY

BATS

Preliminary Roost Assessment (bats)

3.1 A systematic search of the exterior of the building within the Site was undertaken during the PEA site visit to identify potential bat access points and roosting places and to locate any evidence of bats such as bat droppings, urine staining and fur-oil staining. The inspection included exterior features of the buildings, such as sills, window panes, walls and the ground beneath potential access points to look for signs of bats, such as droppings.

3.2 There are no trees present within the Site that are due to be impacted by the current proposals.

3.3 The assessment was made following recommendations provided within Bat Surveys for Professional Ecologists: Good Practice Guidelines, 3rd edition, Bat conservation Trust (collins, 2016) (see Appendix 3 for suitability assessment and survey effort required for structures and trees).

3.4 dusk emergence surveys (detailed in Table 2) were undertaken between May and June 2023 in accordance with the Bat conservation Trust Good Practice Guidelines (collins, 2016).

Table 2. Bat emergence survey details.

Survey location	Survey no.	Survey date	Surveyors	Sunrise/ sunset time	Time		Weather conditions			
							Oc	Wind Bf	Precipitation	cloud cover %
B1 B2 B3 B9	1	18/05/23	RO THu TO TH & 3no. iR cameras	20:47	Start	20:32	22	0	None	10
					finish	22:17	12	12	None	5
B4 B6 B7	2	22/05/23	TH THu & 2no. iR cameras	20:53	Start	20:38	16	B1	None	10
					finish	22:23	13	B0	None	0
B1 B4	3	06/06/23	VE cT & 1no. iR camera	21:10	Start	20:55	12	0	None	50
					finish	22:40	11	2	None	50
B1	4	29/06/23	AB THu & 2no. iR cameras	21:19	Start	21:04	18	1	None	100
					finish	22:50	16	1	None	70

3.5 The emergence surveys commenced 15 minutes prior to sunset and continued for 1.5 hours after sunset.

3.6 Surveyors (listed in Table 3) were positioned around the buildings so that the features with suitability to support roosting bats were visible and any emerging or re-entering bats could be observed. A survey plan is available in Section 4.

3.7 Each surveyor used an EMT Pro 2 and a Elekon Bat Scanner to identify and record bat activity within the Site. data was recorded as to the species, number of bats, any emergence or re-entry locations, time and general activity.

3.8 infrared (iR) cameras were used in place of surveyors to record bat activity. The cameras comprised a canon XA60 Professional uHd 4K camcorders with associated appropriate light sources, mounted on tripods and positioned to cover a full surveyor location. An EMT Pro 2 with an associated tablet was also mounted on a tripod close to each camera to record sound files for any bats emerging from or re-entering the buildings. Appendix 2 includes screen-shots of each iR camera position at the darkest point of the survey to show illumination.

3.9 On completion of the survey, the footage was reviewed using appropriate software and any emergence or re-entry activity recorded, including species (cross-referenced with the associated detector), emergence / re-entry location and behaviour. Any emergence / re-entry video clips were cut and saved for reference.

Table 3. Surveyor details

Surveyor name (initials)	Experience
Tara Hall (TH)	class 2 bat licence: 2018-37433 cLS-cLS
cali Tardivel (cT)	class 1 bat licence: 2020-49197-cLS-cLS
Adam Bedwell (AB)	>10 years bat survey experience
Rowan O'Sullivann (RO)	>10 years bat survey experience
Trevor O'Sullivann (TO)	>6 years bat survey experience
Victoria Evans (VE)	>5 years bat survey experience
Thomas Hurst (THu)	>1 year experience

Hazel dormice

3.10 Presence / likely absence surveys were undertaken using nest tubes according to the methods detailed in the dormouse conservation Handbook 2nd Edition (Bright et al., 2016).

3.11 A points system is used to demonstrate that sufficient survey effort has been employed to determine likely absence of dormice. The points system is based on using 50 nest tubes as a standard and indices of probability based on the likelihood of detecting dormice in any one month. Each month is assigned a number of points, reflecting the likelihood of recording dormice (if present). Nest tubes are most frequently occupied in May and August/September, therefore, these months are assigned a greater value for the index of probability. A minimum of 20 points of search effort is required to prove absence (Bright et al., 2006).

3.12 To determine presence or likely absence, 50 dormouse nest tubes were placed in areas of suitable habitat within the survey area and surrounding landscape. Nest tubes were installed on 17th May 2023 by Thomas Hurst and Miriam Anderson. The location of dormouse nest tubes is shown in Section 5.

3.13 Nest tubes were checked monthly between May and June 2023 by Katy fuller (class 1 dormouse licence: 2022-10826-cL10A) for the presence of dormice or signs of recently constructed dormouse nests.

Table 4. Survey details for the dormouse presence / likely absence surveys

Survey date	Surveyor	Survey Time		Weather conditions			
		Start	End	0c	Wind Bf	Precipitation	cloud cover %
17/05/23	Katy fuller	10:40	12:00	14	B1	None	20
28/06/23	Katy fuller	09:40	11:00	20	B1	None	60

Reptiles

3.14 The suitability of habitats within the Site to support reptiles was assessed during the Preliminary Ecological Appraisal site visit on 16th March 2023.

Presence / likely absence survey

3.15 Reptiles are ectothermic and use their immediate environment to regulate their body temperature. in order to raise their body temperature they either bask in direct sunlight in sloped and sunny positions within suitable habitat or they seek out objects that provide indirect radiation.

3.16 Artificial cover objects (AcOs), comprising bitumen roofing felt, corrugated coruline sheets and tins, were deployed within the Site boundaries in areas considered to provide suitable habitat for reptiles.

3.17 The thermal properties of the AcOs encourage basking reptiles and therefore provide an appropriate and quantitative method on which to base surveys.

3.18 40 AcOs were distributed across the Site, in suitable reptile habitat, on 18th April and left to 'bed in' prior to the first survey on 28th April 2023.

3.19 The AcOs, suitable basking spots and any other potential refugia within the site were then checked during suitable weather conditions for the presence of basking and sheltering reptiles.

3.20 Table 5 provides details of the dates and weather conditions for each survey. Surveys, were carried out by experienced surveyors with a good knowledge of reptile identification and understanding of survey protocol.

3.21 A location plan of artificial cover object locations is presented within Section 6.

Table 5. Survey details for the reptile presence / likely absence surveys

Survey No.	Survey date	Surveyor	Survey Time		Weather conditions				
			Start	End	0c	Wind Bf	Precipitation	Ground condition	cloud cover %
1	28/04/23	Katy fuller	12:25	13:00	14	B2	None	Wet	50
2	02/05/23	Katy fuller	13:20	15:40	14	B2	None	damp	50
3	05/05/23	Katy fuller	11:00	15:25	14	B2	None	damp	100
4	17/05/23	Katy fuller	10:10	10:40	14	B1	None	dry	30
5	24/05/23	Katy fuller	09:55	10:20	15	B2	None	dry	0
6	26/05/23	Katy fuller	11:35	12:05	15	B4	None	dry	30
7	28/05/23	Katy fuller	14:15	14:55	19	B3	None	dry	30

Roman snail

3.22 The suitability of habitats within the Site to support Roman snail was assessed during the Preliminary Ecological Appraisal site visit on 16th March 2023.

Presence / likely absence survey

3.23 Roman snails are active overnight and during periods of current and/or recent wet and humid weather. They shelter in areas of scrub or hedgerow and will venture into rough grassland habitats during optimal weather conditions. Typically, Roman snails have individual distribution ranges of up to 30m.

3.24 Three survey visits were undertaken, which comprised two day time hand searches and one night time torch survey during the Roman snail active season (May - August). All suitable resting spots such as scrub understorey, log piles and any other potential refugia within the Site were searched systematically during the surveys. Transects of any grassland habitats were also carefully hand searched during the surveys.

3.25 All surveys were undertaken during optimal weather conditions i.e. during warm weather in periods of current or recent rainfall and high humidity.

3.26 Table 6 provides details of the dates and weather conditions for each survey. Surveys, were carried out by experienced surveyors with good knowledge of Roman snail identification and understanding of survey protocol.

Table 6. Survey details for the Roman snail presence / likely absence surveys

Survey date	Survey Location	Surveyor	Survey Time		Weather conditions			
			Start	End	Oc	Wind Bf	Precipitation	cloud cover %
29/06/23	development site and up to 30m radius	Tom Hurst & Adam Bedwell	21:00	22:30	18	B1	Morning rain	100
27/07/23		Tom Hurst & John Rowland	13:00	14:30	17	B1	Light rain	100
02/08/23		Tom Hurst & Katy fuller	12:00	15:00	18	B1	Rain	100

LIMITATIONS

3.27 in accordance with ciEEM guidance, consideration should be given to the validity of survey data after a period of 12 months from the date of the survey. This may require a site visit to assess whether ecological conditions within the site have changed and may require further ecological survey work due to the transient nature of some protected species.

Legend

- Application site boundary
- Bat surveyor position
- Surveyor field of view
- Building

native ecology
PROMOTING BIODIVERSITY INTEGRATION

Bat Surveyor Location Plan

Pilgrims Way East
Otford, Sevenoaks
Kent

Drawing ref:	1100_DR09
Revision:	-
Date:	22/08/2023
Scale:	1:325
Paper size:	A3

N

Legend

Application site boundary

Nest tube

Chalkhill

Ruin

Smallholding

1 2 4 28 3 30 27 5 25 29 32 6 31 26 34 24 33 7 37 35 8 23 36 38 9 22 21 50 48 10 47 11 17 20 12 13 15 16 19 14 18 46 45 44 49 39 40 43 41 42

0 20 40 60 80 100 m

native ecology
PROMOTING BIODIVERSITY INTEGRATION

Dormouse Tube Location Plan	
34 Pilgrims Way East, Otford	
Drawing ref:	1100_DR03
Revision:	-
Date:	08/08/2023
Scale:	1:750
Paper size:	A3

N

Chalkhill

Ruin

Smallholding

Legend

Application site boundary

Bitumen felt

0 10 20 30 40 50 m

native ecology
PROMOTING BIODIVERSITY INTEGRATION

Reptile Survey Plan	
34 Pilgrims Way East Otford, Kent	
Drawing ref:	1100_DR04
Revision:	-
Date:	08/08/2023
Scale:	1:400
Paper size:	A3

7. RESULTS

BATS

Preliminary Roost Assessment

7.1 There are nine buildings present within the Site, as detailed within Table 7, below.

Table 7. Results of Preliminary Roost Assessment

Building	Potential roost features	Suitability for roosting bats
B1	Multiple gaps between missing and raised tiles could provide opportunities for crevice dwelling bats, or provide access to the internal loft space for species such as brown long-eared bat. Gaps in the eaves, crevices between brickwork and concrete cladding and around window fixtures could provide opportunities for crevice dwelling bats. Access to internal space could provide suitable habitat for brown long-eared bats.	High
B2	Gaps between metal roofing and lined wooden sarking could provide suitable habitat for crevice dwelling bats	Low
B3	The accessible internal structure could provide roosting opportunities for brown long-eared bats.	Low
B4	The accessible internal structure could provide roosting opportunities for brown long-eared bats.	Low
B5	There is no suitable roost features associated with this building at the time of the survey.	Negligible
B6 & B7	There are gaps within the brickwork and access between the roofing and sarking that could provide suitable roosting opportunities for crevice dwelling bats.	Low
B8	due to the condition of the building there are no potential roost features present at the time of the survey.	Negligible
B9	The open elevation gives access to the internal structure, providing foraging and roosting opportunities for bats.	Low

Presence/likely absence surveys

Dusk emergence survey - 18th May 2023 (sunset 21:16)

Buildings B1, B2, B3 & B9

7.2 No bats were recorded emerging or re-entering the buildings.

7.3 Activity was moderate throughout the survey and dominated by individual common pipistrelle bats, with the first recording at 21:12 (30 minutes after sunset) and the last recording at 22:10.

7.4 A single brown-long eared bat was recorded at 21:51, commuting across the Site and a single Myotis sp. was recorded commuting through the Site at 21:53.

7.5 A moderate level of serotine foraging activity was recorded around a large conifer tree on the Site boundary between 21:38 and 22:00.

7.6 No other bat activity or species was recorded.

Dusk emergence survey - 22nd May 2023 (sunset 20:53)

Buildings B4, B6 & B7

7.7 No bats were recorded emerging or re-entering the buildings.

7.8 Activity was low throughout the survey, with the first recording was at 21:13 of a common pipistrelle (21 minutes after sunset).

7.9 Serotine bats occasionally passed through the Site, one at 21:43 commuting across the Site and another at 21:53 foraging within the Site for several minutes.

7.10 A single brown long-eared bat was recorded at 21:59. No other bat activity or species were recorded.

Dusk emergence survey - 6th June 2023 (sunset 21:10)

Building B1 & B4

7.11 No bats were recorded emerging or re-entering the buildings.

7.12 Activity during the survey was low and dominated by common pipistrelles, with the first bat being recorded at 21:29 (19 minutes after sunset).

7.13 A single serotine commuted across the northern Site boundary at 21:50.

7.14 No other activity or species was recorded.

Dusk emergence survey - 29th June 2023 (sunset 21:19)

Building B1

7.15 No bats were recorded emerging or re-entering the building.

7.16 Activity during the survey was low and dominated by common pipistrelles, with the first being recorded at 21:41 (22 minutes after sunset).

7.17 No other activity or bat species were recorded during the survey.

HAZEL DORMICE

Presence / likely absence survey

7.18 Three dormouse summer nests and an active adult dormouse were recorded in tubes 6, 7 and 8 on the second survey visit in June.

7.19 A map of dormouse distribution throughout the Site is presented within Section 8.

7.20 As presence was confirmed in June, no further surveys were undertaken. full survey results are presented in Table 8 below.

Table 8. Dormouse Survey Results

Survey Month	Results
May	No evidence recorded.
June	1no. active adult hazel dormouse (tube 6) 3no. hazel dormouse nests (tubes 6, 7 and 8)

REPTILES

Presence / likely absence survey

7.21 A peak count of three adult slow worm and three adult common lizard was recorded within the Site.

7.22 Survey results indicate that a small population of slow worm and common lizard is present within the Site. Reptiles were observed under many AcO's, with distribution primarily within the south and western portions of the Site.

7.23 due to the large amount of artificial refugia present within the Site, for example, wood pallet piles, tarpaulin sheeting and brash piles, it is possible that a larger population assemblage is present within the Site that was not recorded during the survey.

7.24 Table 9 provides a summary of the reptile presence/likely absence survey. A map of reptile locations is detailed in Section 9.

Table 9. Survey results for reptiles within the Site.

Survey no.	Survey date	Slow worm			Common lizard		
		Male	female	Sub-adult & juvenile	Male	female	uid
1	28/04/23	0	1	1	0	0	0
2	02/05/23	1	1	2	0	0	0
3	05/05/23	0	2	0	1	2	0
4	17/05/23	1	2	2	0	0	0
5	24/05/23	0	3	2	0	0	0
6	26/05/23	0	1	2	0	0	0
7	28/05/23	2	1	3	0	0	1
Peak adult count		3			3		

ROMAN SNAIL

7.26 during the PEA survey, two empty Roman snail shells were identified within the centre of the Site.

7.27 Active Roman snails were recorded on two of the three survey visits with a peak count of 14no. active adult individuals.

7.28 Table 10 provides a summary of the Roman snail presence / likely absence survey. A map of Roman snail locations is detailed in Section 10.

Table 10. Survey results for Roman snail within the Site.

Survey type	Survey date	Results		
		Live	Empty shell	Notes
Evening torch survey	29/06/2023	8	0	-
daytime hand search	27/07/2023	0	3	-
daytime hand search	02/08/2023	14	9	1no. pair of snails breeding identified within impact zone
Peak active count	14			

N

Chalkhill

Ruin

Smallholding

Legend

- Application site boundary
- Nest tube
- Active adult
- Nest

0 20 40 60 80 100 m

native ecology
PROMOTING BIODIVERSITY INTEGRATION

Dormouse Tube Location Plan

34 Pilgrims Way East,
Otford

Drawing ref:	1100_DR06
Revision:	-
Date:	08/08/2023
Scale:	1:750
Paper size:	A3

N

Chalkhill

Ruin

Smallholding

Legend

- Site boundary
- Bitumen felt
- Slow worm
- Common lizard and slow w

0 10 20 30 40 50 m

native ecology
PROMOTING BIODIVERSITY INTEGRATION

Reptile Presence Location Plan

34 Pilgrims Way East
Otford, Kent

Drawing ref:	1100_DR07
Revision:	-
Date:	08/08/2023
Scale:	1:400
Paper size:	A3

N

Chalkhill

Ruin

Smallholding

Legend

RedLineBoundary

Survey Area

Live

Deceased

0 20 40 60 80 100 m

native ecology
PROMOTING BIODIVERSITY INTEGRATION

Roman Snail Presence Location Plan

34 Pilgrims Way East
Otford, Kent

Drawing ref:	1100_DR08
Revision:	-
Date:	08/08/2023
Scale:	1:600
Paper size:	A3

11. PHOTOGRAPHS

Photograph 1. Summer dormouse nest in Tube 7.

Photograph 2. Adult Roman snails within the Site.

12. ASSESSMENT AND RECOMMENDATIONS

ECOLOGICAL MITIGATION AND COMPENSATION STRATEGY

12.1 it is recommended that an Ecological Mitigation Strategy is produced as part of an Ecological impact Assessment Report to detail species-specific mitigation and habitat compensation measures that are based on survey results.

12.2 The Ecological Mitigation and compensation Strategy should be produced early in the planning application process. This will ensure that the proposed layout is informed by the ecological constraints within the Site and that on-site mitigation and compensation measures are possible. The Ecological Mitigation and compensation Strategy will form part of the Ecological impact Assessment.

LANDSCAPE AND ECOLOGICAL MANAGEMENT PLAN

12.3 A Landscape and Ecological Management Plan (LEMP) is recommended to detail the management and maintenance of retained and created habitats post-development. The LEMP should include habitat enhancement measures, along with management prescriptions and management responsibilities to improve and secure the long-term biodiversity value of the site.

12.4 The LEMP should be produced through liaison with the design team during the development of proposals.

ROOSTING BATS

12.5 The results of the emergence surveys indicate all buildings within the Site are likely absent of roosting bats and therefore no further survey work or mitigation is required.

12.6 The habitats within the Site, including the buildings and boundary trees are used by foraging and commuting common pipistrelles, brown long-eared bats, soprano pipistrelle and serotine. Low to moderate levels of activity were recorded.

12.7 Mitigation and compensation measures will be incorporated into the design proposals and will likely include the careful design of lighting to minimise any post development impacts upon bat species.

HAZEL DORMICE

12.8 Surveys confirmed presence of dormice in suitable habitats within the Site. dormouse presence should therefore be assumed within all suitable connecting habitats.

12.9 Removal of trees and bramble scrub could result in the killing or injury to individual dormice and the loss of suitable nesting and foraging habitat. However, habitat fragmentation is not considered likely as the boundary habitats are being retained.

12.10 due to the strict legal protection afforded to dormice and their habitats, a European Protected Species Mitigation (EPSM) licence will need to be obtained from Natural England prior to the start of works.

12.11 Mitigation and compensation measures will be incorporated into the design proposals and should include the retention and enhancement of existing boundary habitats, and the installation and monitoring of tree mounted dormouse nest boxes.

REPTILES

12.12 Survey work has confirmed the presence of a low population of slow worm and common lizard within the Site. due to the presence of a large amount of refugia within the Site, higher populations of reptiles (not detected during the surveys), of slow worms in particular, is likely.

12.13 unmitigated works within the Site would likely result in the killing or injury of individual slow worm and common lizard. To avoid the killing or injury of reptiles during development works, it is recommended that appropriate mitigation measures are implemented prior to construction works. These should be detailed within an EciA report.

12.14 The population assemblage of slow worm and common lizards can be retained in suitable connected habtats in the applicant's ownership within an area of grassland to the south.

12.15 Reptiles should be translocated out of the development site and into the adjacent receptor site through a reptile translocation programme comprising at least 30 capture visits during suitable weather conditions and when reptiles are active i.e. between late March - early October inclusive.

12.16 Enhancement measures should be detailed within the EciA report to provide long-term habitat for reptiles within the receptor site.

ROMAN SNAILS

12.17 Survey work confirmed the presence of Roman snails within the Site, with a peak count of 14 active individuals.

12.18 unmitigated works within the Site would likely result in the killing or injury of individual Roman snail and habitat loss. To avoid the killing or injury of Roman snails during development works, it is recommended that appropriate mitigation measures are implemented prior to construction works. These should be detailed within an EciA report.

12.19 The population of Roman snail can be retained in suitable connected habitats within the applicant's ownership to the south. This area should be suitably enhanced for Roman snails, to include additional areas of refuge such as log and brash piles.

12.20 The translocation exercise should be completed under a conservation Licence, issued by Natural England.

13. REFERENCES

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14. APPENDIX 1: SUMMARY OF PLANNING POLICY AND LEGISLATION

LEGAL PROTECTION OF BATS

14.1 Species afforded protection under the The conservation of Habitats and Species (Amendment) (Eu Exit) Regulations 2019 are also known as European Protected Species. in the context of this report this relates to bats.

14.2 European Protected Species relate to those listed within the conservation of Habitats and Species (Amendment) (Eu Exit) Regulations 2019 and are afforded the highest level of protection. These species are also protected under the Wildlife and countryside Act 1981. Taken together this level of protection makes it an offence to:

- deliberately capture, injure or kill any wild animal of a European protected species,
- deliberately disturb wild animals of any such species
- damage or destroy a breeding site or resting place of such an animal

14.3 disturbance of animals includes in particular any disturbance which is likely:

- to impair their ability to survive, to breed or reproduce, or to rear or nurture their young, or
- in the case of animals of a hibernating or migratory species, impair their ability to hibernate or migrate
- to affect significantly the local distribution or abundance of the species to which they belong

14.4 The legislation requires that any derogation be dealt with by licencing through an appropriate licencing body (Natural England in England). in determining whether a licence can be granted the licencing body must apply the requirements of Regulation 53, and in particular, the three tests:

1. Regulation 55(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".

2. Regulation 55(9) states: The relevant licensing body must not grant a licence under this regulation unless it is satisfied—
(a) that there is no satisfactory alternative; and
(b) 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.

LEGAL PROTECTION OF REPTILES

14.5 All common and widespread reptiles, which include viviparous lizard, slow worm, grass snake and adder are protected under the Wildlife and countryside Act 1981. This makes it an offence to:

- intentionally or recklessly kill or injure reptiles
- Sell, offer for sale, possess or transport for the purpose of sale or publish advertisement to buy or sell any reptile.

LEGAL PROTECTION OF ROMAN SNAIL

14.6 Roman snail is listed on Schedule 5 of The Wildlife and countryside Act 1981 (as amended) and is protected in relation to Section 9 (1), (2) & (5) in England. This makes it an offence to:

- intentionally kill, injure or take (handle) the species
- Possess a live or dead Roman snail if it was taken from the wild.

THE NATIONAL PLANNING POLICY FRAMEWORK

14.7 The National Planning Policy framework was revised in february 2019 and sets out the Government's planning policies for England and how these are expected to be applied. Within this document, chapter 15 is titled conserving and Enhancing the Natural Environment.

14.8 Of particular relevance within this chapter are the following statements:

Planning policies and decisions should contribute to and enhance the natural and local 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.

To protect and enhance biodiversity and geodiversity, plans should:

- promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species; and identify and pursue opportunities for securing measurable net gains for biodiversity.

When determining planning applications, local planning authorities should apply the following principles:

a) if significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused;

b) development on land within or outside a Site of Special Scientific Interest, and which is likely to have an adverse effect on it (either individually or in combination with other developments), should not normally be permitted. The only exception is where the benefits of the development in the location proposed clearly outweigh both its likely impact on the features of the site that make it of special scientific interest, and any broader impacts on the national network of Sites of Special Scientific Interest;

c) 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; and

d) development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to incorporate biodiversity improvements in and around developments should be encouraged, especially where this can secure measurable net gains for biodiversity.