

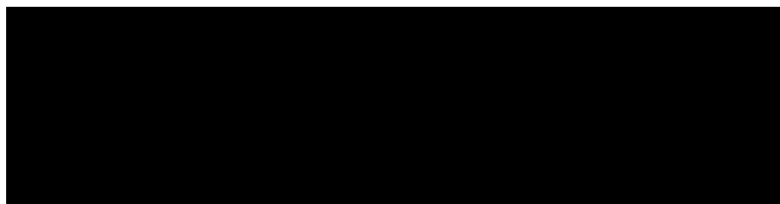


Yapton Road, Bilsham
Preliminary Ecological Assessment (PEA)
For Conrad Energy (Developments) Limited

6th October 2021

South Office
8 Epsom Close
Chippenham, Wiltshire
SN14 0PB

North Office
292 Portobello High Street
Edinburgh
EH15 3AT





Version

VERSION	DATE	AUTHOR	REVIEWED	APPROVED
CIC v1.0	30/09/21	Stewart Parsons	Emma Parsons	04/10/21
CIC v1.0	06/10/21	Stewart Parsons	Emma Parsons	06/10/21

Disclaimer

Copyright © Ellendale Environmental Limited. All rights reserved.

This report has been produced by Ellendale Environmental Limited within the terms and conditions of the contract with the client and taking account of the resources devoted to it by agreement with the client. It has been prepared for the sole use of the client and their professional advisors.

Ellendale Environmental Limited accepts no responsibility for any use of or reliance on the contents of this report by any third party.

The report, and the information contained in it, is intended to be valid for a maximum of 12 months from the date of the survey, providing no significant alterations to the site have occurred.



Contents

1.	Executive Summary	4
2.	Introduction.....	5
2.1	Commission.....	5
2.2	Site Details	5
2.3	Survey Objectives	6
3.	Methodology	7
3.1	Data Search.....	7
3.2	Extended Phase 1 Habitat Survey	7
3.3	Preliminary Protected Species Walkover.....	7
3.4	Survey Area.....	8
3.5	Survey Limitations	8
3.6	Surveyor.....	8
4.	Results	9
4.1	Data Search.....	9
4.2	Extended Phase 1 Habitat Survey	9
4.3	Preliminary Protected Species Survey.....	13
5.	Conclusions	15
5.1	Conclusion.....	15
5.1	Main Recommendations.....	16
6.	Target Notes	17
6.1	Botanical Target Notes (TN)	17
6.2	Animal Target Notes (AN).....	17
7.	Extended Phase 1 Habitat Map	19



1. Executive Summary

Ellendale Environmental Limited was commissioned by Conrad Energy (Developments) Limited to undertake a Preliminary Ecological Assessment (PEA) for an area of land at Yapton Road, Bilsham ('the site'). The proposals are for the erection of a flexible generation facility and associated infrastructure ('the proposed development').

The PEA comprised an Extended Phase 1 Habitat survey and a preliminary protected species walkover. The Extended Phase 1 Habitat survey was undertaken following a Phase 1 survey methodology to list the plant species associated with each habitat, and the preliminary protected species walkover was conducted for the site and the surrounding area.

The site is located to the south-west of Yapton and is approximately 0.9 hectares in size. The site comprises an arable field which, at the time of the survey, had been ploughed following harvesting of crop and was dominated by bare ground, making it unsuitable habitat for protected species. No evidence of protected species was found during the survey and none can realistically be anticipated on this site.

A strip of poor semi-improved grassland out with the site (to the west of the site boundary) provides the most suitable habitat to support protected species; however, no evidence was found during the survey.

Overall, the site is assessed as providing low suitability to support protected species.

Some recommendations have been made for modest post-construction ecological enhancements at the site that are proportionate with the low level of environmental impact from the proposed development.



2. Introduction

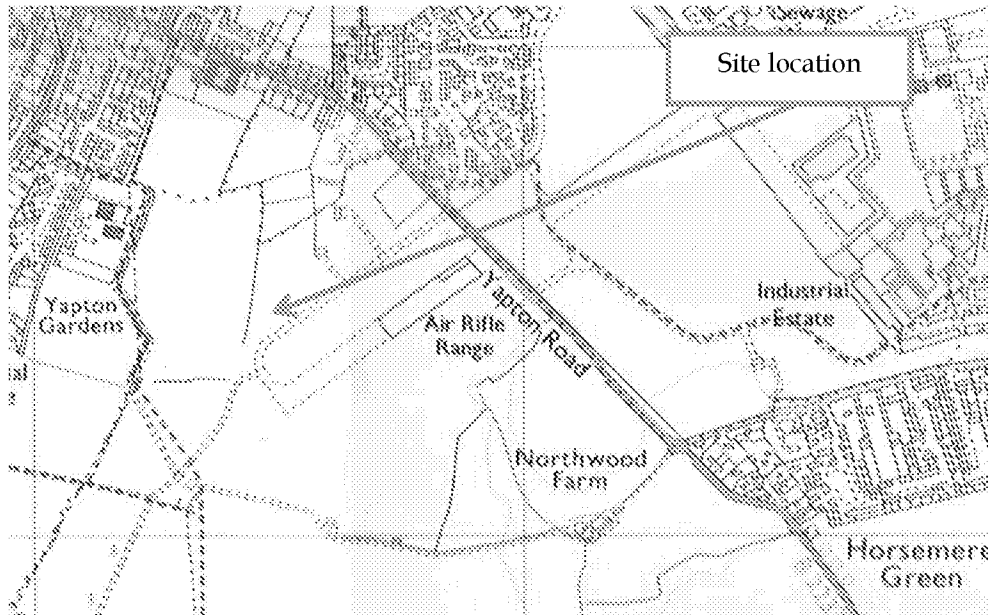
2.1 Commission

Ellendale Environmental Limited was commissioned by Conrad Energy (Developments) Limited to undertake a Preliminary Ecological Assessment (PEA) for an area of land at Yapton Road, Bilsham ('the site'). The proposals are for the erection of a flexible generation facility and associated infrastructure ('the proposed development').

2.2 Site Details

The site is located to the south-west of Yapton, a village and civil parish in the Arun district of West Sussex, England, at OS grid reference SU 98499 02457.

Figure 1: Site location



Reproduced from Ordnance Survey Mapping Map Explorer OL10 Scale 1:25000 by permission of Ordnance Survey on behalf of The Controller of Her Majesty's Stationery Office. © Crown copyright. All rights reserved. Licence number 100054247.



2.3 Survey Objectives

On the basis of the brief provided by the client, Ellendale Environmental conducted an ecological survey to fulfil the following needs:

- ☛ Obtain baseline information on the current habitats and ecological features in and around the site;
- ☛ Identify any further specialist surveys that may be required;
- ☛ Identify the presence (or potential presence) of any protected species whose disturbance may require consent under The Conservation (Natural Habitats, &c.) Regulations 1994 (as amended) or the Wildlife and Countryside Act, 1981 (as amended); and
- ☛ Identify any species or habitats which may require special mitigation during the development of the site.



3. Methodology

3.1 Data Search

Publicly available databases, including MAGIC and the NBN Atlas, were consulted for historical evidence of:

- ☛ Statutory land-based designations;
- ☛ Non-statutory land-based designations; and
- ☛ Protected species.

The data search was conducted within a 2km radius of the site boundaries and this was extended to 5km for bats.

3.2 Extended Phase 1 Habitat Survey

An Extended Phase 1 Habitat survey of the site was undertaken and the habitats present on the site were mapped following a Phase 1 survey methodology (JNCC, 2010), listing the plant species associated with each habitat. This methodology was an Extended Phase 1 habitat survey, whereby all habitats were surveyed and recorded onto a base plan, and any habitats that were considered to be of potential interest to nature conservation were recorded through the use of target notes to annotate a Phase 1 habitat map.

3.3 Preliminary Protected Species Walkover

The site and surrounding areas were examined for signs of protected species, particularly nesting birds, as it was considered that the site had the greatest potential to support this group of animals.

The presence/potential presence of protected or notable species of conservation concern was recorded using target notes, following the Chartered Institute of Ecological and Environmental Management guidance (CIEEM, 2012).



3.4 Survey Area

The survey covered the entire site and areas within 30m (where accessible).

3.5 Survey Limitations

The aim of this survey was not to record every species present on the site, as one survey acts as a snap-shot, recording only those species which are present at the time or whose presence can be indicated through the occurrence of field signs, such as feeding remains, droppings or places used for shelter or foraging.

Evidence collected has been used to draw conclusions about the flora and fauna within the boundary of the site and to provide an assessment of their ecological and nature conservation value.

Weather was not a limiting factor to the survey. The prevailing conditions at the time of the survey are summarised in Table 1.

Table 1: Survey weather conditions

SURVEY DATE	TEMPERATURE (°C)	WIND SPEED (MPH)	CLOUD COVER / PRECIPITATION
19/08/21	21.1	1.7 Avg. 4.0 Max.	90% cloud cover, dry and humid with a cool breeze

3.6 Surveyor

The survey was undertaken by Stewart Parsons, Director and Principal Ecologist of Ellendale Environmental, who is a full member of CIEEM and a Chartered Environmentalist (CEnv). Stewart has over 18 years' professional experience of undertaking ecological surveys across the UK.



4. Results

4.1 Data Search

A 2km data search for existing biological records was undertaken from publicly available databases which confirmed that there are no statutory or non-statutory sites located within 2km of the site boundary.

The following protected species were identified within 2km of the site boundaries by the data search, and this was extended to 5km for bat species:

- ☛ Great crested newt *Triturus cristatus*;
- ☛ Serotine bat *Eptesicus serotinus*;
- ☛ Whiskered bat *Myotis mystacinus*;
- ☛ Brandt's bat *Myotis brandti*;
- ☛ Common pipistrelle bat *Pipistrellus pipistrellus*;
- ☛ Soprano pipistrelle bat *Pipistrellus pygmaeus*;
- ☛ Grass snake *Natrix helvetica*;
- ☛ Slow worm *Anguis fragilis*; and
- ☛ Daubenton's bat *Myotis daubentonii*.

Approximately 160 bird species have been recorded within 2km of the site and are shown on the NBN Atlas; however, none of these records are for within the site boundaries.

Barn owl *Tyto alba* has been recorded in close proximity to the proposed site boundary.

4.2 Extended Phase 1 Habitat Survey

The site is located to the south-west of Yapton and is approximately 0.9 hectares in size. The site comprises an arable field that, at the time of the survey, had been ploughed following harvesting of crop.



To the north and east of the site there is further arable land and a hedgerow. To the south there is an access road, beyond which is further arable land. To the west there is a strip of poor semi-improved grassland and a field drain, beyond which is more arable land.

Photograph 1: showing a view of the site



The main area of the site is dominated by an arable field which, at the time of the survey, was bare following previous harvesting of crop. This field extends to the north and east of the site boundary.

To the west of the site there is a strip of poor semi-improved grassland, approximately 20m wide, that extends down the western side of the arable field boundary. Species present include Yorkshire fog *Holcus lanatus*, ribwort plantain *Plantago lanceolata*, broadleaved dock *Rumex obtusifolius*, ragwort *Rumex obtusifolius*, spear thistle *Cirsium vulgare*, clover *Trifolium repens*, hogweed *Heracleum sphondylium*, cock's-foot



grass *Dactylis glomerata*, bindweed *Calystegia sepium* and perennial ryegrass *Lolium perenne*.

Photograph 2: showing a view of the poor semi-improved grassland



Young trees have been planted within the grassland with species present including silver birch *Betula pendula*, beech *Fagus sylvatica*, hazel *Corylus avellana* and hawthorn *Crataegus monogyna*.

A small field drain is present in the centre of the poor semi-improved grassland which is approximately 0.5m wide, with steep earth banks that are heavily vegetated, and approximately 1m deep. At the time of the survey, the water within the ditch was shallow, approximately 10cm deep and slow flowing.



Photograph 3: showing a view of the field drain



To the south there is an access road that is heavily used by vehicles. Piles of rubble and a soil bund are present to the south-west that are vegetated by species including Yorkshire fog, ribwort plantain, broadleaved dock, ragwort, spear thistle, bramble *Rubus fruticosus sp.*, hogweed, cock's-foot grass, bindweed, teasel *Dipsacus fullonum* and burdock *Arctium lappa*.



Photograph 4: showing a view of the southern site boundary



4.3 Preliminary Protected Species Survey

The bare ground within the arable field of the main site does not provide suitable habitat to support protected species. The arable land is heavily managed and at the time of the survey was not vegetated.

No suitable habitat for reptiles or amphibians was found within the site and the bare ground does not provide any refugia, foraging habitat or hibernacula to support these species. The strip of poor semi-improved grassland may provide some foraging habitat and the soil bund to the south may also provide some refugia; however, no evidence was found during the survey. The grassland strip is isolated and this may restrict the movement of animals into and out of the grassland.

The bare ground within the site does not provide suitable habitat for ground nesting birds.



There are no trees present within the site and therefore there is no suitable habitat for roosting bats or nesting birds. The closest trees are those planted within the grassland strip; however, they are too young to provide roosting habitat for bats and too small to provide habitat for nesting birds.

No evidence of mammals, such as European badger *Meles meles*, was found during the survey and no latrines, or runs were found.

No evidence of water vole *Arvicola amphibius* was found on the field drain during the survey and they are not considered to be present.

Overall, the site is assessed as providing low suitability to support protected species.



5. Conclusions

5.1 Conclusion

The site is located to the south-west of Yapton and is approximately 0.9 hectares in size. The site comprises of arable field that at the time of the survey had been ploughed following harvesting of crop.

The main area of the site is dominated by arable land that was bare ground at the time of the survey and provided no suitable habitat for protected species.

The most suitable area for protected species is a strip of poor semi-improved grassland to the west of the site boundary; however, this area is isolated with arable land on all sides restricting the movement of animals into and out of the site.

There are no trees within the site and the bare ground does not provide suitable habitat for nesting birds.

Trees planted within the strip of poor semi-improved grassland are not suitable to support roosting bats or nesting birds and no evidence was found during the survey.

No evidence of protected species such as badger was found during the survey.

A field drain is present to the west of the site within the poor semi-improved grassland. No evidence of water vole was found during the survey and the ditch was found to be isolated, thus restricting the movement of animals into and out of the site.

No evidence of protected species was found during the survey and none can realistically be anticipated on this site. Overall, the site is assessed as providing low suitability to support protected species.



5.1 Main Recommendations

It is recommended that any vegetation clearance is undertaken outside the bird breeding season, i.e. March to July, as all nesting birds are protected under the Wildlife and Countryside Act 1981 (as amended). If nesting birds are found, these areas of the site will need to be protected from disturbance until the young have fledged naturally.

In addition, the following recommendations are made for modest post-construction ecological enhancements at the site that are proportionate with the low level of environmental impact from the proposed development:

- ☛ As part of the design and layout considered, bird nesting boxes, both small hole and open fronted, could be placed within the site to create nesting opportunities for small bird species.
- ☛ As part of the design and layout considered, bat boxes could be placed on trees around the site boundaries to create roosting opportunities for bat species.
- ☛ As part of the design and layout considered, lighting should be restricted and focused on the site. Light spill on the boundaries of the site should be avoided to create dark corridors through which animals can travel.

These measures aim to increase the diversity of species present on the site after the completion of future development works.



6. Target Notes

6.1 Botanical Target Notes (TN)

TN1 – Arable field that at the time of the survey was bare following harvesting of the crop.

TN2 – A strip of poor semi-improved grassland, approximately 10m wide between two arable fields. Planted trees are present along the grassland strip.

TN3 – A small drainage channel between the arable land.

TN4 – A vegetated earth bank with species similar to the poor semi-improved grassland.

TN5 – An access road that is heavily used by vehicles.

TN6 – Arable field that at the time of the survey was bare following harvesting of the crop.

TN7 – Arable field that at the time of the survey was bare following harvesting of the crop.

6.2 Animal Target Notes (AN)

AN1 – Arable land that was bare ground at the time of the survey and provided no suitable habitat for protected species.

AN2 – A strip of poor semi-improved grassland to the west of the site boundary is isolated with arable land on all sides restricting the movement of animals into and out of the site. There are no trees within the site and the bare ground does not provide suitable habitat for nesting birds. Trees planted within the strip of poor semi-improved grassland are not suitable to support roosting bats or nesting birds and no evidence was found during the survey.



AN3 – A field drain is present to the west of the site within the poor semi-improved grassland. No evidence of water vole was found during the survey and the ditch was found to be isolated, thus restricting the movement of animals into and out of the site.



7. Extended Phase 1 Habitat Map



Drawing Title;
Yapton Road, Bilsham
Extended Phase 1 Map

Client;
Conrad Energy (Developments) Limited

Date; 05/10/21	Drawn By; SP
---------------------------------	-------------------------------

Project Number; EEL405	Version Number; v1.0
---	---------------------------------------

Target Note

● TN

Animal Note

● AN

Woodland and Scrub

● Broadleaf Tree

× Scattered Scrub

===== Hedge

----- Laylandii Hedge

Miscellaneous

--- Earth Bank

Water

----- Ditch

Grassland

□ Arable

▨ Poor Semi-improved Grassland

Built-up Area

▤ Hard Standing

