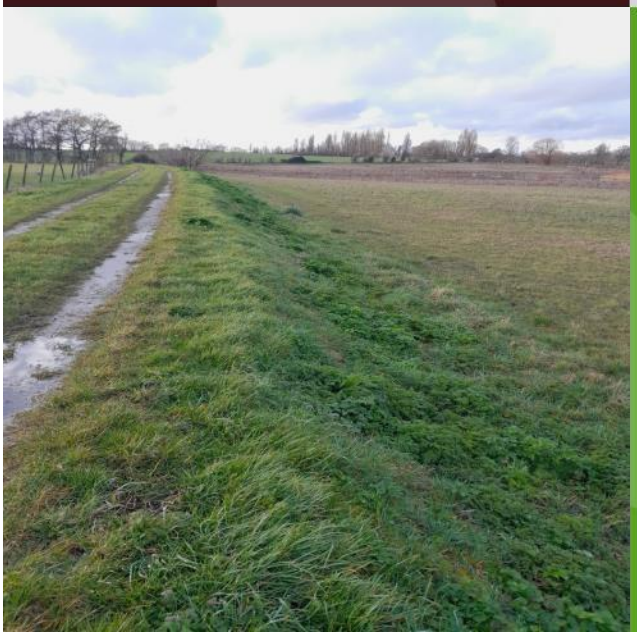
Chalk Road, Higham

Preliminary Ecological Appraisal Report (PEAR)



Client:

Richborough Estates Ltd.

Report Reference:

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ECOLOGY
FLOOD RISK
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EXECUTIVE SUMMARY

i RammSanderson Ecology Ltd were commissioned by Richborough Estates Ltd. to undertake a Preliminary Ecological Appraisal to assess the potential ecological constraints to the proposed outline planning for a residential development (hereafter referred to as the Scheme), located north of Chalk Road, Higham.

ii The land within the Scheme Boundary (hereafter referred to as the Site) is 1.68ha in size and comprised of modified grassland, scrub, hedgerow, line of trees, buildings and other developed land.

Table 1: Executive Summary

Ecological Feature	Potential to be affected by the Scheme	Further Surveys, Assessment or Mitigation Recommended?
Designated Sites	Thames Estuary and Marshes Ramsar and South Thames Estuary and Marshes Site of Special Scientific Interest (SSSI) and Ramsar are located 15m northeast of the Site. The Thames Estuary and Marshes Special Protection Area (SPA) is located 1km north of the Site boundary.	Yes – a Stage 1 Habitat Regulations Assessment is required, to ascertain if works will have a significant impact upon this designated site or that assent for planned works in proximity is required. A CEMP is required to outline mitigation requirements to avoid impacts to the SSSI.
Habitats	Yes – Grassland, scrub and hedgerows to be removed to facilitate development of the Scheme	Habitats should be retained and enhanced where possible. Currently habitats within the northeast of the Site are due to be retained as part of designs. A Biodiversity Impact Assessment (BIA) is required to determine net gain/loss of biodiversity units in accordance with requirements for mandatory Biodiversity Net Gain (BNG). Adhere to root protection areas in accordance with BS 5837:2012 for retained woodland, scrub and trees habitats during construction (as recommended in an Arboriculturists report)
Badger	While no setts or field signs were recorded, the suitability of habitats within the Site mean it is possible that foraging badgers may be impacted by the Scheme.	No further surveys are recommended pertaining to badgers, however it is recommended that works take place under a Precautionary Method of Works (PMW) to be

Ecological Feature	Potential to be affected by the Scheme	Further Surveys, Assessment or Mitigation Recommended?
		outlined within a Construction Ecological Management Plan (CEMP) document.
Bats	The buildings within the Site comprised a mixture of structures that may provide suitability for roosting bats. Furthermore, the railway just off the eastern boundary of the Site represents a potential foraging and commuting corridor for bats.	Owing to the presence of buildings within the Site that may offer suitability, a Preliminary Bat Roost Assessment (PBRA) is recommended to assess for presence/likely absence of roosting bats within (where impacts to the buildings are anticipated). This may be undertaken at any time of year. Furthermore, bat activity surveys are recommended due to the railway located just off-Site. This entails three visits, one in each season (April/May, June/July/August and September/October). This should be supplemented with static monitoring for 5 consecutive nights during each of those seasons.
Hazel Dormouse	Habitats within the Site were largely considered unsuitable for hazel dormouse, with a lack of significant suitable boundary hedgerows, woodland or lines of trees.	Owing to the presence of some, albeit limited, foraging habitats such as the scrub and hedgerows it is recommended that where works shall impact upon such habitats that a PMW is utilised as outlined in a CEMP.
Otter and Water Vole	No habitats were present within the Site that presented significant foraging habitat for otters or water voles, such as water courses. The canal off-Site likely has potential for both species, but the railway present a buffer from the works, and the habitats on Site aren't indicative to significant numbers of foraging or commuting individuals.	it is anticipated that only commuting and/foraging individuals would be subject to risk of impact. It is therefore recommended that a PMW is utilised as outlined within a CEMP.
Great Crested Newt	A pond was identified within the Site boundary, as well as an additional water body and ditch within 500m without major dispersal barriers present, which may have suitability for populations of great crested newts.	It is recommended that further survey is undertaken to these water bodies which shall comprise of a Habitat Suitability Index (HSI) for P1 and subsequent eDNA surveys for P1, D1 and the onsite pond. HSI surveys may be undertaken at any

Ecological Feature	Potential to be affected by the Scheme	Further Surveys, Assessment or Mitigation Recommended?
		time of year, though eDNA surveys may only be undertaken between April – June inclusive. Where a positive result is identified, indicating GCN presence, this shall inform further survey and/or mitigation requirements.
Reptiles	The Site presented limited suitability for common reptile species, with the scrub habitat to the southwest, hedgerows and line of trees offering the greatest suitability for commuting and foraging individuals.	Owing to the presence of some suitable habitat, but the majority being sub-optimal, it is recommended that a precautionary method of works is adhered to in order to reduce impacts to negligible as outlined within a CEMP.
Birds	The Site supports a mosaic of habitat types such as the buildings, scrub and grasslands which are suitable for a variety of urban and ground nesting bird species. The site is also in close proximity to Thames Estuary and Marshes Ramsar and South Thames Estuary and Marshes SSSI, Ramsar and SPA. There is a risk of potential destruction of active nests of these species, including ground-nesting birds. Two wintering bird surveys were also undertaken in January and February, during high tide. No birds identified as qualifying species within the designated sites were identified during these surveys, and only low numbers of notable birds were identified, primarily within the off-site northern field adjacent to the Site, such as gadwall and lapwing.	Given the Scheme impacts to these habitats and the Site's proximity to the Ramsar, four breeding bird surveys should be undertaken between April to mid—July inclusive. During construction, clearance of vegetation outside of core nesting season (September-February) is recommended. If this is not possible, a nesting bird check by a suitably qualified ecologist must have taken place within 24 hours of work commencing. An additional two wintering bird surveys during November and December are also recommended to provide a full season of wintering bird data and passage surveys in October and March.
Terrestrial Invertebrates	The habitats observed were limited in their suitability for terrestrial invertebrates.	Due to the lack of available optimal habitat onsite, it is considered that key terrestrial invertebrate species are likely absent from site and no further investigation is required.
Other Notable Species	The habitats within the Survey Area were noted for their suitability for notable species including European hedgehog,	No further survey is required, however it is recommended that

Ecological Feature	Potential to be affected by the Scheme	Further Surveys, Assessment or Mitigation Recommended?
	brown hare and common toad of which the hedgerows and scrub offer the highest value for hibernating, foraging and commuting for both species.	works take place under a PMW to be outlined within a CEMP document to prevent potential disturbance and/or injury to notable species including hedgehog and common toad

CONTENTS

FIGURES

TABLES

APPENDICES

1 INTRODUCTION

1.1 Terms of Reference

i RammSanderson Ecology Ltd (RS) were commissioned by Richborough Estates Ltd. to undertake a Preliminary Ecological Appraisal (PEA) to assess the potential ecological constraints to the proposed residential development (hereafter referred to as the Scheme), located north of Chalk Road, Higham. All land situated within the red line of the Scheme is hereafter referred to as the Site and is shown on Figure 1.

ii The PEA has been undertaken with reference to current good practice[1] and forms part of the technical information commissioned by Richborough Estates Ltd. in connection with the Scheme. The results of the PEA are presented in this PEA report (PEAR), which addresses relevant wildlife legislation and planning policy as summarised in Appendix 1. The PEAR is consistent with the requirements of British Standard 42020:2013 *Biodiversity. Code of Practice for Planning and Development*.

iii This PEAR is intended for advice in respect of Scheme design, site layout and / or site investigation. Further ecological surveys and / or ecological impact assessment (including detailed mitigation measures) may be required in connection with a planning application or to contribute to an Environmental Impact Assessment once the Scheme proposals have been finalised and any required surveys have been completed.

1.2 The Scheme

i The Scheme is comprised of an outline planning application for a residential development consisting of up to 40 dwellings with associated open space, parking and other infrastructure. Demolition of existing buildings will be required as part of the Scheme. Approval is also sought for new vehicular access to the Site from Chalk road and all other matters are reserved.

1.3 The Site

i The Site is located north of Chalk Road, Higham, Rochester, ME3 7JY at Ordnance Survey national grid reference TQ 71071 73016 and is approximately 1.68ha in size.

ii The Site comprised of modified grassland in use for livestock pasture, hedgerows, scrub, buildings and developed land, sitting on the northern boundary of the village of Lower Higham. The Site is bounded by Chalk Road and the urban areas of Lower Higham to the immediate south with a railway line to the east and arable land to all remaining aspects. The wider area consists of largely arable landscape and pasture and the Thames and Medway Canal immediately beyond the railway line to the east.

1.4 Scope of the Preliminary Ecological Appraisal

i This PEAR presents ecological information obtained during the following:

- A desk-study undertaken on 31/01/2025 to obtain records of designated sites, notable habitats[2] and protected and notable species[3] up to 2km of the Site (the area covered by the desk study is hereafter referred to as the Study Area); and,

[1] CIEEM (2017). Guidelines for Preliminary Ecological Appraisal, 2nd edition. Chartered Institute of Ecology and Environmental Management, Winchester.

[2] Notable habitats are taken as principal habitats for the conservation of biodiversity listed under Section 41 of the Natural Environment and Rural Communities Act 2006; habitats listed under the Kent Biodiversity Action Plan (BAP); hedgerows identified as being 'important' under the wildlife criteria of the Hedgerow Regulations 1997, ancient woodlands and veteran trees.

[3] Notable species are taken as principal species for the conservation of biodiversity listed under Section 41 of the Natural Environment and Rural Communities Act 2006; any species listed in an IUCN Red Data Book; and any other species listed under the Kent BAP.

- A walkover survey of accessible land within the Site (the area covered by the survey is hereafter referred to as the Survey Area) on 26/01/2025.

ii The purpose of the PEAR is to provide a high-level ecological appraisal of the Site, specifically to:

- establish baseline conditions and determine the presence of Important Ecological Features (IEF)[4] (or those that could be present), as far as is possible;
- to identify potential ecological constraints to the Scheme and make initial recommendations to avoid impacts on IEFs, where possible;
- to identify requirements for mitigation, where possible, including mitigation measures that will be required and those that may be required (depending on results of further surveys or final scheme design);
- to establish any requirements for more detailed surveys; and,
- to identify any opportunities offered by the Scheme to deliver biodiversity enhancements.

iii The methodology followed for undertaking the desk study and field surveys is detailed in Appendix 2.

[4] Important Ecological Features are habitats, species, ecosystems and their functions and processes that are of conservation importance and could potentially be affected by the Scheme.

2 BASELINE CONDITIONS, CONSTRAINTS AND RECOMMENDATIONS

2.1 Surveyor Competence

i The walkover survey was led by Harry Taylor BSc (Hons) MSc who has been a professional ecologist for 5 years and has the required competencies (Chartered Institute of Ecology and Environmental Management) to undertake this type of survey. In addition to this, Harry also holds a Level 3 Field Identification Skills Certificate (FISC).

2.2 Limitations to the Assessment

i General limitations to undertaking desk and field-based assessments are provided in Appendix 2. Specific limitations to the assessment are detailed below:

- The survey was completed during the period of October to April which is generally considered less efficient than the survey being completed during the spring or summer, and it is possible that some plant species have been missed by the field survey. However, in view of the ecological character of the habitats recorded, and management of the Site, it is considered that the survey is adequate to make a robust assessment of habitats present and the sites likely nature conservation significance.

2.3 Designated Sites

2.3.1 Desk Study

i Table 2 summarises the designated sites situated within the Study Area.

Table 2. Designated Sites within Study Area

Site Name	Designation	Location[5]	Brief Description
Thames Estuary and Marshes	Ramsar, Special Protection Area (SPA)	15m NE (Ramsar), 1.09km N (SPA)	The site comprises extensive intertidal mudflats and saltmarsh. Additional habitats include ponds, lakes, seawalls, and small beaches. The site provides important breeding and feeding habitat for large bird populations.
South Thames Estuary and Marshes	Site of Special Scientific Interest (SSSI)	15m NE	The habitats consist of an extensive mosaic of grazing marsh, saltmarsh, mudflats, freshwater pools, and areas of woodland. The site supports large numbers of waterfowl.
Canal and Grazing Marsh, Higham	Local Wildlife Site (LWS)	50m E	No information provided.
Nr Queens Farm	Roadside Nature Reserve (RNR)	1.5km NW	No information provided.
Telegraph Hill, Higham	LWS	1.6km SE	No information provided.

[5] Where designated sites are situated outside of the Site boundary, the distance and direction is given at the closest point of the designated site from the Site

Site Name	Designation	Location[5]	Brief Description
Court Wood etc., Shorne	LWS	1.7km SW	No information provided.

2.3.2 Constraints and Recommendations

ii Habitats within the Site are deemed negligible for qualifying species listed within the Ramsar and SPA, including migrating black-tailed godwit and wintering dunlin and red knot within the Ramsar designation and avocet and hen harrier within the SPA designations. Habitats on Site are deemed negligible due to the high levels of management and the constant presence of livestock. More suitable habitat is noted within the wider landscape.

iii However, the Ramsar, SPA and SSSI is within walking distance of the Site. Residents of the Site could potentially visit there recreationally, presenting impacts to the designated site. To encourage minimal recreational disturbances in the wider area, signs and other educational tools could be utilized encouraging visitors to keep to pathways. In the absence of mitigation measures, a negative impact is anticipated on the Ramsar/SPA as well as the SSSI. The impacts to the Ramsar and SPA should be addressed within a Habitat Regulations Assessment (HRA). Mitigation to address impacts to the SSSI should be outlined within a CEMP.

2.4 Habitats

2.4.1 Desk Study

i Table 3 summarises the records of notable habitats and protected or notable flora[6] (including veteran trees[7]) within the Study Area.

Table 3. Notable Habitats and Protected and Notable Flora within Study Area

Habitat/ Flora Feature	Reason for Conservation Interest	Location[8]
Unnamed woodland	Ancient Woodland	1.1km SW
Peartree Wood	Ancient Woodland	1.7km SW
Coastal and floodplain grazing marsh	Priority Habitat, Local Biodiversity Action Plan Habitat	Closest located 200m N; additional 32 located north-east and north-west
Deciduous woodland	Priority Habitat	Closest located 200m N; additional 25 located north, south, east, and west

[6] For this assessment 'flora' includes vascular and non-vascular plants, fungi and lichens.
[7] For this assessment the definition of a veteran tree is taken from Annex 2 of the National Planning Policy Framework (glossary): "A tree which, because of its great age, size or condition is of exceptional value for wildlife, in the landscape, or culturally."
[8] Where features are situated outside of the Site boundary, the distance and direction is given at the closest point of the designated site from the Site

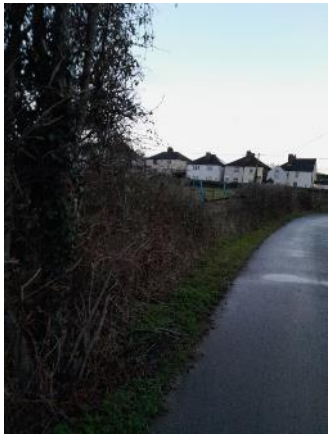
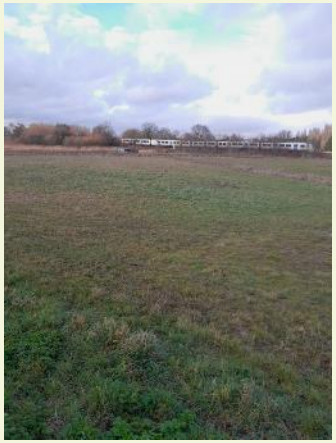
Habitat/ Flora Feature	Reason for Conservation Interest	Location[8]
Traditional orchard	Priority Habitat, Local Biodiversity Action Plan Habitat	Closest located 300m SE; additional 8 located south, east, and west
Chalk rivers (low certainty)	Priority Habitat, Local Biodiversity Action Plan Habitat	Closest located 0.8km NE; additional 21 located north-east
Additional habitats	May contains Priority Habitats including deciduous woodland, traditional orchard, reedbeds, coastal and floodplain grazing marsh	Closest located 15m E; additional 12 located north, north-west, and south-west
Open mosaic habitat	Can be extremely diverse and can support a rich assemblage of invertebrates	Closest located 0.6km SE; additional 6 located north, south, east and west
Good quality semi-improved grassland	May be botanically species-rich	Closest located 1.1km N; additional 6 located north-east and north-west
Nuttall's waterweed	Listed on Schedule 9 of the Wildlife and Countryside Act 1981 (as amended)	7 records; closest record was located 1.2km NW
Water fern	Listed on Schedule 9 of the Wildlife and Countryside Act 1981 (as amended)	2 records; closest record was located 1.6km N
Bluebell	Listed on Schedule 8 Section 13(2) of the Wildlife and Countryside Act 1981 (as amended)	2 records; closest record was located 1.8km S
Japanese knotweed	Listed on Schedule 9 of the Wildlife and Countryside Act 1981 (as amended)	1 record located 1.9km W

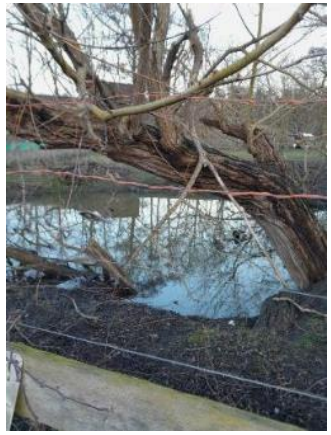
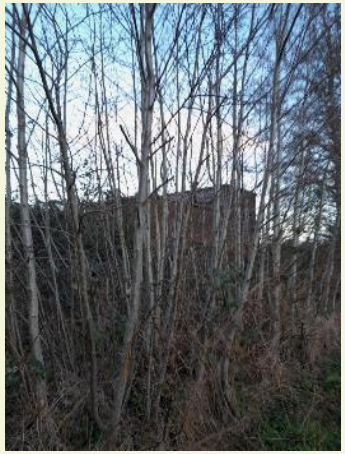
2.4.2 Field Survey

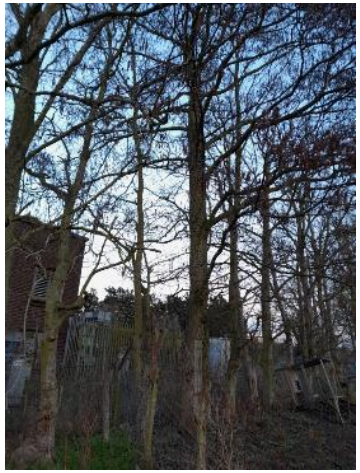
ii Summary descriptions of the habitats within the Survey Area are provided below in Table 4 and shown on Figure 2, with specific features highlighted by target notes (TNs).

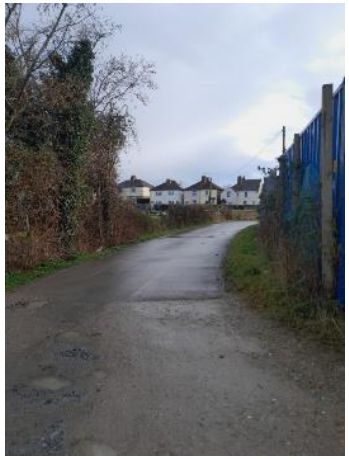
iii Habitat types detailed are listed in order of the UKHab Survey Handbook (UKHab Ltd, 2023). The species list provided in this report reflect only those taxa observed during the survey and are not an exhaustive list of all species that may be present, as the survey only provides a snapshot of the Site.

Table 4: Habitats within Survey Area

Habitat	Description	Area (m^2)	Proportion of site (%)	Ecological Importance & Outcome of Proposal	Photograph
H 2a6 Other native hedgerows Secondary code: 116 Flailed	Three species-poor native hedgerows are present within the site. A hedgerow was located on the southern boundary of the Site and was comprised of dominant elder and abundant ivy. A second hedgerow was located on the southeastern boundary of the Site and was comprised of dominant hawthorn plus abundant ivy and bramble. A third hedgerow was located towards the eastern extent of the Site and was comprised of dominant hawthorn, abundant ivy and bramble plus occasional alder. Hedgerows located on the southern boundary had recently been flailed.	147m	N/A	Some ecological importance for reptiles and nesting birds, as well as, European hedgehog, brown hare and common toad.	
g4 Modified grassland Secondary code: 200 Tree	Modified grassland habitat was located throughout the Site and was comprised of dominant perennial rye-grass, abundant Yorkshire fog, frequent meadowsweet, occasional broadleaved dock, common nettle and dandelion plus rarely abundant ribwort plantain. Two mature crack willow trees and two young alder trees were present within this habitat.	8369	54.85	This habitat has negligible ecological value.	

Habitat	Description	Area (m^2)	Proportion of site (%)	Ecological Importance & Outcome of Proposal	Photograph
r1g Other standing water Secondary code: 41 Pond (non-priority)	A pond was present towards the eastern extent of the Site. This habitat's water level fluctuated naturally with artificial pipework absent. The pond also had high turbidity and was surrounded by modified grassland. Macrophytes were absent.	421	2.76	The pond may have ecological value for amphibians (including great crested newts).	
w1g Other broadleaved woodland Secondary codes 32 Scattered trees 202 young trees – self-set.:	An area of other broadleaved woodland was present towards the eastern boundary of the Site comprised of young self-seeded downy birch.	137.17	0.9	Some importance to nesting birds and commuting/foraging mammals.	

Habitat	Description	Area (m^2)	Proportion of site (%)	Ecological Importance & Outcome of Proposal	Photograph
w1g Other broadleaved woodland Secondary code: 33 Line of trees	A line of semi-mature alder trees was present on the eastern boundary of the Site.	63m	N/A	Some importance to nesting birds and commuting and foraging mammals.	
u1b5 Building	A collection of small agricultural/commercial buildings were present within the centre of the Site. These are all currently in use. The buildings were mostly comprised of corrugated metal cladding or brick structures with pitched roofs. Some buildings were open structures for storage and vehicle parking.	1215	7.96	Potential importance for roosting bat species.	

Habitat	Description	Area (m^2)	Proportion of site (%)	Ecological Importance & Outcome of Proposal	Photograph
u1c Artificially unsealed, unvegetated surface.	This habitat was present throughout the Site in the form of access roads and vehicle parking areas.	272	1.78	No ecological importance to wildlife.	

2.4.1 Constraints and Recommendations

iv A BIA is required at this stage, as this is critical in understanding the impacts to habitats within the Site because of the Scheme for the purposes of mandatory BNG. See Section 3 for further details.
Mitigation measures to protect retained trees and other habitats within the northeast of the Site should be adhered to in accordance with an Arboriculturist's report, which should contain guidance on protective fencing in line with root protection areas and other such measures in accordance with BS 5837:2012.

2.5 Badger

2.5.1 Desk Study

i There are 28 recent records of badger within the Study Area.

2.5.2 Field Survey

ii No field signs or evidence of existing setts were noted within the Site boundaries. The Site habitats were largely sub-optimal for residential badger, with suitability limited to the small scrub patches and hedgerow. The modified grassland within the Site provides foraging habitat for the species.

2.5.3 Constraints and Recommendations

iii Badgers construct setts in most habitats, often near a source of water and on a bank near hedgerows, scrub and tree lines. As such, habitats on site present suitability. While no setts or field signs were recorded, the suitability of habitats within the Site mean it is possible that foraging animals may be impacted by the Scheme.

iv No further surveys are recommended pertaining to badgers, however it is recommended that works take place under a Precautionary Method of Works (PMW) to be outlined within a Construction Ecological Management Plan (CEMP) document to prevent potential disturbance and/or injury to commuting or foraging badgers.

2.6 Bats

2.6.1 Desk Study

i There are fifteen recent records of bats within the Study Area. The closest / most relevant of these records is associated with common pipistrelle which is approximately 0.7km from the Site boundary. No records of existing European Protected Species Licence (EPSL) applications were identified.

2.6.2 Field Survey

ii The habitats within the Site present 'moderate' suitability for foraging bat species, particularly due to the adjacent railway line Thames and Medway Canal to the east of the Site. In addition, hedgerows and lines of trees offer commuting opportunities surrounding the Site boundaries.

iii The trees within the Site were not fully assessed for their roosting potential. However, the trees noted within the Site were largely immature and lacked suitability for features that would provide roosting suitability.

iv The three buildings within the Site comprised a mixture of structures that may provide suitability for roosting bats.

2.6.3 Constraints and Recommendations

v The habitats within the Site deemed to be of 'Moderate' suitability for foraging bat species and as such constraints as a result of the Scheme may be possible. It is recommended that, owing to the presence of these habitats in addition to the adjacent railway, canal and SPA, further activity surveys are undertaken. This will allow for monitoring of potential impacts of any development. This will comprise of one survey per

season (spring – April/May, summer – June/July/August and autumn – September/October) and should be supplemented by use of static monitoring during each of these seasons for five consecutive night.

vi Additionally, owing to the presence of buildings and trees within the Site that may offer suitability, a Preliminary Bat Roost Assessment (PBRA) is recommended to assess for presence/likely absence of roosting bats within (where impacts to the buildings and trees are anticipated). This may be undertaken at any time of year. These will inform if further bat emergence surveys are required. Further bat emergence surveys would require 1-3 surveys depending on classification of the building/tree (low/PRF-I, moderate or high/PRF-M) as specified within the Bat Surveys for Professional Ecologists guidance (Collins, J. (Eds.), 2023).

2.7 Hazel Dormouse

2.7.1 Desk Study

i There are no recent records of hazel dormouse within the Study Area.

2.7.2 Field Survey

ii Habitats within the Site were largely considered unsuitable for hazel dormouse, with the majority of habitats being managed modified grassland. Though habitats including lines of trees and hedgerows were noted, these habitats were small in scale and not considered suitable for refuge seeking individuals.

2.7.3 Constraints and Recommendations

iii Owing to the lack of sufficient suitable habitat for refuge seeking individuals, the species is considered likely to be residentially absent from the Site and as such, no further survey is required. However, owing to the presence of some, albeit limited, foraging habitats such as the hedgerows and railway boundary habitats, it is recommended that where works shall impact upon such habitats that a PMW is utilised as outlined in a CEMP.

2.8 Otter and Water Vole

2.8.1 Desk Study

i There are no recent records of otter within the Study Area.

ii There are 11 recent records of water vole within the Study Area. The closest of these records was noted to be within the Site boundary, however this is attributed to an incomplete grid reference provided to the relevant data centre.

2.8.2 Field Survey

iii No watercourses were noted within the Site. A single pond was noted within the eastern half of the Site, though the suitability of this habitat for otter and water vole was considered limited owing to a lack of surrounding banks and vegetation appropriate for burrow and/or holt creation and the continued presence of livestock and human disturbance.

iv The remaining terrestrial habitats within the Site of suitability were limited to hedgerows, though connectivity to such habitats from WC1 was not noted.

2.8.3 Constraints and Recommendations

v Despite the presence of the Thames and Medway Canal (WC1) within 100m of the Site boundaries, the habitats within the Site present limited foraging and traversing opportunities for individual otter, particularly when considered alongside the lack of suitable connecting habitat within the wider landscape. Additionally, WC1 lies beyond the Site,-adjacent to railway line, though this would only serve as a partial barrier to

dispersal. As such, it is anticipated that only commuting and/foraging individuals would be subject to risk of impact. It is therefore recommended that a PMW is utilised as outlined within a CEMP.

vi As the watercourse lies beyond the zone of influence (ZoI) for water vole, the species is considered likely absent from the Site with no further consideration required.

2.9 Great Crested Newt

2.9.1 Desk Study

i There are no recent records of great crested newts (GCN) within the Study Area.

ii A total of 14 water bodies are present within 500m of the Site (P1 – P8, D1 – D5 and WC1).

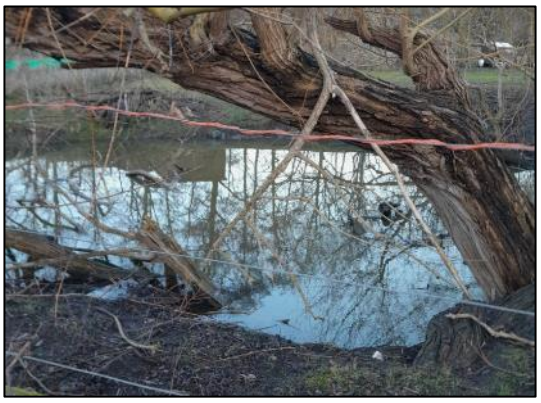
iii One of the water bodies (WC1) has been screened out of further assessment because it is a flowing watercourse unsuitable for great crested newts[9]. A total of 10 further water bodies (D2 – D5 and P3 – P8) are screened out of requiring further assessment as there are major barriers[10] to great crested newt movement between the water body and the Site including WC1 and the urban development to the south of the Site.

iv P1, P2 and D1 cannot be scoped out for the reasons outlined above and are therefore subject to further consideration.

2.9.2 Field Survey

v Table 6 summarises the features that have the potential to support great crested newts within the Site. Where access to aquatic features was possible, habitat suitability index (HSI)[11] assessments have been completed.

Table 5. Summary of features with potential to support Great Crested Newt

Feature	Description	Location	HSI Score	Photograph
P1	A turbid pond surrounded by scrub and modified grassland. Depth unknown due to turbidity and no sign of aquatic or marginal vegetation suitable for egg laying.	Within the Site boundaries	0.5 (Below Average)	

[9] Great crested newts do not generally like running water, though they will inhabit very slow-flowing watercourses such as backwaters, ditches and canals.

[10] The following constitute major barriers to dispersal and are unlikely to be traversed by great crested newts: rivers and larger brooks; main roads such as A-roads, motorways or any other road with high traffic volume (i.e. high traffic volume during the night when great crested newt are more likely to be dispersing/commuting); and major urban infrastructure including extensive areas of hardstanding and buildings and dense networks of minor roads with little green space.

[11] Habitat Suitability Index score is an assessment of the potential for a waterbody to support great crested newts.

2.9.3 Constraints and Recommendations

vi The terrestrial habitats within the Site present some, albeit limited, suitability for terrestrial phase GCN including the hedgerows and scrub. Such habitats may also present hibernation suitability. The pond within the Site was assessed to be of 'Below Average' score, indicating sub-optimal suitability but GCN presence cannot be ruled out at this stage.

vii Owing to the presence of water bodies within the Site as well as within 500m featuring connectivity to the Site (P1, P2 and D1), it is recommended that further survey is undertaken to these water bodies which shall comprise of a Habitat Suitability Index (HSI) for P2 and subsequent eDNA surveys for P1, P2 and D1. HSI surveys may be undertaken at any time of year, though eDNA surveys may only be undertaken between April – June inclusive. Where a positive result is identified, indicating GCN presence, this shall inform further survey and/or mitigation requirements.

2.10 Common Species of Reptile

i 'Common species of reptile' refers to common lizard, slow worm, adder and grass snake. The Site is located outside of the known range of smooth snake and sand lizard and these species are not considered in this report.

2.10.2 Desk Study

ii There are eight recent records of common lizard, slow worm and grass snake within the Study Area. The closest / most relevant of these records is associated with grass snake which is approximately 0.6km from the Site boundary.

2.10.3 Field Survey

iii The Site presented limited suitability for common reptile species, with the scrub habitat to the southwest, hedgerows and line of trees offering the greatest suitability for commuting and foraging individuals. Such habitats may also present hibernation suitability for such, though the limited scale of these habitats limits population size and therefore only individuals may occur.

iv No field signs indicative of reptile presence were noted by the surveyor.

2.10.4 Constraints and Recommendations

v Owing to the presence of some suitable habitat, but the majority being sub-optimal, and good connectivity to the wider landscape via the adjacent railway and nearby canal, it is recommended that a precautionary method of works is adhered to in order to reduce impacts to negligible as outlined within a CEMP. This will involve using hand tools only and clearing in one direction to allow any reptile species to disperse of their own accord.

2.11 Birds

2.11.1 Desk Study

i There are recent records for 80 notable[12] bird species within the Study Area. These include twenty species listed on Annex I of the EC Birds Directive 1994, 27 species listed on Schedule 1 of the Wildlife and

[12] Notable bird species are taken as those listed: on Annex I of the EC Birds Directive (2009/147/EC); on Schedule 1 of the Wildlife and Countryside Act 1981 (as amended); as Species of Principal Importance (SPI) for the Conservation of Biodiversity in England listed in Section 41 of the Natural Environment and Rural Communities Act 2006; as Red or Amber in the Birds of Conservation Concern

Countryside Act 1981 (as amended), six Species of Principal Importance (SPI), seventeen species on the Conservation Concern 5 (BoCC5) Red list (Stanbury, 2021) and 31 species on the BoCC5 Amber list. The records also include one species of bird (sandwich tern) that is a priority species in Kent as listed on the Kent BAP.

2.11.2 Field Survey

ii The site presented limited suitability for Schedule 1 bird species with the presence of a line of trees, scattered trees, a pond and reed beds.

iii Two wintering bird surveys were undertaken, in January and February. None of the qualifying species for the Ramsar Site (grey plover, red knot, dunlin or redshank) were identified within the Site, and only low numbers of notable species were identified, primarily within the off-site northern field, adjacent to the northern boundary of the Site. These included gadwall and lapwing. Full results can be seen in Figures 4 and 5.

2.11.3 Constraints and Recommendations

iv The Site supports a mosaic of habitat types such as trees, hedgerows and grasslands which are suitable for a variety of urban and widespread bird species. Given the Scheme impacts to these habitats and the Site's proximity to the Ramsar and SPA, a suite of bird surveys should be undertaken including wintering birds, breeding birds and passage surveys.

v Breeding bird surveys should comprise 4 visits between March and Mid-July.

vi To complete the wintering bird survey effort, 2 more visits are required, in November and December.

vii Due to black-tailed godwit being listed as a qualifying species as a passage species in Spring/Autumn within the Ramsar designation, and the SPA supports internationally important populations of migratory ringed plover, grey plover, dunlin, red knot, black-tailed godwit and redshank, as well as nationally important populations of shelduck, teal and pintail, additional passage surveys are required in October and March.

viii There is a risk of mortality/injury to nesting birds as a result of the Scheme during a future construction phase. Therefore, it is recommended that, where possible, tree felling and vegetation clearance will be undertaken outside the core bird nesting season (1st March to 31st August, though variation in dates is possible) to avoid damage or destruction of occupied nests or harm to breeding birds. If this cannot be achieved, works within the core bird nesting season will require an inspection of the vegetation to be cleared for breeding birds and their nests by a suitability qualified ecologist no more than 24 hours prior to any works being undertaken. If any birds are identified during the survey, they will be left in situ for their entire nesting period and alternative approaches to the should sought. This may include leaving an exclusion zone around the nesting area to avoid disturbance.

(BoCC) 4 (Eaton MA, Aebischer NJ, Brown AF, Hearn RD, Lock L, Musgrove AJ, Noble DG, Stroud DA and Gregory RD (2015). Birds of Conservation Concern 4: the population status of birds in the United Kingdom, Channel Islands and Isle of Man. British Birds 108, 708-746); bird species or groups listed under the Kent BAP.

2.12 Terrestrial Invertebrates

2.12.1 Desk Study

i There are recent records of 45 notable[13] terrestrial invertebrate species within the Study Area. The closest / most relevant of these records is associated with *Lipara rufitarsis* which is approximately 30m from the Site boundary.

2.12.2 Field Survey

ii The habitats observed were limited in their suitability for terrestrial invertebrates, with the scrub to the southwest and hedgerows offering sub-optimal refuge opportunities due to limited size.

2.12.3 Constraints and Recommendations

iii Due to the lack of available optimal habitat onsite, it is considered that key terrestrial invertebrate species are likely absent from site and no further investigation is required.

2.13 Other Notable Species

2.13.1 Desk Study

i There are 25 recent records of other notable species[14] within the Study Area. The closest / most relevant of these records is associated with European hedgehog which is listed as 'onsite'.

2.13.2 Field Survey

ii The habitats within the Survey Area were noted for their suitability for notable species including European hedgehog, brown hare and common toad of which the hedgerows and scrub offer the highest value for hibernating, foraging and commuting for both species.

2.13.3 Constraints and Recommendations

iii It is anticipated that the species noted above may be subject to impacts by the Scheme, with the largest impacts being to European hedgehog individuals that may utilise the Site.

iv No further survey is required, however it is recommended that works take place under a PMW to be outlined within a CEMP document to prevent potential disturbance and/or injury to notable species including hedgehog and common toad.

[13] Notable terrestrial invertebrates are taken as principal species for the conservation of biodiversity listed under Section 41 of the Natural Environment and Rural Communities Act 2006; any invertebrate listed under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended); any invertebrate listed under Schedule 2 of the Conservation of Habitats and Species Regulations 2017 (as amended); any invertebrate listed in the IUCN Invertebrate Red Data Book (1991); and any invertebrate listed under a Kent BAP.

[14] Notable species are taken as principal species for the conservation of biodiversity listed under Section 41 of the Natural Environment and Rural Communities Act 2006; any species listed in an IUCN Red Data Book; and any other species listed under the Kent BAP that are not referred to in previous sections of the report.

3 OPPORTUNITIES FOR ENHANCEMENTS

i This section highlights opportunities for providing ecological enhancements, based on the current Scheme details. These are high level opportunities and would need to be developed in greater detail once further surveys have been completed and the Scheme proposals, such as detailed areas of habitat loss are confirmed.

3.2 Native Planting Opportunities

3.2.1 Planting New Hedgerows

i If planting new hedgerows or replacing them, a minimum of six native species should be used, which could include hawthorn, elder, blackthorn, field maple, English elm and hazel. Standard trees such as English oak, beech, lime species, rowan and wild cherry could be planted. Once hedgerows are established, they should be trimmed in an 'A' shape to on a tri-annual basis to increase their suitability for local fauna. Planting should be undertaken during early winter, providing the ground is not frozen. Planting up gaps can be done in conjunction with coppicing existing plants, to give new plants minimum competition. To further reduce competition and aid establishment of the planted-up sections, the bases of the plants would be kept weed free through spot treatment of herbicide for the first three years.

3.2.2 Enhancing Retained Hedgerows

ii If enhancing current hedgerows, a minimum of four different native species should be plug planted at the appropriate time of year (see 4.2.1). A hedgerow seed mix such as the N9F Hedgerow Mix by Naturescape (naturescape.co.uk), following spot treatment to remove any undesirable ruderal species such as common nettle from the understorey would also improve the botanical diversity and value of the hedgerow. A buffer of 1m should be retained at the base of all hedgerows to reduce disturbance and allow the establishment of more diverse flora.

3.2.3 Tree Planting

iii If any trees are to be removed in proposals, these could be replaced elsewhere on site with planting native tree species as compensation. Species that could be planted include beech, wild cherry, English oak, lime species and hazel.

3.2.4 Wildflower Meadows

iv Enhancing any areas not to be developed by creating wildflower meadows will increase biodiversity and provide a range of food sources for invertebrates such as pollinators and lepidoptera. This will, in turn provide an ample food source for insectivores such as bats and hedgehogs.

v The ground could be prepared for supplementary planting with minimal effort, using a chain harrow. Any existing vegetation should be removed, and the soil should be raked to break it up, producing a fine, firm layer of soil. It is recommended that Long Season Meadow Mix (available from Naturescape) is used to allow for a long growing season, producing an aesthetically pleasing meadow of flowers, thus negating the requirement for an extensive mowing regime. Seeds should be sowed during autumn or spring, and if there is a dry period, the soil being sowed should be watered.

vi Once established, the grassland will only require mowing in September (with the arisings being left for 48hrs prior to removal to allow the seeds to disperse for the following year). Any cutting should be removed from the ground, so that a low level of fertility is maintained, and any unwanted weeds such as nettles or thistles should be removed during the first year of management.

3.3 Other Enhancements

i The following enhancements could be delivered for biodiversity as part of the Scheme, that don't contribute towards the calculation of biodiversity net gain but can still deliver significant improvements for biodiversity:

- Any landscape planting associated with the Scheme should consider the use of native shrub species and also species such as lavender which provide important sources for pollinating species. The Royal Horticultural Society provide online resources to identify suitable plants for garden areas that are aesthetically pleasing but of significant value to local pollinators (www.rhs.org.uk/plantsforpollinators).
- Consideration to the provision of hibernacula within the woodland habitat for reptiles, and hedgehog. Regarding hedgehogs, boxes such as the "Hedgehog House with Hinged Inspection Roof" available at www.arkwildife.co.uk are recommended to provide a long-term solution for individual hibernating, commuting or foraging hedgehogs with the Site boundaries.
- Consideration to provision of bird nest boxes could also be given in respects to the retained trees. Use of boxes such as the Schwegler 1B nest box provide a long-term nest box solution requiring limited replacement unlike wooden boxes which need regular replacement as a result of weathering.
- Consideration to provision of bat boxes could also be given in respects to the retained trees. Use of boxes such as the Vivara woodstone box provide a long-term nest box solution requiring limited replacement unlike wooden boxes which need regular replacement as a result of weathering.
- Additional enhancements that could easily be met within the development scope include the incorporation of bat and bird nest boxes and hedgehog boxes. Boxes could be placed either on new buildings or on retained trees within the Site boundaries and hedgehog boxes within the ornamental planting and compost piles. The tree mounted bat boxes should face south (for additional warmth), and be positioned at least 4 metres from the ground, with the entrances being free of overhanging branches. It is also recommended that bird nest boxes be placed 1.5m below each bat box, to ensure that the birds have somewhere to nest and do not inhabit the bat boxes. Suitable bat box dimensions are 430mm high X 270mm wide X 140mm deep and the boxes are designed to mimic natural roost sites and to provide a stable environment. In-cavity bat boxes located on buildings could be incorporated into the structure of the properties as they are built. These boxes would consist of Ibstock Enclosed Bat Box 'C' which is positioned at least 3 metres from the ground, facing either south, south-west or south-east (for additional warmth) and close to good foraging habitat. Theses bat box dimensions are 215mm high x 215mm wide x 105mm deep (small) or 290mm high x 215mm wide x 105mm deep (large) and are made from brick. An example of a suitable bat box is shown below.
- Compensation for the loss of badger foraging habitat and well as maintenance of ecological corridors through the Site are recommended. This could include planting fruit trees and keeping a buffer of vegetation the boundaries of the site, and planting of fruit and nut bearing trees and shrubs.
- Where any permanent residential fencing is to be constructed, small 15x15cm mammal holes should be installed within these fences. 'Hedgehog Highway' signs (available from the British Hedgehog Preservation Society) could be installed above these holes to prevent them being filled in in the future. This will help to maintain their permanency and so the connectivity for mammals, such as hedgehogs, to the site and the surrounding landscape

ii These recommendations are made prior to receipt of final plans so may therefore be generic and may be adjusted to more appropriate methods at a later stage.

4 SUMMARY

i This PEAR is based on a desk study and ecological surveys undertaken 26/01/2025, to assess the ecological constraints to the Scheme and to provide advice in respect of Scheme design, site layout and / or site investigation.

ii The following further surveys, summarised in Table 6, are recommended to support planning design.

Table 6: Summary of Recommendations

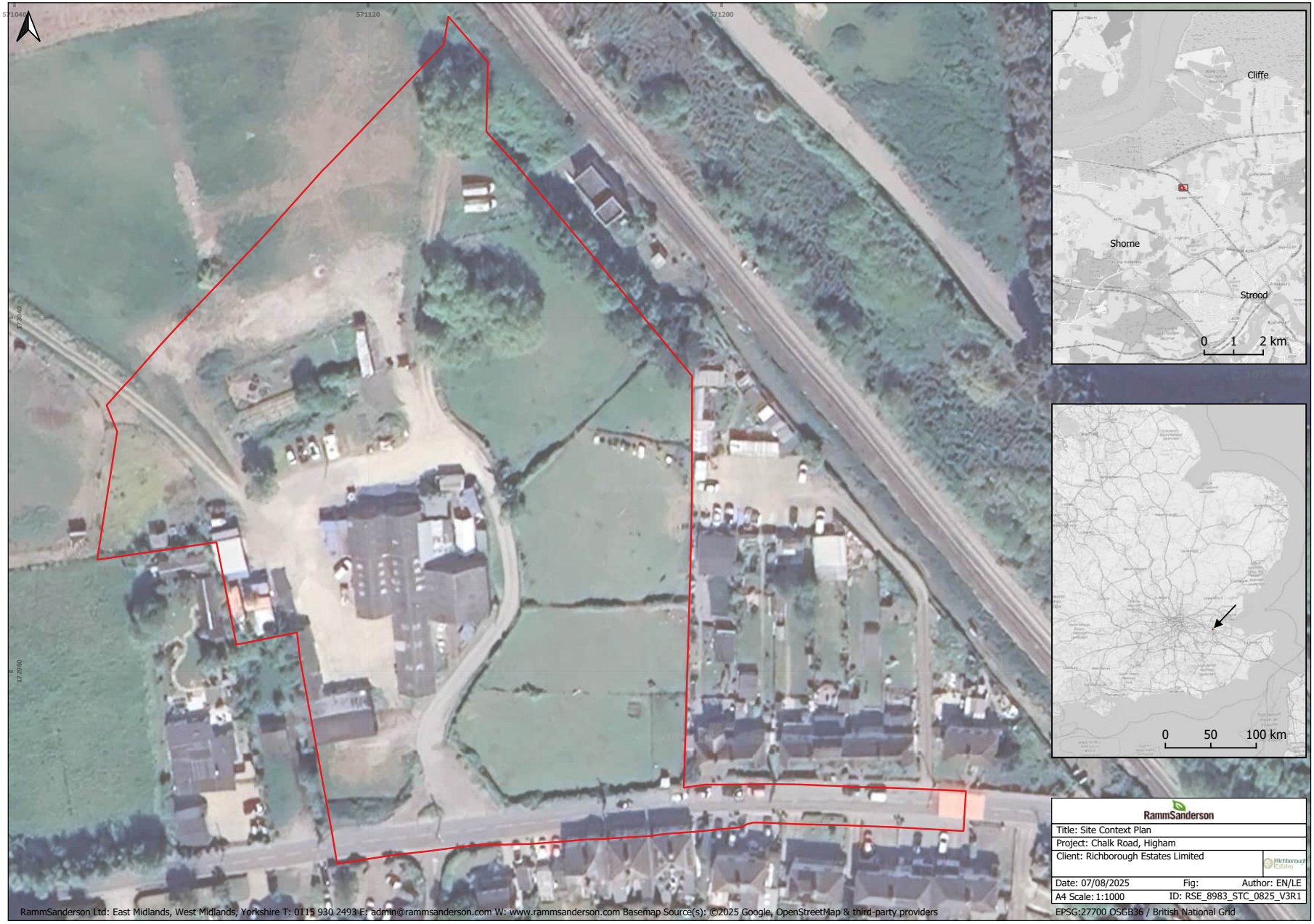
Ecological Feature	Recommendation	Timing
Designated sites	A HRA is required in the absence of mitigation due to the anticipated negative impacts on the Ramsar/SPA and SSSI adjacent to the Site.	Any time of year, pre-development.
Habitats	Deliver 10% Biodiversity Net Gain through a Biodiversity Impact Assessment. Tree root protection areas.	Can be taken at any time of year. During works.
Badger	Precautionary Methods of Works detailed within a CEMP/PMW document.	CEMP/PMW to be outlined prior to commencement of works.
Bats	Further Survey – A PBRA is recommended on the Sites buildings and trees if these are to be impacted by the Scheme. Bat Activity Transect Surveys and Static Monitoring is recommended throughout the Site.	PBRA's may be undertaken at any time of year. Activity surveys may be undertaken between April and September, with a minimum of three surveys required spread between March/April, June/July/August and September/October. Static monitoring should coincide with these seasons, being deployed for 5 consecutive nights.
Hazel Dormouse	Precautionary Methods of Works detailed within a CEMP/PMW document. Works should avoid the hibernation season (November-March).	CEMP/PMW to be outlined prior to commencement of works.
Otter and Water Vole	Precautionary Methods of Works detailed within a CEMP/PMW document for otter. No further recommendations for water vole.	CEMP/PMW to be outlined prior to commencement of works.
Great Crested Newt	Further survey – HSI of waterbodies with subsequent eDNA surveys where waterbodies are assessed to be suitable.	HSI's can be undertaken at any time of the year by a suitably qualified ecologist, with eDNA surveys being undertaken between April and June.
Reptiles	Precautionary Method of Works.	Directional clearance to be undertaken within suitable temperatures outside of the hibernation period (November to February inclusive) using hand tools only to allow reptiles to disperse of their own accord.

Ecological Feature	Recommendation	Timing
Birds	Breeding bird surveys	Four surveys between April to mid-July Inclusive.
	Further wintering bird surveys	Two additional surveys to complete a full season of data collection, in November and December.
	Passage bird surveys	Two surveys, in October and March.
	Clear vegetation outside of core bird nesting season, where possible, if not nesting checks are required by an ecologist.	Core bird nesting season (1st March to 31st August). During works.
Terrestrial Invertebrates	No further recommendations	N/A
Other Notable Species	Precautionary Methods of Works detailed within a CEMP/PMW document.	CEMP/PMW to be outlined prior to commencement of works.

4.2 Re-Survey of Site

i Due to the mobility of animals and the potential for colonisation of the Site, it is recommended that an updated ecological survey be undertaken prior to the redevelopment of this Site should this not occur within 18 months of the date of the field survey.

5 FIGURES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372040
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Cliffe
Shorne
Strood
0 1 2 km
0 50 100 km
RammSanderson
Title: Site Context Plan
Project: Chalk Road, Higham
Client: Richborough Estates Limited
Date: 07/08/2025
Fig:
Author: EN/LE
A4 Scale: 1:1000
ID: RSE_8983_STC_0825_V3R1
RammSanderson Ltd: East Midlands, West Midlands, Yorkshire T: 0115 930 2493 E: admin@rammsanderson.com W: www.rammsanderson.com Basemap Source(s): ©2025 Google, OpenStreetMap & third-party providers
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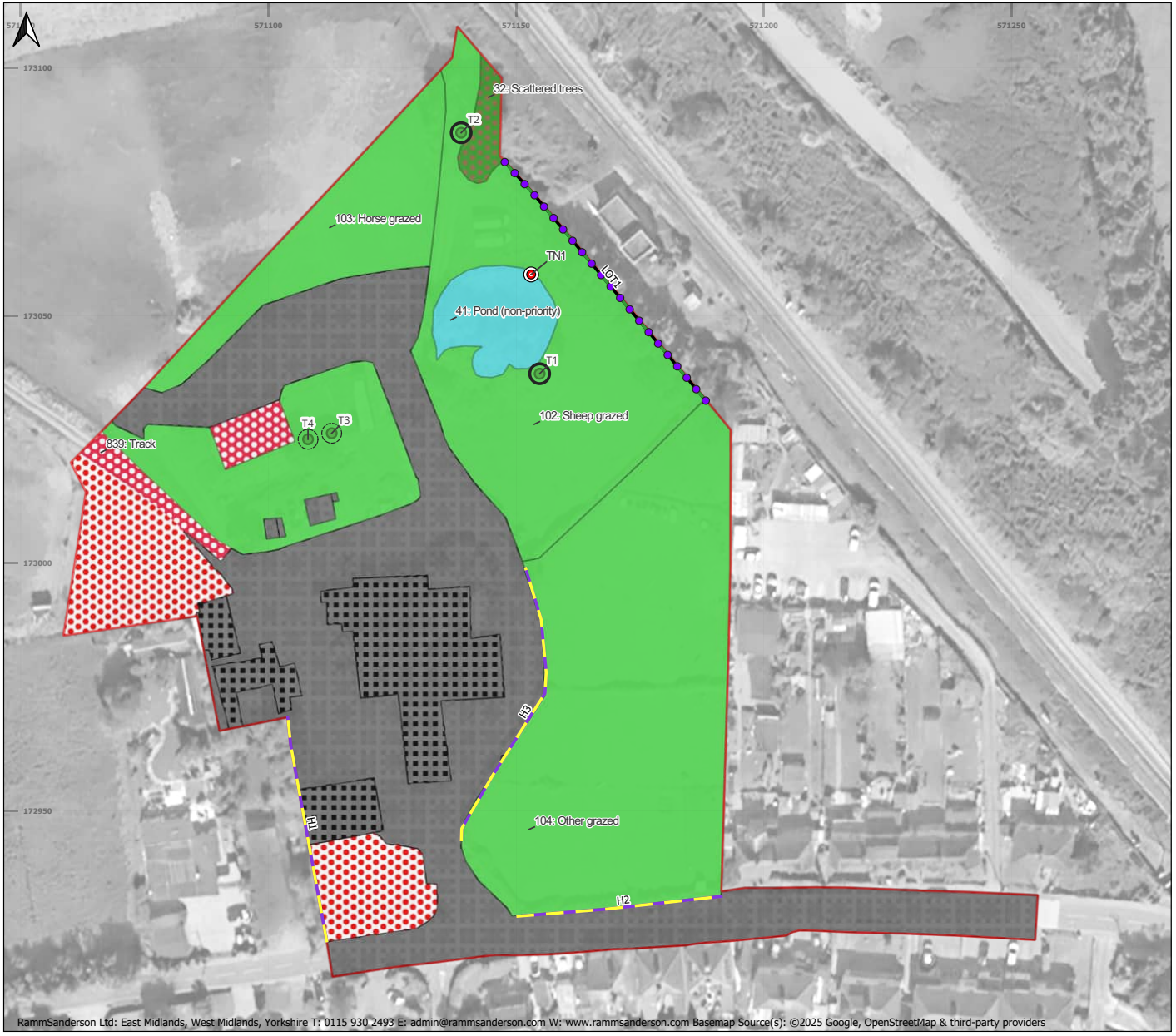


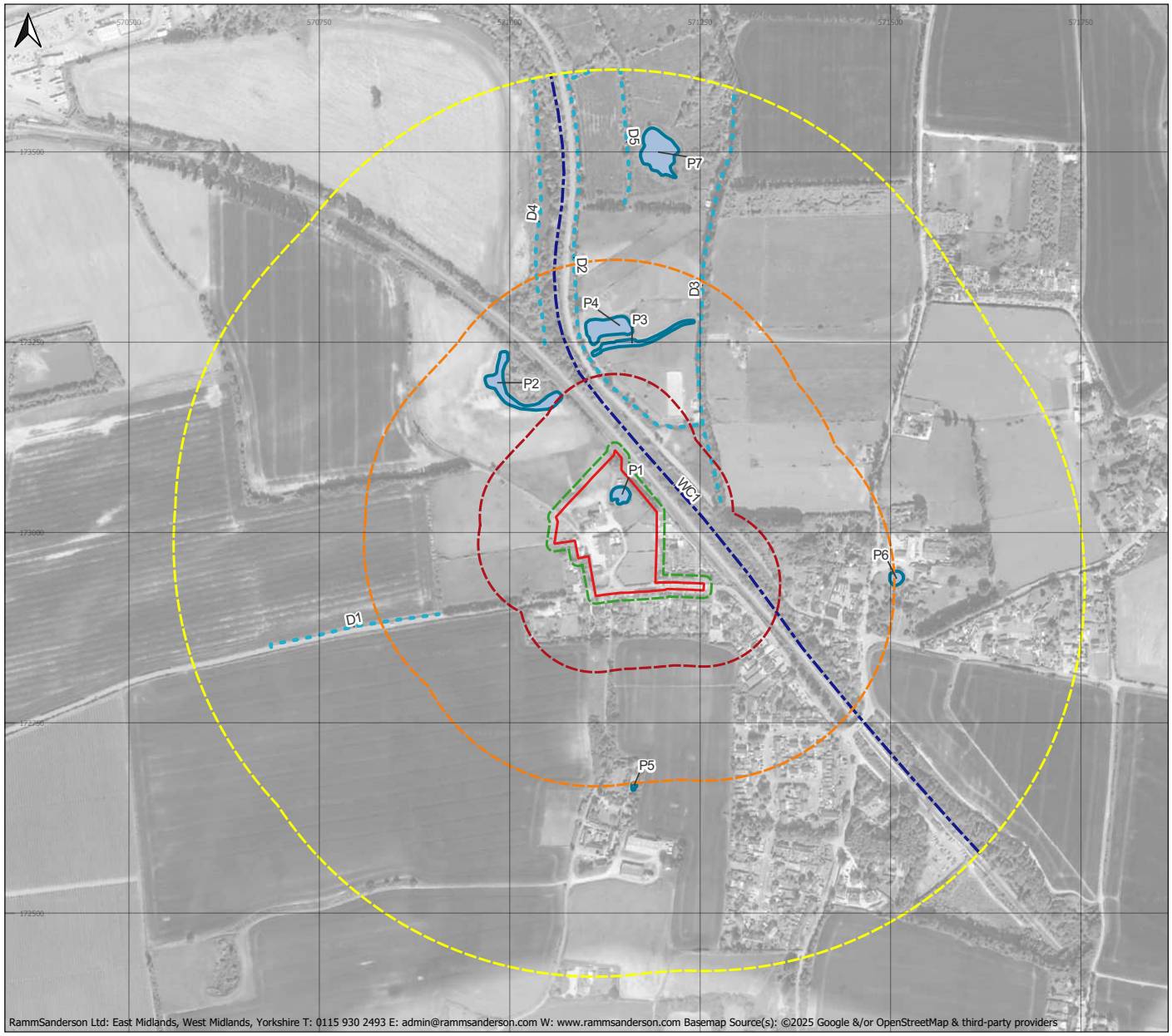
Key

- Site Boundary
- g4: Modified grassland
- r1g: Other standing water
- u1b: Developed land; sealed surface
- u1b5: Buildings
- u1c: Artificial unvegetated, unsealed suface
- u1d: Suburban mosaic of developed and natural surface
- w1g: Other broadleaved woodland
- h2a: Native hedgerow
- g4 200: Tree (Large rural tree)
- g4 200: Tree (Small rural tree)
- Target Notes
  TN1 Log pile - Some GCN hibernation potential

RammSanderson

Title: UKHabs Habitat Plan	
Project: Chalk Road, Higham	
Client: Richborough Estates Limited	
Date: 07/08/2025	Fig: Author: EN
Habitat MMU: 25m²	Linear MMU: 5m (length)
A4 Scale: 1:1000	ID: RSE_8983_UKH_0825_V2R1

EPSG:27700 OSGB36 / British National Grid



Key

- Site Boundary
- 10m Buffer
- 100m Buffer
- 250m Buffer
- 500m Buffer
- Pond Location
- Canal
- Ditch/Drain

Pond	Area (m2)
P1	421.28
P2	1601.92
P3	805.28
P4	1371.59
P5	48.34
P6	260.16
P7	2082.38

RammSanderson

Title: Waterbody Plan

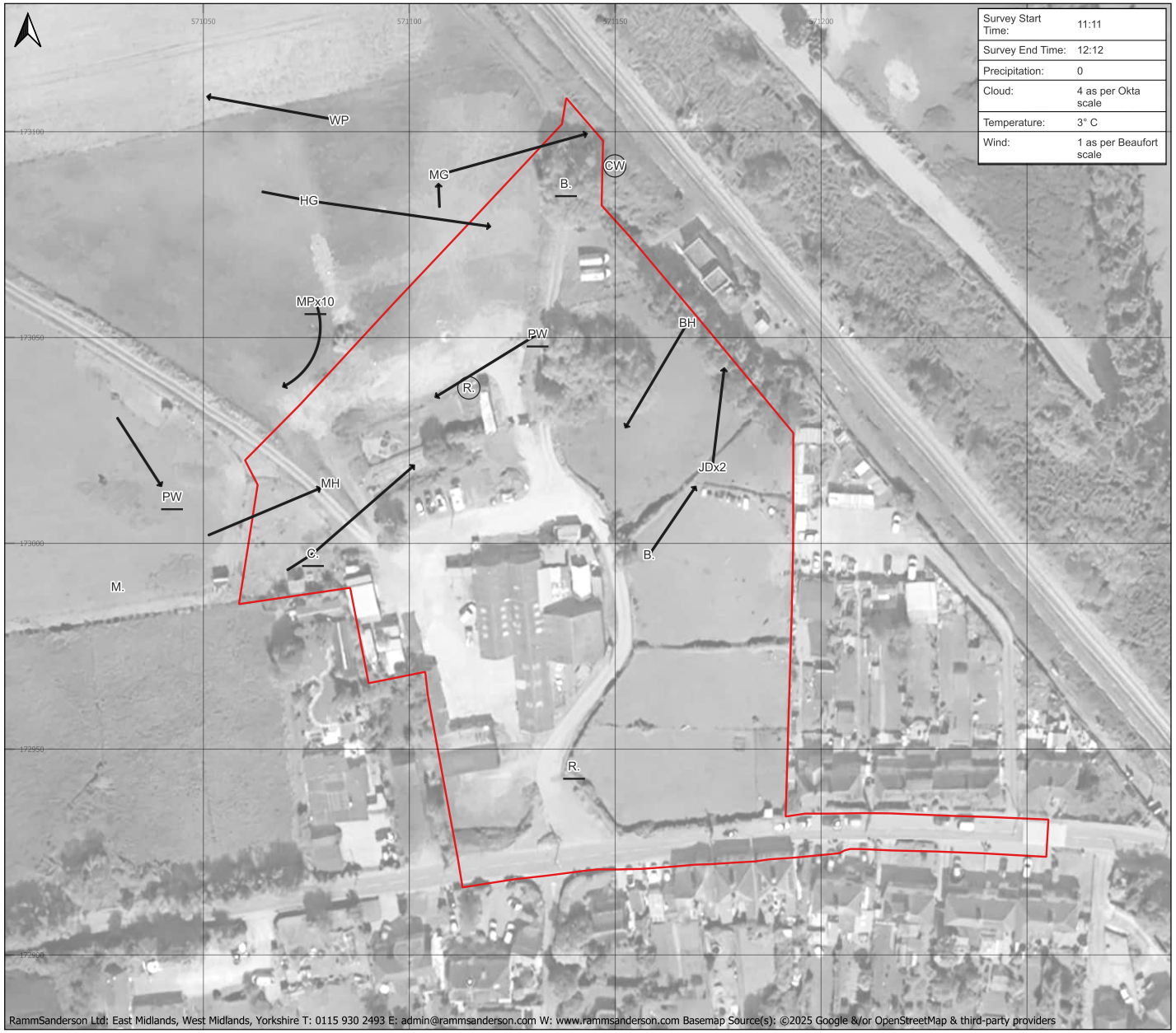
Project: Chalk Road, Higham

Client: Richborough Estates Limited

Date: 07/08/2025 Fig: Author: EN/LE

A4 Scale: 1:6500 ID: RSE_8983_WBY_0825_V3R1

EPSG:27700 OSGB36 / British National Grid



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Survey End Time:	12:12
Precipitation:	0
Cloud:	4 as per Okta scale
Temperature:	3° C
Wind:	1 as per Beaufort scale

Key

- Site Boundary
- Flying in and landing
- Flying away (from being perched)
- Flying over
- Two separate birds singing
- Same bird registration
- Call
- Alarm Call
- Song
- Foraging/Circling Behaviour

sp_abbrev	species
B.	Common Blackbird
BH	Black-headed Gull
C.	Carrion Crow
CW	Cetti's Warbler
HG	Herring Gull
JD	Eurasian Jackdaw
M.	Mistle Thrush
MG	Magpie
MH	Common Moorhen
MP	Meadow Pipit
PW	Pied Wagtail
R.	European Robin
WP	Common Woodpigeon
WR	Wren

RammSanderson

Title: Wintering Bird Survey Plan - Survey 1 - 21/01/2025

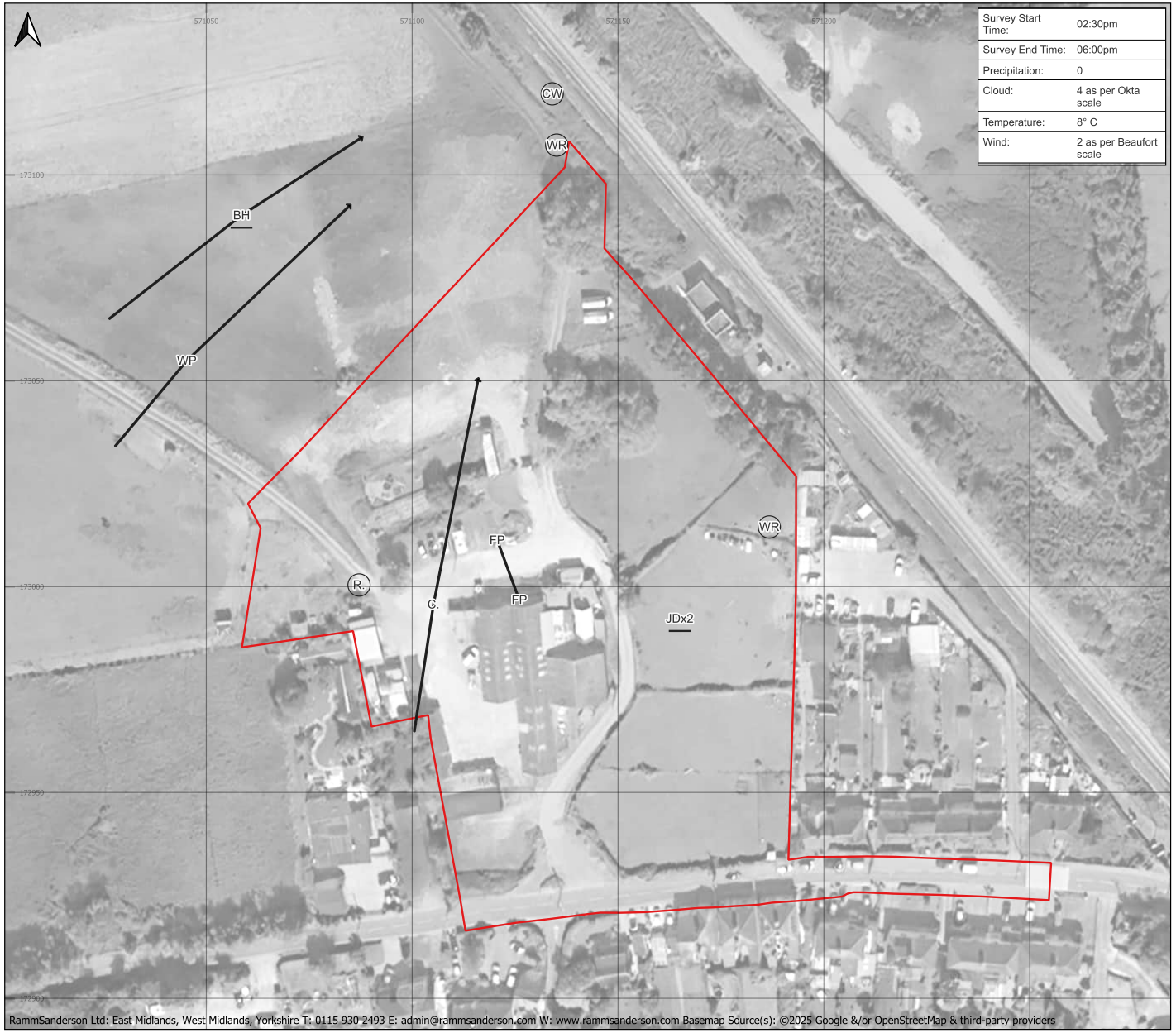
Project: Chalk Road, Higham

Client: Richborough Estates Limited

Date: 07/08/2025 Fig: Author: EN

A4 Scale:1:1200 ID: RSE_8983_WBS1_0825_V2R1

EPSG:27700 OSGB36 / British National Grid



Survey Start Time:	02:30pm
Survey End Time:	06:00pm
Precipitation:	0
Cloud:	4 as per Okta scale
Temperature:	8° C
Wind:	2 as per Beaufort scale

Key

- Site Boundary
- Flying in and landing
- Flying away (from being perched)
- Flying over
- Two separate birds singing
- Same bird registration
- Call
- Alarm Call
- Song
- Foraging/Circling Behaviour

sp_abbrev	species
BH	Black-headed Gull
C.	Carrion Crow
CW	Cetti's Warbler
FP	Feral Pigeon
JD	Eurasian Jackdaw
R.	European Robin
WP	Common Woodpigeon
WR	Wren

RammSanderson

Title: Wintering Bird Survey Plan - Survey 2 - 26/02/2025

Project: Chalk Road, Higham

Client: Richborough Estates Limited

Date: 07/08/2025 Fig: Author: EN

A4 Scale:1:1200 ID: RSE_8983_WBS2_0825_V2R1

EPSG:27700 OSGB36 / British National Grid

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APPENDIX 1: RELEVANT LEGISLATION AND PLANNING POLICY

i The UK is no longer a member of the European Union (EU). EU legislation as it applied to the UK on 31 December 2020 is now a part of UK domestic legislation. EU legislation which applied directly or indirectly to the UK before 11.00 p.m. on 31 December 2020 has been retained in UK law as a form of domestic legislation known as 'retained EU legislation'.

ii The Secretary of State for the Environment, Food and Rural Affairs and Welsh Ministers have made changes to parts of the Conservation of Habitats and Species Regulations 2017 (referred to as the 2017 Regulations) so that they operate effectively. Most of these changes involve transferring functions from the European Commission to the appropriate authorities in England. All other processes or terms in the 2017 Regulations remain unchanged and existing guidance is still relevant and are now referred to as The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 (the 2019 Regulations).

Designated Sites

Special Protection Areas (SPA) / Special Areas of Conservation (SAC)

i These sites in the UK no longer form part of the EU's Natura 2000 ecological network. The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations, 2019, have created a national site network on land and at sea, including both the inshore and offshore marine areas in the UK.

ii The national site network includes:

- existing SACs and SPAs
- new SACs and SPAs designated under these Regulations

iii Any references to Natura 2000 in the 2017 Regulations and in guidance now refers to the new national site network.

iv Formal Appropriate Assessment is required to be undertaken by the competent authority before undertaking, or giving consent, permission or other authorisation for any work which are likely to have a significant effect on such a site.

Wetland of International Importance (Ramsar site)

i Designated under the Convention on Wetlands of International Importance especially by Waterfowl Habitat 1971 (the Ramsar Convention), in the UK, these sites are treated as having the same level of protection as SPA's and SAC's.

Sites of Special Scientific Interest

i Under the Wildlife and Countryside Act 1981 (as amended), it is an offence to carry out or permit to be carried out any operations likely to damage the Site of Special Scientific Interest (SSSI). These operations are listed in the SSSI notification.

ii Owners, occupiers, public bodies and statutory undertakers must give notice and obtain the appropriate consent under S.28 of the Wildlife and Countryside Act 1981 (as amended), before undertaking operations likely to damage a SSSI.

Local Nature Reserve

i A Local Nature Reserve (LNR) is a statutory designation made under the National Parks and Access to the Countryside Act, 1949, by principal local authorities (district, borough or unitary councils).

ii The local authority must control the LNR land - either through ownership, a lease or an agreement with the owner.

iii LNRs are given protection through policies in local development plans.

Locally Designated Sites

i Local Wildlife Sites are sites with 'substantive nature conservation value'. They are defined areas, identified and selected for their nature conservation value, based on important, distinctive and threatened habitats and species with a region.

ii They are usually selected by the relevant Wildlife Trust, along with representatives of the local authority and other local wildlife conservation groups.

iii The LWS selection panel, select all sites that meet the assigned criteria, unlike SSSIs, which for some habitats are a representative sample of sites that meet the national standard. Consequently, many sites of SSSI quality are not designated and instead are selected as LWSs. Consequently, LWSs can be amongst the best sites for biodiversity.

Protected Species

Bats / Hazel Dormouse / Otter / Great Crested Newt

i These species, known as European Protected Species, are protected under Regulation 43 of the 2017 Regulations as amended by the 2019 Regulations. This makes it an offence to deliberately capture, injure or kill an animal; deliberately disturb an animal; or damage or destroy a breeding site or resting place used by an animal.

ii Deliberate capture or killing is taken to include "accepting the possibility" of such capture or killing. Deliberate disturbance of animals includes in particular any disturbance which is likely a) to impair their ability (i) to survive, to breed or reproduce, or to rear or nurture their young, or (ii) in the case of animals of hibernating or migratory species, to hibernate or migrate; or b) to affect significantly the local distribution or abundance of the species to which they belong.

iii Where development works are at risk of causing one or more of the offences listed above, a mitigation licence from Natural England can be obtained to facilitate the works that would otherwise be illegal.

iv These species are also protected under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended). This makes it an offence to intentionally or recklessly obstruct access to any structure or place used for shelter or protection or disturb an animal in such a place.

v Lower levels of disturbance not covered by the Conservation of Habitats and Species Regulations 2017 remain an offence under the Wildlife and Countryside Act 1981 although a defence is available where such actions are the incidental result of a lawful activity that could not reasonably be avoided.

Nesting Birds

i All wild birds are protected under the Wildlife and Countryside Act 1981 (as amended), with some species afforded greater protection under Schedule 1 of the Wildlife and Countryside Act 1981 (as amended). In addition to the protection from killing or taking that all birds receive, Schedule 1 birds and their young must not be disturbed at the nest.

ii There are no licensing purposes that explicitly cover development activities affecting wild birds.

Common Species of Reptile (common lizard, slow worm, grass snake and adder)

i Common species of reptile are protected against intentional killing and injury under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended). There is no requirement for a licence where development works affect common species of reptiles. Instead, Natural England (English Nature, 2004) advise that where reptiles are present, they should be protected from any harm that might arise during the development works through appropriate mitigation.

Badger

ii Badgers and their setts are protected under the Protection of Badgers Act 1992 (as amended). This makes it an offence to wilfully kill, injure or take a badger; or intentionally or recklessly damage, destroy or obstruct access to a badger sett or disturb a badger in its sett.

iii It is not illegal to carry out disturbance activities near setts that are not occupied, i.e. those that do not show signs of current use.

iv Where required, licences for development activities involving disturbance or sett interference or closure are issued by Natural England. Licences for activities involving watercourse maintenance, drainage works or flood defences are issued under a separate process.

v When assessing the requirement for a licence in respect of development, Natural England (Natural England, 2009) state that badgers are relatively tolerant of moderate levels of noise and activity around their setts, and that a low or moderate level of apparent disturbing activity at or near to badger setts does not necessarily disturb the badgers occupying those setts.

vi Licences are normally not granted from December to June inclusive (the badger breeding season) because dependent cubs may be present within setts.

Species and Habitats of Principal Importance for the Conservation of Biodiversity

vii Section 40 of the Natural Environment & Rural Communities Act (NERC) 2006 sets out the duty for public authorities to conserve biodiversity in England.

viii Habitats and species of principal importance for the conservation of biodiversity are identified by the Secretary of State for England, in consultation with Natural England, are referred to in Section 41 of the NERC Act for England. The list, known as the 'England Biodiversity List', of habitats and species can be found on the Natural England web site.

ix The 'England Biodiversity List' is used as a guide for decision makers such as public bodies, including local and regional authorities, in implementing their duty under Section 40 of the NERC Act 2006 to have regard to the conservation of biodiversity in England when carrying out their normal functions. The habitats and species on the List, are material considerations of planning, where present on an application site.

Hedgerows

i Under The Hedgerow Regulations, 1997, it is against the law to remove or destroy certain hedgerows without permission from the local planning authority. In general, permission will be required before removing hedges that are at least 20 metres in length, over 30 years old and contain certain species of plant. The local planning authority will assess the importance of the hedgerow using criteria set out in the regulations.

Planning Policy

National Planning Policy Framework, 2024

ii The National Planning Policy Framework (NPPF) (Department of Communities & Local Goverment, 2024) sets out the Governments planning policies for England and how these are expected to be applied by Local Authorities within their Local Development Frameworks (LDF).

iii Regarding the NPPF, the most pertinent paragraphs are:

> *8.c) "to protect and enhance our natural, built and historic environment, including making effective use of land, improving biodiversity, using natural resources prudently, minimising waste and pollution, and mitigating and adapting to climate change, including moving to a low carbon economy"*

187.d) "minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures"

192.b) "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."

193.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."

193.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 reasons63 and a suitable compensation strategy exists."

BNG Policy

i The National Planning Policy Framework states that "planning decisions should minimise impacts on and provide net gain for biodiversity". Furthermore, from February 2024, 10% BNG became mandatory under Schedule 7A of the Town and Country Planning Act 1990 (as inserted by Schedule 14 of the Environment Act 2021). This means all relevant developments must achieve at least 10% BNG relative to the baseline biodiversity value of all land within the planning application boundary.

6.2 Local Planning Policy

i. The Site is located within the authority of Gravesham Borough Council. Policies within the Gravesham Borough Council Local Plan (adopted September 2014) that are relevant to biodiversity are:

CS12: Green infrastructure sates that:

- Sites designated for their biodiversity value will be protected, with the highest level of protection given to internationally designated Special Protection Areas, Special Areas of Conservation and Ramsar sites, followed by nationally designated Sites of Special Scientific Interest, followed by Local Wildlife Sites and then by other areas of more local importance for biodiversity;
- There will be no net loss of biodiversity in the Borough, and opportunities to enhance, restore, re-create and maintain habitats will be sought, in particular within the Biodiversity Opportunity Areas shown on the Strategic Green Infrastructure Network map and within new development; and,
- Where a negative impact on protected or priority habitats/species cannot be avoided on development sites and where the importance of the development is considered to outweigh the biodiversity impact, compensatory provision will be required either elsewhere on the site or off-site, including measures for ongoing maintenance.

6.3 Local Biodiversity Action Plans

ii. The Kent Biodiversity Strategy aims to deliver, over a 25- year period, the maintenance, restoration and creation of habitats that are thriving with wildlife and plants and ensure that the county's terrestrial, freshwater, intertidal and marine environments regain and retain good health. The Strategy has identified seventeen priority habitats and thirteen priority species that Kent can play a significant part in the restoration of. It has also identified a handful of species that can act as indicators of the health of our ecosystems.

Habitat action plans

- Lowland beech and yew woodland

- Lowland meadow
- Ponds
- Rivers
- Intertidal chalk and subtidal chalk
- Chalk grassland
- Vegetated shingle
- Lowland dry acid grassland/lowland heathland
- Intertidal mudflats and coastal saltmarsh
- Lowland mixed broadleaved woodland
- Brownfield
- Traditional orchard
- Subtidal mud
- Hedgerows
- Wet woodland
- Coastal and floodplain grazing marsh
- Chalk streams

Species action plans

- Water vole
- Serotine bat
- Hedgehog
- Harbour and grey seals
- Turtle dove
- Swift
- Nightingale
- Sandwich tern
- Lapwing
- Shrill carder bee
- Adonis blue
- Common blue
- Heath fritillary
- Adder
- European eel
- Dwarf or Kentish milkwort
- True fox-sedge
- Lady orchard

APPENDIX 2: METHODOLOGY

Desk Study

Background Records Search

i The preliminary ecological assessment includes a desk study to obtain background records relevant to a Site and the Scheme. The data obtained provides contextual information for the scope of field surveys, to aid the evaluation of field survey results, and to provide supplementary information where complete field survey coverage is not possible.

ii The Study Area is dependent upon the nature, timing and scale of the Scheme, as well as the location of the Site and the surrounding landscape. These variables all contribute to what is referred to as the Zone of Influence (ZoI) of the Scheme, which is the area over which ecological features may be affected by biophysical changes because of the works and associated activities.

iii On 31/01/2025 the Kent and Medway Biological Records Centre was contacted to obtain the following ecological data:

- Records of non-statutory designated sites (Local Wildlife Site (LWS) and Roadside Nature Reserve (RNR)) within 2km of the Site boundary;
- Records of legally protected and notable species (fauna and flora) within 2km of the Site boundary, including Species of Principal Importance for the Conservation of Biodiversity listed under Section 41 of the Natural Environment & Rural Communities Act 2006 in the England Biodiversity List[15].

iv The Multi-Agency Geographic Information for the Countryside (MAGIC) (www.magic.gov.uk) website was reviewed for the following information:

- Designated sites of nature conservation importance (statutory sites only) within 2km of the Site: Special Protection Areas (SPAs), Wetlands of International Importance (Ramsar sites) and Special Areas of Conservation (SACs); and,
- Notable habitats within 2km of the Site, these being areas of ancient woodland and 'Habitats of Principal Importance for the Conservation of Biodiversity' included in the England Biodiversity List.

Great Crested Newt Pond Search

i Ordnance Survey maps and the Where's the Path website (https://wtp2.appspot.com/wheresthepath.htm) have been used to identify the presence of water bodies within 500 m of the Site boundary, in order to help establish if the land within and immediately surrounding the Site could be used by great crested newts. This species can use suitable terrestrial habitat up to 500 m from a breeding pond (English Nature, 2001), though there is a notable decrease in great crested newt abundance beyond 250 m from a breeding pond (Natural England, 2004).

Field Survey

i The preliminary ecological assessment includes a walkover survey of the Survey Area (all land within the Site), broadly following the methodology set out in the UKHab survey guidance (UKHab Ltd, 2023). This survey

[15] Section 40 of the Natural Environment & Rural Communities Act 2006 requires that very public authority must, in exercising its functions, have regard, so far as is consistent with the proper exercise of those functions, to the purpose of conserving biodiversity. The Secretary of State has drawn up, in accordance with Section 41 of the Act and in consultation with Natural England, a list of habitats and species of principal importance for the conservation of biodiversity in England that is known as the England Biodiversity List

method records information on habitat types and is 'extended' to record any evidence of and potential for protected or notable species to be present. Plant names recorded during the survey follow (Stace, 2019).

ii During the walkover survey, the following protected or notable species are considered:

- **Badger**: the survey involves searching for signs of badger activity including setts, tracks, snuffle holes and latrines, following the methodology detailed in (Scottish Natural Heritage, 2018) and (Harris, 1989).
- **Bats**: the survey involves searching for potential roosting sites for bats within trees and structures (such as buildings, bridges or underground features such as mines) and categorising the potential of those trees or structures to support roosting bats (buildings: negligible to high, or confirmed roost; trees: confirmed roost, PRF-M or PRF-I), in accordance with Bat Conservation Trust (BCT) (Collins, J. (Eds.), 2023) guidance.
- **Hazel dormouse**: the survey involves assessing the potential of habitats within the Survey Area to support hazel dormouse, following English Nature guidance (English Nature, 2006);
- **Otter**: the survey involves assessing the potential of watercourses and water bodies, and adjacent terrestrial habitat within the Survey Area to support otter, following RSPB (Ward, 1994) and (Chanin, 2003) guidance;
- **Water vole**: the survey involves assessing the potential of watercourses and water bodies within the Survey Area to support water vole, following The Mammal Society (Dean, 2016) guidance;
- **Birds**: the survey involves assessing the potential of habitats within the Survey Area to support breeding, wintering or migrating birds, either individually notable species or assemblages of both common and rarer species;
- **Great crested newt**: the survey involves assessing the potential of habitats within the Survey Area to support great crested newt, following English Nature (English Nature, 2001) and Froglife (Froglife, 2001) guidance;
- **Reptiles**: the survey involves assessing the potential of habitats within the Survey Area to support reptiles (typically adder, grass snake, common lizard and slow worm only, though in some locations and habitat types (most notably heathland) may also include smooth snake and sand lizard), following Froglife (Froglife, 1999) and JNCC ((Joint Nature Conservation Committee, 2003) guidance;
- **Notable species of invertebrate**: the survey involves assessing the potential of habitats within the Survey Area to support notable species of invertebrates, both terrestrial and aquatic (including white-clawed crayfish);
- **Protected or Notable species of plants**: the survey involves recording protected or notable plant species;
- **Other notable species**: the survey involves assessing the potential of habitat within the Survey Area to support other Notable Species, such as hedgehog, brown hare, polecat or common toad;
- **Non-native invasive plant species**: the survey involves recording evidence of the presence of invasive plants listed on (Wildlife and Countryside Act , 1981 (as amended)) and subject to strict legal control.

Great Crested Newt Habitat Suitability Assessment

i Waterbodies within 500m (where accessible) were evaluated against the great crested newt HSI criteria (R. S. Oldham, 2000). The HSI provides a measure of the suitability of a water body to support great crested newt by assigning an overall score of between 0 and 1, which is based on ten key criteria as follows:

- SI1 Geographic location
- SI2 Pond area
- SI3 Pond drying
- SI4 Water quality
- SI5 Shade
- SI6 Presence of water-fowl
- SI7 Presence of fish
- SI8 Number of local ponds
- SI9 Terrestrial habitat quality
- SI10 Plant coverage

ii In general, ponds with a higher score are more likely to support great crested newt than those with lower score. Suitability for great crested newt is determined in accordance with the scale outlined in the Table below.

Table 7: HSI Scoring Criteria

HSI Score	Pond Suitability
<0.5	Poor
0.5 – 0.59	Below average
0.6 – 0.69	Average
0.7 – 0.79	Good
>0.8	Excellent

Limitations

i The aim of a desk study is to help characterise the baseline context of a proposed development and provide valuable background information that would not be captured by a single site survey alone. Information obtained during the course of a desk study is dependent upon people and organisations having made and submitted records for the area of interest. As such, a lack of records for a particular habitats or species does not necessarily mean that the habitats or species do not occur in the study area. Likewise, the presence of records for particular habitats and species does not automatically mean that these still occur within the area of interest or are relevant in the context of the proposed development.

ii An ecological survey represents a 'snapshot' in time of the ecological condition of a Site. The ecological character of a Site can change substantially throughout both the course of a year, and from year to year impacting on the extent and quality of habitats potential to support protected species.