WOLD ECOLOGY LTD

2 Redwood Gardens, Driffield,
East Riding of Yorkshire. YO25 6XA
01377 200242

Chris Toohie M Sc. MCIEEM
chris.toohie@woldecology.co.uk
www.woldecology.co.uk

Rolston Camp, Rolston

ECOLOGICAL APPRAISAL

March 2023

		Staff Member	Position
Habitat Survey and Ecological Appraisal	:	Chris Toohie MSc MCIEEM Peter Cook	Ecologist
Lead Bat Surveyor	:	Matt Arnold	Ecologist
Report prepared by	:	Chris Toohie MSc MCIEEM Peter Cook	Ecologist

DOCUMENT CHECKING

Issue No.	Date.	Status.	Verified by.
1	23/03/2023	Draft for internal review.	Daniel Lombard B Sc MCIEEM
2	02/04/2023	Submission of non-draft version for client.	Chris Toohie MSc MCIEEM

This report contains sensitive information concerning protected species and caution should be exercised when copying and distributing to third parties.

TABLE OF CONTENTS

1.0 EXECUTIVE SUMMARY

1.1 In June 2021 and March 2023, Wold Ecology was commissioned by Grandeur Lifestyle Group Team to undertake an extended phase 1 habitat survey and ecological appraisal at the former Rolston Camp, Rolston, (national grid reference TA 22003 45047) in East Yorkshire.

1.2 In order to accomplish the brief, a desk top study, external consultation, a habitat classification field survey, bat activity survey and ecological appraisal was undertaken by Wold Ecology staff.

1.3 The habitats within the Application Site comprise semi improved grassland with buildings and bare ground located in a rural location.

1.4 The proposed development involves site clearance and the erection of a holiday park including services and infrastructure.

1.5 The field survey and ecological appraisal targeted the following species and habitats relevant to the Application Site and the development proposal. The field surveys and ecological appraisal results are summarised below:

		Application Site Status
Mitigation and compensation	**Barn Owl**	Within the northern room of the toilet block and especially beneath beams, several fresh (less than 1 month) and old (greater than 1 month) Barn Owl pellets were observed during the March 2023 visit; a barn owl also flew from the toilet block's northern room. These results indicate the toilet block is used as an Active Roost Site (See target note 3). A ledge suitable for nesting was observed within the toilet block. It is possible that the toilet block is used a nest site. Further surveys during late spring and summer will be required to determine if the toilet block is used by nesting barn owls.
Proceed with caution, timing constraints	**Birds**	The site is suitable for nesting birds with various designations. Any trees, shrubs, vegetation and buildings to be removed should be cleared outside of the bird nesting season (i.e. clearance should be undertaken between mid-September and early February inclusive) or be carefully checked by an ecologist to confirm no active nests are present - prior to removal during the summer period. If nesting birds are found during the watching brief, works will need to stop until the young have fledged.
Reasonable Avoidance Measures	**Amphibians**	Whilst the likelihood of encountering great crested newts within the Application Site is negligible, it is recommended that an amphibian method statement is implemented.

No roosting bats, Method Statement approach (Section 7.0) – Toilet block	**Bats**	The field surveys during June 2021 and March 2023 did not identify any evidence of roosting bats. As no bats or signs of bats were recorded in the toilet block, a Natural England European Protected Species development license is not required. The method statement outlined in section 7.2 details the best working practice and precautions to be taken to avoid breaking the law and must be followed and provided to all contractors involved with the demolition of the building. The bat survey data is valid until May 2023.
No ecological constraints.	**Badger**	No further surveys recommended.
	Reptiles	
	Habitats	There are no Statutory or non-statutory sites located within or adjacent to the Application Site. No Biodiversity Action Plan habitats are located within or adjacent to the Application Site.
Impact Assessment **No further assessments**	**EcIA**	No further surveys beyond the desk study and field survey are necessary to allow an assessment of ecological effects and to design appropriate mitigation. There is sufficient information available about the design of the project to allow a full assessment of ecological effects, and no significant ecological effects are predicted.

1.6 This report is valid until **September 2024**. After this time, additional surveys need to be undertaken to confirm that the status of the site for protected species, site habitat composition and conclusions within this report have not changed.

1.7 Species list within this report may be forwarded to the local biodiversity records centre to be included on their national database. No personal information will be sent. Please contact Wold Ecology Ltd if you do not wish the species accounts and grid references to be shared.

2.0 INTRODUCTION

2.1 In June 2021, Wold Ecology was commissioned by Grandeur Lifestyle Group Team to undertake an extended phase 1 habitat survey and ecological appraisal at the former Rolston Camp, Rolston, (national grid reference TA 22003 45047) in East Yorkshire.

2.2 An ecological assessment is a requirement of the Local Planning Authority (LPA), as part of the planning application process. This is specified in the following legislation:

- National Planning Policy Framework (NPPF): Conserving and Enhancing the Natural Environment.

2.3 To protect and enhance biodiversity and geodiversity, plans should:

a) Identify, map and safeguard components of local wildlife-rich habitats and wider ecological networks, including the hierarchy of international, national and locally designated sites of importance for biodiversity; wildlife corridors and stepping stones that connect them; and areas identified by national and local partnerships for habitat management, enhancement, restoration or creation.

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.

2.4 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.

2.5 The following should be given the same protection as habitats sites:

a) potential Special Protection Areas and possible Special Areas of Conservation;

b) listed or proposed Ramsar sites; and

c) sites identified, or required, as compensatory measures for adverse effects on habitats sites, potential Special Protection Areas, possible Special Areas of Conservation, and listed or proposed Ramsar sites.

2.6 In addition, an ecological assessment is also required so that the local authority comply with the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 and to have regard to the purpose of conserving biodiversity in the exercise of their functions (Natural Environment and Rural Communities (NERC) Act 2006).

2.7 Planning authorities must determine whether the proposed development meets the requirements of Article 16 of the EC Habitats Directive before planning permission is granted (where there is a reasonable likelihood of European Protected Species being present). Therefore, during its consideration of a planning application, where the presence of a European protected species is a material consideration, the planning authority must satisfy itself that the proposed development meets three tests as set out in the Directive.

2.8 The LPA has to assess whether the development proposal would breach Article 12(1) of the Habitats Directive. If Article 12(1) would be breached, the LPA would have to consider whether Natural England was likely to grant a European protected species licence for the development; and in so doing the LPA would have to consider the three derogation tests:

a) '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'.

In addition, the LPA must be satisfied that:

(b) 'That there is no satisfactory alternative'

(c) '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'.

2.9 Relevant Case Law

- Woolley v Cheshire East Borough (2009).
- R. (Morge) v Hampshire County Council (2011).
- Prideaux v. Buckinghamshire County Council and Fcc Environmental UK Limited (2013).

2.9.1 The rulings summarise that if it is clear or perhaps very likely that the requirements of the Directive cannot be met because there is a satisfactory alternative or because there are no conceivable 'other imperative reasons of over-riding public interest" then the authority should act on that and refuse permission.'

2.9.2 The conclusion of the judgement is that LPAs must ensure that the option/alternative that best takes into account all the relevant considerations (not just EPS) should be the preferred option assuming that the other two tests specified in Article 16 (1) are also met.

2.9.3 The judgements also clarified that it was not sufficient for planning authorities to claim that they had discharged their duties by imposing a condition on a consent that requires the developer to obtain a licence from Natural England. Natural England considers it essential that appropriate survey information supports a planning application prior to the determination. Natural England does not regard

the conditioning of surveys to a planning consent as an appropriate use of conditions.

2.10 In order to fulfil the brief, the following has been undertaken:

- A desktop study and consultation.
- Field survey including accessible adjacent land up to 1km.
- The scope of the ecology survey is proportionate to the scale of the likely ecological effects and in this case, 2km from the Application Site.
- A phase 1 habitat survey.
- Ecological appraisal.

2.11 This report describes the findings of the field survey and desktop study whilst identifying the requirement for further ecological surveys to ensure that a comprehensive study is undertaken.

2.12 Where Ecological Impact Assessments (EcIA) is not part of an Environmental Impact Assessment, the views of the competent authority, standing advice and use of an Ecological Appraisal can assist with the scoping of a potential EcIA.

2.13 Consultation with the planning ecologists for Hull City Council, Ryedale District Council and East Riding of Yorkshire Council (July 2020) confirmed that EcIA's are only usually required when developments are likely to have significant ecological impact effects and that developments of this size are unlikely to require a specific EcIA. Wold Ecology Ltd have undertaken 300 Preliminary Ecological Appraisals between 2015 and 2020 for similar sites and schemes; this report format and content within has been accepted by Local Authority planning ecologists during this time period without the request for an additional EcIA. This report format, which is also commonly used by ecological consultants, is widely accepted in support of planning applications.

2.14 Where further ecological surveys have been recommended, the impact assessment will be included within those specific reports.

2.15 Whilst an EcIA on its own is not a statutory requirement, the following principles which underpin EcIA are considered within this assessment:

- Avoidance - Seek options that avoid harm to ecological features (for example, by locating on an alternative site).
- Mitigation - Adverse effects should be avoided or minimised through mitigation measures, either through the design of the project or subsequent measures that can be guaranteed – for example, through a condition or planning obligation.
- Compensation - Where there are significant residual adverse ecological effects despite the mitigation proposed, these should be offset by appropriate compensatory measures.
- Enhancements - Seek to provide net benefits for biodiversity over and above requirements for avoidance, mitigation or compensation.
- Determine the importance of ecological features affected, through survey and/or research;
- Assess impacts potentially affecting important features.

3.0 COMPANY PROFILE

3.1 Wold Ecology Ltd was established in 2006 and are experienced in providing a bespoke service for environmental management and ecological assessments. Wold Ecology Ltd employs several experienced and qualified staff/associates to undertake specialist ecological contracts.

3.2 Wold Ecology Ltd provides a wide range of specialised advice aimed at integrating business with nature. We specialise in ecological surveys, land management planning and site assessments which include:

- **European Protected Species Surveys**
  Bats, Birds, Great Crested Newts, Water Vole, Badger, Crayfish and Fungi surveys. Phase 1 and Phase 2 NVC Habitat Surveys and Ecological Impact Assessments (EcIA).
- **Ecological Impact Assessments and Preliminary Ecological Appraisals**
- **European Protected Species Licenses**
  Bat Licenses - Chris Toohie is one of 186 Natural England Registered Consultant (February 2021) who can hold a Natural England Bat Mitigation Class Licence.
  Great crested newt development license holders. Implementation of licenses (amphibian fencing, destructive searches, watching briefs and post development monitoring).
- **Arboricultural Surveys.**
  Arboricultural Impact Assessments, Root Protection Zones and CAD drawings.
- **Ecological Construction Method Statements and Ecological Enhancements Plans.**
- **Ecological Clerk of Works.**

3.3 Wold Ecology is committed to working towards the conservation of our natural heritage. Wold Ecology support The Wolds Barn Owl Study Group, Driffield Millennium Green, Filey Bird Observatory, Cornfield Project (Ryedale Folk Museum), Butterfly Conservation (Yorkshire Branch) and RSPB projects with volunteer staff time and financial resources. Wold Ecology has adopted an important site for nature conservation on Flamborough Head.

3.4 Wold Ecology is an Associate Member of the RSPB and Corporate Member of the Bat Conservation Trust.

3.5 Surveyor Profile – Chris Toohie M Sc., MCIEEM.

3.5.1 Job title: Director.

3.5.1.1 Expertise.

- Chris has conducted over 850 bat surveys since 2006 and held over 120 Natural England development licenses - Natural England Bat Low Impact Class License Registered Consultant.
- Phase 1 habitat field surveys and ecological appraisals including Building Research Establishment Environmental Assessment Method (BREEAM) assessments and Biodiversity Metric assessments.
- Great crested newt and reptile surveys.

- Management planning, woodland and orchard management and community environmental projects including funding applications.

3.5.2 Qualifications.

- M Sc. Arboriculture and Community Forest Management.
- HND Countryside Management.
- Great Crested Newt License – 2016-19412-CLS-CLS (held concurrently since 2009).
- Class 2 bat license – RC027 and 2019-44215-CLS-CLS (held concurrently since 2009).

3.5.3 Professional Membership.

- Member of the Chartered Institute of Ecology and Environmental Management (held concurrently since 2007).

3.6 Field Surveyor Profile – Peter John Cook.

3.6.1 Expertise.

- Phase I habitat field surveys
- Phase II National Vegetation Classification surveys
- Lichen and lower plant surveys
- Surveys for environmental grant schemes (associated with Farming and Wildlife Advisory Group)
- Community environmental projects.

3.6.2 Qualifications.

- BSc. Chemistry & Zoology (University of London) with Ancillary Botany at Part I.
- Museum of Natural History IdQ in Vascular Plants.

3.6.3 Membership.

- Retired Fellow of the Linnean Society (FLS)
- Member, Botanical Society of Britain & Ireland (BSBI),
- Joint Recorder (BSBI) for SE Yorkshire

4.0 HABITAT SURVEY METHODOLOGY

4.1 Field surveys were undertaken at the Application Site on 15th June and 29th June 2021. During the site visit, the whole of the Application Site and accessible neighbouring land was examined in detail.

Survey	Date	Wind Speed	Wind Direction	Temperature		Rainfall	Cloud Cover
				Start	Finish		
Field	15/06/2021	12mph	SE	16°C	14°C	None	40%
Bat survey	29/06/2021	4mph	SW	14°C	12°C	None	100%
Field	23/03/2023	15mph	SW	13°C	13°C	None	40%

4.2 The habitats within the Application Site were mapped (see Appendix 2) according to the techniques described in the publication *Handbook for Phase 1 Habitat Survey* (JNCC 2010). The CIEEM 'Guidelines for Preliminary Ecological Appraisal - Second Edition' (December 2017) state that this is an appropriate habitat classification system.

4.3 Target notes (if applicable) provide descriptions of the main habitats found on the site, including information about species composition, habitat structure, evidence of management, habitats too small to map and transitional or mosaic habitats.

4.4 Sufficient detail on the composition of the vegetation was obtained from the field survey, which enabled it to be successfully characterised and assessed.

4.5 During the site visit, notes were made of features of potential value to other groups such as birds, mammals, amphibians, reptiles, or invertebrates, paying particular attention to species protected by law:

Species/Group	Indicative habitat	Field signs (in addition to sightings)
Bats	Roosts - Trees, buildings, bridges, caves etc. Foraging areas - e.g. Parkland, waterbodies, wetlands, woodland, hedgerows Commuting routes - Linear features (e.g. hedgerows, water courses, tree lines).	Potential roost sites: Droppings, urine splashes, staining and feeding remains.
Badger	Habitat mosaic in rural and many urban habitats	Excavations and tracks, sett entrances, latrines, hairs, well-worn paths, prints, scratch marks on trees
Otter	Rivers, streams, canals, ponds, lakes, ditches, drains and coastal areas.	Holts (or dens), prints, spraints, slide marks into watercourses and feeding signs.
Water Vole	Rivers, streams, canals, ponds, lakes, ditches, drains and marshes.	Burrow entrances, prints, distinctive latrine areas and feeding signs.
Birds	Habitat mosaic	Nests, droppings below nest sites (especially in buildings of trees); tree holes
Reptiles	Habitat mosaic	Sloughed skins
Great Crested Newt	Ponds within 250m of suitable habitat within the site boundary. Habitat Suitability Index (HSI assessment)	Egg wraps and animals (depending on time of year)

4.6 The field survey and ecology report reflect relevant guidance from the following CIEEM documents:

- Guidelines for Preliminary Ecological Appraisal - Second Edition, December 2017.
- Guidelines for Ecological Impact Assessment in The UK And Ireland - Terrestrial, Freshwater, Coastal and Marine (September 2018).

4.7 Bat survey methodology

4.7.1 Daytime and Visual Inspection

4.7.1.1 The daytime assessment identified whether the area had any signs of occupancy and/or bat usage. This took the form of a methodical search, both internally and externally, for actual roosting bats and their signs. Specifically, the visual survey involved:

- Assessment for droppings on walls, windowsills and in roof spaces
- Scratch marks and staining on beams, other internal structures and potential entrance and exit holes
- Wing fragments of butterfly and moth species underneath beams and other internal structures
- The presence of dense spider webs at a potential roost can often indicate absence of bats
- Assessment of crevices and cracks in the buildings to assess their importance for roosting bats
- The duration of the daytime, visual inspection was 25 minutes

4.7.1.2 Summary of daytime inspection and visual survey

Date of each survey visit	**Structure reference/location**	**Equipment used/available**	**Weather**
29/06/21	Toilet block	Binoculars, 1million candle power clu-lite torch, micro Dart endoscope, Dewalt DW03050 Laser Measure. 3.9m telescopic ladders Phantom 4 Drone	16°C, 20% cloud. Beaufort 0. No recent rain.
Comments (to include # of surveyors used for each visit): 1 surveyor undertook the visual inspection.			
Date of each survey visit	**Structure reference/location**	**Equipment used/available**	**Weather**
23/03/23	Toilet block	Binoculars, 1million candle power clu-lite torch, micro Dart endoscope, Dewalt DW03050 Laser Measure. 3.9m telescopic ladders	13°C, 40% cloud. Beaufort 4, SW. No recent rain.
Comments (to include # of surveyors used for each visit): 1 surveyor undertook the visual inspection.			
Personnel: Chris Toohie (Class 2 bat license - 2019-44215-CLS-CLS and RC027) – 15th June 2021 and 23rd March 2023.			

4.8 Activity Surveys

4.8.1 Emergence surveys are used to determine bat presence in a building and can also give a good estimate of the numbers present. Bats can emerge up to 15 minutes before sunset and 2 hours after sunset. The survey times ensured that bats would have emerged from their roost sites and would be foraging (see section 9.4 and 9.5).

4.8.2 Summary of emergence survey(s)

Date of each survey visit	Start/end times and times of sunset	Structure reference/location	Equipment used/available	Weather
29/06/21	Sunset: 2143 Start: 2125 Finish: 2340	Toilet Block	Cluson CB2 1 million candle power lamps Digital thermometer Anabat Walkabout Wildlife Acoustics EM Touch 2 PRO EM3 Anabat Express Night vision scope	14°C - 12°C, 100% cloud. Beaufort 1, SW. No recent rain.
Comments (to include # of surveyors used for each visit): 2 surveyors were positioned around the site so that all potential access points, identified in the daytime, visual inspection, could be observed.				
Personnel: Matthew Arnold (Class 1 bat licence – 2018-35035- CLS-CLS) – 29th June 2021 Graham Coulbeck – 29th June 2021				

4.9 Summary of personnel

Personnel	Experience	Licence No.
Chris Toohie MCIEEM	Project Manager of Wold Ecology with over 11 years' experience surveying bat roosts for development licences. Chris has conducted approximately 900 bat activity surveys since 2006, held over 130 development licenses and is one of only 186 (April 2021) Natural England Registered Consultants who can hold a Bat Mitigation Class Licence.	RC027 and 2019-44215-CLS-CLS
Matthew Arnold	Experienced Wold Ecology Ltd bat surveyor, Matthew has conducted over 200 bat activity surveys for Wold Ecology since 2013.	2018-35035-CLS-CLS
Graham Coulbeck	Experienced Wold Ecology Ltd bat surveyor with over 3 years of bat activity survey experience undertaken under the tuition of Wold Ecology licensed bat ecologists. Graham has undertaken over 100 bat activity surveys.	N/A

5.0 LIMITATION OF FIELD SURVEY

5.1 Whilst the majority of the Application Site was examined at the macro scale, many species will have been overlooked at the micro level because it is not the purpose of a phase 1 habitat survey to classify all taxa occurring in the Application Site. In addition, whilst the actual timing of the survey was adequate to classify the habitat types, there is undoubtedly a strong seasonal element to the presence of species within the site and species occurring outside of the survey period will have been missed.

5.2 This report will serve to indicate the possible value of the site in nature conservation terms based upon the initial field survey and desk top data gathered. As with any survey of this kind, it cannot be a definitive description of the site and its associated habitats and species.

5.3 Access was only granted within the Application Site and land owned by the client; in some instances neighbouring land was studied from vantage points and public land, maps within the public domain and aerial photography, it is possible that habitats important to the ecology of the Application Site may not have been recorded fully. A Phantom 4 Drone was used to assist with the field survey.

5.4 It is not always possible to identify every pond within 250m of an Application Site and whilst every effort was made to access all ponds, Wold Ecology Ltd do not guarantee that every pond within 250m have been included within this assessment.

5.5 However, a phase 1 habitat survey and ecological appraisal of this nature, supported by a thorough desk top survey, is sufficient to make a number of informed assumptions about the ecology of the site.

6.0 DESK TOP STUDY

6.1 General description

6.1.1 The Application Site is located in the small settlement of Rolston, approximately 2.5km south of Hornsea and in a rural location. The Application Site is approximately 2 ha and is immediately surrounded by arable/rough grassland and the North Sea including maritime cliffs and sandy beaches. Habitats within the Application Site are dominated by grassland with a single building and hard standing.

6.1.2 Habitats within 2km surrounding the Application Site is primarily low lying agricultural land dominated by arable production with some grazed pasture and the North Sea. Woodland cover within 2km is low and occurs as small shelterbelts, plantations adjacent to farms and game cover. Whilst the Application Site is not connected to any ecologically valuable habitat, connectivity within 2km is provided by hedgerows, hedgerows with trees and ditches that drain the predominant arable land and link the site with the wider countryside. Due to the close proximity to the North Sea, the site is exposed to maritime conditions and wind.

6.1.3 A summary of the surrounding habitat is (radius of < 2km from the site):

- Buildings – farm buildings and residential properties
- Hedgerow
- Mature trees and woodland
- Arable
- Mature private gardens
- Ponds and watercourses
- Acre Dike
- South Drain
- Grazed pasture

6.2 Desktop Study.

6.2.1 Natural England, the North & East Yorkshire Ecological Data Centre (NEYEDC), www.magic.gov.uk, social media, local authority planning portal and Wold Ecology employees, field surveyors and network of associate ecologists were consulted in order to obtain any ecological information that they hold of relevance to the Application Site and surrounding area.

6.2.2 The desk top study identifies land parcels of nature conservation value within 2 km of the Application Site. Relevant extracts from associated documentation are highlighted below. The following data resources were searched:

- Sites of Special Scientific Interest (SSSI)
- Special Protection Areas (SPA)
- National Parks
- National Reserves
- Special Areas of Conservation (SAC)
- Ramsar sites
- Areas of Outstanding Natural Beauty (AONB)
- Local Nature Reserves (LNR)
- Local wildlife sites (LWS) or equivalent

- Natural England Habitat Inventories
- Natural Character Area documentation
- European protected species records
- UK Biodiversity Action Plan habitats and species records
- Local Biodiversity Action Plan habitats and species records
- Notable species records

6.2.3 International Designated Sites

6.2.3.1 The following International Designated Sites lie within 2 km of the Application Site (see figure 1):

Designation	**Name or location of site**	**Grid reference in relation to the search area**
Special Protection Areas	Greater Wash	Entirety of coastal/ marine section of search area.

6.2.3.2 The Greater Wash SPA is described as:

- The Greater Wash SPA is classified for the protection of red-throated diver (*Gavia stellata*), common scoter (*Melanitta nigra*), and little gull (*Hydrocoloeus minutus*) during the non-breeding season, and for breeding Sandwich tern (*Sterna sandvicensis*), common tern (*Sterna hirundo*) and little tern (*Sternula albifrons*).
- This site protects important foraging areas for the largest breeding populations of little tern in the UK marine SPA network (798 pairs), and important areas used by the second largest non-breeding populations of red-throated diver (1,407 individuals) and little gull (1,255 individuals) within the UK SPA network. The boundary of the Greater Wash SPA extends beyond 12 nautical miles; hence it is a site for which both Natural England and JNCC have responsibility to provide statutory advice. The SPA lies along the east coast of England in the mid-southern North Sea and extends between the counties of Yorkshire (to the north) and Suffolk (to the south).
- The Greater Wash SPA boundary was produced as a composite boundary enclosing the extents of the important areas identified for each of the qualifying species. The seaward extent of the boundary is defined by the distribution of red-throated diver, and by the foraging area of Sandwich tern off the north Norfolk Coast.

6.2.3.3 The International Designated Site is located adjacent to the Application Site and is a marine protection area. The landward boundary follows Mean High Water and the boundary of this SPA extends into offshore waters beyond 12 nautical miles. Consequently, the impact to the International Designated Site from the proposed terrestrial development is considered to be negligible.

6.2.4 Nationally Designated Sites

6.2.4.1 There are no Nationally Designated Sites within 2 km of the Application Site.

6.2.5 Locally Designated Sites

6.2.5.1 The following locally designated sites lie within 2 km of the Application Site (see figure 2):

6.2.5.1.1 Local Wildlife Sites

Site Name	Site Ref	Grid Reference	Status
Rolston Hall	TA2040-01	TA217449	Deleted LWS

6.2.5.2 The Locally Designated Site will not be impacted on due to the small-scale nature of the proposed development and the distance between the Application Site and the nearest LWS which is greater than 200 metres. Consequently, the impact to the Locally Designated Site is considered to be negligible.

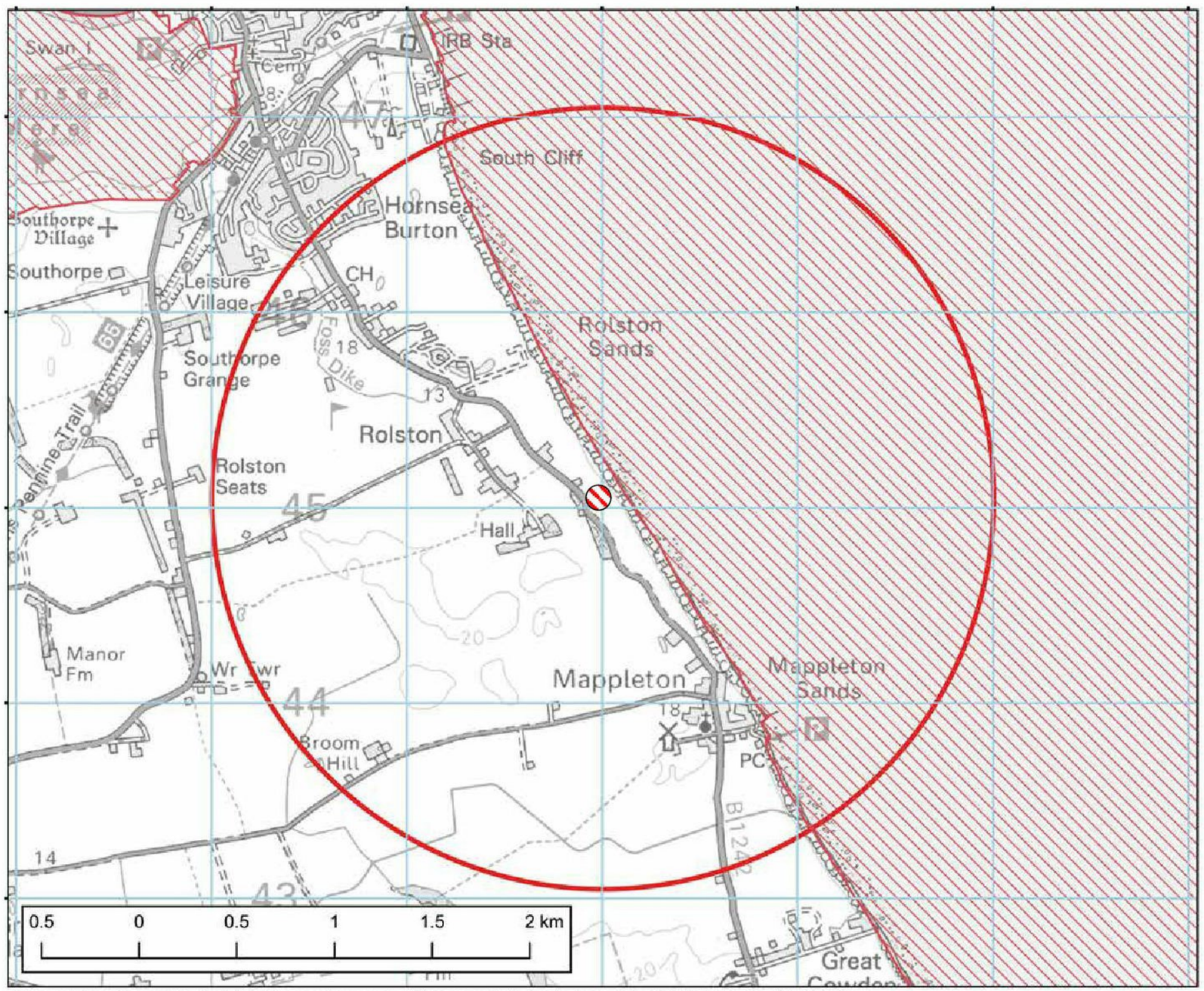
6.2.6 Natural England Habitat Inventories

6.2.6.1 All the Natural England Priority Habitat inventories were searched, including the woodland inventory and grassland inventory. The following areas of notable habitat from the Habitat Inventories list were found within 2 km of the Application Site (see Figure 3).

Habitat type	Location description
Maritime cliff and slope	Along the coastline from Mappleton Sands to Rolston Sands, as well as a very small area at South Cliff, Hornsea Burton.
Deciduous woodland	Several small polygons throughout the search area.
Traditional orchard	One small polygon at TA203458.

6.2.6.2 The Natural England Priority Habitats will not be impacted on due to the small-scale nature of the proposed development. Consequently, the impact to the Natural England Priority Habitat is considered to be negligible.

Figure 1.



NORTH

Scale: 1:25,000

Drawing title:
Internationally Designated Site Map

Legend

International Designated Sites

SPA

Search Area

Application Site

WOLD ECOLOGY LTD

2 Redwood Gardens
Driffield
East Yorkshire
YO25 6XA

T: 01377 200242
E: info@woldecology.co.uk
W: www.woldecology.co.uk

Figure 2.

NORTH

Scale: 1:25,000

Drawing title:
Locally Designated Site Map

Legend

- East Yorkshire LWS
- Search Area
- Application Site

WOLD ECOLOGY LTD

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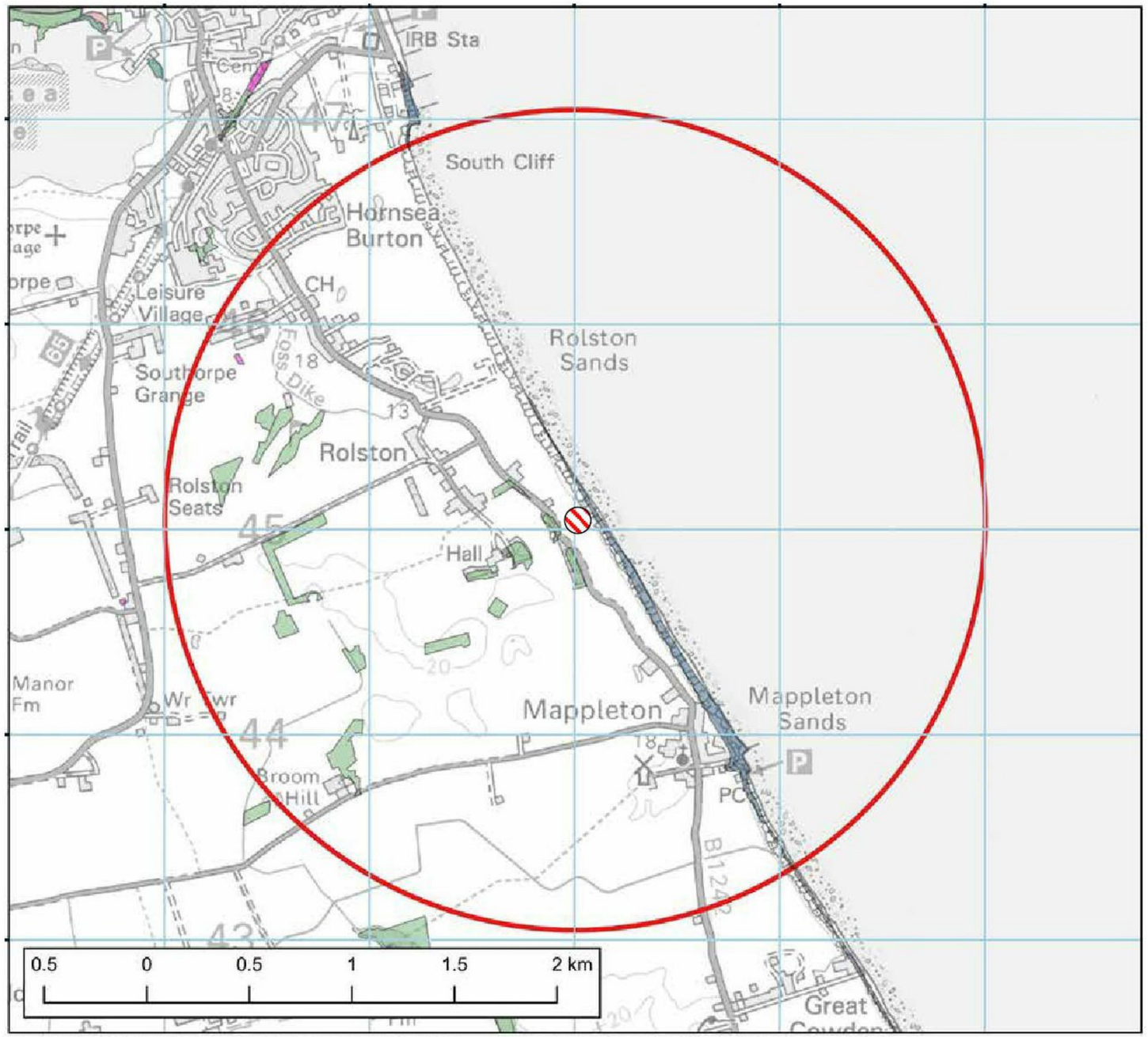
Driffield
East Yorkshire
YO25 6XA

T: 01377 200242
E: info@woldecology.co.uk
W: www.woldecology.co.uk

Figure 3.



NORTH

Scale: 1:25,000

Drawing title:
Natural England Priority Habitats Map

Legend

PHI

- Deciduous woodland
- Maritime cliff and slope
- Traditional orchard
- Search Area
- Application Site

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Driffield
East Yorkshire
YO25 6XA

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E: info@woldecology.co.uk
W: www.woldecology.co.uk

6.3 Natural Character Areas

6.3.1 National Character Areas (NCAs) divide England into 159 distinct natural areas. Each is defined by a unique combination of landscape, biodiversity, geodiversity and cultural and economic activity. Their boundaries follow natural lines in the landscape rather than administrative boundaries, making them a good decision making framework for the natural environment. As part of its responsibilities in delivering the Natural Environment White Paper, Biodiversity 2020 and the European Landscape Convention, Natural England is revising its National Character Area profiles to make environmental evidence and information easily available to a wider audience.

6.3.2 NCA profiles are guidance documents which will help to achieve a more sustainable future for individuals and communities. The profiles include a description of the key ecosystem services provided in each character area and how these benefit people, wildlife and the economy. They identify potential opportunities for positive environmental change and provide the best available information and evidence as a context for local decision making and action.

6.3.3 The Application Site lies within Natural Character Area 40 Holderness and is summarised below:

- Holderness is a rural, low-lying, undulating plain with the broad, shallow valley of the River Hull flowing southwards through the centre towards Hull. The river eventually joins the expansive Humber Estuary where it becomes tidal, enclosed by flood banks, and drains into the North Sea.
- The National Character Area (NCA) is bounded by the dip slope of the Yorkshire Wolds to the north and west, while eastwards, beyond the coastline of soft boulder clay cliffs, lies the North Sea. Rapid erosion of these cliffs is a conspicuous feature of this NCA, and forms part of an important coastal process of sediment transfer. Holderness is the single most important source of sediment in the southern North Sea: the sediment is carried south to the Humber, the Lincolnshire coast and the Wash, where it feeds beaches and through accretion helps intertidal habitats to adjust to rising sea levels.
- Holderness shares an underlying chalk aquifer with the Yorkshire Wolds and is an important water resource for the area. The springs and streams flowing from the Wolds are part of the most northerly chalk streams in Britain, and they merge to form the River Hull in Holderness. The River Hull's headwaters are designated as a Site of Special Scientific Interest (SSSI) as a chalk stream and for marginal riparian habitats. Holderness has six SSSI which provide evidence of the glacial and postglacial history of the area. These consist of exposures in cliffs and gravel pits, and also include the remnants of bogs and meres. Hornsea Mere is a large, natural lake and is designated as an SSSI for its marginal habitats and as a Special Protection Area for populations of wintering wildfowl.

6.3.4 There are no relevant Statements of Environmental Opportunities that are relevant to the Application Site.

6.4 European Protected Species records (relevant to the Application Site)

6.4.1 Badger

- Badger *Meles meles* is recorded within the 2km radius surrounding the Application Site (source – NEYEDC 2023 and Wold Ecology network pers comm).

6.4.2 Bats

- Currently, there is no pre-existing information on bats at the site.
- There are records of brown long-eared bat *Plecotus auritus*, noctule *Nyctalus noctula*, Daubenton's bat *Myotis daubentonii*, Nathusius's pipistrelle *Pipistrellus nathusii*, soprano pipistrelle *Pipistrellus pygmaeus* and common pipistrelle *Pipistrellus pipistrellus* within the surrounding 5km radius of the Application Site. (source – NEYEDC 2023 and Wold Ecology network pers comm). Wold Ecology bat records date from 2006 and include over 1000 bat activity surveys.
- There are no known Natural England development licenses relating to bats within 2km of the Application Site (source – www.magic.gov.uk).

6.4.3 Great crested newts

- Great crested newt *Triturus cristatus* was recorded at the Hornsea Tesco development during 2010; the Tesco site is 2.5km north of the Application Site (source - http://www.hulldailymail.co.uk/Discovery-grass-snakes-delay-opening-Tesco-store-Hornsea/story-11979448-detail/story.html).
- Great crested newts are also present along the Stream Dike that links Hornsea Mere and the North Sea (source – Wold Ecology ecological network). The Stream Dike is approximately 3km north of the Application Site.
- Great crested newt is also recorded at Marlborough Road allotments, over 1.5km of the Application Site (source – Wold Ecology ecological network).
- There are no great crested newt records within 2km of the Application Site (source – NEYEDC 2023 and Wold Ecology network pers comm).
- There are no Natural England eDNA records within 2km of the Application Site (source - https://naturalengland-defra.opendata.arcgis.com/datasets/great-crested-newts-edna-pond-surveys-for-district-level-licensing-england
- Wold Ecology great crested newt surveys at ponds 2km north of the Application Site recorded the following amphibians:

Date	Grid reference	Location	County	Taxon Name	Common Name	Count
April 2018	TA 20926 47281 TA 20911 47144 TA 21024 46907	Hornsea	East Yorkshire	**Great crested newt**	***Triturus cristatus***	**0**
				Smooth newt	*Lissotriton vulgaris*	34
				Palmate newt	*Lissotriton helveticus*	0
				Common frog	*Rana temporaria*	37
				Common toad	*Bufo bufo*	18

- There are no great crested newt Natural England development licenses within 2km of the Application Site (source – www.magic.gov.uk).
- There are no records of great crested newts at Rolston Hall (source – ERYC planning portal).

6.4.4 Water vole

- Water vole *Arvicola amphibious* is recorded within the surrounding 2km radius with records at:

Location	Distance from site	Direction
Mappleton	In excess of 500m	S
source – NEYEDC 2023 and Wold Ecology network pers comm		

6.4.5 Otter

- There are no otter *Lutra lutra* records within 2km of the Application Site (source – NEYEDC 2023).

6.4.6 Reptiles

- There are no reptile records within 2km of the Application Site (source – NEYEDC 2023 and Wold Ecology network pers comm).

7.0 PHASE 1 FIELD SURVEY RESULTS

7.1 The following habitat types were recorded within the Application Site:

Phase 1 Habitat Classification	JNCC Reference Code
Semi improved neutral grassland	B2.2
Scrub scattered	A2.2
Fence	J2.4
Buildings	J3.6
Bare ground	J4

7.2 Semi improved neutral grassland

7.2.1 The major part of the site is a mosaic of coarse, semi-improved neutral grassland that has not been cultivated for many years, however, selected areas have been cropped for haylage since its closure as a holiday camp site.

7.2.2 This habitat dominates the Application Site and in terms of the National Vegetation Classification of grass associations, the major part of this site is mesotrophic grassland type 9 (MG9: *Holcus lanatus –Deschampsia cespitosa*) grassland of both the *Poa trivialis* subcommunity (MG9a) on moister lower-lying gleyed soils and hollows, and the *Arrhenatherum elatius* subcommunity on higher, drier soils. A total of 74 plant species were recorded, distributed across the site as described below. Some species were ruderal associated with the relatively small areas of historical activity and disturbance. However, most were associated with the semi-improved neutral grassland - JNCC B2.2.

7.2.3 Grassland type MG9a was dominant in the lower half of the field which is subject to surface drainage run-down and inundation. The dominant grass species is Yorkshire Fog *Holcus lanatus* with tussocks of Tufted Hair-grass *Deschampsia cespitosa* and scattered grasses Red Fescue *Festuca rubra*, Creeping Bent *Agrostis stolonifera*, Common Bent *Agrostis capillaris*, Rough Meadow-grass *Poa trivialis*, Cock's-foot *Dactylis glomerata*, and Perennial Rye-*grass Lolium perenne*. Dicotyledenous species include Creeping Buttercup *Ranunculus repens*, Meadow Buttercup *R. acris*, Lesser Stitchwort *Stellaria graminea*, Creeping thistle *Cirsium arvense*, Common Sorrel *Rumex acetosa*, Mouse-ear *Cerastium fontanum*, Ribwort Plantain *Plantago lanceolata*, Meadow Vetchling *Lathyrus pratensis,* White Clover *Trifolium repens*, Meadowsweet *Filipendula ulmaria*, Cuckoo Flower *Cardamine pratensis* and Greater Bird's-foot-trefoil *Lotus pedunculatus*. Pignut *Conopodium majus,* an indicator of ancient meadows, was atypically frequent in this sward and Spiked Sedge *Carex spicata* was found at GR TA219450. Spiked Sedge is uncommon east of the River Hull.

7.2.4 Grassland type MG9b is a more coarse grassland type with many of the species found in MG9a but with False Oat-grass *Arrhenatherum elatius* joining the co-dominant Yorkshire Fog, Cock's-foot and Tufted Hair-grass. Tall Fescue *Schedenorus arundinaceus* and Silverweed *Potentilla anserina* were locally frequent at the higher east side of the site reflecting influence by salt spray. Other inclusions reflecting a drier status were Compact Rush *Juncus conglomeratus*, Wood-rush *Luzula campestris* and both Male-fern *Dryopteris filix-mas* and Broad Buckler-fern *D. dilatata*.

7.2.5 Within this habitat, a dry ditch runs along the western boundary adjacent to the metalled road.

7.3 Scrub

7.3.1 A number of felled trees are also present along the western boundary and in the north western corner of the Application Site. The majority of these trees/scrub have been felled during winter 2021 and are small in size and scattered. This habitat is dominated by Bramble *Rubus fruticosus* with Wild Cherry *Prunus avium*, Hawthorn, Ash *Fraxinus excelsior*, Sycamore *Acer pseudoplatanus* and Guelder Rose *Viburnum opulus* were present during the field survey.

7.3.2 Areas that are not cut for haylage are beginning to scrub with Bramble *Rubus fruticosus* and occasional Dog Rose *Rosa canina* and Hawthorn *Crataegus monogyna;* this habitat is relatively sparse and less than 1m in height.

7.3 Fence

7.3.1 A small area of steel security fencing is located in the south east corner of the Application Site and has low ecological significance and does appear to prevent large vertebrates dispersing in to the Application Site.

7.4 Buildings

7.4.1 The following building is present within the Application Site:

a. ***Toilet block*** – is single storey and comprises breeze block walls and a pitched roof covered with corrugated cement fibre boards. The roof is supported by smooth sawn timbers and is not lined.

b. **Caravan** – the temporary caravan is single storey and comprises a timber frame and steel panels.

7.5 Bare ground

7.5.1 Bare ground habitats are comprise concrete pathways and former building bases substrate. These habitats have yet to be colonised by an ephemeral/short perennial vegetation community.

7.5.2 Rubble and timber piles are present within this habitat (see target note 2).

7.6 The following species of fauna were recorded during the field survey:

- Wren *Troglodytes troglodytes*
- Starling *Sturnus vulgaris*
- House sparrow *Passer domesticus*
- Swallow *Hirundo rustica*
- Woodpigeon *Columba palumbus*
- Swift *Apus apus*
- Herring gull *Larus argentatus*
- Common gull *Larus canus*
- Skylark *Alauda arvensis*
- Barn owl *Tyto alba*
- Common pipistrelle *Pipistrellus pipistrellus*

8.0 SPECIES APPRAISAL

8.1 The habitats within and surrounding the Application Site are potentially important, and the development area may impact upon mobile species. Consequently, the field survey and ecological appraisal targeted the following species relevant to the Application Site and proposed development:

- Bats
- Great crested newt
- Badger
- Reptiles
- Birds
- Hedgehog

8.2 Bats

8.2.1 Legislation

8.2.1.1 All bats and their roosts are fully protected under the Wildlife and Countryside Act 1981 (as amended by the Countryside and Rights of Way Act 2000) and are further protected under the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019.

8.2.1.2 The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019, provision 41 states an offence is committed if a person:

(a) Deliberately captures, injures, or kills any wild animal of a European protected species (i.e. bats),
(b) Deliberately disturbs wild animals of any such species,
(c) Deliberately takes or destroys the eggs of such an animal, or
(d) Damages or destroys a breeding site or resting place of such an animal.

8.2.1.3 Section 9 of the Wildlife and Countryside Act (1981) states:

- It is an offence for anyone without a licence to kill, injure, disturb, catch, handle, possess or exchange a bat intentionally. It is also illegal for anyone without a licence to intentionally damage or obstruct access to any place that a bat uses for shelter or protection.

8.2.1.4 Bat roosts are protected throughout the year, whether or not bats are occupying a roost site.

8.2.3 Field Survey Results

8.2.3.1 Following the visual inspection, an assessment was made of the buildings suitability to support roosting bats.

8.2.3.2 **Toilet Block** (see target note 1) - the following roosting opportunities were present within the fabric of the building:

- Gaps behind cement fibre board end panels.
- Gaps in missing mortar and within block work.
- The doors and window frames were tight fitting.
- Gaps above the internal wall plates.
- Access into the building is provided by the partially collapsed roof.
- The corrugated cement fibre boards were tightfitting.

- No evidence of bats was observed in the building during the June 2021 and March 2023 field surveys.
- The building has been assessed as having a LOW SUITABILITY to support bats.

8.2.3.3 **Caravan** - no roosting opportunities were present within the fabric of the caravan due to the following:

- The timber frame and wall panels were tightfitting.
- The timber structure ensures that there are no gaps within a wall cavity.
- There are no gaps in the roof structure to support roosting bats.
- There was no open doors/windows for bat access into the caravan.
- No evidence of bats was observed.
- The outbuilding has been assessed as having a NEGLIGIBLE SUITABILITY to support roosting bats.

8.2.3.4 Emergence Survey - 29th June 2021

- The first Common Pipistrelle bat was detected at 2222. This was not close to the anticipated (< 30 minutes after sunset) emergence time and suggests that the bat did not emerge from a roost close by. The bat appeared from north of the Application Site.
- A single Common Pipistrelle was the only bat observed during the field survey, despite optimum conditions.
- No bats were observed emerging from the toilet block.

8.2.3.5 For survey results see appendix 11.9.

8.2.3.6 No roosting bats or evidence of roosting bats were observed during the field surveys. The impact to roosting bats is considered to be **neutral**.

8.2.4 **Site Status Assessment**

8.2.4.1 Based on building inspections and an emergence survey, it has been determined that the studied toilet block is unlikely to support a bat roost. The results are based on survey work conducted in June, but as the toilet block has a low suitability to support roosting bats, there remains the low possibility that bats could use the toilet block at other times of the year.

8.2.4.2 The Application Site is exposed to the North Sea and comprises a relatively uniform habitat composition in an area dominated by arable production and influenced by exposed maritime conditions. The wider area supports several inland woodland habitats and sheltered mature gardens which offer alternate foraging and commuting habitat for bats. The Application Site is exposed and consequently, the Application Site is sub optimum for foraging and commuting bats and is not considered integral to the favourable conservation status of local bat populations. The impact to foraging and commuting bats is considered to be **neutral**.

8.2.5 Biodiversity Gains and Recommendations

8.2.5.1 Specially designed bat boxes can be located on site. Schwegler Bat Boxes are recommended and well tested boxes. The following bat boxes provide additional roost habitats and are available from Wold Ecology:

- The **1FQ** is an attractive box designed specifically to be fitted on the external wall of a house, barn, or other building. Equally appealing to bats as a roost or a nursery, it features a special porous coating to help maintain the ideal temperature inside along with a rough sawn front panel to enable the bats to land securely.

8.2.5.2 The majority of these boxes are self-cleaning as they are designed so that the droppings fall out of the entrance. This reduces the possibility of smell during the summer months. For more information on designs and installation of bat boxes see: www.schwegler-natur.de and www.bct.org.uk.

8.2.5.3 Wold Ecology recommends that at least 2 bat boxes are sited on new buildings on site. Bat boxes should be erected on south, east or west elevations; 3-5 metres above ground level or close to roof lines.

8.2.5.4 Lighting has a detrimental effect on bat activity; many bats will actually avoid areas that are well lit. Lighting can cause habitat fragmentation by preventing bats from commuting between roosts and foraging grounds (A.J Mitchell-Jones 2004).

8.2.5.5 It is recommended that a lighting consultant is employed to design a lighting plan based on the following principles:

- Luminaire and light spill accessories - Lighting should be directed to where it is needed, and light spillage avoided. This can be achieved by the design of the luminaire and by using accessories such as hoods, cowls, louvres and shields to direct the light to the intended area only.
- If applicable, the height of lighting columns in general should be as short as is possible as light at a low level reduces the ecological impact. However, there are cases where a taller column will enable light to be directed downwards at a more acute angle and thereby reduce horizontal spill. For pedestrian lighting, this can take the form of low level lighting that is as directional as possible and below 1 lux at ground level.
- Aim for lighting column of 5m or less, hooded and cowled to prevent light spill, for main lighting columns.
- All luminaires should lack UV elements when manufactured. Metal halide, fluorescent sources should not be used.
- LED luminaires should be used where possible due to their sharp cut-off, lower intensity, good colour rendition and dimming capability.
- A warm white spectrum (ideally <2700Kelvin) should be adopted to reduce blue light component.
- Luminaires should feature peak wavelengths higher than 550nm to avoid the component of light most disturbing to bats (Stone, 2012).
- Internal luminaires can be recessed where installed in proximity to windows to reduce glare and light spill.
- The use of specialist bollard or low-level downward directional luminaires to retain darkness above can be considered.
- Only luminaires with an upward light ratio of 0% and with good optical control should be used.

- Luminaires should always be mounted on the horizontal, i.e. no upward tilt.
- Any external security lighting should be set on motion-sensors and short (1min) timers.
- As a last resort, accessories such as baffles, hoods or louvres can be used to reduce light spill and direct it only to where it is needed.
- Light spill can be successfully screened through soft landscaping and the installation of walls, fences and bunding

8.2.5.6 At this site, new lighting design will ensure lights will **not** be mounted where they will shine directly on to bat boxes or the adjacent woodland habitat. A light intrusion lux level besides woodland edges along the western boundary will be 1 lux or below.

8.2.5.7 The impact from lighting to bat species foraging and commuting around the Application Site is considered to be **negligible**.

8.3 Great crested newt.

8.3.1 Legislation

8.3.1.1 The great crested newt is protected under European and British legislation. Under European legislation it is protected under EC Directive (92/43/EEC) 'The Conservation of Natural Habitats and of Wild Fauna and Flora', being listed under Annexes IIa and IVa. This is implemented in Britain under the Wildlife and Countryside Act 1981 (as amended by the Countryside and Rights of Way Act 2000) and is further protected under the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019. This prohibits the intentional killing of newts, the deliberate taking or destruction of eggs, damage or destruction of a breeding site or resting place, intentional/reckless damage to or obstruction of a place used for shelter or protection, possession of a great crested newt and any form of trade of great crested newts.

8.3.1.2 Under British legislation, the great crested newt is given full protection under section 9 of the Wildlife and Countryside Act 1981 (as amended). This Act transposes into UK law the Convention on the Conservation of European Wildlife and Natural Habitats (commonly referred to as the 'Bern Convention'). This prohibits the intentional killing, injuring or taking, possession or disturbance of great crested newts whilst occupying a place used for shelter or protection and the destruction of these places. Protection is given to all stages of life (e.g. adults, sub-adults, larvae, and ovae).

8.3.1.3 In combination the above legislation prohibits the following:

- Intentionally kill, injure or take a great crested newt;
- Possess or control any live or dead specimen or anything derived from a great crested newt;
- Intentionally or recklessly damage, destroy or obstruct access to any structure or place used for shelter or protection by a great crested newt;
- Intentionally or recklessly disturb a great crested newt while it is occupying a structure or place which it uses for that purpose;
- Deliberately capture or kill a great crested newt;
- Deliberately disturb a great crested newt;
- Deliberately take or destroy eggs of a great crested newt;

- Damage or destroy a breeding site or resting place of a great crested newt.

8.3.1.4 The great crested newt is therefore described as 'fully protected'.

8.3.2 Field Survey Methodology

8.3.2.1 A habitat assessment was completed on the proposed development area and surrounding land (250 metres radius) accessible at the time of the survey. The assessment combined Great Crested Newt Mitigation Guidelines (English Nature 2001) and Evaluating the Suitability of Habitat for the Great Crested Newt (R. S. Oldham, J. Keeble, M. J. S. Swan and M. Jeffcote, undated) methodology.

8.3.2.2 The entire Application Site was assessed for its potential to support great crested newts, whilst conducting the field survey. In addition, aerial photographs, maps and physical searches of the surrounding landscape identified how the Application Site is connected to ponds within the locality and potentially, great crested newt populations.

8.3.3.3 The likely presence of great crested newts in ponds can be predicted by examining aquatic habitat features such as the presence of fish, waterfowl, and water quality. This data is used to calculate a habitat suitability index (Oldham *et. al.* 2000). The HSI is represented by a number from 0 to 1, the higher the number the more likely the pond is to be occupied by great crested newt. The HSI system is not sufficiently precise to allow the conclusion that any high score will support great crested newts, or that a pond with a low score will not do so.

8.3.3 Field Survey Results

8.3.3.1 No records of great crested newt occur within 2km of the Application Site. The closest known populations are in excess of 2.5km north of the Application Site and are fragmented by urban habitats, arable land and road networks.

8.3.3.2 A single pond was identified within 250 metres of the Application Site boundaries, the locations and number of ponds was identified in the field and through the use of aerial photographs, a Phantom 4 Drone and OS maps. Permission to survey the pond and take water samples for eDNA analysis was verbally denied by the land owner on 22nd June 2021.

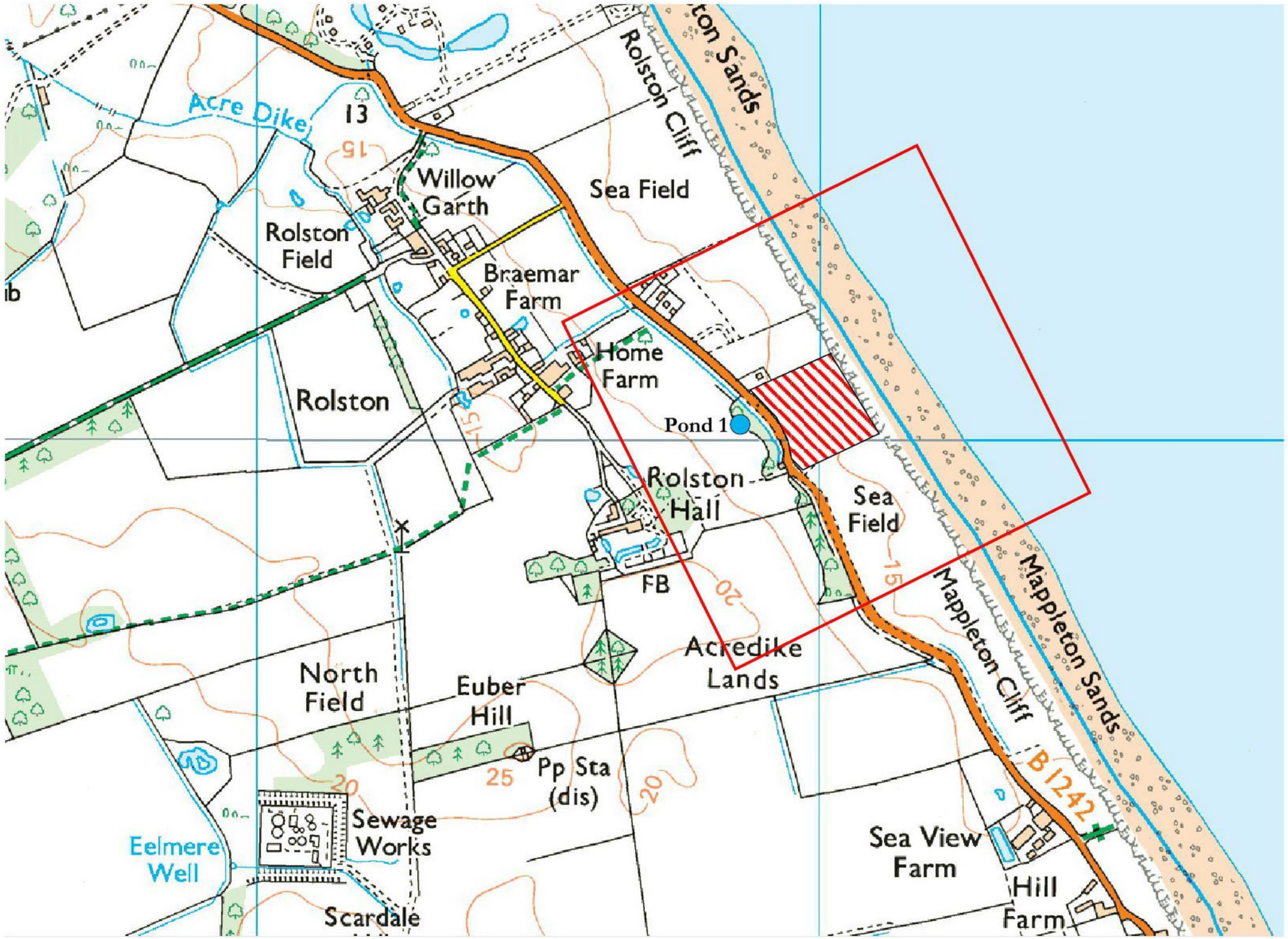
8.3.3.3 Consequently, the single ponds included in the assessment is (see figure 4):

- Pond 1 (P1) – NGR TA 21867 45025. The pond was surveyed with a drone and with binoculars during March 2023 when surrounding vegetation was low.

8.3.3.4 HSI Scoring

Pond	**HSI Score** (tenth root of total)	**Suitability**
1	0.67	Average
Full details of the HSI scoring can be viewed in Appendix 11.8.		

Figure 4.



NORTH

Not to Scale

Drawing title:
Pond map.

KEY

●	Pond accessed via a drone
—	250m radius
▨	Application Site

WOLD ECOLOGY LTD

2 Redwood Gardens
Driffield
East Yorkshire
YO25 6XA

T: 01377 200242
E: info@woldecology.co.uk
W: www.woldecology.co.uk

8.3.3.2 No ponds or permanent water bodies suitable for breeding great crested newts were observed within the Application Site, the field survey and analysis of maps suggests that the nearest pond is located 52m west of the Application Site.

8.3.4 Site Status Assessment

8.3.4.1 Whilst it is not always possible to demonstrate site absence from a single site survey, with the evidence collected from a habitat survey and desk top study, the likelihood of the presence of great crested newts in the Application Site is decreased. Key attributes to the negligible reduced probability of great crested newts being present are:

- No records of great crested newt exist within 1km of the Application Site.
- There is no current knowledge of great crested newts within the Application Site.
- Optimum amphibian terrestrial habitat (grasslands, scrub and tree cover) are present adjacent to pond 1.
- The B1242 is a busy metalled road and consequently, this road is considered a significant barrier to great crested newt dispersal; especially as optimum great crested newt terrestrial habitat is abundant adjacent to the pond west of the road. The road is approximately 6m wide.
- In addition to the metalled road, Acre Dike ditch also reduces amphibian dispersal into the Application Site. The dike comprises flowing water and is steep sided, it has a bank of approximately 2 m.

8.3.5 Whilst the likelihood of encountering great crested newts within the Application Site is reduced, it is recommended that an amphibian method statement should be implemented.

8.3.6 Amphibian Method Statement

8.3.6.1 This method statement (MS) has been designed to ensure the avoidance of disturbance, killing or injuring amphibians by taking all reasonable steps to ensure works do not impact upon amphibians. This Method Statement will ensure that:

- Reasonable steps are taken to ensure that the risk of amphibians being killed or injured is minimal.
- Amphibians are not to be significantly disturbed by the works.

8.3.6.2 Summary of method statement:

- Hand search.
- Tool box talk, and safe working practices employed.
- Safe working practices

8.3.6.3 A hand search will be undertaken each morning prior to the start of any ground works and the following will be implemented:

- A suitably qualified, experienced, and licensed ecologist shall be appointed to act as an ecological clerk of works (ECoW) to supervise all work associated with site clearance and to ensure that the recommendations in this method statement are implemented correctly.
- A hand search will be undertaken each morning prior to the start of any ground works.
- Tall ruderal and rank grassland will be directionally strimmed in two stages to create open and suboptimum exposed habitat.

- Cutting of vegetation should be undertaken between the hours of 12:00 and 15:00 only. Staff shall be given a tool box talk to ensure they are aware of the possible presence of amphibians on site, what to look out for and their level of protection. It is recommended that the vegetation is cut to a height of about 10cm; this should be short enough to make the area undesirable but will not be short enough to harm any during cutting/strimming.
- All cut vegetation should be removed off site to ensure open and exposed conditions.
- During the active growing period, the vegetation within the construction zone will receive a careful application of an approved herbicide. This is in order to reduce shelter and cover; thus, making the construction zone poor quality for amphibians by reducing areas of shelter and foraging grounds.
- Prior to machinery entering the site, the access route and any optimum areas of terrestrial amphibian habitat will be hand searched by the ECoW to look for any resting amphibians.
- Once the areas have been hand searched and after confirmation by the ECoW that no amphibians are present the machinery can enter site and begin site clearance.
- Excavated materials—these will not be tipped onto areas of potential value to amphibians. Tipping areas are to be approved and searched by the ECoW prior to being used.
- No destructive works can be completed if the overnight air temperature is below 5°C prior to the works commencing. The ECoW will advise on whether the prevailing weather conditions are suitable for the works proposed to be completed.
- The contractors and those involved with building works should take care not to provide temporary refugia for amphibians. Temporary refugia include stacking of sundries in plastic bags, leaving piles of rubble and the use of tarpaulins/plastic sheets. These all should be stacked on pallets (Off-Ground).
- Any trenches or deep pits within the development site should be infilled on the same day, securely covered up or provide a means of escape should amphibians enter. A means of escape could include a roughened plank of wood or similar, placed in the trench as a ramp to the surface. This is particularly important if the trench/pit is liable to fill with water.
- Any trenches/pits will be inspected each morning to ensure no amphibians have become trapped overnight.
- Amphibians that are encountered should be released into adjacent well vegetated habitats where they are not open to predation. Amphibians should not be put into ponds.
- Open pipework left overnight should be blanked off at the end of each working day.

8.3.6.4 In the unlikely event that great crested newts are encountered during the construction operations, you must:

- Encountered amphibians should always be released in a sheltered area close to a suitable refuge, in weather conditions conducive to activity (night time temperatures above 5°C). Release should be as soon as possible, and special care should be taken when releasing amphibians terrestrially during the day. Night releases are better, but amphibians should not be unduly held in captivity. As a general rule, amphibians captured on land should not be released into water and vice versa, as this may disturb their physiology.

- If great crested newts are recorded at any point during the ground stripping and destructive searches, **all work must stop on site** and the ECoW be informed immediately so that the situation can be assessed, and a way forward agreed. This will involve the following:
  - Removing the site clearance equipment from the site where great crested newts were found whilst avoiding any further offences.
  - The ECoW may contact Natural England to agree a suitable way forward. However, in reality this situation is unlikely to occur, but if it did, it would mean that no further work on site could be completed until a license had been obtained from Natural England.

8.3.6.5 Timing

8.3.6.5.1 It is unacceptable to attempt to capture amphibians once they have started to hibernate, which occurs when night temperatures drop towards freezing point, typically shortly before the first frosts, around mid-late October. This is largely because it is very difficult to find and capture animals once they have started to find refuges for winter; there is a risk that areas may be searched and declared free of amphibians when in fact the animals are still present in inaccessible underground crevices or in refuges. Searching destructively in winter, especially without a prior capture effort, is also more likely to result in mortality. In addition, from a welfare point of view it is most unwise to capture and relocate amphibians which have begun their winter dormancy.

8.3.6.5.2 Encountered amphibians should always be released in a sheltered area close to a suitable refuge, in weather conditions conducive to activity. Release should be as soon as possible, and special care should be taken when releasing amphibians terrestrially during the day. Night releases are better, but amphibians should not be unduly held in captivity. As a general rule, amphibians captured on land should not be released into water and vice versa, as this may disturb their physiology.

8.4 Birds

8.4.1.1 Birds are afforded various levels of protection and levels of conservation status on a species by species basis. The most significant general legislation for British birds lies within Part 1 of the Wildlife and Countryside Act 1981 (as amended). Under this legislation, it is an offence to, kill, injure or take any wild bird, take, damage or destroy the nest of any wild bird while that nest is in use or being built, take or destroy an egg of any wild bird.

8.4.1.2 Schedule 1 Birds

8.4.1.2.1 Schedule 1 birds are rare or scarce species afforded the same protection as above (8.4.1.1), but also have additional protection under Part 1 of the Wildlife and Countryside Act 1981 (as amended). This further protection protects these species from being intentionally or recklessly disturbed whilst nesting, either at or close to the nest site.

8.4.1.3 Planning consent for a development does not provide a defence against prosecution under this act.

8.4.2 Field Survey Methodology

8.4.2.1 All bird species recorded by either sight, song or call were noted, in addition particular attention was given to key species of conservation concern and which habitat within the Application Site they were recorded using. All active (and disused) nests, territorial, breeding, and foraging birds were recorded in further detail to analyse how breeding birds use the Application Site.

8.4.2.2 The survey followed guidance and methods recommended within *Bird Monitoring Methods, a manual of techniques for key UK species* Gilbert et.al RSPB 1998, *Common Standards Monitoring Guidance for Birds* JNCC 2004 and *Survey Techniques Leaflet 8.*

8.4.2.3 Wold Ecology assessed the site for schedule 1 listed species recorded having bred or attempted to breed in Yorkshire (Wold Ecology, NEYEDC), which have the potential to breed within the Application Site and/or surrounding adjacent local area or breed elsewhere whilst using the Application Site to forage or roost.

8.4.3 Field Survey Results

8.4.3.1 Schedule 1 Listed Birds

8.4.3.1.1 Wold Ecology concludes that the Application Site is of low value to breeding schedule 1 listed species.

8.4.3.1.2 Summary of the Application Site's suitability to support schedule 1 birds:

Species recorded within 2km	Suitability of Application Site
Barn Owl *Tyto alba*	Within the northern room of the toilet block and especially beneath beams, several fresh (less than 1 month) and old (greater than 1 month) Barn Owl pellets were observed during the March 2023 visit; a barn owl also flew from the toilet block's northern room. These results indicate the toilet block is used as an Active Roost Site (See target note 3).

	A ledge suitable for nesting was observed within the toilet block. It is possible that the toilet block is used a nest site. Further surveys during late spring and summer will be required to determine if the toilet block is used by nesting barn owls. As male barn owls often roost away from the nest site. There remains a possibility the roosting bird could be part of an active pair with the main nest being in the vicinity of the Application Site.

8.4.3.1.3 **Barn Owl recommendations**

8.4.3.1.3.1 A ledge suitable for nesting was observed within the toilet block. It is possible that the toilet block is used a nest site. Further surveys during late spring and summer will be required to determine if the toilet block is used by nesting barn owls.

8.4.3.1.3.2 Within 30 days prior to development works taking place, an inspection by a qualified barn owl surveyor must be undertaken to ensure the status of barn owls has not changed since the initial survey.

8.4.3.1.3.3 There will be no timing constraints for sites that do not support a nest.

8.4.3.1.3.4 Although nesting has been recorded in every month of the year, most pairs lay eggs only in the spring. Nest sites must not be disturbed when active, this will be determined by a barn owl ecologist. Within 30 days prior to development works taking place, an inspection by a qualified barn owl surveyor must be undertaken to ensure the status of barn owls has not changed since the initial survey.

8.4.3.1.3.5 It is recommended that two new permanent nesting/roosting sites are provided inside a building on site or on a pole within 100m of the toilet block. The aim of this provision is to ensure that a suitable roost/nest site remains available long beyond after the development has been completed. Recommendations within Barn Owls and Rural Planning Applications A guide for Planners should be followed.

8.4.3.1.3.6 Permanent nest boxes should be carefully located away from any bat mitigation on site.

8.4.3.1.3.7 Wold Ecology recommends boxes made by Green Future Building (GFB):

- The tried and tested GFB 'Ecology Design' Barn Owl boxes are made using extreme fibreboard, which has a manufacturer's material guarantee of 50 years. Pinned, glued and screwed using stainless steel screws, GFB provides a guarantee of 15 years for these boxes. Access via a door at the front is provided in order for cleaning, ringing and research purposes. The front shelf allows an area for both mature and young owls to land and stand without the risk of baby owls falling out of the box. GFB believe these next generation boxes are the best on the market and our original design has been tried and tested through extensive use in the Yorkshire Wolds.
- The new barn owl box has been redesigned incorporating a new fibreboard material and finish guaranteed to repel all weathers and guaranteed to increase long term durability.
- All GFB boxes are constructed to a high standard and can be offered either as fully built-up units or in the increasingly popular flat-pack form. On the

fully assembled boxes, panels are completely removable to help with positioning and fixing of boxes when working at heights. Self-assembly of our flat-packed box is easy as the five sections screw together neatly, requiring only a screw driver or power driver.

- Contact details for GFB are available at http://greenfuturebuilding.org.uk/

8.4.3.2 None-schedule 1 birds - breeding birds

8.4.3.2.1 Impacts related to breeding birds are essentially related to the temporary loss of habitat which is utilised by breeding species. Related to this is the risk that birds could be nesting within impacted habitats at the time that construction work is programmed to start. Of relevance to this project are small passerine species, particularly those associated with the buildings, rank grassland and scrub.

8.4.3.3 None-schedule 1 birds - wintering birds

8.4.3.2.1 The Application Site is not considered to be valuable to wintering birds like wildfowl and waders. The Application Site is bounded roads causing regular disturbance, reducing the value of the habitat for these species groups, nor is it in close proximity to suitable estuarine habitats. The only impact typically of any relevance to wintering birds are those associated with the temporary loss of food sources. This is principally associated with the loss of sections of scrub which provide a potential source of food to a range of wintering species. However, these habitats are abundant within the wider area and are not thought to be of significant importance to birds.

8.4.4 **Wold Ecology does not recommend any further surveys for birds.**

8.4.5 Biodiversity Gains and Recommendations

8.4.5.1 It is concluded that the Application Site is a suitable habitat for agricultural bird species with various designations. There is nesting potential for a range of birds such as thrushes, finches, wood pigeon *Columba palumbus*, magpie *Pica pica*, dunnock *Prunella modularis* and wren *Troglodytes troglodytes*. Several simple management prescriptions can improve the site for breeding bird species.

8.4.5.2 Any buildings, trees, shrubs, scrub and tall vegetation to be removed should be cleared outside of the bird nesting season (i.e. clearance should be undertaken between mid-September and early February inclusive) or be carefully checked* by an ecologist to confirm no active nests are present - prior to removal during the summer period. If nesting birds are found during the watching brief, works will need to stop until the young have fledged. Since a number of nests are active, work will need to wait until fledging has occurred, then trees should be removed immediately to avoid other nests being created.

* Thick and overgrown hedgerows are often difficult to inspect fully and removal of a hedge during the spring/summer period is not recommended.

8.4.5.3 In order to increase nesting opportunities for birds, it is recommended that Schwegler bird boxes are erected throughout the site. Local Authority guidance recommends that 25% of houses within a development should contain a bird box. A summary of recommended bird boxes is listed below:

Name	Description	Number
Schwegler Nest Box 1B	Tree box	1
Schwegler Nest Box 2GR	Tree box	1
Schwegler Starling box 3S	Tree box	1
Schwegler swift box #16S	Building box for caves	2

8.4.5.4 Boxes should be placed so that the entrance does not face the prevailing wind, rain and strong sunlight. The sector from north to south east should be used, with south facing boxes positioned in more shaded areas. Boxes should be positioned away from the damp side of the tree trunk, usually told by algae, lichen and moss growth. Boxes should also be angled downwards to stop rain blowing into them.

8.4.5.5 Many species will use boxes at a wide variety of heights however to give the box protection in areas with a lot of human or mammalian predator activity they should be placed approximately 3-4 metres above ground level. A clear flight path should be available to and from the nest box.

8.5 [redacted]

[redacted]

8.5.3.2 **No further surveys or mitigation are required for badgers.**

8.6 Reptiles

8.6.1 Legislation

8.6.1.1 The legislation relating to the protection of the more common reptiles (adder *Vipera berus*, grass snake *Natrix helvetica*, common lizard *Zootoca vivipara* and slowworm *Anguis fragilis*) in Britain is contained mainly within the Wildlife and Countryside Act (1981) as amended by the Countryside and Rights of Way Act (2000). Their inclusion on Schedule 5 gives 'partial protection' (i.e. only parts of section 9 apply). Under the Act it is an offence to;

- Intentionally (or recklessly) kill or injure commoner reptile species.

8.6.1.2 The less common reptile species such as sand lizard *Lacerta agilis* and smooth snake *Coronella austriaca* have a higher level of protection under the Wildlife and Countryside Act (1981).

8.6.1.3 Since its original enactment, the Wildlife and Countryside Act has been subject to many changes (notably via Schedule 12 of the Countryside and Rights of Way Act 2000) and is further protected under the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019. These have in particular affected penalties and enforcement. Offences under section 9 of the Act are now 'arrestable'. Enforcement is usually by the Police and less frequently by Natural England. However, section 25(2) of Wildlife and Countryside Act also states that a local authority may institute proceedings. Prosecutions can result in a level five fine (currently £5000) for each offence (and the Act is specific that killing/injuring of each individual animal can constitute a separate offence), the forfeiture of any equipment, etc., used to perpetrate that offence and (under the Countryside and Rights of Way Act 2000) up to six months imprisonment.

8.6.2 Field Survey Methodology

8.6.2.1 No direct observations or field signs of reptiles was recorded on site. A full walkover was undertaken to assess the sites potential to support reptiles.

8.6.3 Field Survey Results

8.6.3.1 The desktop study did not identify any reptile records within 2km of the Application Site. Reptiles are moderately localised in East Yorkshire.

8.6.3.2 The Application Site is considered to be unsuitable for reptiles for the following reasons:

- The Application Site and adjacent habitats are heavily disturbed on a daily basis.
- Compost heaps, rotten logs and decaying vegetation provide important breeding, foraging and thermoregulation habitat for slow worm and grass snake. None of which are present in sufficient quantity within the Application Site.
- Reptiles are typically not very wide-ranging species, instead staying in optimum habitat. Such optimum habitat does not occur within or around the Application Site reducing the likelihood of animals passing through the site.
- This past management is likely to have resulted in the site being sub-optimum for a long-time period, reducing the likelihood of viable populations persisting.
- The site is small, surrounded by disturbed land and fragmented from optimum reptile habitat in the wider area.

8.6.4 **Wold Ecology does not recommend any further surveys for reptiles.**

8.7 Hedgehog

8.7.1 Legislation

8.7.1.1 Although the Hedgehog *Erinaceus europaeus* only receives partial protection under the Wildlife and Countryside Act 1981 (as amended), its numbers have declined dramatically over the past two decades, resulting in the suggested proposal of upgrade to a higher level of protected status. The British population has declined by 25% over the past 10 years. The reasons for the decline are thought to be complex but include the loss of hedgerows and permanent grasslands as well as agricultural intensification.

8.7.2 Field Survey Methodology

8.7.2.1 All features of potential value to hedgehogs are surveyed; including areas of thick vegetation, outbuildings, lawns, grassland, scrub, woodland, and hedge bases. Evidence of breeding nests, hibernation nests and loafing nests were searched for in areas of suitable cover.

8.7.2.2 Well-worn animal paths, pool edges and footpaths were inspected for hedgehog footprints. Open areas were inspected for hedgehog droppings, particularly amenity grassland. Additionally, the surrounding road system was surveyed for road casualties.

8.7.2.3 The following field signs will indicate the presence of hedgehogs:

- Nests within dense vegetation
- Hedgehog droppings and prints
- Road causalities.

8.7.3 Field Survey Results.

8.7.3.1 No active or unused hedgehog nests were found within the Application Site.

8.7.4 Biodiversity Gains and Recommendations

8.7.4.1 Care must be taken whilst carrying out vegetation clearance, or strimming. A thorough check of the vegetation prior to removal will help ensure that no hedgehogs are injured or killed during development works. Sleeping hedgehogs frequently suffer severe injuries from strimmers.

8.7.4.2 Avoid setting fire to piles of vegetation unless they have been turned, checked or moved immediately prior to burning. Hedgehogs often get killed or injured in fires during vegetation removal ad during early November.

8.7.4.3 Encouraging thick hedgerow bases and areas of rough grassland will offer good hedgehog habitat within the study area. Hedgehogs favour lawned grassland in close proximity to rough grassland for foraging where they can access soil invertebrates on evenings.

8.7.4.4 A number of hedgehog houses should be positioned around the site within hedge bases, dense bramble and rough grassland – where applicable. These will provide important breeding and hibernation sites for hedgehogs within the local area. Boxes should be sited out of direct sunlight with the entrance facing away from prevailing winds, in or under thick vegetation. The boxes should be situated away from busy roads or areas of high disturbance.

8.7.4.5 Providing connectivity between habitats by leaving gaps below fences, gates and walls will allow hedgehogs access in and out of the site. Hedgehog holes must be created in all partition fences, allowing free movement between gardens. Perimeter boundary fencing will include a hedgehog hole every 20m.

9.0 HABITATS APPRAISAL

9.1 Biodiversity Action Plans (BAP) Habitats of Principal Importance for the Conservation of Biological Diversity

9.1.1 In 1995, 'Biodiversity: The UK Steering Group Report' was published, which aimed to conserve and enhance biological diversity within the UK, including action plans for 38 key habitats and for 402 of our most threatened species. These plans describe the status of each habitat and species, outline the threats they face, set targets and objectives for their management, and propose actions necessary to achieve recovery. The Biodiversity Action Plans (BAP) have recently been updated, new ones added, and others removed, so there are numerous habitats that have been listed as priorities for conservation action. A list of these UK BAP species and habitats can be found at http://jncc.defra.gov.uk/page-5706

9.1.2 In addition, there are approximately 150 Local Biodiversity Action Plans (LBAP), normally at county level. These plans usually include actions to address the needs of the UK priority habitats and species in the local area, together with a range of other plans for habitats and species that are of local importance or interest.

9.1.3 In summary, none of the following UKBAP Habitats (which meet the UKBAP Habitat criterion) were recorded on site:

UK BAP broad habitat.	UK BAP priority habitat.	Habitat present within the Application Site.
Rivers and Streams	Rivers	**N**
Standing Open Waters and Canals	Oligotrophic and Dystrophic Lakes	**N**
	Ponds	**N**
	Mesotrophic Lakes	**N**
	Eutrophic Standing Waters	**N**
	Aquifer Fed Naturally Fluctuating Water Bodies	**N**
Arable and Horticultural	Arable Field Margins	**N**
Boundary and Linear Features	Hedgerows	**N**
Broadleaved, Mixed and Yew Woodland	Traditional Orchards	**N**
	Wood-Pasture and Parkland	**N**
	Upland Oakwood	**N**
	Lowland Beech and Yew Woodland	**N**
	Upland Mixed Ashwoods	**N**
	Wet Woodland	**N**
	Lowland Mixed Deciduous Woodland	**N**
	Upland Birchwoods	**N**
Coniferous Woodland	Native Pine Woodlands	**N**
Acid Grassland	Lowland Dry Acid Grassland	**N**
Calcareous Grassland	Lowland Calcareous Grassland	**N**
	Upland Calcareous Grassland	**N**
Neutral Grassland	Lowland Meadows	**N**
	Upland Hay Meadows	**N**
Improved Grassland	Coastal and Floodplain Grazing Marsh	**N**
Dwarf Shrub Heath	Lowland Heathland	**N**
	Upland Heathland	**N**
Fen, Marsh and Swamp	Upland Flushes, Fens and Swamps	**N**

	Purple Moor Grass and Rush Pastures	**N**
	Lowland Fens	**N**
	Reedbeds	**N**
Bogs	Lowland Raised Bog	**N**
	Blanket Bog	**N**
Montane Habitats	Mountain Heaths and Willow Scrub	**N**
Inland Rock	Inland Rock Outcrop and Scree Habitats	**N**
	Calaminarian Grasslands	**N**
	Open Mosaic Habitats on Previously Developed Land	**N**
	Limestone Pavements	**N**
Supralittoral Rock	Maritime Cliff and Slopes	**N**
Supralittoral Sediment	Coastal Vegetated Shingle	**N**
	Machair	**N**
	Coastal Sand Dunes	**N**
Marine Habitats		**N**

9.2 Hedgerows

9.2.1 Biodiversity Gains and Recommendations

9.2.1.1 New hedgerows should be created along the northern, western and southern boundaries:

- Hawthorn *Crataegus monogyna* 20%
- Blackthorn *Prunus spinosa* 20%
- Holly *Ilex aquifolium* 10%
- Hazel *Corylus avellana* 10%
- Dogwood *Cornus sanguinea* 5%
- Field Maple *Acer campestre* 10%
- Crab Apple *Malus sylvestris* 10%
- Wayfaring tree *Viburnum lantana* 5%
- Guelder rose *Viburnum opulus* 10%

9.2.1.2 The hedgerows bounding the site should be kept free of fertilisers, pesticides and development on land within 3m of the hedge centre. The long-term management of these hedges will add to their biodiversity value; the hedge should be cut only once every two or three calendar years and on alternate sides. Cutting the hedge in January will provide maximum quantities of food for birds over winter.

9.2.1.3 A minimum 3m grass margin adjacent to the hedges adjacent within the Application Site should be encouraged and allowed to provide rough grassland dispersal routes and habitat for small mammals. The grassland should be cut during late summer (August/September) with all cuttings should be removed from the site to stop soil enrichment and the smothering of less competitive species of herb. The grassland should be cut every 2-3 years, as part of the management program on a 2-3-year rotation, to avoid scrub encroachment. The grassland margins should be topped at 12cm to encourage tussocks.

9.3 Management planning

9.3.1 It is recommended that a detailed Ecological Construction Method Statement and an Ecological Enhancement Management Plan is produced in order to protect, maintain and enhance the sites ecological value.

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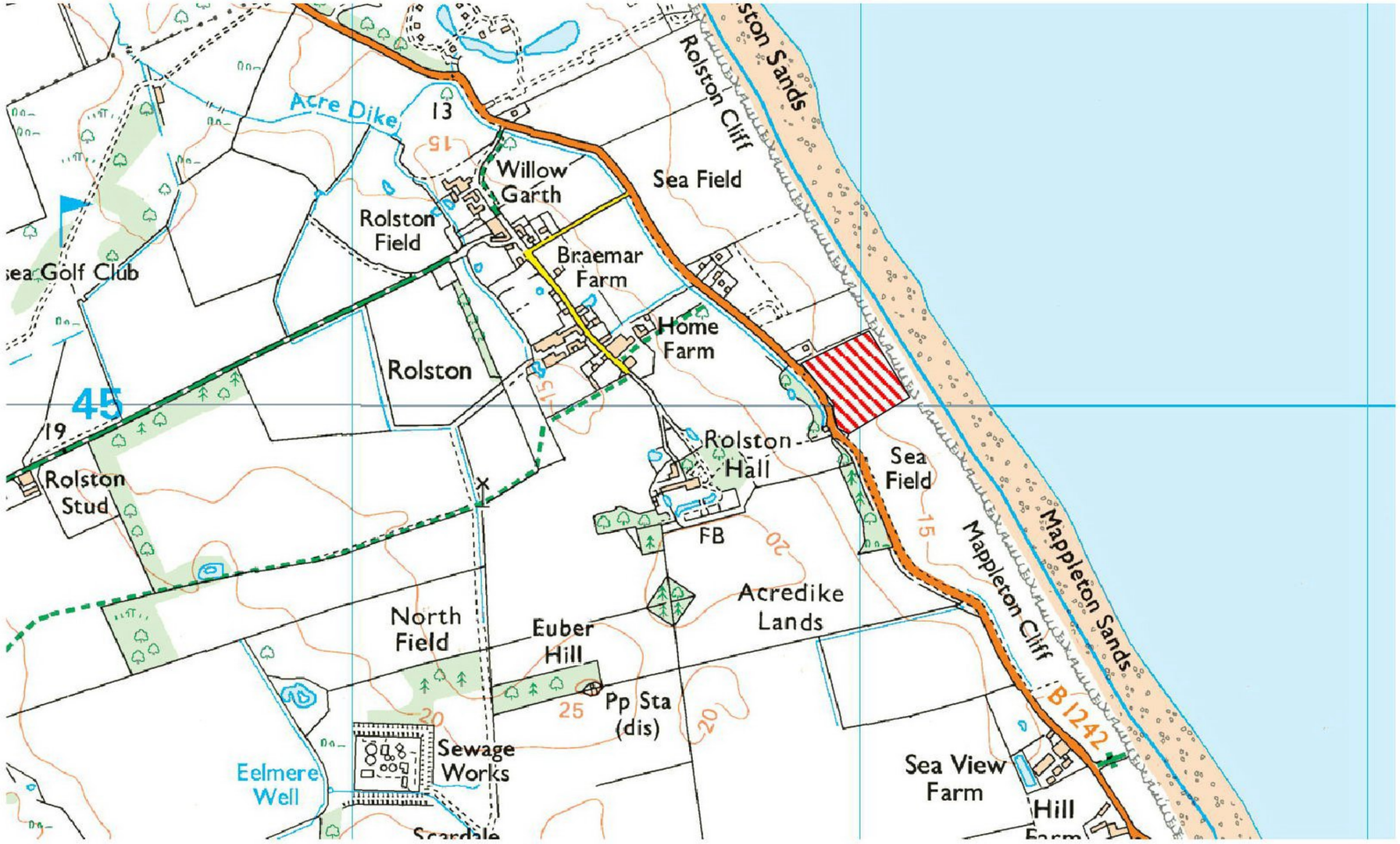
11.0 APPENDICES

11.1 Appendix 1



NORTH

Scale: 1:25,000

Drawing title:

Site Location

WOLD ECOLOGY LTD

2 Redwood Gardens
Driffield
East Yorkshire
YO25 6XA

T: 01377 200242
E: info@woldecology.co.uk
W: www.woldecology.co.uk

11.2 Appendix 2

NORTH

Not to Scale

Drawing title:
Phase 1 Habitat Map

	Scattered scrub
SI	Semi-improved grassland
	Bare ground
	Building
	Application Site boundary
	Target Note

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Target Notes

Target Note	Description	Grid Reference
1	Toilet Block with low bat roosting suitability	TA 21978 45127
2	Rubble piles within the site.	TA 21932 45109
3	Barn Owl roost within the toilet block.	TA 21983 45131

11.3 Appendix 3 – Summary of desktop study

Organisation.	Response Summary.	Date.
Natural England.	Local designations.	July 2021
Natural England.	UKBAP species and habitats within 2 km.	July 2021
North and East Yorkshire Ecological Data Centre.	Species lists within 2 km.	July 2021
www.magic.gov.uk	European Protected species licenses within 2km.	July 2021
Wold Ecology network.	Species lists within 5 km of the Application Site.	2006 – to present day.

11.4 Appendix 4 - Protected Species Legislation

The following provides background to the current legislation in England - for full details reference should be made to the relevant legislation. A number of wild animals are classified as Protected Species as they are protected by various pieces of legislation. The most commonly encountered Protected Species of animal are listed in the table below. This table summarises which sections of legislation each species is protected by and the legislative text is provided on the following pages.

Legislation	Schedule 5 Wildlife and Countryside Act 1981 (As amended) Part 1							EPS	PBA
	S1 (1)	S1 (4 & 5)	S9 (1)	S9 (2)	S9 (4)(a)	S9 (4)(b)	S9 (5)		
Adder V*ipera berus*			✓*				✓		
Common lizard *Zootoca vivipara*			✓*				✓		
Grass snake *Natrix helvetica*			✓*				✓		
Slow worm *Anguis fragilis*			✓*				✓		
Smooth snake *Coronella austriaca*			✓	✓	✓	✓	✓	✓	
Sand lizard Lacerta agilis			✓	✓	✓	✓	✓	✓	
Great Crested Newt *Triturus cristatus*			✓	✓	✓	✓	✓	✓	
Natterjack Toad *Epidalea calamita*			✓	✓	✓	✓	✓	✓	
All UK bats *Chiroptera*			✓	✓	✓	✓	✓	✓	
Water vole *Arvicola amphibious*			✓	✓	✓	✓	✓		
Otter *Lutra lutra*			✓	✓	✓	✓	✓	✓	
Dormouse *Muscardinus avellanarius*			✓	✓	✓	✓	✓	✓	
Badger *Meles meles*									✓
Red Squirrel *Sciurus vulgaris*			✓	✓	✓	✓	✓		
Pine Marten *Martes martes*			✓	✓	✓	✓	✓		
Scottish Wildcat *Felis silvestris*			✓	✓	✓	✓	✓	✓	
White-clawed crayfish *Austropotamobius pallipes*			✓				✓		
All Nesting birds	✓								
Specific Nesting birds i.e. Barn Owl, Black Redstart	✓	✓							

S = Section
() = Paragraph
EPS = European Protected Species i.e. listed under Regulation 40 of the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019
PBA = Protection of Badgers Act 1992
*** = Only part of this section**

Legislative Text

Wildlife and Countryside Act 1981 (as amended)

Since its original enactment, the Wildlife and Countryside Act has been subject to many changes (notably via Schedule 12 of the Countryside and Rights of Way Act 2000). These have in particular affected penalties and enforcement. Offences under section 9 of the Act are now 'arrestable'. Enforcement is usually by the Police and less frequently by Natural England. However, section 25(2) of Wildlife and Countryside Act also states that a local authority may institute proceedings. Prosecutions can result in a level five fine (currently £5000) for each offence (and the Act is specific that killing/injuring of each individual animal can constitute a separate offence), the forfeiture of any equipment, etc., used to perpetrate that offence and (under the Countryside and Rights of Way Act 2000) up to six months' imprisonment.

The Wildlife and Countryside Act 1981 (as amended), transposes into domestic law the Convention on the Conservation of European Wildlife and Natural Habitats (the Bern Convention). It is an offense under the various sections of Part 1 of the Act to -

S.1 (1) intentionally kill, injure, or take any wild bird or their eggs or nests.
S.1 (4) intentionally or recklessly kill, injure, or take any wild bird listed on Schedule 1 of the Act, or their eggs or nests (special penalties apply if convicted) (For a full list of Schedule 1 bird species see the full text of the Wildlife and Countryside Act 1981 [as amended])
S.1(5) (a) disturb any wild bird listed on Schedule 1 while it is building a nest or is in, on or near a nest containing eggs or young; or
(b) disturb dependent young of such a bird
S.9 (1) intentionally or recklessly kill, injure or take any wild animal included in Schedule 5 (certain reptiles are only protected from killing and injuring);
S.9 (2) be in possession or control of any live or dead wild animal included in Schedule 5 or any part or derivative;
S.9 (4) (a) intentionally or recklessly damage or destroy, or obstruct access to, any structure or place used by a Schedule 5 animal for shelter or protection;
S.9 (4) (b) disturb any such animal while it is occupying such a structure or place which it uses for that purpose
S.9 (5) (a) sell, offer for sale, possess or transport any live or dead wild animal included in Schedule 5 for the purpose of sale or any part or derivative;
S.9 (5) (b) advertise for buying or selling such things.

European Protected Species (EPS)

EPS and their breeding sites or resting places are protected under Regulation 41 of the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019. These Regulations transpose Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora (EC Habitats Directive) into national law.

A person who—
(a) deliberately captures, injures or kills any wild animal of a European protected species,
(b) deliberately disturbs wild animals of any such species,
(c) deliberately takes or destroys the eggs of such an animal, or
(d) damages or destroys a breeding site or resting place of such an animal, is guilty of an offence.

For the purposes of paragraph (b), 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 a 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.

(However, please note that the existing offences under the Wildlife and Countryside Act, which cover obstruction of places used for shelter or protection (for example, a bat roost), disturbance and sale, still apply to EPS.)

These actions can be made lawful through the granting of licenses by the appropriate authorities, e.g. Natural England. Licenses may be granted for a number of purposes (such as science and education, conservation, preserving public health and safety), but only after the appropriate authority is satisfied that there are no satisfactory alternatives and that such actions will have no detrimental effect on the wild population of the species concerned.

Protection of Badgers Act 1992 (PBA)

The main legislation protecting badgers is the Protection of Badgers Act 1992. This Act consolidates all previous legislation including the Badgers Act 1973 (as amended) and the Badgers (Further Protection) Act 1991. Under the 1992 Act it is an offence to:

- destroy a sett
- interfere with a badger sett by damaging a sett or any part thereof
- obstruct access to a sett
- disturb a badger while occupying a sett
- wilfully kill, injure, take or attempt to kill, injure or take a badger;
- dig for a badger
- possess a dead badger or any part of a badges
- cruelly ill-treat a badger
- use badger tongs in the course of killing, taking or attempting to kill a badger
- sell or offer for sale or control any live badger
- mark, tag or ring a badger
- cause a dog to enter a sett

The 1992 Act defines a badger sett as: "any structure or place which displays signs indicating current use by a badger". Since development operations may take place over a protracted period, Natural England recommends that licences be sought for developments that may affect seasonally–used setts as well as main setts. Natural

England considers a good guide to be that if a sett has shown signs of occupation within the past twelve months it is considered active.

The Protection of Badgers Act 1992 allows for licences to be issued for a number of purposes, including development under the Town and Country Planning Act 1990 and to prevent serious damage to property. Licences to interfere with badger setts or disturb badgers for development are issued by the Government's statutory nature conservation agencies, e.g. Natural England.

11.5 Appendix 5 - Staff Profiles

Field Surveyor Profile – Chris Toohie M Sc., MCIEEM.

Job title: Director.

Career Summary.

- Chris has worked in the environmental sector for all of his working life. He is an experienced and competent site manager with well-developed organisational skills and a proven ability to deal with a variety of situations in pressurised and challenging environments. As the former site manager of Millington Wood SSSI, Beverley Parks Millennium Orchard Local Nature Reserve and three reserves on the Flamborough Head Heritage Coast/SSSI, Chris has gained an understanding of the functioning of local government and the skills to operate within such structures and multicultural environments. Chris completed over 14 years within local authority countryside services.
- Chris is currently heavily involved in local projects and has volunteered his time and resources to benefit local conservation projects that include The Wolds Barn Owl Study Group, Ryedale Folk Museum Cornflower Project, BTO, Lower Derwent Valley, North Cliff Marsh Flamborough, Butterfly Conservation and apple conservation. As a trustee of Driffield's Millennium Green, Chris has allocated his own time and financial resources to enhance the ecological value of the site.
- Chris is an excellent communicator and his enthusiasm for his work has enabled the successful deliverance of numerous conservation schemes. Chris has been instrumental in raising over £100,000 for environmental and community projects since 2005. These have included grants from Natural England, landfill tax credits and Heritage Lottery funding.

Project Experience in last 5 years.

- Chris has undertaken over 850 bat activity surveys since 2006 including writing and implementing over 120 Natural England bat development licenses.
- Chris is one of 186 (February 2021) Natural England Registered Ecological Consultants able to hold a Low Impact Bat Class Licence (BLICL). Chris is the only Natural England Registered Ecological Consultant in East Yorkshire/Hull/Lincolnshire and one of a small number of Registered Consultants in North Yorkshire. The BLICL can reduce time and costs in the long term if roosting bats are found.
- Phase 1 ecology surveys and Preliminary Ecological Appraisals have included National Nature Reserves, SSSI's, local wildlife sites and urban sites; specifically, Chris has undertaken ecological surveys at Raincliffe Wood SSSI, sections of Hadrian's Wall and numerous English Heritage Castles.

- Contracts have included Natural England, English Heritage, East Riding of Yorkshire Council, Scarborough Borough Council, NPS London, Hull City Council, Gateway, Riverside Housing, IMS Windpower, Kier London Ltd, NHS, Castle Howard Estates, Cemex, Stroma, Bolton Abbey Estates and Pell Frischman.

Field Surveyor Profile – Peter Cook MBE.

Job title: Freelance Ecologist.

Career Summary.

- Peter has worked professionally in the field of Chemical Regulatory affairs and industrial health and safety, however, has devoted much time both voluntarily and semi-professionally in the environmental sector throughout a working life of 40 years.
- Well-developed organisational skills, proven skills in species identification across a range of biota, an in-depth appreciation of the biodiversity in his native East Yorkshire and a good understanding of the National Vegetation Classification scheme. Peter's contribution to British botany has earned him recognition as Fellow of the Linnean Society.
- Peter has both applied and developed the above skills in various positions in the South Holderness Countryside Society (Conservation Projects Officer, Chairman (11 years) and Treasurer) developing/managing the Beacon Lagoons Nature Reserve, the Hollym Carrs Nature Reserve and various other small reserves. In this capacity, and as Recorder for the Botanical Society of the British Isles, Peter has also assisted the Local Authority in the identification and surveying of Local Wild Life Sites and serves voluntarily on the Selection Panel. He has also played a part in the development of the County Biodiversity Action Plan and the Integrated Coastal Zone Management Plan. He has published widely and is currently engaged in surveying the County in the Atlas2020 project for the Botanical Society of Britain and Ireland.
- Peter has volunteered his time and resources to benefit local conservation projects such as the above and also the Withernsea Millennium Green project, which involved contaminated land remediation. The scale of this project (£700,000) alone resulted in recommendation for the honour of MBE by the Department for the Environment in 2000. The total value of conservation projects attributable to Peter's involvement is almost £1M and continues with influence on development and management of the Kilnsea Wetlands reserve (2013-ongoing). Also, an exciting new venture to establish a Conservation Resource Centre from derelict farm buildings coupled with a new (in 2018) 2.8 acre nature reserve to be managed as an educational resource for children aged 8-14, owned and managed by the SHCS. Peter remains as Treasurer and Executive of the SHCS and Chairman of the Withernsea Millennium Green Trust.

11.6 Appendix 6 – Identification of Legal and Planning Policy Issues in England

Scope of Assessment
The first step is to identify any biodiversity features found on the site that are subject to legal or policy controls, as follows:

Designated Sites
The location of the site is compared to the distribution of sites with a statutory or non-statutory nature conservation designation using information derived from the desk study. Consideration is given to designated sites that could be affected directly or indirectly by the proposed development.

Habitats outside Designated Sites
The habitats known to occur on the site are compared to those which receive some protection, in law or policy, outside of designated sites i.e. hedgerows, uncultivated land and semi-natural areas, habitats listed as Priorities in the UKBAP, habitats listed as Habitats of Principal Importance for the Conservation of Biodiversity by the Secretary of State and habitats listed as requiring action in the Local Biodiversity Action Plan.

Ancient Woodland
The ancient woodland inventory is checked to determine whether any known ancient woodland occurs either on the site or nearby.

Protected Species
The species known to occur on the site as a result of the desk study and Phase 1 habitat survey are compared with those listed in nature conservation legislation i.e. the Wildlife and Countryside Act 1981, as amended, and the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019.

In addition, the species known to occur on the site as a result of the desk study and Phase 1 habitat survey are compared with those listed in animal welfare legislation, i.e. the Badgers Act 1992 and the Wild Mammals (Protection) Act 1996.

Biodiversity Action Plan Priority Species
The species known to occur on the site are compared with those listed as Priorities in the UKBAP, Species of Principal Importance for the Conservation of Biodiversity by the Secretary of State or requiring action in the Local Biodiversity Action Plan.

Other Species of Conservation Concern
The species known to occur on the site are compared with other nature conservation listings, such as red data books.

Invasive Plant Species
The species of plant present on the site are compared with those listed by government agencies as invasive non-natives, with particular attention given to those listed in the Wildlife and Countryside Act.

Review of Legislation and Policy
If any of the above are found to occur on or near the site and are likely to be affected by the development in any way, the relevant legislation and planning policy

(including national, regional, county and borough policies) are examined to determine whether the proposed development is compliant.

Ecological Enhancement

Planning policy generally requires new developments to be enhanced for biodiversity. The existing proposals are considered to determine whether biodiversity enhancements are offered and whether they are adequate to meet the policy requirements. Again, national, regional, county and borough policies are considered.

Identification of Potential Further Ecological Issues

Further ecological issues are those which cannot be resolved during the desk study, extended phase 1 habitat survey and ecological appraisal for any reason, including the following:

- The development is near a designated site and consultation with the relevant regulator is required to determine whether further assessment is required;
- Suitable habitat is present on or near the site for a protected species/species of conservation concern and specialist survey techniques are required for their detection;
- Suitable habitat is present on or near the site for a protected species/species of conservation concern and the extended phase 1 habitat survey and ecological appraisal was not undertaken at a suitable time of year for their detection;
- A protected species/species of conservation concern was found on or near the site but further information on population size or distribution is required to resolve any legal and planning policy issues (such as obtaining licences).

Discussion of issues raised by 3rd parties, e.g. reports of protected species from the site by local people, may also be discussed under this heading.

The desk study is used as a guide to the protected species/species of conservation in the local area, however, the list is not taken to be exhaustive and it is borne in mind that some species may no longer occur in the locality.

No attempt is made to evaluate the importance of the site for species not yet confirmed to be on or near the site, nor to discuss the implications for the development if the species were to be found on the site.

No attempt is made to evaluate the importance of the site for species not yet confirmed to be on or near the site, nor to discuss the implications for the development if the species were to be found on the site.

11.8 Appendix 8 - HSI Scoring.

11.8.1 The HSI for great crested newts is a measure of habitat suitability but is not a substitute for newt surveys. In general, ponds with high HSI scores are more likely to support great crested newts than those with low scores (The Herpetological Conservation Trust, 2008).

11.8.2 The HSI is a geometric mean of ten suitability indices (SI):
HSI = (SI1 x SI2 x SI3 x SI4 x SI5 x SI6 x SI7 x SI8 x SI9 x SI10)1/10

- The ten suitability indices are scored for a pond, in the field and from map work.
- The ten field scores are then converted to SI scores, on a scale from 0.01 to 1 (0.01 instead of 0, because multiplying by 0 reduces all other SI scores to 0).
- The ten SI scores are then multiplied together.
- The tenth root of this number is then calculated (X)1/10

11.8.3 The field scores were collected by Chris Toohie. Some of the field scores are categorical, some are numerical. The numerical field scores are converted to SI scores by reading off the values from graphs produced by Oldham *et al.* (2000). Full details of the HSI rationale and guidance can be obtained from the Herpetological Conservation Trust.

11.8.4 **HSI Results**

Geographical location – **SI 1**
All ponds are located in Zone A
Pond 1 = 1.0

Pond area – **SI 2**
The approximate size of the pond is shown in brackets.
Pond 1 (100m^2) = 0.2

Pond drying – **SI 3**
Pond 1 (Never Dries) = 0.9

Water quality – **SI 4**
Pond 1 (Moderate) = 0.67

Shade – **SI 5**
Pond 1 (90%) = 0.4

Fowl – **SI 6**
Pond 1 (Absent) = 1.0

Fish – **SI 7**
Pond 1 (Possible) = 0.67

Ponds within 1 km – **SI 8**
Pond 1 (11) = 0.9

Terrestrial habitat – **SI 9**
Pond 1 (Good) = 1.0

Macrophytes – **SI 10**
Pond 1 (30%) = 0.6

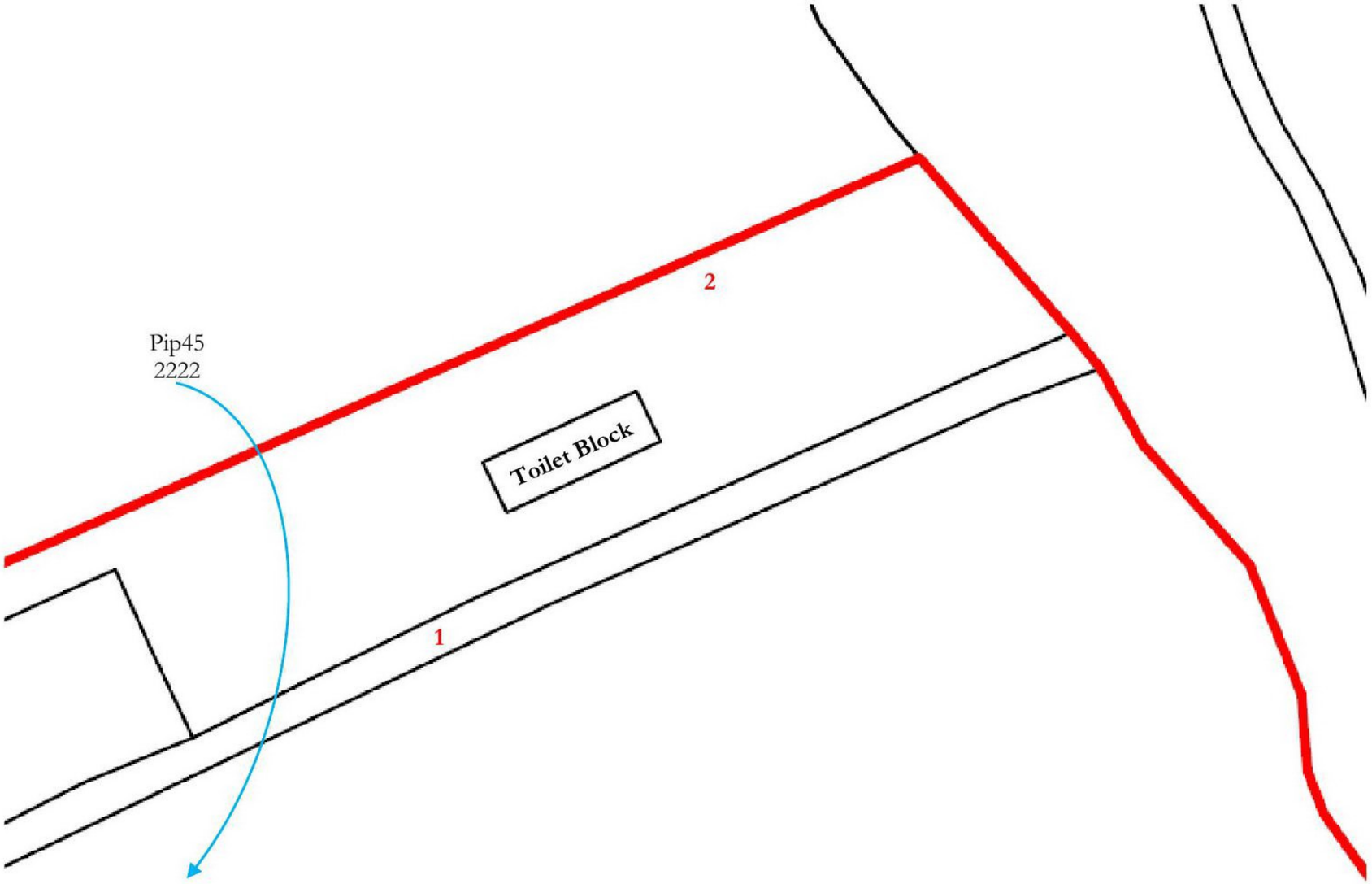
Summary of HSI scoring.											
SI	1	2	3	4	5	6	7	8	9	10	Total
Pond 1	1.0	0.2	0.9	0.67	0.4	1	0.67	0.9	1	0.6	0.017453

11.8.5 Each SI score is multiplied together to give a total. The tenth root of this number is then calculated, consequently, the calculated HSI for a pond should score between 0 and 1.

11.9 Appendix 9 - Bat Survey

11.9.1 Bat records for the activity survey conducted in June 2021

Date – 29th June 2021					
Loc.	**Time**	**Species**	**kHz**	**Direction**	**Comment**
2	2222	C. Pipistrelle	45	SW	Commuting
1	2222	C. Pipistrelle	45		Audible



NORTH

Not to Scale

Drawing title:
Emergence Survey Plan –
29th June 2021

KEY

1 - 2 Location of surveyors

Commuting activity

WOLD ECOLOGY LTD

2 Redwood Gardens
Driffield
East Yorkshire
YO25 6XA

T: 01377 200242
E: info@woldecology.co.uk
W: www.woldecology.co.uk