Fosse Green Energy

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EN010154

6.3 Environmental Statement Appendices

Appendix 8-E: Great Crested Newt

VOLUME

6

Planning Act 2008 (as amended)

Regulation 5(2)(a)

Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 (as amended)

18 July 2025

Planning Act 2008

The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulation 2009 (as amended)

Fosse Green Energy

Development Consent Order 202[ ]

6.3 Environmental Statement Appendices

Appendix 8-E: Great Crested Newt

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Planning Inspectorate Scheme Reference	EN010154
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Rev 1	18 July 2025	DCO Submission
Rev 2	02 September 2025	Procedural Decision

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1. Introduction

1.1 Background

1.1.1 This report forms a technical appendix to the Environmental Statement (ES), specifically to accompany **Chapter 8: Ecology and Nature Conservation** of this ES **[EN010154/APP/6.1]**. This report characterises the baseline conditions for Great Crested Newt (GCN) *(Triturus cristatus*) within the DCO Site Boundary of the Fosse Green Energy project (hereafter referred to as the Proposed Development), reporting on the results of a desk study and field surveys undertaken within the Zone of Influence (ZoI) (see definition in **Section 3.1**), where accessible.

1.1.2 Further information on the Proposed Development is included within **Chapter 3: The Proposed Development** of this ES **[EN010154/APP/6.1]**.

1.2 Aims and Objectives

1.2.1 The aim of this appendix is to determine the presence and distribution of GCN within the ZoI.

1.2.2 The objectives, therefore, are to:

a. review existing ecological data to identify any records of GCN occurring within the Study Area (see **Section 3.1**);

b. identify the presence of potentially suitable water bodies located within the Survey Area (see **Section 3.1**) using Ordnance Survey (OS) aerial mapping and online sources; and

c. undertake GCN Habitat Suitability Index (HSI) assessments on identified accessible water bodies, followed by environmental DNA (eDNA) surveys of those water bodies which are assessed as potentially suitable, to confirm presence or absence of GCN.

1.2.3 Combined, this is being used to determine the:

a. Biodiversity importance of the DCO Site Boundary for GCN; and

b. Potential impacts of the Proposed Development on GCN and any required mitigation (as presented in **Chapter 8: Ecology and Nature Conservation** of this ES **[EN010154/APP/6.1]**).

2. Relevant Legislation, Policy and Guidance

2.1 Legislation

2.1.1 All stages of the GCN life cycle as well as their habitat are fully protected under Schedule 2 of The Conservation of Habitats and Species Regulations 2017 (as amended) (Habitats and Species Regulations) (Ref 1). GCN is listed in Schedule 5 of the Wildlife & Countryside Act 1981 (WCA) (Ref 2), which affords it protection under Section 9, as amended by the Countryside and Rights of Way Act 2000 (CRoW) (Ref 3). It is also listed in Annex II and VI of the European Council (EC) Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora (Habitats Directive) (Ref 4), is included as a Species of Principal Importance (SPI) in England under Section 41 of the Natural Environment and Rural Communities Act 2006 (NERC) (Ref 5). In combination, this makes it an offence to:

a. Deliberately capture, injure or kill a GCN;

b. Deliberately take or destroy their eggs;

c. Deliberately, intentionally or recklessly disturb an individual; or

d. Damage, destroy or obstruct access to any structure which a GCN used for shelter or protection.

2.1.2 The protection includes both the breeding water body[1] itself and the terrestrial habitat used for foraging and hibernation, which may be distant (up to 500 metres (m)) from the water body (Ref 6), although 250m is more typical, acknowledging that there is a notable decrease in abundance of GCN beyond a distance of 250m from a breeding pond (Ref 7).

2.2 European Protected Species Licencing

2.2.1 Where GCN habitat, including their breeding sites and resting places, is present on a site and a development has the potential to cause one or more offences under the Habitats and Species Regulations (Ref 1), a European Protected Species Licence (EPSL) is required from Natural England to allow the development to proceed. This licence allows the development to proceed with exemption from offences, provided works are undertaken with strict accordance of the terms of the licence. A licence cannot, however, be obtained to provide protection against offences under the WCA (Ref 2).

[1] A water body that is suitable for GCN is a certain clearly distinguishable part of surface water, such as a lake, pond or watercourse (such as a ditch / stream) without any flow.

2.2.2 In determining whether to grant a licence, Natural England must apply the requirements of Regulation 55 of the Habitats and Species Regulations (Ref 1), these being:

a. Regulation 55(1) states: "*subject to the provisions of this regulation, the relevant licensing body may grant a licence for the purposes specified in paragraph 2*". The relevant section of paragraph 2 being:

b. (e) a licence can be granted for the purposes of "*preserving public health or public safety or other imperative reasons of overriding public interest including those of a social or economic nature and beneficial consequences of primary importance for the environment.*"

c. Regulation 55(9) states: "*the relevant licensing body must not grant a licence under the regulation unless it is satisfied –*

(a) "that there is no satisfactory alternative;" and

(b) "that the action authorised will not be detrimental to the maintenance of the population of the species concerned at a favourable conservation status in their natural range."

2.2.3 A determining authority must also apply these tests when determining a planning application (including an application for a development consent order), where a proposed development is likely to cause an offence under the Habitats and Species Regulations (Ref 1).

2.2.4 In order for a EPSL to be approved by Natural England for works with GCN, it must be demonstrated that the Proposed Development will minimise any potential impacts upon GCN and will not be detrimental to the maintenance of the population of the species concerned at a favourable conservation status in their natural range.

2.2.5 Offences can be avoided through the implementation of appropriate mitigation that will minimise the potential for any offences to be committed. Mitigation can include the undertaking of vegetation clearance works at an appropriate time of the year and completing works in accordance with methods that will minimise or avoid potential disturbance or destruction of habitats. In such circumstances it is sensible for works to be completed using Reasonable Avoidance Measures (RAMs).

2.3 Species of Principal Importance

2.3.1 In England, NERC (Ref 5) requires the Secretary of State for Environment, Food and Rural Affairs to publish and maintain a list of habitats and species that are of 'principal importance' for the purpose of conserving biodiversity and are regarded as conservation priorities under the UK Biodiversity Framework 2024 (Ref 8), which supersedes the UK Biodiversity Action Plan (UKBAP) (Ref 9). The UKBAP was launched in 1994 and established a framework and criteria for identifying species (and habitat types) of conservation concern.

2.3.2 GCN is listed as being a Species of Principal Importance (SPI) for conservation in England as required by section 41 of NERC (Ref 5). Therefore, the presence of GCN on a site is of material consideration during the planning process and is used to guide decision-makers such as public bodies (including

local and regional authorities) in implementing their duty under section 40 of NERC .

2.4 Local Priority Species

2.4.1 The Proposed Development is located within the county of Lincolnshire. Formerly, the Lincolnshire Biodiversity Action Plan (3rd edition) (Lincolnshire BAP) (Ref 10) provided context to inform identification of threatened or uncommon species of local relevance, alongside priorities for conservation and enhancement targeted at a local level in Lincolnshire. However, under the Environment Act 2021 (Ref 11), these are being replaced by Local Nature Recovery Strategies (LNRSs), which are a system of spatial strategies for nature which will support delivery of biodiversity net gain (BNG) and provide more focussed action for nature recovery. Whilst this is still being developed for Lincolnshire and with no specific habitat or species plans currently in place, this report references the Lincolnshire BAP, for which GCN is included in a grouped species action plan for newts (Ref 10).

2.4.2 Additionally, the Lincolnshire BAP (Ref 10) identified the following threats to GCN populations in Lincolnshire:

a. Loss of suitable breeding ponds due to lowered water-tables; infilling for development, farming or waste disposal; neglect; natural succession; shading from surrounding vegetation;

b. Degradation, loss and fragmentation of terrestrial habitats;

c. Introduction of fish into breeding ponds, which eat young newts and eggs; and

d. Chemical pollution, eutrophication and toxic effects of agrochemicals.

3. Methods

3.1 Characterising the baseline

3.1.1 Within this report, the following terminology is used when referring to the geographic areas within which assessments were made:

a. Study Area– the area within which the Proposed Development will be located and a 2km radius (as defined in **Chapter 8: Ecology and Nature Conservation** of this ES **[EN010154/APP/6.1]**) which was subject to collection of background information e.g. desk study records for GCN to supplement the findings of the survey work.

b. Zone of Influence (ZoI) – the area over which GCN may be affected by the Proposed Development which, using the criteria below and proportionate to the Proposed Development's impacts, is typically no greater than 250m from the DCO Site Boundary. The scope of field surveys was defined through review of likely impacts of the Proposed Development and results of the desk study; and

c. Survey Area – the area within which the GCN survey work was undertaken (the DCO Site Boundary plus a radius of up to 250m, where access allowed).

3.1.2 The ZoI is based on the:

a. Nature of the Proposed Development (a solar farm and associated infrastructure), project activities and the potential for effects at all development stages (construction, operation and decommissioning);

b. Nature of the current land use (predominantly arable) and habitats in the vicinity, the water bodies present, their connectivity (e.g. through hedgerows, grassland margins) and how they may be used by GCN;

c. Presence of GCN in the ZoI, based on the location of the DCO Site Boundary and desk study data;

d. Applicable legislation; and

e. Habits, behaviours and preferences of GCN and whether these could be affected both spatially and temporally.

3.2 Desk Study

3.2.1 A desk study was undertaken as part of the PEA in 2024 and records of GCN within a 2km radius of the DCO Site Boundary were obtained through Greater Lincolnshire Nature Partnership (GLNP). Only records up to ten years old were considered within the assessment, as any records older than ten years are unlikely to be still representative of GCN populations in the local area.

3.2.2 Aerial photographs, OS maps and the indicative design of the Proposed Development (as presented in **Figure 3-2-A: Indicative Fixed South Facing Site Layout Plan** and **Figure 3-2-B: Indicative Single Axis Tracker Site Layout Plan** of this ES **[EN010154/APP/6.2]**) were reviewed to identify water bodies of potential value to GCN within the ZoI. This review included

identifying any key routes of potential habitat connectivity to the DCO Site Boundary from outside water bodies (e.g., ponds) and significant barriers to GCN dispersal (e.g., main roads or rivers). This exercise was used to scope out the need for field surveys where connectivity was limited, where there were barriers to dispersal for GCN or where no impacts were predicted. Furthermore, any water bodies that were beyond 250m from the DCO Site Boundary were not subject to further survey as GCN commonly move between water bodies up to a distance of 250m from each other (Ref 7), although there are studies showing GCN travelling much further than this (Ref 6) and consideration for survey was made in recognition of this.

3.2.3 The Multi-Agency Geographic Information for the Countryside ('MAGIC') website (Ref 12) was reviewed to identify species licence returns of GCN that are within 2km of the DCO Site Boundary, to identify species presence in the wider area and supplement the data search.

3.3 Field Survey

Habitat Suitability Index (HSI)

3.3.1 The Habitat Suitability Index (HSI) method for GCN (Ref 13) was devised to quantitively assess the suitability of water bodies to support GCN, using ten suitability features of the water body, which are assessed in the field and are later converted into a HSI index to determine a measure of breeding suitability for GCN. HSI surveys can be undertaken at any time of year and were undertaken on each water body as access became available.

3.3.2 A description of the ten indices is presented in **Table 1**.

Table 1: GCN suitability indices and description

Suitability Indices	Suitability Indices Title	Suitability Indices Description
(SI1)	Geographic location	Different areas of the UK represent different indices scores. The UK is divided into three zones (A, B and C) which illustrate decreasing potential for GCN in regard to their geographical range
(SI2)	Water body area	The optimum water body size is between 500 and 750m^2.
(SI3)	Water body permanence	The optimal frequency of drying is one year per decade as this reduces the number of predatory fish. However, permanent water retention is preferable to annual drying up.
(SI4)	Water quality	Good water quality is optimal and is measured through invertebrate diversity and the condition of the water body.
(SI5)	Water body shading	Represented as a percentage of the bank, GCN occurrence is significantly reduced above a threshold of 75% shade.

Suitability Indices	Suitability Indices Title	Suitability Indices Description
(SI6)	Impact of waterfowl	Waterfowl impact on water body vegetation and water turbidity is a negative indicator for GCN as heavy use by waterfowl can deteriorate the suitability of a waterbody for GCN.
(SI7)	Occurrence of fish	The effect of fish presence is related to the species. Some species can have negative impacts and GCN rarely coexist with larger predatory fish species. Other species (depending on conditions) are not detrimental.
(SI8)	Water body density	The presence of water bodies within the local area increases the chances of GCN becoming established from nearby water bodies (and also the suitability of the local area to support a meta-population).
(SI9)	Terrestrial habitat	In general, scrub, unimproved grassland, woodland (deciduous and coniferous) and gardens are regarded as being suitable terrestrial habitat, unlike improved pasture, arable and hardstanding. The SI9 is the combination between positive factors (suitable habitat) and negative factors (e.g., inherent barriers to movement such as roads). The surrounding habitat is scored according to the extent of high-quality terrestrial newt habitat.
(SI10)	Macrophyte content	The highest occurrence of GCN is found in water bodies with emergent vegetation cover between 25% and 50% and submerged vegetation between 50% and 75%.

3.3.3 The ten field scores were converted into suitability index scores which were multiplied together then calculated to the power of 0.1, to give the resulting HSI score which were categorised in terms of their suitability to support GCN as follows:

a. <0.5: poor likelihood of presence;
b. 0.5 – 0.59: below average likelihood of presence;
c. 0.6 – 0.69: average likelihood of presence;
d. 0.7 – 0.79: good likelihood of presence; and
e. >0.8: excellent likelihood of presence.

3.3.4 Any water body with an HSI score of below average or greater is then surveyed using eDNA analysis or field-based methods, to determine GCN presence or absence.

eDNA Laboratory Analysis

3.3.5 Further to the HSI assessment, suitable (see **Section 3.3.4**) and accessible water bodies identified within the Survey Area were scoped in for environmental DNA (eDNA) survey.

3.3.6 eDNA survey is an established technique for determining presence or absence of GCN within aquatic habitats, which is approved by Defra and Natural England within their standing advice (Ref 14). In aquatic environments, eDNA is naturally diluted and distributed in the water. Sources of eDNA in water derive from faeces, mucous, gametes, shed skin and carcasses. The eDNA survey involves the collection of water samples for laboratory analysis for the DNA of species of interest, in this case GCN. The sampling procedure is prescribed in the published method and requires that the water sample be taken between 15th April and 30th June.

3.3.7 The eDNA surveys were undertaken in May 2023 (water bodies 57 and 66 as presented in **Figure 8-E-1** in **Annex A** of this appendix **[EN010154/APP/6.3]**); June 2024 (water bodies 49, 50, 59 and 61 as presented in **Figure 8-E-1** in **Annex A** of this appendix **[EN010154/APP/6.3]**); and May 2025 (water bodies 5, 6, 9, 14 and 20) by AECOM ecologists in accordance with the published protocol for survey (Ref 15), using eDNA sampling kits and analysis services undertaken by one of the approved suppliers. To prevent contamination of the samples:

a. Gloves were worn at all times during the sampling process, and gloves were replaced between sample collection from the water body and pipetting into the sterile sub-sample tubes; and

b. Samples were collected without entering the water i.e., the surveyor stood only on the water body bank or water body edges. This prevented disturbance of the substrate to limit cross-contamination.

3.3.8 The field sampling protocol consisted of the following steps for each surveyed water body:

a. The location of sub-samples was spaced as evenly as possible around the margin of the water body. Sub-samples generally targeted areas with potential egg laying substrate (e.g., vegetation) and open water areas which newts may be using for displaying. Prior to sampling, the water column was mixed by gently using a ladle to stir through the entire water column, whilst avoiding disturbing the sediment on the bed of the water body. Sampling of very shallow water (less than 5-10cm deep) was avoided where possible;

b. A new pair of gloves was put on to keep the next stage as uncontaminated as possible;

c. Using a clear plastic pipette, approximately 15mL of water were taken from the bag and pipetted into six sterile tubes containing 35mL of ethanol to preserve the eDNA sample (i.e., the tube was filled to the 50mL mark);

d. The tube was shaken vigorously for ten seconds to mix the sample and preservative. This is essential to prevent DNA degradation and was also repeated for each of the six conical tubes. Before taking each sample, the

water in the bag was shaken to homogenise the sample, as DNA material constantly sinks to the bottom; and

e. The box of preserved sub-samples was kept in a fridge and then later returned to ambient temperature in the laboratory for analysis.

3.3.9 eDNA kits were procured from SureScreen Scientifics and on collection of samples, they were then sent back to SureScreen Scientifics to be analysed in their laboratory. Laboratory analysis was consistent with the methods described in Appendix 5 of the WC1067 Technical Advice Note (Ref 16), including control analysis for inhibition and degradation.

3.3.10 eDNA sampling resulted in a result of either positive (eDNA was detected in the water sample), negative (no eDNA was detected in the sample and GCN are likely absent) or inconclusive (the sample was degraded or otherwise could not provide a positive or negative result.

3.4 Biodiversity Importance

3.4.1 An essential prerequisite step to allow an ecological impact assessment of the Proposed Development was an evaluation of the relative biodiversity importance of the Survey Area for GCN. This is necessary to set the terms of reference for the subsequent ecological impact assessment (as presented in **Chapter 8: Ecology and Nature Conservation** of this ES **[EN010154/APP/6.1]**).

3.4.2 The method of evaluation that was utilised has been developed with reference to the Chartered Institute of Ecology and Environmental Management (CIEEM) Guidelines (Ref 17). This gives guidance on scoping and carrying out environmental assessments and places appraisal in the context of relevant policies and at a geographical scale at which feature matters (i.e. international, national, regional, county, district, local or site). Data received through desk study and field-based surveys were used to identify the importance of GCN. Professional judgement was also applied, where necessary. Relevant published national and local guidance and criteria can be used, where available, to inform the assessment of biodiversity importance and to assist consistency in evaluation. Population and conservation status for GCN within Lincolnshire has been made with reference to the GLNP's '*Newts: an assessment of current status in Greater Lincolnshire*' (Ref 18).

3.5 Assumptions and Limitations

3.5.1 This report is based on the administrative county of Lincolnshire whilst recognising that key aspects of biodiversity are co-ordinated and managed within the geography of Greater Lincolnshire, for example the Nature Strategy for the Greater Lincolnshire Nature Partnership.

Desk Study

3.5.2 The aim of a desk study was to help characterise the baseline context of the Proposed Development and provide valuable background information that would not be captured by site surveys. Information obtained during the course of the desk study was dependent upon people and organisations having made

and submitted records for the area of interest. As such, a lack of records for GCN does not necessarily mean that this species does not occur in the Study Area. Likewise, the presence of records of GCN does not automatically mean that these still occur within the area of interest or are relevant in the context of the Proposed Development.

3.5.3 Due to recent changes in the DCO Site Boundary, some ponds previously identified within 250m of the DCO Site Boundary are no longer within this 250m buffer zone and are therefore scoped out of further assessment. However, the original pond numbering has been kept to ensure consistency with HSI and eDNA results.

Field Survey

3.5.4 The HSI survey is not sufficiently precise to conclude that any particular water body with a score of average or greater will support GCN or that those with a score of below average will not support GCN. However, it is a useful and recognised tool for establishing the potential suitability of water bodies for breeding GCN to inform further survey requirements. The HSI for GCN is a measure of habitat suitability and is not a substitute for aquatic amphibian surveys.

3.5.5 Any water bodies that were dry at the time of HSI survey were recorded as such and then a precautionary HSI was taken, based on known indices or those recorded on similar ponds, but these results are not included in **Annex B** of this appendix **[EN010154/APP/6.3]**. Generally, water bodies that are dry at the time of HSI survey in spring are unlikely to support breeding GCN.

3.5.6 Sufficient information was gathered from the surveys to provide an assessment of GCN presence within the Survey Area.

4. Results

4.1 Desk Study

4.1.1 The data search, through GLNP, returned eight records of GCN presence or absence from five different locations within the Study Area and from the preceding ten years, although only two records were of GCN presence (from 2014), the other records related to confirmed absence. The closest record to the DCO Site Boundary was of a negative eDNA sample (confirming GCN absence) approximately 40m from the DCO Site Boundary in 2021. All other records (including that of GCN presence) were beyond 250m from the DCO Site Boundary.

4.1.2 A review of 'MAGIC' (Ref 12) did not identify any GCN class survey licence returns within the Study Area. The closest record was approximately 6.8km north east of the DCO Site Boundary from 2015.

4.1.1 A literature review for abundance of GCN in Lincolnshire identified that GCN is relatively abundant within Greater Lincolnshire but "*there are still many gaps in our understanding of the species range*" (Ref 18).

4.1.2 From the desk study, using maps and aerial photography, 68 water bodies were identified within the Survey Area (as presented in **Figure 8-E-1** in **Annex A** of this appendix **[EN010154/APP/6.3]**).

4.1.3 Of the 68 water bodies identified, the desk study scoped out the need to calculate the HSI of 53 water bodies for the following reasons:

a. Distance between the water body and the DCO Site Boundary; and, or

b. Barriers to GCN dispersal between the water body and the DCO Site Boundary, such as roads, rivers, intensively managed farmland; and, or

c. Other reasons e.g. the pond is no longer present, as identified from aerial imagery, or the management and, or use of the water body (e.g. fishing, suggesting the presence of large fish that would predate GCN) determined that the water body will not support breeding GCN.

4.1.4 The rationale for scoping ponds out of further survey during the desk study is presented in **Annex D** of this appendix **[EN010154/APP/6.3]**.

4.2 Field Survey

4.2.1 This section presents the results of HSI and eDNA surveys undertaken in 2023, 2024 and 2025.

HSI Surveys

4.2.2 Eighteen water bodies identified within and adjacent to the DCO Site Boundary (see **Figure 8-E-1** in **Annex A** of this appendix **[EN010154/APP/6.3]**) were surveyed to initially check that each water body held water and then a HSI was calculated for each water body, where required.

The HSI calculations are presented in **Annex B** of this appendix **[EN010154/APP/6.3]** and summarised in **Table 2**.

Table 2: HSI Scores

HSI Score	Water body (see Figure 8-E-1 in Annex A)
Excellent	61
Good	6
Average	57, 59, 66
Below Average	5, 9, 14, 20, 49, 50
Poor	18, 19, 29, 31, 33, 54, 62

4.2.3 Nine other water bodies were initially scoped in for field surveys during the desk study but were dry at the time of survey (12, 23, 32, 34, 36, 39, 40, 43, 58). Based on HSI indices from similar ponds, these dry ponds would have been scored as poor and were scoped out of further surveys.

eDNA Surveys

4.2.4 Water samples were taken from eleven water bodies within the DCO Site Boundary that scored above an HSI score of below average (see **Table 2**) and held water in May 2023, June 2024 and May 2025, which were analysed for GCN eDNA. The eDNA water bodies were 5, 6, 9, 14, 20, 49, 50, 57, 59, 61 and 66.

4.2.5 All the eDNA samples returned a negative result for GCN, confirming GCN absence from these water bodies.

4.2.6 The results of the eDNA laboratory analyses are included in **Annex C** of this appendix **[EN010154/APP/6.3]**.

5. Conclusions

5.1.1 The desk study identified 69 water bodies within 250m of the DCO Site Boundary, potentially relevant to GCN. The desk study identified eight records (presence or absence) of GCN, occurring within 2km of the DCO Site Boundary and from the preceding ten years. The desk study identified GCN presence in two water bodies within 2km of the DCO Site Boundary although both are more than 500m from the DCO Site Boundary and the records are from 2014. Fifty-one of the 69 water bodies identified in the desk study were scoped out of further assessment, the majority as a result of barriers between the water body and the DCO Site Boundary (see **Section 4.1.3**).

5.1.2 Between 2023 and 2025, eighteen water bodies within the Survey Area were surveyed for their suitability to support GCN (see **Annex B** of this appendix **[EN010154/APP/6.3]**). Eleven of these water bodies had an HSI score of greater than 'below average' and held water in May or June 2023, 2024 or 2025 (water bodies 5, 6, 9, 14, 20, 49, 50, 57, 59, 61 and 66). Water samples were collected from these eleven water bodies for eDNA analysis. The eDNA analysis of each of the water bodies indicated a negative result for GCN eDNA, confirming absence (see **Annex C** of this appendix **[EN010154/APP/6.3]**).

5.1.3 A summary of the assessment of all water bodies is presented in **Annex D** of this appendix **[EN010154/APP/6.3]**.

5.1.4 On the basis of the scoping of the water bodies and the data reported in this appendix, it is concluded that GCN is not present within the DCO Site Boundary nor within 250m of the DCO Site Boundary.

5.1.5 Should the presence of GCN within the ZoI be identified, for example, if undertaking update surveys post consent, mitigation will need to be implemented, and is formalised through a Construction and Environment Management Plan (CEMP) to:

a. Ensure compliance with relevant legislation; and

b. Avoid impacts that would give rise to a potential "significant effect," therefore contrary to planning policy and biodiversity obligations of NERC (Ref 5).

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Ref 15 Biggs, J., Ewald N., Valentini, A., Gaboriaud C., Griffiths, R.A., Foster, J., Wilkinson, J., Arnett, A., Williams, P. and Dunn, F. (2014). Analytical and methodological development for improved surveillance of the Great Crested Newt. Defra Project WC1067. Freshwater Habitats Trust, Oxford.

Ref 16 Biggs J, Ewald N, Valentini A, Gaboriaud C, Griffiths RA, Foster J, Wilkinson J, Arnett A, Williams P and Dunn F 2014. Analytical and methodological development for improved surveillance of the Great Crested Newt. Appendix 5. Technical advice note for field and laboratory sampling of great crested newt (Triturus cristatus) environmental DNA. Freshwater Habitats Trust, Oxford

Ref 17 Chartered Institute of Ecology and Environmental Management (CIEEM). (2018). Guidelines for Ecological Impact assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine, version 1.3.

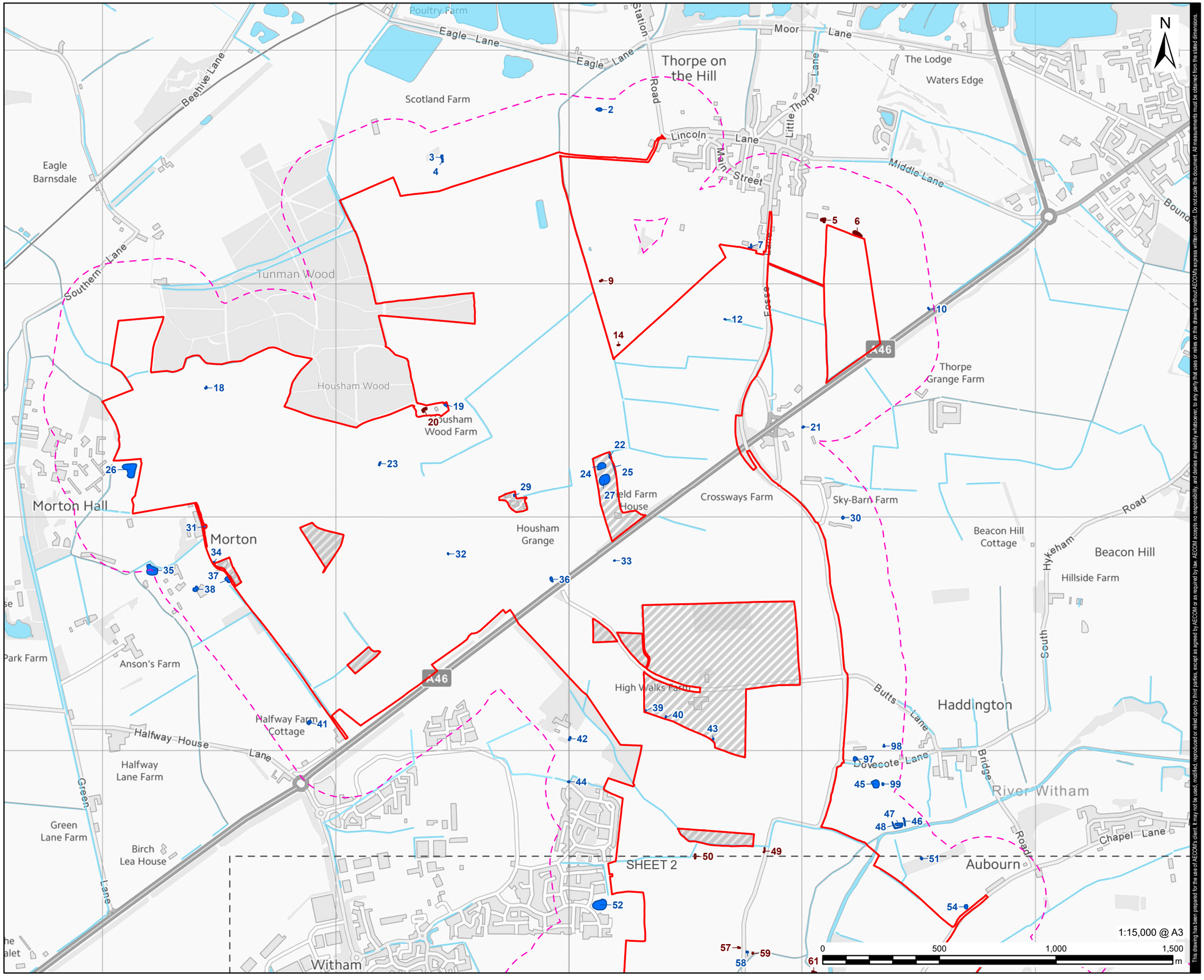
Ref 18 Greater Lincolnshire Nature Partnership (2013). Newts: an assessment of current status in Greater Lincolnshire [online] Available at: https://glnp.org.uk/images/uploads/news/newt-report-march-2013.pdf [Accessed February 2025]

Annex A Figures

Figure 8-E-1 Water bodies within 250m of the DCO Site and survey locations for Great Crested Newt

Revision: 0 Drawn: BF Checked: LL Approved: NS Date: 2025-08-22

Filename: \\na.aecomnet.com\fs\EMEA\London-UKLON06\Legacy\UKLON06PFPSW001\UKLON06PFPSW001-V1\DPEL\Library\GIS_DATA\Projects\Fosse Green Energy Park\02_Maps\Environmental Statement\Chapter 08 - Ecology\FGE_Figure8E_GCNFGE_Figure8E_GCN.aprx



Fosse Green Energy

PROJECT

Fosse Green Energy

CLIENT

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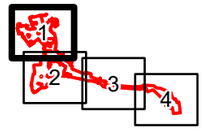
www.aecom.com

LEGEND

- DCO Site Boundary
- Land not included in the DCO Site Boundary
- 250m Survey Buffer
- Pond Assessed for Great Crested Newts
- Pond Surveyed for Great Crested Newts, eDNA Surveys (Negative result)
- Other Watercourse
- Other Waterbody

SHEET LAYOUT



NOTES

LEGISLATION

Regulation 5(2)(a) Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009.

ISSUE PURPOSE

DCO Submission

FIGURE TITLE

Water bodies within 250m of the DCO Site and survey locations for GCN Sheet 1 of 4

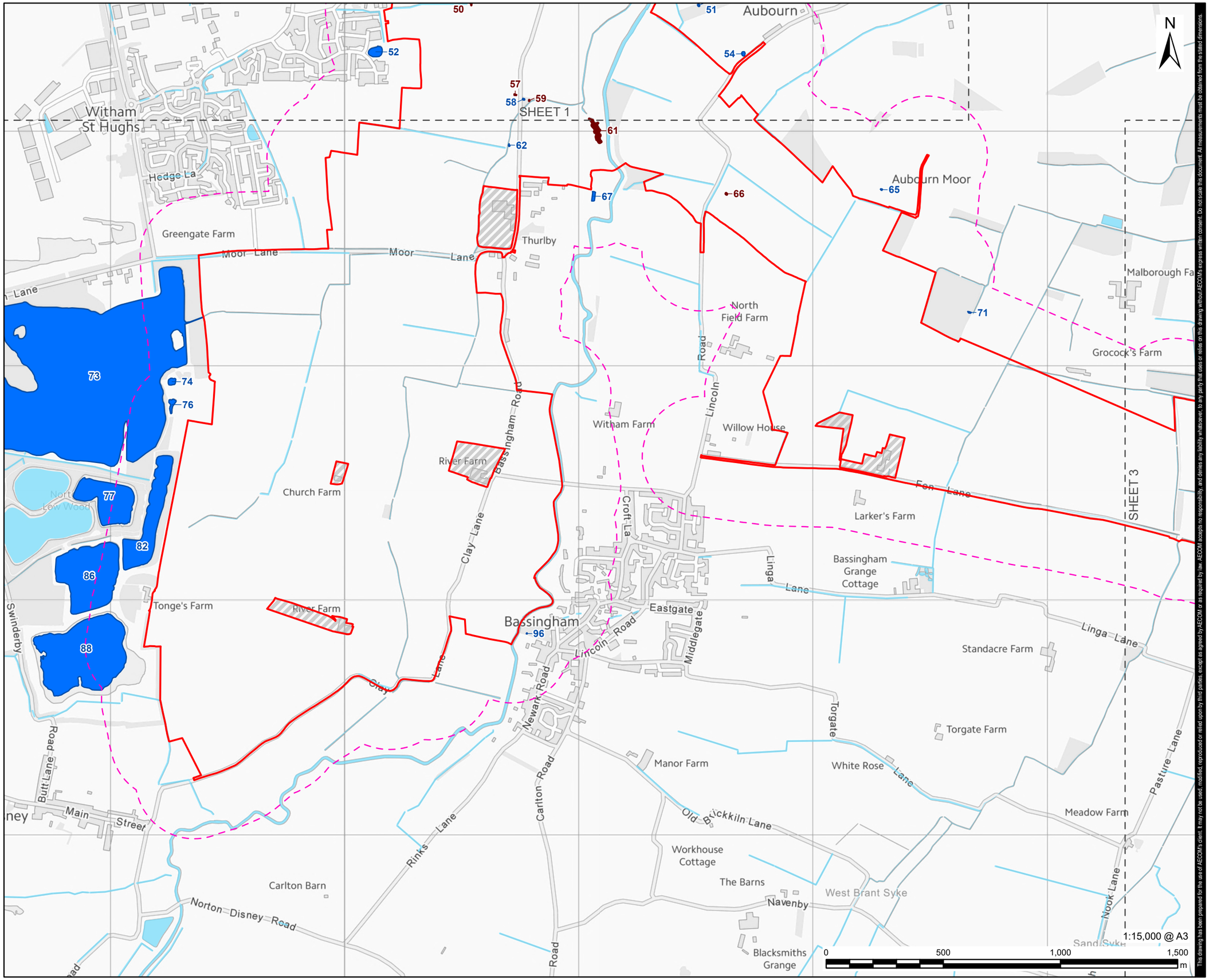
FIGURE NUMBER	REV.
Figure 8-E-1	02

DOCUMENT REFERENCE

EN010154/APP/6.2.

Revision: 0 Drawn: BF Checked: LL Approved: NS Date: 2025-08-22

Filename: \\na.aecomnet.com\fs\EMEA\London-UKLON06\Legacy\UKLON06PFPSW001\UKLON06PFPSW001-V1\DPEL\Library\GIS_DATA\Projects\Fosse Green Energy Park\02_Maps\Environmental Statement\Chapter 08 - Ecology\FGE_Figure8E_GCNFGE_Figure8E_GCN.aprx



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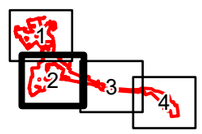
LEGEND

- DCO Site Boundary
- Land not included in the DCO Site Boundary
- 250m Survey Buffer
- Pond Assessed for Great Crested Newts
- Pond Surveyed for Great Crested Newts, eDNA Surveys (Negative result)
- Other Watercourse
- Other Waterbody

SHEET LAYOUT



NOTES

LEGISLATION

Regulation 5(2)(a) Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009.

ISSUE PURPOSE

DCO Submission

FIGURE TITLE

Water bodies within 250m of the DCO Site and survey locations for GCN Sheet 2 of 4

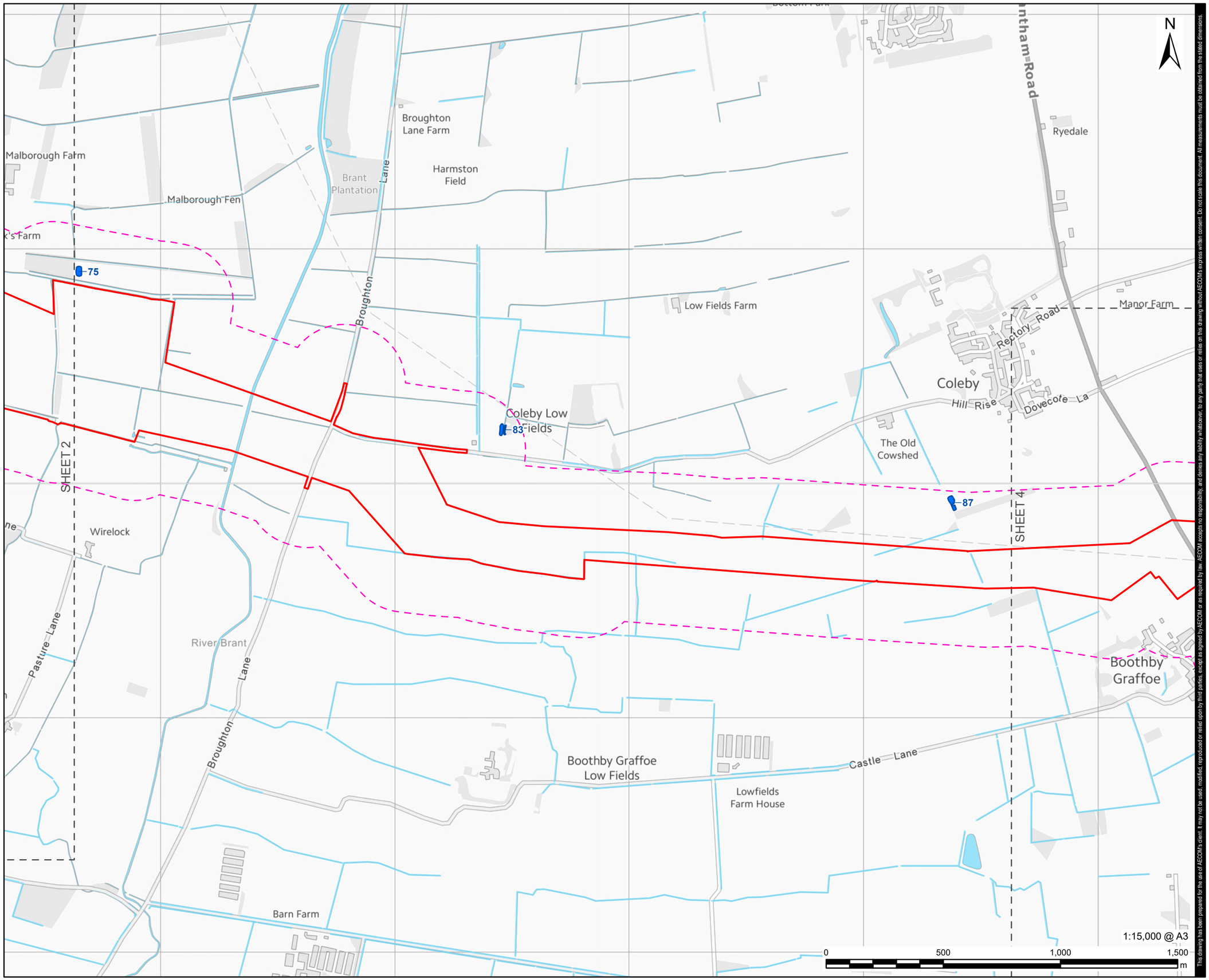
FIGURE NUMBER	REV.
Figure 8-E-1	02

DOCUMENT REFERENCE

EN010154/APP/6.2.

Revision: 0 Drawn: BF Checked: LL Approved: NS Date: 2025-08-22

Filename: \\na.aecomnet.com\fs\EMEA\London-UKLON06\Legacy\UKLON06PFPSW001\UKLON06PFPSW001-V1\DPE\Library\GIS_DATA\Projects\Fosse Green Energy Park\02_Maps\Environmental Statement\Chapter 08 - Ecology\FGE_Figure8E_GCNFGE_Figure8E_GCN.aprx



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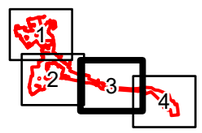
LEGEND

- DCO Site Boundary
- 250m Survey Buffer
- Pond Assessed for Great Crested Newts
- Other Watercourse
- Other Waterbody

SHEET LAYOUT



NOTES

LEGISLATION

Regulation 5(2)(a) Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009.

ISSUE PURPOSE

DCO Submission

FIGURE TITLE

Water bodies within 250m of the DCO Site and survey locations for GCN
Sheet 3 of 4

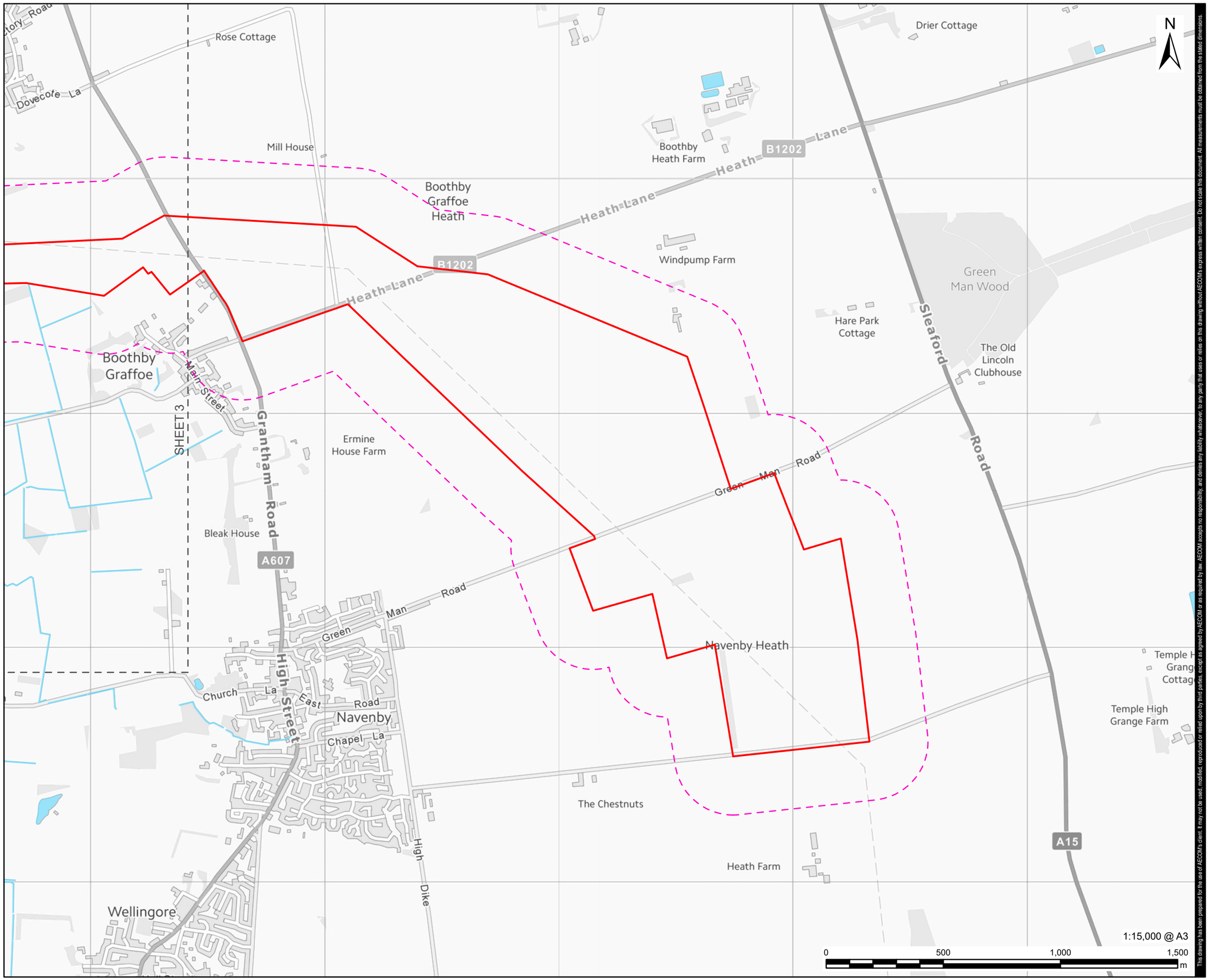
FIGURE NUMBER	REV.
Figure 8-E-1	02

DOCUMENT REFERENCE

EN010154/APP/6.2.

Revision: 0 Drawn: BF Checked: LL Approved: NS Date: 2025-08-22

Filename: \\ra.aecomnet.com\fs\EMEA\London-UKLON08\Legacy\UKLON08FFPSW001\UKLON08FFPSW001-V1\DPEL\Library\GIS_DATA\Projects\Fosse Green Energy Park\02_Maps\Environmental Statement\Chapter 08 - Ecology\FGE_Figure8E_GCNFGE_Figure8E_GCN.aprx



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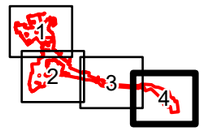
LEGEND

- DCO Site Boundary
- 250m Survey Buffer
- Other Watercourse
- Other Waterbody

SHEET LAYOUT



NOTES

LEGISLATION

Regulation 5(2)(a) Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009.

ISSUE PURPOSE

DCO Submission

FIGURE TITLE

Water bodies within 250m of the DCO Site and survey locations for GCN Sheet 4 of 4

FIGURE NUMBER	REV.
Figure 8-E-1	02

DOCUMENT REFERENCE

EN010154/APP/6.2.

Annex B HSI scores of ponds scoped in to the assessment

Water body Reference (see Figure 8-E-1)	Pond Area (m^2)	Pond Drying	Quality	Shade (%)	Fowl	Fish	Ponds	Terrestrial Habitat	Macrophytes (%)	HSI Score (Note 1)
Pond 5	200	Rarely	Moderate	10	Absent	Major	1	Good	30	Below average
Pond 6	400	Rarely	Moderate	0	Minor	Absent	1	Moderate	30	Good
Pond 9	150	Annually	Moderate	0	Minor	Absent	3	Moderate	30	Below average
Pond 14	100	Annually	Moderate	0	Absent	Absent	3	Moderate	50	Below average
Pond 18	<50	Annually	Poor	85	Absent	Possible	12	Moderate	0	Poor
Pond 19	<50	Annually	Bad	50	Absent	Absent	3	Moderate	20	Poor
Pond 20	100	Annually	Poor	30	Absent	Absent	3	Moderate	40	Below average
Pond 29	<50	Annually	Moderate	90	Absent	Absent	0	Moderate	80	Poor
Pond 31	<50	Annually	Bad	100	Absent	Possible	13	Moderate	0	Poor
Pond 33	<50	Sometimes	Poor	100	Absent	Absent	7	Poor	0	Poor
Pond 49	200	Never	Poor	100	Minor	Possible	20	Moderate	0	Below average
Pond 50	150	Never	Poor	95	Minor	Possible	20	Good	0	Below average
Pond 54	50	Annually	Moderate	90	Absent	Absent	1	Moderate	80	Poor
Pond 57	<50	Sometimes	Poor	60	Absent	Absent	17	Poor	50	Average
Pond 59	<50	Sometimes	Poor	80	Absent	Absent	17	Good	0	Average
Pond 61	1750	Never	Good	60	Minor	Possible	18	Good	60	Excellent
Pond 62	<50	Annually	Poor	100	Minor	Absent	17	Poor	0	Poor
Pond 66	<50	Sometimes	Poor	60	Absent	Absent	13	Poor	70	Average

Note 1 - Ponds with an HSI score of below average or higher were sampled for Great Crested Newt eDNA.

Annex C eDNA results

TECHNICAL REPORT

ANALYSIS OF ENVIRONMENTAL DNA IN POND WATER FOR THE DETECTION OF GREAT CRESTED NEWTS (TRITURUS CRISTATUS)

SUMMARY

When great crested newts (GCN), *Triturus cristatus*, inhabit a pond, they continuously release small amounts of their DNA into the environment. By collecting and analysing water samples, we can detect these small traces of environmental DNA (eDNA) to confirm GCN habitation or establish GCN absence.

RESULTS

Date sample received at Laboratory: 24/05/2023
Date Reported: 31/05/2023
Matters Affecting Results: None

Lab Sample No.	Site Name	O/S Reference	SIC	DC	IC	Result	Positive Replicates
3741	Fosse - Pond 4	-	Pass	Pass	Pass	Negative	0
3743	Fosse - Pond 5	-	Pass	Pass	Pass	Negative	0

Notes: Fosse – Pond 4 is referenced as Pond 57 throughout this report, Fosse – Pond 5 is referenced as Pond 66 throughout this report

Folio No: 2478-2024
Purchase Order: 1657918

Issue Date: 08.07.2024
Received Date: 26.06.2024

SureScreen Scientifics

GCN eDNA Analysis

Summary

When great crested newts (GCN), *Triturus cristatus* , inhabit a pond, they continuously release small amounts of their DNA into the environment. By collecting and analyzing water samples, we can detect these small traces of environmental DNA (eDNA) to confirm GCN habitation or establish GCN absence.

Results

Lab ID	Site Name	OS Reference	Degradation Check	Inhibition Check	Result	Positive Replicates
4427	Fosse_59		Pass	Pass	Negative	0/12
4431	Fosse_50		Pass	Pass	Negative	0/12
4432	Fosse_49		Pass	Pass	Negative	0/12
4433	Fosse_61		Pass	Pass	Negative	0/12

Matters affecting result: none

Notes: Fosse_59 referenced in this report as Pond 59, Fosse_50 referenced as Pond 50, etc.

Folio No:	1267-2025
Purchase Order:	60700987
Contact:	Aecom Infrastructure & Environment Uk Ltd
Issue Date:	23.05.2025
Received Date:	09.05.2025

SureScreen Scientifics

GCN eDNA Analysis

Summary

When great crested newts (GCN), *Triturus cristatus* , inhabit a pond, they continuously release small amounts of their DNA into the environment. By collecting and analyzing water samples, we can detect these small traces of environmental DNA (eDNA) to confirm GCN habitation or establish GCN absence.

Results

Lab ID	Site Name	OS Reference	Degradation Check	Inhibition Check	Result	Positive Replicates
GCN25 0050	Fosse 19	SK 894 644	Pass	Pass	Negative	0/12
GCN25 0051	Fosse 14	SK 901 650	Pass	Pass	Negative	0/12
GCN25 0052	Fosse 6	SK 912 652	Pass	Pass	Negative	0/12
GCN25 0053	Fosse 5	SK 910 652	Pass	Pass	Negative	0/12
GCN25 0054	Fosse 9	SK 900 652	Pass	Pass	Negative	0/12

Matters affecting result: none

Annex D Summary of Great Crested Newt assessment for all water bodies

Water body number (see Figure 8-E-1 for location)	Distance from the Proposed Development (metres)	HSI Assessment carried out? (HSI score: excellent, good, average, below average, poor)	eDNA analysis carried out? (GCN – present / absent)	Supporting Comments
2	196	No	No	Scoped out during desk study, of requiring any further assessment or survey, due to distance, nearly 200m from the Proposed Development and barriers to dispersal, separated from the Proposed Development by intensively managed arable fields and Clay Lane. Therefore, no impacts to GCN would occur, even if present within this water body.
3	121	No	No	Scoped out during desk study, of requiring any further assessment or survey, due to distance, >100m from the Proposed Development and barriers to dispersal, separated from the Proposed Development by intensively managed arable fields and Clay Lane. Therefore, no impacts to GCN would occur, even if present within this water body.
4	112	No	No	Scoped out during desk study, of requiring any further assessment or survey, due to distance, >100m from the Proposed Development and barriers to dispersal, separated from the Proposed Development by intensively managed arable fields and Clay Lane. Therefore, no impacts to GCN would occur, even if present within this water body.
5	15	Yes – below average	Yes – absent	GCN confirmed as absent by eDNA analysis (see **Annex C [EN010154/APP/6.3]**).

Water body number (see Figure 8-E-1 for location)	Distance from the Proposed Development (metres)	HSI Assessment carried out? (HSI score: excellent, good, average, below average, poor)	eDNA analysis carried out? (GCN – present / absent)	Supporting Comments
6	4	Yes – good	Yes – absent	GCN confirmed as absent by eDNA analysis (see **Annex C [EN010154/APP/6.3]**).
7	5	No	No	Scoped out during desk study, of requiring any further assessment or survey, as within a residential garden and therefore water body may not still be present.
9	37	Yes – below average	Yes – absent	GCN confirmed as absent by eDNA analysis (see **Annex C [EN010154/APP/6.3]**).
10	224	No	No	Scoped out during desk study, of requiring any further assessment or survey, due to distance, >200m from the Proposed Development and barriers to dispersal, separated from the Proposed Development by intensively managed arable fields. Therefore, no impacts to GCN would occur, even if present within this water body.
12	Within the DCO Site Boundary	No	No	This pond was dry at time of HSI survey. However, a HSI based on indices from similar ponds and this pond would score as poor. It is unlikely that this pond ever holds water outside of winter months and therefore the likelihood of GCN being present is low. Furthermore, there are no records of GCN in nearby water bodies.
14	25	Yes – below average	Yes – absent	GCN confirmed as absent by eDNA analysis (see **Annex C [EN010154/APP/6.3]**).
18	Within the DCO Site Boundary	Yes – Poor	No	Scoped out of requiring eDNA survey due to poor HSI score, including poor water quality and little to no aquatic macrophytes (see **Annex B [EN010154/APP/6.3]**).
19	On the boundary of the DCO Site	Yes – Poor	No	Scoped out of requiring eDNA survey due to poor HSI score, including small size, dries annually and bad water quality (see **Annex B [EN010154/APP/6.3]**).

Water body number (see Figure 8-E-1 for location)	Distance from the Proposed Development (metres)	HSI Assessment carried out? (HSI score: excellent, good, average, below average, poor)	eDNA analysis carried out? (GCN – present / absent)	Supporting Comments
20	9	Yes – below average	Yes – absent	GCN confirmed as absent by eDNA analysis (see **Annex C [EN010154/APP/6.3]**).
21	208	No	No	Scoped out during desk study, of requiring any further assessment or survey, due to distance, >200m from the Proposed Development and separated by Haddington Lane, a main road which would act as a barrier to GCN dispersal to the DCO Site Boundary . There would be no impacts to GCN, even if present within this water body.
22	On the boundary of the DCO Site	No	No	Scoped out during desk study, of requiring any further assessment or survey, as this water body is within a holiday park, used for amenity purposes, including fishing. It is unlikely that this water body supports GCN due to the presence of large fish and waterfowl. This water body is outside of the DCO Site Boundary and there would be no impacts to GCN, even if present within this water body.
23	Within the DCO Site Boundary	No	No	This pond was dry at time of HSI survey. However, a HSI based on indices from similar ponds and this pond would score as poor. It is unlikely that this pond ever holds water outside of winter months and therefore the likelihood of GCN being present is low. Furthermore, there are no records of GCN in nearby water bodies.
24	13	No	No	Scoped out during desk study, of requiring any further assessment or survey, as this water body is within a holiday park, used for amenity purposes, including fishing. It is unlikely that this water body supports GCN due to the presence of large fish and waterfowl. This water body is outside the DCO Site Boundary and there would be no impacts to GCN, even if present within this water body.

Water body number (see Figure 8-E-1 for location)	Distance from the Proposed Development (metres)	HSI Assessment carried out? (HSI score: excellent, good, average, below average, poor)	eDNA analysis carried out? (GCN – present / absent)	Supporting Comments
25	On the boundary of the DCO Site	No	No	Scoped out during desk study, of requiring any further assessment or survey, as this water body is within a holiday park, used for amenity purposes, including fishing. It is unlikely that this water body supports GCN due to the presence of large fish and waterfowl. This water body is outside of the DCO Site Boundary and there would be no impacts to GCN, even if present within this water body.
26	18	No	No	Scoped out during desk study, of requiring any further assessment or survey, as this is a large water body that is not suitable for GCN (most likely supports large fish and waterfowl). Additionally, a negative eDNA sample (proving GCN absence) was identified from this water body from 2021.
27	10	No	No	Scoped out during desk study, of requiring any further assessment or survey, as this water body is within a holiday park, used for amenity purposes, including fishing. It is unlikely that this water body supports GCN due to the presence of large fish and waterfowl. This water body is outside of the DCO Site Boundary and there would be no impacts to GCN, even if present within this water body.
29	On the boundary of the DCO Site	Yes – Poor	No	Scoped out of requiring eDNA survey due to poor HSI score, including poor water quality and little to no aquatic macrophytes (see **Annex B [EN010154/APP/6.3]**).
30	101	No	No	Scoped out during desk study, of requiring any further assessment or survey, due to distance, >100m from the Proposed Development and separated by Haddington Lane, a main road which would act as a barrier to GCN dispersal to theDCO Site Boundary . There would be no impacts to GCN, even if present within this water body.

Water body number (see Figure 8-E-1 for location)	Distance from the Proposed Development (metres)	HSI Assessment carried out? (HSI score: excellent, good, average, below average, poor)	eDNA analysis carried out? (GCN – present / absent)	Supporting Comments
31	Within the DCO Site Boundary	Yes - poor	No	Scoped out of requiring eDNA survey due to poor HSI score, including poor water quality and little to no aquatic macrophytes (see **Annex B [EN010154/APP/6.3]**).
32	Within the DCO Site Boundary	No	No	This pond was dry at time of HSI survey. However, a HSI based on indices from similar ponds and this pond would score as poor. It is unlikely that this pond ever holds water outside of winter months and therefore the likelihood of GCN being present is low. Furthermore, there are no records of GCN in nearby water bodies.
33	Within the DCO Site Boundary	Yes – poor	No	Scoped out of requiring eDNA survey due to poor HSI score, including poor water quality and poor terrestrial habitat (see **Annex B [EN010154/APP/6.3]**).
34	Within the DCO Site Boundary	No	No	This pond was dry at time of HSI survey. However, a HSI based on indices from similar ponds and this pond would score as poor. It is unlikely that this pond ever holds water outside of winter months and therefore the likelihood of GCN being present is low. Furthermore, there are no records of GCN in nearby water bodies.
35	225	No	No	Scoped out during desk study, of requiring any further assessment or survey, due to distance, >200m from the Proposed Development and separated by residential properties and minor roads which would act as a barrier to GCN dispersal to the DCO Site Boundary . There would be no impacts to GCN, even if present within this water body.
36	Within the DCO Site Boundary	No	No	This pond was dry at time of HSI survey. However, a HSI based on indices from similar ponds and this pond would score as poor. It is unlikely that this pond ever holds water outside of winter months and therefore the likelihood of GCN being present is low. Furthermore, there are no records of GCN in nearby water bodies.

Water body number (see Figure 8-E-1 for location)	Distance from the Proposed Development (metres)	HSI Assessment carried out? (HSI score: excellent, good, average, below average, poor)	eDNA analysis carried out? (GCN – present / absent)	Supporting Comments
37	3	No	No	Whilst this water body is adjacent to the DCO Site Boundary , it was Scoped out during desk study, of requiring any further assessment or survey, due to distance, c.170m from the developed areas of the Proposed Development, with adjacent fields of the Proposed Development identified as proposed grassland enhancement (see **Figure 3-2-A** and **3-2-B** of this ES **[EN010154/APP/6.2]**). There would be no impacts to GCN, even if present within this water body.
38	114	No	No	Scoped out during desk study, of requiring any further assessment or survey, due to distance, >100m from the Proposed Development and >300m from the developed areas of the Proposed Development, with adjacent fields of the Proposed Development identified as proposed grassland enhancement (see **Figure 3-2-A** and **3-2-B** of this ES **[EN010154/APP/6.2]**). There would be no impacts to GCN, even if present within this water body.
39	On the boundary of the DCO Site	No	No	This pond was dry at time of HSI survey. However, a HSI based on indices from similar ponds and this pond would score as poor. It is unlikely that this pond ever holds water outside of winter months and therefore the likelihood of GCN being present is low. Furthermore, there are no records of GCN in nearby water bodies.
40	On the boundary of the DCO Site	No	No	This pond was dry at time of HSI survey. However, a HSI based on indices from similar ponds and this pond would score as poor. It is unlikely that this pond ever holds water outside of winter months and therefore the likelihood of GCN being present is low. Furthermore, there are no records of GCN in nearby water bodies.
41	77	No	No	Scoped out during desk study, of requiring any further assessment or survey, due to barriers to dispersal, separated from the Proposed Development by intensively

Water body number (see Figure 8-E-1 for location)	Distance from the Proposed Development (metres)	HSI Assessment carried out? (HSI score: excellent, good, average, below average, poor)	eDNA analysis carried out? (GCN – present / absent)	Supporting Comments
				managed arable fields and a minor road (The Avenue). Therefore, no impacts to GCN would occur, even if present within this water body.
42	158	No	No	Scoped out during desk study, of requiring any further assessment or survey, due to distance (>150m from the Proposed Development) and within an industrial (quarried) area which is likely to prevent GCN dispersal to/from this water body (if present). There would be no impacts to GCN, even if present within this water body.
43	On the boundary of the DCO Site	No	No	This pond was assumed to be dry at time of HSI survey, based on its location on woodland edge. However, a HSI based on indices from similar ponds and this pond would score as poor. It is unlikely that this pond ever holds water outside of winter months and therefore the likelihood of GCN being present is low. Furthermore, there are no records of GCN in nearby water bodies.
44	149	No	No	Scoped out during desk study, of requiring any further assessment or survey, due to distance (nearly 150m from the Proposed Development) and within a residential garden and therefore water body may not still be present. There would be no impacts to GCN, even if present within this water body.
45	144	No	No	Scoped out during desk study, of requiring any further assessment or survey, due to distance (nearly 150m from the Proposed Development) and barriers to GCN dispersal between this water body and the Proposed Development, being separated by Haddington Lane. Furthermore, this water body is >200m from any developed areas of the Proposed Development. There would be no impacts to GCN, even if present within this water body.

Water body number (see Figure 8-E-1 for location)	Distance from the Proposed Development (metres)	HSI Assessment carried out? (HSI score: excellent, good, average, below average, poor)	eDNA analysis carried out? (GCN – present / absent)	Supporting Comments
46	168	No	No	Scoped out during desk study, of requiring any further assessment or survey, due to distance (>150m from the Proposed Development) and barriers to GCN dispersal between this water body and the Proposed Development, being separated by Haddington Lane. Furthermore, this water body is >200m from any developed areas of the Proposed Development. There would be no impacts to GCN, even if present within this water body.
47	145	No	No	Scoped out during desk study, of requiring any further assessment or survey, due to distance (nearly 150m from the Proposed Development) and barriers to GCN dispersal between this water body and the Proposed Development, being separated by Haddington Lane. Furthermore, this water body is >200m from any developed areas of the Proposed Development. There would be no impacts to GCN, even if present within this water body.
48	131	No	No	Scoped out during desk study, of requiring any further assessment or survey, due to distance (>100m from the Proposed Development) and barriers to GCN dispersal between this water body and the Proposed Development, being separated by Haddington Lane. Furthermore, this water body is >200m from any developed areas of the Proposed Development. There would be no impacts to GCN, even if present within this water body.
49	Within the DCO Site Boundary	Yes – below average	Yes – absent	GCN confirmed as absent by eDNA analysis (see **Annex C [EN010154/APP/6.3]**).
50	Within the DCO Site Boundary	Yes – below average	Yes - absent	GCN confirmed as absent by eDNA analysis (see **Annex C [EN010154/APP/6.3]**).

Water body number (see Figure 8-E-1 for location)	Distance from the Proposed Development (metres)	HSI Assessment carried out? (HSI score: excellent, good, average, below average, poor)	eDNA analysis carried out? (GCN – present / absent)	Supporting Comments
51	131	No	No	Scoped out during desk study, of requiring any further assessment or survey, due to distance (>100m from the Proposed Development). This water body is within woodland and is likely to be dry for the majority of the year. Regardless, there would be no impacts to GCN, even if present within this water body.
52	38	No	No	Scoped out during desk study, of requiring any further assessment or survey, as Airbus imagery (dated 5th August 2024) does not identify the presence of any water. Additionally, this water body is >100m from any developed areas of the Proposed Development and there would be no impacts to GCN, even if present.
54	6	Yes - Poor	No	Dry at time of survey. Scoped out of requiring eDNA survey due being dry and poor HSI score.
57	Within the DCO Site Boundary	Yes – average	Yes – absent	GCN confirmed as absent by eDNA analysis (see **Annex C [EN010154/APP/6.3]**).
58	Within the DCO Site Boundary	No	No	This pond was dry at time of HSI survey. However, a HSI based on indices from similar ponds and this pond would score as poor. It is unlikely that this pond ever holds water outside of winter months and therefore the likelihood of GCN being present is low. Furthermore, there are no records of GCN in nearby water bodies.
59	Within the DCO Site Boundary	Yes – average	Yes – absent	GCN confirmed as absent by eDNA analysis (see **Annex C [EN010154/APP/6.3]**).
61	Within the DCO Site Boundary	Yes – excellent	Yes – absent	GCN confirmed as absent by eDNA analysis (see **Annex C [EN010154/APP/6.3]**).

Water body number (see Figure 8-E-1 for location)	Distance from the Proposed Development (metres)	HSI Assessment carried out? (HSI score: excellent, good, average, below average, poor)	eDNA analysis carried out? (GCN – present / absent)	Supporting Comments
62	Within the DCO Site Boundary	Yes – poor	No	Scoped out of requiring eDNA survey due to poor HSI score, including poor water quality and little to no aquatic macrophytes (see **Annex B [EN010154/APP/6.3]**).
65	59	No	No	Scoped out during desk study, of requiring any further assessment or survey, as it appears from aerial imagery that this water body is not likely to be present as it is located on the edge of woodland and latest aerial imagery (dated 5th August 2024) does not show any water body present. Regardless, there would be no impacts to GCN, even if present within this water body
66	Within the DCO Site Boundary	Yes – average	Yes – absent	GCN confirmed as absent by eDNA analysis (see **Annex C [EN010154/APP/6.3]**).
67	10	No	No	Scoped out during desk study, of requiring any further assessment or survey, as it appears from aerial imagery that this water body is not likely to be present as it is located on the edge of woodland and latest aerial imagery (dated 5th August 2024) does not show any water body present. Regardless, there would be no impacts to GCN, even if present within this water body
71	114	No	No	Scoped out during desk study, of requiring any further assessment or survey, as it appears from aerial imagery that this water body is not likely to be present as it is located on the edge of woodland and latest Airbus imagery (dated 5th August 2024) does not show any water body present. Regardless, there would be no impacts to GCN, even if present within this water body
73	5	No	No	Scoped out during desk study, of requiring any further assessment or survey, as this is a large water body, used for recreational purposes and likely to support large

Water body number (see Figure 8-E-1 for location)	Distance from the Proposed Development (metres)	HSI Assessment carried out? (HSI score: excellent, good, average, below average, poor)	eDNA analysis carried out? (GCN – present / absent)	Supporting Comments
				fish and waterfowl which would inhibit any population of GCN present. There would be no impacts to GCN, even if present within this water body.
74	143	No	No	Scoped out during desk study, of requiring any further assessment or survey, due to distance (>100m from the Proposed Development) and nearly 180m from the developed areas of the Proposed Development ((see **Figure 3-2-A** and **3-2-B** of this ES **[EN010154/APP/6.2]**). Therefore, there would be no impacts to GCN, even if present within this water body.
75	32	No	No	Scoped out during desk study, of requiring any further assessment or survey, as this water body is >100m from the developed areas of the Proposed Development ((see **Figure 3-2-A** and **3-2-B** of this ES **[EN010154/APP/6.2]**). Therefore, there would be no impacts to GCN, even if present within this water body.
76	75	No	No	Scoped out during desk study, of requiring any further assessment or survey, as this water body is within 100m of the Proposed Development boundary, it is >100m from the developed areas of the Proposed Development ((see **Figure 3-2-A** and **3-2-B** of this ES **[EN010154/APP/6.2]**). Therefore, there would be no impacts to GCN, even if present within this water body.
77	161	No	No	Scoped out during desk study, of requiring any further assessment or survey, due to distance (>150m from the Proposed Development) and as this is a large water body, used for recreational purposes and likely to support large fish and waterfowl which would inhibit any population of GCN present. There would be no impacts to GCN, even if present within this water body.

Water body number (see Figure 8-E-1 for location)	Distance from the Proposed Development (metres)	HSI Assessment carried out? (HSI score: excellent, good, average, below average, poor)	eDNA analysis carried out? (GCN – present / absent)	Supporting Comments
82	29	No	No	Scoped out during desk study, of requiring any further assessment or survey, as this is a large water body, used for recreational purposes and likely to support large fish and waterfowl which would inhibit any population of GCN present. There would be no impacts to GCN, even if present within this water body.
83	154	No	No	Scoped out during desk study, of requiring any further assessment or survey, due to distance (>150m from the Proposed Development). There would be no impacts to GCN, even if present within this water body.
85	185	No	No	Scoped out during desk study, of requiring any further assessment or survey, due to distance (>150m from the Proposed Development). There would be no impacts to GCN, even if present within this water body.
86	165	No	No	Scoped out during desk study, of requiring any further assessment or survey, due to distance (>150m from the Proposed Development) and as this is a large water body, used for recreational purposes and likely to support large fish and waterfowl which would inhibit any population of GCN present. There would be no impacts to GCN, even if present within this water body.
87	168	No	No	Scoped out during desk study, of requiring any further assessment or survey, due to distance from the Cable Corridor, (>150m from the Proposed Development). There would be no impacts to GCN, even if present within this water body.
88	83	No	No	Scoped out during desk study, of requiring any further assessment or survey, as this is a large water body, used for recreational purposes and likely to support large

Water body number (see Figure 8-E-1 for location)	Distance from the Proposed Development (metres)	HSI Assessment carried out? (HSI score: excellent, good, average, below average, poor)	eDNA analysis carried out? (GCN – present / absent)	Supporting Comments
				fish and waterfowl which would inhibit any population of GCN present. There would be no impacts to GCN, even if present within this water body.
96	36	No	No	Scoped out during desk study, of requiring any further assessment or survey, due to barriers to GCN dispersal between this water body and the Proposed Development, being separated by the River Witham. There would be no impacts to GCN, even if present within this water body.
97	42	No	No	Scoped out during desk study, of requiring any further assessment or survey, due to barriers to GCN dispersal between this water body and the Proposed Development, being separated by Haddington Lane. Furthermore, this water body is >100m from any developed areas of the Proposed Development. There would be no impacts to GCN, even if present within this water body.
98	168	No	No	Scoped out during desk study, of requiring any further assessment or survey, due to distance (>150m from the Proposed Development) and barriers to GCN dispersal between this water body and the Proposed Development, being separated by Haddington Lane. Furthermore, this water body is >200m from any developed areas of the Proposed Development. There would be no impacts to GCN, even if present within this water body.
99	185	No	No	Scoped out during desk study, of requiring any further assessment or survey, due to distance (>150m from the Proposed Development) and barriers to GCN dispersal between this water body and the Proposed Development, being separated by Haddington Lane. Furthermore, this water body is >200m from any

Water body number (see Figure 8-E-1 for location)	Distance from the Proposed Development (metres)	HSI Assessment carried out? (HSI score: excellent, good, average, below average, poor)	eDNA analysis carried out? (GCN – present / absent)	Supporting Comments
				developed areas of the Proposed Development. There would be no impacts to GCN, even if present within this water body.