



EAST PARK ENERGY

East Park Energy

EN010141

Environmental Statement Volume 2 – Technical Appendices

Appendix 7-1: Ecological Baseline Report

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Appendix 7-1: Ecological Baseline Report

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1.0 INTRODUCTION

1.1 Background

- 1.1.1 This appendix has been prepared to accompany **ES Vol 1 Chapter 7: Ecology and Nature Conservation [EN010141/DR/6.1]** of the Environmental Statement (ES) for the East Park Energy project (the ‘Scheme’).
- 1.1.2 The objectives of this report are to:
- Provide baseline information on the current habitats and ecological features both within the Site and in the immediately surrounding area;
 - Identify the proximity of any designated sites for nature conservation interest; and,
 - Identify the presence or potential presence of any protected species or habitats.
- 1.1.3 The report has been informed by desk-based review of relevant ecological information, extended habitat survey, badger survey, breeding bird survey, wintering bird survey and great crested newt (GCN) environmental DNA (eDNA) surveys. Reference is made to relevant legislation, planning policy and guidance, as appropriate.
- 1.1.4 Consideration has been given to the potential presence of rare, protected, or notable habitats and species, and the location of nearby features including designated sites for nature conservation.
- 1.1.5 Throughout this report, common names for species are favoured over scientific names unless there is potential for confusion and in which case scientific names are also presented.

2.0 METHODOLOGY

2.1 Desk Study

2.1.1 A desk study was undertaken to identify existing information on the presence of designated sites for nature conservation, protected and notable species and habitats within proximity to the Site as follows:

- Statutory designated sites for nature conservation, within 5km of the Site, extending to 10km for internationally protected sites, or 30km for internationally protected sites with bat qualifying features;
- Non-statutory designated sites for nature conservation within 2km of the Site; and,
- Existing records of priority habitats and protected and notable faunal species (dated within the last 10 years), within 2km of the Site.

2.1.2 The following key sources were consulted:

- Natural England and Joint Nature Conservation Committee (JNCC) websites¹;
- The Multi Agency Geographic Information for the Countryside (MAGIC) website²;
- District Level Licencing Data³;
- England Peat Map Portal⁴;
- The Woodland Trust Ancient Tree Inventory website⁵;
- National Biodiversity Network (NBN) Atlas⁶ (white clawed crayfish data with licence types CC0, CC-BY and OGL covering commercial use only);

¹ <http://jncc.defra.gov.uk/>

² <https://magic.defra.gov.uk/MagicMap.aspx>

³ <https://naturalengland-defra.opendata.arcgis.com/datasets/great-crested-newts-edna-pond-surveys-for-district-level-licensing-england?geometry=-1.451%2C51.749%2C-1.002%2C51.823>

⁴ [England Peat Map \(EPM\) Portal](#)

⁵ <https://ati.woodlandtrust.org.uk/>

⁶ <https://nbnatlas.org/>

- Bedfordshire and Luton Biodiversity Recording and Monitoring Centre (BLBRMC)⁷; and,
- Cambridgeshire and Peterborough Environmental Records Centre (CPERC)⁸.

2.1.3 Reference was also made to Ordnance Survey maps of the wider area and online aerial images in order to determine any features of nature conservation interest in the wider area, including potential ponds and watercourses.

2.2 Field Surveys

Preliminary Ecological Appraisal

2.2.1 The majority of the Site was initially included within a Preliminary Ecological Appraisal (PEA) survey undertaken between 11th and 13th April 2022. The survey followed UK industry standard Joint Nature Conservation Committee (JNCC) Phase 1 Habitat Methodology and with reference to the Chartered Institute of Ecology and Environmental Management (CIEEM), Technical Guidance Series Guidelines for Preliminary Ecological Appraisal.

Habitat Survey

2.2.2 Some areas were not accessible during the PEA survey. These areas were included in a habitat survey on 26th and 27th July 2022, following the UK industry standard UKHab methodology (UK Habitat Classification Working Group. 2020⁹) (Version 1.0) with reference to the Chartered Institute of Ecology and Environmental Management (CIEEM Guidelines for Preliminary Ecological Appraisal (CIEEM, 2017)¹⁰.

⁷ <https://www.bedscape.org.uk/BRMC/newsite/>

⁸ <https://www.cperc.org.uk/>

⁹ <https://ukhab.org/ukhab-documentation/>

¹⁰ CIEEM. (2017). *Guidelines for Preliminary Ecological Appraisal, 2nd edition. Chartered Institute of Ecology and Environmental Management, Winchester.*

- 2.2.3 Previously surveyed habitats assessed following Phase 1 methodology were updated using UKHab methodology (Version 1.0) between 22nd and 24th March 2023.
- 2.2.4 All areas of the Site were re-surveyed in 2024 due to the expiry of previously collected data. Data collected in 2024 used the updated UKHab methodology (Version 2.0).
- 2.2.5 The cable route, and any areas that had not been surveyed due to amendments in the red line boundary were surveyed using UKHab methodology (Version 2.0) between 16th – 17th June, 14th – 16th July and 28th – 29th July 2025.
- 2.2.6 All surveys were undertaken by suitably qualified and competent ecologists.
- 2.2.7 The extent of the Site and habitats as surveyed is shown on **ES Vol 3 Figure 7-3 [EN010141/DR/6.3]** with accompanying photographs in Annex 1 of this Appendix.
- 2.2.8 All habitats were mapped and described using the highest level of UK habitat classification as possible, with each individual habitat feature being assigned to a primary habitat and then described with secondary codes, if applicable. The surveys were extended to include the additional recording of specific features, using a series of ‘target notes’ (TNs) indicating the presence, or likely presence, of protected species, invasive species and other species of conservation significance.
- 2.2.9 Buildings onsite were assessed externally, and where access was available, internally, for their suitability to support roosting bats by way of preliminary roost assessment (PRA). Suitability of structures for roosting bats was classified in accordance with Bat Conservation Trust guidance, as follows (from Collins et al., 2023, ¹¹ Table 4.1):

¹¹ Collins et al. (ed) (2023) *Bat Surveys for Professional Ecologists: Good Practice Guidelines*. 4th edition, BCT: London

- **Negligible:** No obvious habitat features likely to be used by roosting bats, however, a small element of uncertainty remains as bats can use small and apparently unsuitable features on occasion.
- **Low:** A structure with one or more potential roost sites that could be used by individual bats opportunistically at any time of the year. Structures that do not provide enough space, shelter, protection, appropriate conditions and/or suitability surrounding habitat to be used on a regular basis or by larger numbers of bats (i.e., unlikely to be suitable for maternity and not a classic cool/stable hibernation site but could be used by individual hibernating bats).
- **Moderate:** A structure with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions and surrounding habitat but unlikely to support a roost of high conservation status.
- **High:** A structure with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions and surrounding habitat. These structures have the potential to support high conservation status roosts, e.g., maternity or classic cool/stable hibernation site.

2.2.10 Trees within the Site were assessed for their suitability to support roosting bats by way of Ground Level Tree Assessment (GTLA) in accordance with Bat Conservation Trust guidance (Collins, 2023). Suitability for roosting bats was classified as follows (from Tables 4.2 and 6.2 in the guidance document):

- **None:** Either no Potential Roost Feature (PRF) in the tree or highly unlikely to be any.
- **FAR:** Further assessment required to establish if PRF's are present in the tree.
- **PRF:** A tree with at least one PRF present.
- **PRF- I:** PRF is only suitable for individual bats or very small numbers of bats due to size or lack of suitable surrounding habitats.

- **PRF- M:** PRF is suitable for multiple bats and may therefore be used by a maternity colony.

2.3 Limitations

- 2.3.1 Limitations regarding specific protected species surveys (if any) are detailed separately in the relevant corresponding appendices.
- 2.3.2 Slight amendments to the Site boundary were made following the completion of surveys. As such, very minor areas of red line boundary changes were mapped from adjacent fields and aerial imagery. Habitats are typical of the Site and immediate surrounds, and as such it is considered that a sufficient understanding of the habitats present has been gathered from surveys undertaken.

Desk Study

- 2.3.3 A desk study does not identify a comprehensive account of all species and features of ecological importance within the study area, however it improves the understanding of the Site's ecological value and the likely species and habitats within the area.

Habitat Survey

- 2.3.4 A habitat survey does not constitute a detailed botanical survey or faunal species list or provide a full protected species survey, but enables competent ecologists to ascertain an understanding of the ecology of the Site in order to:
- Broadly identify the nature conservation value of the Site and assess the significance of any potential impacts on habitats/species recorded; and/or,
 - Confirm the need and extent of any additional specific ecological surveys that are required to identify the true nature conservation value of the Site (if any).
- 2.3.5 Access was not available to all areas of the Site, specifically the area of land located along the cable connected between Eaton Socon Site C and D; and

at Eaton Socon Substation and associated land located at the southern extend of the grid connection.

3.0 BASELINE

3.1 Designated Sites for Nature Conservation

Statutory Designated Sites

- 3.1.1 No international statutory designated sites for nature conservation were identified within 10km of the Order Limits.
- 3.1.2 Seven national statutory designated sites for nature conservation are located within 5km of the Site, the closest being Swineshead Wood Site of Special Scientific Interest (SSSI), located approximately 900m north. A summary of these statutory designated sites is provided in Table 3.1.
- 3.1.3 A review of MAGIC identified that the Site is located within a SSSI Impact Risk Zone (IRZ), however the Scheme does not meet the criteria whereby the LPA should consult with Natural England regarding potential risks to the applicable SSSI and/or other associated statutory designated sites.
- 3.1.4 This section should be read with reference to **ES Vol 3 Figure 7-1 [EN010141/DR/6.3]**.

Table 3.1: Statutory designated sites

SSSI: Site of Special Scientific Interest; LNR: Local Nature Reserve; SAC: Special Area of Conservation.

Site Name	Approximate Distance and Direction from Site	Description
Swineshead Wood SSSI	900m north	An ancient ash/maple woodland with structural and biological diversity. Historically managed as coppice with standards. Contains a rich flora. ¹²

¹²

<https://designatedsites.naturalengland.org.uk/SiteDetail.aspx?SiteCode=S1001520&SiteName=swine&countyCode=&responsiblePerson=&SeaArea=&IFCAAArea=>

Site Name	Approximate Distance and Direction from Site	Description
St. Neot's Common SSSI	1.57km east	A riverside common with alluvial grassland and associated ponds, ditches and willow carr. The grassland remains under the traditional management and has a species-rich sward. Contains diverse invertebrate and amphibian populations. ¹³
Little Paxton Wood SSSI	1.58km north-east	A wet ash-maple woodland, which have undergone a significant national decline. Historically managed as a coppice-with-standards. Has extremely diverse flora which includes one nationally restricted species (spiked star-of-Bethlehem <i>Ornithogalum pyrenaicum</i>), as well as a number of species which are of very local occurrence in Cambridgeshire. ¹⁴
Perry Woods SSSI	1.84km north	An ash-maple ancient woodland. Supports diverse floral and invertebrate diversity. ¹⁵
Grafham Water SSSI	2.83km -north	An extensive reservoir that can support nationally important numbers of summer moulting mute swan and wintering great crested grebe, tufted duck and coot. It is also an important site for passage migrants, wintering and breeding birds. A small pond also supports GCN. ¹⁶
Little Paxton Pits LNR	3.11km -north-east	An extensive area of flooded gravel workings, with a diverse vegetation structure. The pits are of national importance for wintering wildfowl and an important stopping point for migrants. Notable use by wintering gadwall with over 1% of the British wintering population. The invertebrate fauna is extremely rich and includes a number of national rarities including a number of flies (Diptera) (<i>Spilogona scutulata</i> , <i>Limnophora scrupulosa</i> , <i>Dolichopus andulusiacus</i> and <i>Lispocephala falculata</i>) and the leaf-hopper (Homoptera) <i>Idiocerus herrichi</i> . Other notable species present include common spotted-orchid, bee orchid, blue fleabane, hare's-foot clover and knotted clover. ¹⁷

¹³

<https://designatedsites.naturalengland.org.uk/SiteDetail.aspx?SiteCode=S1002239&SiteName=st.%20neot&countyCode=&responsiblePerson=&SeaArea=&IFCAArea=>

¹⁴

<https://designatedsites.naturalengland.org.uk/SiteDetail.aspx?SiteCode=S1000864&SiteName=little%20paxton&countyCode=&responsiblePerson=&SeaArea=&IFCAArea=>

¹⁵

<https://designatedsites.naturalengland.org.uk/SiteDetail.aspx?SiteCode=S1002166&SiteName=perry%20wood&countyCode=&responsiblePerson=&SeaArea=&IFCAArea=>

¹⁶

<https://designatedsites.naturalengland.org.uk/SiteDetail.aspx?SiteCode=S1002330&SiteName=grafham&countyCode=&responsiblePerson=&SeaArea=&IFCAArea=>

¹⁷

<https://designatedsites.naturalengland.org.uk/SiteLNRDetail.aspx?SiteCode=L1009006&SiteName=Little%20Paxton%20Pits%20&countyCode=&responsiblePerson=&SeaArea=&IFCAArea=>

Site Name	Approximate Distance and Direction from Site	Description
Little Paxton Pits SSSI	3.12km north-east	An extensive area of flooded gravel workings, with a diverse vegetation structure. The pits are of national importance for wintering wildfowl and an important stopping point for migrants. Notable use by wintering gadwall with over 1% of the British wintering population. The invertebrate fauna is extremely rich and includes a number of national rarities including a number of flies (Diptera) (<i>Spilogona scutulata</i> , <i>Limnophora scrupulosa</i> , <i>Dolichopus andulusiacus</i> and <i>Lispocephala falculata</i>) and the leaf-hopper (Homoptera) <i>Idiocerus herrichi</i> . Other notable species present include common spotted-orchid, bee orchid, blue fleabane, hare's-foot clover and knotted clover. ¹⁸
Eversen and Wimpole Woods SAC	17.4km south-east	Annex II species that are a primary reason for selection of this site: 1308 Barbastelle <i>Barbastella barbastellus</i> The site comprises a mixture of ancient coppice woodland (Eversden Wood) and high forest woods likely to be of more recent origin (Wimpole Woods). A colony of barbastelle is associated with the trees in Wimpole Woods. These trees are used as a summer maternity roost where the female bats gather to give birth and rear their young. Most of the roost sites are within tree crevices. The bats also use the site as a foraging area. Some of the woodland is also used as a flight path when bats forage outside the site.

Non-statutory Designated Sites

- 3.1.5 Data provided by CPERC and BLBRMC indicate that no non-statutory designated sites for nature conservation are located within the Site, however two County Wildlife Site (CWS) Huntingdon Wood CWS and Kangaroo Meadow CWS are located adjacent to the Order Limits.
- 3.1.6 A further 17 non-statutory designated sites for nature conservation, all CWS are located within 2km of the Site.

¹⁸

<https://designatedsites.naturalengland.org.uk/SiteDetail.aspx?SiteCode=S1002350&SiteName=Little%20Paxton%20Pits%20&countyCode=&responsiblePerson=&SeaArea=&IFCAArea=>

3.1.7 Details of these non-statutory designations are provided in Table 3.2. This Section should be read with reference to **ES Vol 3 Figure 7-2 [EN010141/DR/6.3]**.

Table 3.2: Non-statutory designated sites.

CWS: County Wildlife Site; RNR: Roadside Nature Reserve.

Site Name	Approximate Distance and Direction from Site	Description
Huntingdon Wood CWS	Adjacent Site	The site is a woodland listed in the Cambridgeshire Inventory of Ancient Woodland which retains more than 25% semi-natural cover.
Kangaroo Meadow CWS	Adjacent Site	Recognised for the presence of neutral grassland. A small triangular area of unimproved neutral grassland which can be inundated in winter.
High Wood CWS	115m south	The site is a woodland listed in the Cambridgeshire Inventory of Ancient Woodland which retains more than 25% semi-natural cover.
Moor Road Marshy Fields CWS	255m south	The site supports at least 0.5ha of NVC community S7 Lesser Pond-sedge swamp.
The Elms Paddock CWS	315m north-east	The site supports frequent numbers of at least 8 neutral grassland indicator species.
Staploe and Honeydon RNR	355m south-west	Recognised for supporting nationally scarce Spiked Star of Bethlehem or Bath Asparagus (<i>Ornithogalum pyrenaicum</i>), Sulphur Clover (<i>Trifolium ochroleucon</i>) and Crested Cow-wheat (<i>Melampyrum cristatum</i>)
Cemetery North of Churchyard CWS	375m north	The site supports frequent numbers of at least 8 neutral grassland indicators, at least 3 of these are strong indicators.
Willow Pollards West of Sharps Barn CWS	465m east	The site supports at least 5 mature pollard willows in association with other semi-natural habitat.
Meagre Wood CWS	485m north-east	The site is a woodland listed in the Cambridgeshire Inventory of Ancient Woodland which retains more than 25% semi-natural cover.
Swineshead Wood CWS	900m north-west	Recognised for the presence of ancient semi-natural woodland. The northern and western areas of the woodland comprise mixed plantation with open areas. The remainder of the site, designated also as a SSSI, is previously managed

Site Name	Approximate Distance and Direction from Site	Description
		structurally and species diverse ancient semi-natural woodland on wet soils.
Sandye Lane CWS	910m north-west	Recognised for the presence of neutral grassland. A green lane linking Spanoak Wood and Tilbrook Bushes CWS with Swineshead CWS
River Great Ouse CWS (Cambridgeshire)	995m west	Major river not grossly modified by canalisation or poor water quality; supports >0.5ha NVC S6 swamp; >0.5ha S4 swamp; >0.05ha MG13 grassland; a nationally scarce vascular plant (<i>Nymphoides peltata</i>); breeding populations of a nationally rare dragonfly (<i>Libellula fulva</i>)
Wyboston Pits CWS	1.03km west	The Site comprises a series of flooded disused gravel pits surrounded largely by amenity grassland with scattered trees and shrubs but with smaller areas of neutral and marshy grasslands and broadleaved plantation.
Agdengreen Wood CWS	1.07km north	The site is a woodland listed in the Cambridgeshire Inventory of Ancient Woodland which retains more than 25% semi-natural cover.
Tilbrook Bushes and Sandy Lane CWS	1.13km North-west	The site supports a population of a vascular plant species which is rare in the county and because it supports as least 500m of hedgerow of the requisite dimensions and species diversity that is allowed to flower and fruit.
Hook and Home Woods CWS	1.14km south	Recognised for the presence of ancient semi-natural woodland. The CWS comprises two discrete areas of woodland; Hook Wood semi-natural broadleaved woodland and the northern section of Home Wood, containing semi-natural broadleaved woodland, conifer plantation at the eastern end and a central area of dense scrub.
Midloe Woods CWS	1.20km north-east	The site is a woodland listed in the Cambridgeshire Inventory of Ancient Woodland which retains more than 25% semi-natural cover.
Spanoak Wood and Tilbrook Bushes CWS	1.25km north-west	Recognised for the presence of ancient semi-natural woodland and marsh. An ancient woodland site, consisting mostly of young mixed planation of spruce and oak with a field layer of tall grasses and herbs. To the east of the site is an area of marshy neutral grassland.
Honeyhill Wood CWS	1.27km north	The site is a woodland listed in the Cambridgeshire Inventory of Ancient Woodland which retains more than 25% semi-natural cover.

Site Name	Approximate Distance and Direction from Site	Description
Keysoepark Wood CWS	1.47km south	Recognised for the presence of ancient semi-natural woodland. A block of semi-natural broadleaved woodland with a mature canopy underplanted with conifers.
Horse Close CWS	1.56km north-east	The site supports frequent numbers of at least 8 neutral grassland indicator species, at least 3 of these are strong indicators. Additionally it supports a population of a Nationally Scarce vascular plant species.
Melchbourne Woods CWS	1.58km west	Recognised for the presence of ancient semi-natural woodland. A large area of semi-natural broadleaved woodland and plantation, most of which is ancient woodland.
River Great Ouse CWS (Bedfordshire)	1.61km south-east	Designated for river habitats and adjacent habitats and features which are considered part of the river system.
Little Barford CWS	1.65km south-east	A complex of two semi-improved pastures to the east, an area of swamp vegetation in a poplar plantation to the west (not surveyed), a churchyard and the neighbouring section of the River Great Ouse.
Bushmead Meadows CWS	1.71km south	Recognised for the presence of neutral grassland. One of the largest and most species rich areas of CWS grassland (in Bedfordshire) north of Bedford.
Begwary Brook Pits CWS	1.87km south-east	Contains a diversity of habitats including marsh, neutral grassland, ponds, lakes, ditches and woodland. The River Great Ouse forms the eastern and northern boundaries of the County Wildlife Site.

3.2 Priority Habitats – Existing Records

3.2.1 A review of MAGIC, BLBRMC and CPERC data, Ordnance Survey Maps and aerial imagery identified nine Habitats of Principal Importance (also known as priority habitats) under Section 41 of the NERC Act/UK Biodiversity Action Plan within 2km of the Site. Of these, the following four priority habitats were identified within the Site; hedgerows, streams, deciduous woodland and ponds.

3.2.2 Ten priority habitats listed under the Local Biodiversity Action Plans (LBAPs) were identified within 2km of the Site.

3.2.3 Information on priority habitats within 2km of the Site is presented in Table 3.3. Where numerous records of a particular habitat were recorded, only the closest record to the Site has been provided, in order to provide context for the Site and surrounding area.

Table 3.3: Priority habitats – existing records

NERC S.41: Natural Environment and Rural Communities (NERC) Act (2006); UKBAP: UK Biodiversity Action Plan Priority Habitat; LBAP: Local Biodiversity Action Plan Priority Habitat; AWI: Ancient Woodland Inventory.

Priority Habitat Name	Designation	Approximate Distance from Site
Hedgerows	NERC S.41, UKBAP, LBAP	Within the Site.
Deciduous woodland	NERC S.41, UKBAP, LBAP	Within the Site.
Ponds	NERC S.41, UKBAP, LBAP	Within the Site.
Coastal and floodplain grazing marsh	NERC S.41, UKBAP, LBAP	Immediately adjacent to the Order Limits.
Traditional orchards	NERC S.41, UKBAP, LBAP	Immediately adjacent to the Order Limits.
Ancient woodland	AWI, LBAP	Immediately adjacent to the Order Limits (Huntingdon Wood).
Lowland fen	NERC S.41, UKBAP	255m south.
Lowland meadows	NERC S.41, UKBAP, LBAP	260m north-east
Wet woodland	NERC S.41, UKBAP, LBAP	890m south
Reedbed	NERC S.41, UKBAP, LBAP	1.63km south-east

3.3 Ancient and Irreplaceable Habitats

- 3.3.1 A review of MAGIC and the England Peat Map identified no ancient or irreplaceable peat soil habitats within the Site or within 500m of the Order Limits.
- 3.3.2 A review of MAGIC and data provided by CPERC and BLBRMC identified two ancient woodland parcels within 500m of the Order Limits and fourteen within 2km of the Site. The closest ancient woodland is Huntingdon Wood, which is directly adjacent to the grid connection element of the Order Limits.
- 3.3.3 Woodland Trust Ancient Tree Inventory identified no notable trees within the Site, or within 500m of the Order Limits.

3.4 Extended Habitat Survey

- 3.4.1 This section should be read in conjunction with the UKHab Habitat Plan as presented in **ES Vol 3 Figure 7-3 [EN010141/DR/6.3]**.

Site Description

- 3.4.2 The Site comprises four distinct areas (East Park Sites A to D) joined with cable and grid connection corridors, as described below and displayed on **ES Vol 3 Figure 1-2: Site References [EN010141/DR/6.3]**.

East Park Site A

- 3.4.3 East Park Site A, west of B660 Kimbolton road and B660 Pertenhall Road, predominantly consists of large arable fields planted with cereal crops at the time of survey. Fields are typically bounded by species-poor hedgerows dominated by hawthorn and blackthorn, but also variously including field maple, ash, oak, dog rose, sycamore, hazel.
- 3.4.4 Within the north of East Park Site A lies the Pertenhall Brook, while more natural at the western extent, the watercourse becomes more open and heavily modified towards the east of East Park Site A, including the straightening and deepening of the channel. At the western extent and along

the southern bank in particular are mature tree lines of ash and willow, with unmanaged grassland in more open areas towards the east of the Site.

- 3.4.5 Habitats immediately beyond the East Park Site A boundary include further arable fields, blocks of plantation broadleaved woodland, as well as the existing Manor Farm solar array.

East Park Site B

- 3.4.6 East Park Site B, east of B660 Pertenhall Road, similarly comprises agricultural habitats consisting of cereal crops and non-cereal (legume) crops. Fields typically have modified grassland margins consisting of common species typical of agricultural landscapes.
- 3.4.7 Fields are bounded by hedgerows, typically species-poor and dominated by hawthorn and blackthorn but variously also containing oak, ash, willow, elder and sycamore. Ditches are also present, as well as some small streams that are tributaries of the Pertenhall Brook.
- 3.4.8 A few small areas of broadleaved woodland are located within Site B.
- 3.4.9 Habitats immediately beyond the East Park Site B boundary include further arable fields, with the village of Little Staughton to the South.

East Park Site C

- 3.4.10 East Park Site C surrounding New Wood consists predominantly of arable fields bounded by ditches and with modified grassland margins.
- 3.4.11 New Wood is located centrally in the parcel, which is an oak dominated woodland with evidence of use for gamebird rearing.
- 3.4.12 The River Kym is present to the north of Site C; the river is approximately 5m wide and with banks modified by reprofiling. The river is lined with trees including ash and willow and grassland bank tops.
- 3.4.13 Habitats immediately beyond the East Park Site C boundary include further arable fields, with the village of Staughton Highway to the north.

East Park Site D

- 3.4.14 East Park Site D comprises predominantly arable fields with small blocks of woodland and scrub on the western boundary, as well as recent hedgerow planting. Field boundaries are less well established in this Site.
- 3.4.15 Habitats immediately beyond the East Park Site D boundary include further arable fields. High wood, a small woodland block, and a solar farm is present to the south of East Park Site D.

Cable Corridor B - C – East Park Site B to Site C

- 3.4.16 The cable corridor connects East Park Site B and C across an unnamed road and arable fields.

Cable Corridor C - D – East Park Site C to Site D

- 3.4.17 The cable corridor connects East Park Site C and D across Moor Road and an arable field.

Grid Connection – East Park Site D to Eaton Socon Substation

- 3.4.18 The Grid Connection connects East Park Site D to the Eaton Socon Substation and crosses open arable fields, Duloe Brook, Duloe Road and Bushmead Road.
- 3.4.19 Habitats adjacent to the Grid Connection predominantly consist of arable land but also includes Huntington Wood (ancient woodland and CWS).

Detailed Habitat Descriptions

- 3.4.20 Detailed description for each habitat types recorded across the Scheme are presented in Table 3.4, target notes are presented in Table 3.5 and photographs are presented in Annex 1.

Table 3.4: UKHab habitats summary (Bold indicates Habitat of Principal Importance)

Habitat Code	Descriptions	Photo No
c1	<p><u>Arable and horticulture</u></p> <p>Arable fields comprising of primarily bare soil. Some fields had some areas of crop vegetation, and one field was recently stripped to bare ground; another field was recently ploughed. Species recorded within this habitat type include bristly oxtongue and tansy.</p> <p>This habitat type was common within East Park Site B, but also present within East Park Site A and D.</p> <p>Secondary codes associated with this habitat type included tall forbs (16), bare ground (510) and abandoned (519).</p>	1, 12
c1a	<p><u>Arable field margins</u></p> <p>This habitat type was recorded along a field within the Grid Connection.</p> <p>Species recorded within the habitat include birds foot trefoil, bristly oxtongue, white clover, red clover, alfalfa and creeping thistle.</p>	8
c1a6	<p><u>Arable margins pollen and nectar</u></p> <p>Field margins with species including tansy, buckwheat, creeping thistle, bristly oxtongue, oxeye daisy and Yorkshire fog.</p> <p>This habitat type was uncommon at the Site; it was recorded within East Park Site A and D.</p>	-
c1a8	<p><u>Arable field margins wild bird mix</u></p> <p>Blocks or strips of crops left unharvested for game birds.</p> <p>This habitat type was recorded within East Park Site A and D.</p>	-
c1c	<p><u>Cereal crops</u></p> <p>Arable field containing cereal crops.</p> <p>This habitat type was dominant within East Park Site B and D, whilst also present within East Park Site A and C.</p>	-
c1c5	<p><u>Winter stubble</u></p> <p>Winter stubble was recorded within East Park Site A and within the Grid Connection.</p>	13
c1c7	<p><u>Other cereal crops</u></p> <p>Arable fields containing improved rye grass, barley, wheat and occasionally oilseed rape and oat crops were present at the Site.</p>	1, 5

Habitat Code	Descriptions	Photo No
	<p>This habitat type was recorded within East Park Site A, B, C, D and within the Grid Connection.</p> <p>Secondary codes associated with this habitat type included bare ground (510).</p>	
c1d8	<p><u>Other non-cereal crops</u></p> <p>Fields containing field beans were present within East Park Site B and C.</p> <p>Secondary codes associated with this habitat type include ploughed (600).</p>	-
g3	<p><u>Neutral grassland</u></p> <p>This habitat type was present as a grassland strip bordering the road within the Grid Connection.</p> <p>The grassland was false oat dominant, other species including knapweed were also present.</p>	-
g3c	<p><u>Other neutral grassland</u></p> <p>This habitat type was present within East Park Site A, B, C and within the Grid Connection.</p> <p>Species recorded within habitats classified as other neutral grassland include perennial ryegrass, cocksfoot, false oat grass, timothy, meadow grass, red clover, knapweed, birds foot trefoil, common vetch, field bindweed, hogweed, bristly oxtongue, nettle, bramble, willow herb, crested dogs tail, creeping thistle and wild carrot.</p> <p>Secondary codes associated with this habitat type included scattered scrub (10), tall forbs (16), scattered trees (32), mown (106), tall or tussocky sword (128) and young trees – planted (201).</p>	-
g3c5	<p><u>Arrhenatherum neutral grassland</u></p> <p>Arrhenatherum neutral grassland was recorded within the Grid Connection.</p> <p>Strips of arrhenatherum neutral grassland was present alongside roads/tracks. This habitat type was typically dominated by false oat grass, other species present include perennial ryegrass, cocksfoot, hogweed, field bindweed, poppy and nettle.</p> <p>Secondary codes associated with this habitat type included scattered scrub (10) and mown (106).</p>	9
g4	<p><u>Modified grassland</u></p> <p>Modified grassland is present across the Site.</p> <p>This habitat type predominantly borders arable land; but is also present as footpaths and tracks. Occasionally</p>	2, 7, 10

Habitat Code	Descriptions	Photo No
	<p>entire fields of modified grassland are present. In areas this habitat type is mown or present along footpaths.</p> <p>Species recorded within this habitat type include perennial rye grass, timothy grass, cocksfoot, false oat grass, meadow grass, meadow fescue, soft brome, creeping buttercup, ribwort plantain, ragwort, field bindweed, may weed, bristly oxtongue, sorrel, red clover, teasle, thistle, nettle, black knapweed, docks, oilseed rape and cowslip parsley.</p> <p>Secondary codes associated with this habitat type include tall forbs (16), mown (106), earthbank (112) and track (839).</p>	
h3	<p><u>Dense scrub</u></p> <p>A patch of dense scrub comprising bramble, hawthorn, blackthorn, scattered ash and willow trees is present within East Park Site B.</p>	-
h3d	<p><u>Bramble scrub</u></p> <p>Bramble scrub was present within East Park Site A and within the Grid Connection.</p> <p>Within East Park Site A scattered trees comprising hawthorn, willow, elm and elder were present within the bramble scrub.</p>	-
h2h	<p><u>Mixed scrub</u></p> <p>Mixed scrub with hawthorn, blackthorn, bramble, goat willow, oak and ash were present within East Park Site C and D.</p> <p>Secondary codes associated with this habitat type include scattered trees (32).</p>	-
r1	<p><u>Standing open water and canals</u></p> <p>Three ponds are located within the Site.</p> <p>Pond P25 was located within East Park Site A, Pond P14 and P31 was located within East Park Site B</p> <p>Full descriptions of the ponds are detailed within ES Volume 2 Appendix 7-5: GCN Presence or Absence eDNA Report.</p> <p>Secondary codes associated with this habitat type include pond (42).</p>	
u1c	<p><u>Artificial unvegetated, unsealed surface</u></p> <p>This habitat type is present within East Park Site C and within the Grid Connection.</p> <p>Areas of this habitat type included a stone yard, access track and storage area.</p>	

Habitat Code	Descriptions	Photo No
	Secondary codes associated with this habitat type include track (839).	
u1e	<u>Built linear features</u> Built linear features comprising roads, tracks, fences and brick walls were present across the Site. Secondary codes associated with this habitat type include scattered scrub (10), fence (612), road (800), track (839) and mortared wall (853).	6, 9
u1b5	<u>Buildings</u> A total of four buildings were present at the Site; two buildings are located within East Park Site A, and two buildings are located within East Park Site C. Buildings varied in levels of Bat Roost Potential (BRP) from none – high BRP.	
w1g	<u>Other broadleaved woodland</u> Other broadleaved woodland was present within East Park Site A, B and C. Woodland stands were mostly plantation dominating species include ash, sycamore or oak.. Other species also recorded included elder, field maple, hawthorn, black poplar, apple, white poplar, Norway maple, willow, blackthorn, birch, Scots pine and hazel. This habitat type was also present as linear habitats, as lines of trees within East Park Site C and D. Species recorded include field maple, elm, blackthorn, hawthorn, elder, willow and ash. Secondary codes associated with this habitat type include scattered scrub (10), plantation (29), line of trees (33), ecologically valuable line of trees (34), dry ditch (50.500) and earthbank (112).	
w1f	<u>Lowland mixed deciduous woodland</u> This habitat type was present within East Park Site D. Species composition comprised mature oak and ash, with recently planted cherry and birch trees at the woodland edge. Ground flora was dominated by ground ivy, cleavers, nettle and lord's and ladies.	
w1f7	<u>Other Lowland mixed deciduous woodland</u> Other lowland mixed deciduous woodland was recorded within East Park Site B, C and within the Grid Connection. Species recorded include oak, ash, hawthorn and blackthorn.	

Habitat Code	Descriptions	Photo No
	Secondary codes associated with this habitat type include plantation (29) and semi-natural woodland (30).	
w1h	<u>Other woodland; mixed</u> Other woodland; mixed was present within East Park Site A. The plantation comprised of species including pine, birch, oak, willow, elder, hazel and hawthorn.	
w1h5	<u>Other woodland; mixed; mainly broadleaved</u> This habitat type is present within East Park Site D. The habitat type is present as linear lines of trees, species present include birch, willow, cypress, oak and eucalyptus.	
h2a	<u>Native Hedgerows</u> This habitat type was common within East Park Site A, B and C. Typically, hedgerows were dominated by hawthorn and blackthorn; other species including field maple, oak, ash, rose spp., elder, willow and elm. Across the Site, managed, unmanaged, intact and defunct native hedgerows were present, some contained trees and some were associated with ditches and/or fences.	
h2a5	<u>Species-rich native hedgerows</u> Species-rich hedgerows were uncommon across the Site; they were recorded within East Park Site A, C and within the Grid Connection. Species recorded include blackthorn, hawthorn, field maple, elder, elm, wayfaring tree, aspen, dogrose, ash, willow, hazel and oak. Some species-rich hedgerows were recently planted, others supported trees, some were associated with fences, dry and seasonally wet ditches. Secondary codes associated with this habitat type include hedgerow with trees (11), dry ditch (50.500) young trees – planted (201) and seasonally wet ditch (50.502).	
h2a6	<u>Other Native Hedgerows</u> Other native hedgerows were recorded as being species-poor across the Site and were found to be present within East Park Site A, B, C, D and within the Grid Connection. Typically, hedgerows were dominated by hawthorn and blackthorn. Other species recorded include ash, dogrose,	3, 11

Habitat Code	Descriptions	Photo No
	<p>oak, elder, field maple, willow, apple, guelder rose and elm.</p> <p>Hedgerows across the site were intact, defunct, managed, unmanaged, some contained trees and were associated with dry ditches, seasonally wet ditches, wet ditches and fences.</p> <p>Secondary codes associated with this habitat type include hedgerow with trees (11), dry ditch (50.500), seasonally wet ditch (50.502), wet ditch (50.503), pond (42), young trees – planted (201), fence (612),</p>	
h2b	<p><u>Non-native and ornamental hedgerow</u></p> <p>An ornamental yew hedgerow, forming a garden boundary was present within East Park Site A.</p>	
r1	<p><u>Standing open water and canals</u></p> <p>A series of ditches with open water were present across the Site.</p>	
r1g	<p><u>Other standing water</u></p> <p>A series of drainage ditches retaining water were present across the Site.</p>	4
r2b	<p><u>Other rivers and streams</u></p> <p>The Pertenhall Brook is present within East Park Site A and Duloe Brook is present within the Grid Connection. Both meet the definition of this habitat type.</p> <p>Full descriptions of the watercourses are detailed within ES Volume 2 Appendix 7-6: Otter and Water vole Survey Report.</p>	13
Individual Trees	<p><u>Individual Trees</u></p> <p>Individual trees were recorded within East Park Site A and B. Tree species recorded include oak, ash, cherry, osier, field maple and sycamore.</p> <p>The age class of trees included immature, semi-mature, mature and veteran/ancient.</p>	12
Scattered scrub	<p><u>Scattered scrub</u></p> <p>Point habitats comprising of scattered scrub was present within East Park Site A and B. Species recorded included bramble, elder, dogrose, blackthorn and willow.</p>	-

3.4.21 Table 3.5 details target notes recorded during the habitat surveys.

Table 3.5: Target Notes

Map Ref.	Details
1	Ash tree located on woodland edge within East Park Site A with BRP – PRF-M. Features include woodpecker holes.
2	Mature ash tree located north of Pertenhall Brook within East Park Site A with BRP – PRF-M. Features potentially used by bats include rot holes and cracks.
3	Mature willow tree located south of the Pertenhall Brook within East Park Site A with BRP – PRF-M. Features potentially used by bats include cracks and broken limbs.
4	Area of woodland located within East Park Site B. Multiple trees with BRP – PRF-M. Features potentially used by bats include woodpecker holes. Multiple log piles present within the woodland.
5	Tree located within East Park Site B with BRP – FAR. Features potentially used by bats include cracks along limbs.
6	Ash tree located within East Park Site B with BRP – FAR. Features potentially used by bats include rot holes and a broken limb.
7	Two ash trees located within East Park Site B with BRP – FAR.
8	Barn owl box located approximately 50m north of the red line boundary of East Park Site B.
9	Barn located within East Park Site B. The barn is used for log storage and is open to one side. It has brick walls, a corrugated roof and wooden beams. The barn has moderate potential to support roosting bats and potential to support hibernating bats. Features potentially used by bats include gaps and cracks between bricks, concrete and beams. Evidence of owl comprising whitewash and pellets was present.
10	Standing dead tree present on the northern boundary of East Park Site B with BRP – PRF-M. Features present include a cavity within the trunk. Evidence of barn owl was recorded with whitewash on the trunk. The tree has the potential to support a barn owl nest site.
11	Meadow salsify and knapweed recorded along an arable field margin within East Park Site D.
12	Pyramidal orchid and bee orchid recorded along an arable field margin within East Park Site D.
13	Ash tree present along woodland edge within East Park Site D with BRP – PRF - M. Features potentially used by bats include woodpecker holes at approximately 5m.
14	Incidental observation of brown hare within East Park Site D.

Map Ref.	Details
15	Incidental observation of brown hare within East Park Site D.
16	Mature oak tree located along field boundary at the north of East Park Site D with BRP – FAR. Feature with potential suitability to support bats located on the northern aspect of the tree.
17	Mature oak tree located along a field boundary at the north of East Park Site D with BRP – FAR. The feature recorded and potentially used by bats was a hollow/rotting trunk.
18	Mature oak tree located along a field boundary at the north of East Park Site D with BRP – FAR. The feature recorded and potentially used by bats was a hollow/rotting trunk.
19	Mature oak tree located along a field boundary at the north of East Park Site D with BRP – PRF-I.
20	Semi mature ash tree located along a field boundary within East Park Site A with BRP – PRF-M. Features present include a large crack in the main trunk of the tree.
21	Oak tree located along the southern boundary of East Park Site A with BRP – PRF-M. Features present include several rot holes and cracks.
22	Oak tree located along the southern boundary of East Park Site A with BRP – PRF-M. Features present include multiple rot holes and cracks. Little owl occupancy also recorded within the tree.
23	Mature ash tree located along the northern boundary of East Park Site B with BRP – PRM-M. Features present include large cracks, ivy cover and broken branches.
24	Mature ash tree with BRP - PRF-M located along the Grid Connection. Features present include lifted bark, wound to potential cavity and rot hole. Tree is partially felled with recent fire damage.
25	Small mammal burrow recorded on southern bank of Duloe Brook.
26	Two barns immediately adjacent the boundary of East Park Site A that were considered to be suitable for a range of breeding owl and raptor species, including barn owl. The barns were also considered to have high potential to support roosting bats. One barn had a slate roof, whilst the other had a corrugated metal roof. Both barns had features considered suitable for use by roosting bats including cracks between the brick mortar and gaps under the bargeboards. The tiled roof included many gaps in tiles and between the tiles and roof tile ridge.

3.5 Protected and Notable Species

Birds

Desk Study

- 3.5.1 The combined data search returned 5,903 bird records comprising 129 species within 2km of the Order Limits during the last ten years. This included barn owl, bittern, black tern, brambling, Cetti's warbler, common scoter, crossbill, fieldfare, goldeneye, green sandpiper, greenshank, hobby, kingfisher, little ringed plover, Mediterranean gull, merlin, osprey, peregrine, pintail, red kite, redwing, whimbrel and white-tailed eagle, which are listed on Schedule 1 of the Wildlife and Countryside Act 1981 (as amended).
- 3.5.2 Species returned in the 2km search area that are listed on Annex 1 of the Directive 2009/147/EC (Birds Directive) include barnacle goose, bar-tailed godwit, bittern, black tern, great white egret, kingfisher, little egret, Mediterranean gull, merlin, osprey, peregrine, red kite, smew and white-tailed eagle.
- 3.5.3 A total of 27 Natural Environment & Rural Communities (NERC) Act Section 41 Species were returned from the combined data return including bittern, bullfinch, common scoter, corn bunting, cuckoo, curlew, dunnock, European white-fronted goose, grasshopper warbler, grey partridge, hawfinch, herring gull, house sparrow, lapwing, lesser redpoll, lesser spotted woodpecker, linnet, marsh tit, reed bunting, skylark, song thrush, spotted flycatcher, starling, tree sparrow, turtle dove, yellow wagtail and yellowhammer.
- 3.5.4 The data search returned 37 BoCC Red List species and 47 BoCC Amber List species within 2km of the Order Limits. Swift and barn owl are further listed under the Cambridgeshire and Peterborough Local Biodiversity Action Plan. A review of MAGIC shows that the Site is not allocated as an Important Bird Area.

Field Survey

- 3.5.5 As listed in Table 3.5, during the habitat surveys, several structures and trees were recorded within the Site which were considered to potentially support notable species of owl/raptor. These included TN8, TN9 and TN10.
- 3.5.6 TN8 comprised a barn owl box situated on a pole adjacent to an unmanaged hedgerow approximately 50m north of the boundary of East Park Site B. Close inspection was not possible and therefore occupancy of the box is unknown.
- 3.5.7 TN9 included a log storage building within East Park Site B. The brick building was identified with white wash down the internal pillars, as well as owl pellets on the floor.
- 3.5.8 TN10 was identified as dead standing tree with a large hole in the trunk. The tree was considered to occupy a potential owl nest, with some white wash recorded down the side of the trunk.
- 3.5.9 TN26 comprised two barns immediately adjacent the boundary of East Park Site A that were considered to be suitable for a range of breeding owl and raptor species, including barn owl. The barns were not accessed during the survey, and as such, no evidence of breeding owl/raptor was recorded.
- 3.5.10 Results of field surveys, comprising wintering bird and breeding bird surveys are presented in **ES Vol 2 Appendix 7-2 and 7-3 [EN010141/DR/6.2]**, respectively.

Bats

- 3.5.11 The combined data search returned 18 recent bat records comprising 12 species categories within 2km of the Site, dated within the last 10 years. These include an unknown bat species, brown long-eared bat, common pipistrelle, Daubenton's bat, lesser noctule, an unknown Myotis species, Nathusius's pipistrelle, noctule bat, pipistrelle bat species, serotine, soprano pipistrelle and Western barbastelle. No species of bat are listed as LBAP

species. No records were returned within the Site itself, with the majority of records located in urban habitat within St. Neots.

- 3.5.12 A review of the MAGIC website identified one Natural England protected species licence for bats within 2km of the Site. This licence (case reference: EPSM2012-4493) granted the destruction of breeding and resting site for common pipistrelle and brown long-eared bat. The licence was active between 2013 and 2016 and was identified approximately 1.38km south of the East Park Site D.

Roosting Bats

- 3.5.13 During the habitat surveys within the Site 18 trees were noted to have potential to support roosting bats. 11 trees were noted to have PRF-M suitability (TN1, TN2, TN3, TN4, TN10, TN13, TN20, TN21, TN22, TN23 and TN24), one tree was noted to have PRF-I suitability (TN19), and six trees were noted to have FAR suitability (TN5, TN6, TN7, TN16, TN17 and TN18). Further information is listed in Table 3.5.
- 3.5.14 One structure (TN9) was identified within East Park Site B which offered moderate suitability to support roosting bats. In addition, two barns immediately outside of East Park Site A (TN26) offered high suitability for roosting bats. Further details are listed in Table 3.5.
- 3.5.15 TN9 includes a log storage building in East Park Site B that is open on one side. The storage building contains a double layer of brick walls and a corrugated metal roof with internal wooden beams. Cracks are present in the mortar between bricks and within the wooden beams. The building was classified as having moderate bat roost potential.
- 3.5.16 TN26 comprises two barns adjacent to East Park Site A. One barn was identified with a slate roof, whilst the other barn contained a corrugated metal roof. The barns contained many cracks between the brick mortar and also contained gaps under the bargeboards. Roof tiles included many gaps, which

are also present between the tiles and roof tile ridge. Both barns were considered to have high bat roost potential.

Foraging and Commuting Bats

- 3.5.17 Habitats within the Site as a whole are considered to fit the description most closely for land of 'moderate' interest for foraging bats in accordance with Bat Conservation Trust (BCT) guidance, with continuous habitat connected to the wider landscape that could be used for commuting and foraging. However, the arable habitats, which the Site is dominated by, offer poor quality habitat for foraging and commuting bats.
- 3.5.18 Linear features within and around the Site such as tree lines, hedgerows, field margins, ditches, woodland edges and watercourses are considered to offer the most favourable habitats for foraging/commuting bats, particularly the Pertenhall Brook and the River Kym.
- 3.5.19 Bat activity surveys identified the following species utilising the Site (and predominantly the field boundary features): common pipistrelle, soprano pipistrelle, Nathusius' Pipistrelle brown long-eared bat, barbastelle, noctule and *Myotis* sp.
- 3.5.20 Results of field surveys, comprising bat surveys are presented in **ES Vol 2 Appendix 7-7 [EN010141/DR/6.2]**.

Amphibians

- 3.5.21 The combined data return included 27 records of amphibian within 2km of the Site during the last ten years. Records comprised 17 GCN, six common toad, two common frog and two smooth newts. No records were returned within the Site itself, however a GCN record was returned directly adjacent to Order Limits of East Park Site D (pond P44; see **ES Vol 3 Figure 7-7 [EN010141/DR/6.3]**). This GCN record was made in 2019 and comprised a positive eDNA result from a pond situated adjacent to the Site's northern access track that connects to the B645. Remaining records were distributed throughout all habitats of the wider landscape.

- 3.5.22 A review of MAGIC identified no granted Natural England licences for GCN within 2km of the Site.
- 3.5.23 Further review of MAGIC identified five GCN Class Survey Licence Returns in three locations, all of which had confirmed presence of GCN in 2015. The closest of these was identified 1.35km north-east of the East Park Site C.
- 3.5.24 Three ponds were identified within the Site and a further 22 ponds were identified within 250m of the Site from OS and aerial mapping.
- 3.5.25 The results of GCN Habitat Suitability Assessment and eDNA surveys are presented in **ES Volume 2 Appendix 7-5 [EN010141/DR/6.2]**.
- 3.5.26 The vast majority of the Site is arable land, which has negligible suitability for amphibians. Habitats within the Site such as ponds, ditches, woodland, hedgerow bases, tree line bases and associated grassland field-margins provide further suitable habitat for breeding, hibernating, commuting and foraging amphibians.
- 3.5.27 During the extended habitat survey, multiple log piles were also identified in an area of woodland directly adjacent to the western Order Limits of East Park Site A (TN4). Such log piles have potential to act as wildlife hibernacula and are considered suitable for amphibians.

Reptiles

- 3.5.28 The combined data search returned three records of grass snake within 2km of the Site during the last ten years. No records were returned within the Site itself, with the closest recording located in Little Staughton; c.245m east of East Park Site B.
- 3.5.29 A review of MAGIC identified no granted Natural England licences for reptiles within 2km of the Site.
- 3.5.30 The vast majority of the Site is arable land, which has negligible suitability for reptiles. Habitats within the Site such as ponds, ditches, woodland, hedgerow

bases, tree line bases and associated grassland field-margins provide further suitable habitat for hibernating, commuting and foraging.

- 3.5.31 During the extended habitat survey, multiple log piles were also identified in an area of woodland directly adjacent to the western Order Limits of East Park Site A (TN4). Such log piles have potential to act as wildlife hibernacula and are considered suitable for reptiles.

Badger

- 3.5.32 Discussed separately within **ES Vol 2 Appendix 7-4: Confidential Badger Survey Report [EN010141/DR/6.2]**.

Otter

- 3.5.33 The combined data search returned 21 recent records of otter, the closest of which was located north of East Park Site C along the section of the River Kym adjacent to the Site. Records including sightings, spraints and prints are located along the length of the River Kym. Recent camera trap records were also provided within the data search located on the Riseley Brook, which connects directly to the Pertenhall Brook. Records primarily centre on the River Great Ouse.
- 3.5.34 Returned records included live and dead sightings of otter, as well as signs such as spraints and prints. A confirmed holt was identified 945m north of the Site, with a possible holt also identified 650m north, records were dated in 2020 and 2017 respectively.
- 3.5.35 No otter field signs were identified within the Site during the extended habitat survey.
- 3.5.36 Several onsite and adjacent watercourses were considered suitable for otter, including an unnamed stream located within East Park Site B that connects to Pertenhall Brook, Pertenhall Brook, South Brook and the Duloe Brook. Such watercourses were considered to provide suitable foraging and

commuting opportunities, as well as locations for establishing holts and resting places in areas of riparian vegetation.

- 3.5.37 Two other watercourses, Honeydon Brook and Colmworth Brook identified from aerial imagery may also provide suitable habitat for the species. These watercourses which were not subjected to detailed surveyed due to access constraints.
- 3.5.38 Results of field surveys, comprising otter surveys are presented in **ES Volume 2 Appendix 7-6 [EN010141/DR/6.2]**.

Water Vole

- 3.5.39 The combined data search returned nine records of water vole within 2km of the Site. Of these, none were identified within the Site itself. Records were made between 2018 and 2022, with the closest record identified located 1.1km north-west of East Park Site C along the River Kym. Records comprised live sightings, latrines, burrows and feeding remains.
- 3.5.40 Six records were identified c.1.65km south-west of Eaton Socon Substation situated at the most southern end of the proposed cable route. The clustered records were recorded along a wet ditch, which itself extends c.1.7km east before connecting to the Honeydon Brook / Colmworth Brook which runs directly along the Order Limits of the proposed cable route south of Eaton Socon substation.
- 3.5.41 Two additional records of water vole were identified c.1.8km east of the Site in Hen Brook located within St. Neots.
- 3.5.42 No conclusive signs of water vole were identified within the Site during the extended habitats surveys; a small mammal burrow was recorded along the bank of Duloe Brook (TN25), no other field signs were recorded, therefore this is not considered to be conclusive evidence of the presence of water vole.
- 3.5.43 Watercourses and ditches present within and immediately adjacent to the Site offer suitable habitat for the species, with foraging, commuting and

burrowing opportunities available. The most suitable watercourses at and adjacent to the Site comprise the River Kym, Pertenhall Brook and an unnamed stream located within East Park Site B that connects to Pertenhall Brook.

- 3.5.44 Two other watercourses, Honeydon Brook and Colmworth Brook identified from aerial imagery may also provide suitable habitat for the species. These watercourses which were not subjected to detailed surveyed due to access constraints.
- 3.5.45 Results of field surveys, comprising water vole surveys are presented in **ES Volume 2 Appendix 7-6 [EN010141/DR/6.2]**.

Hazel Dormouse

- 3.5.46 The combined data search returned no records of hazel dormouse within 2km of the Site during the past ten years.
- 3.5.47 A review of MAGIC identified no granted Natural England licences for dormice within 2km.
- 3.5.48 During the habitat survey no signs of hazel dormouse were recorded. The dominant arable habitat within the Site provides negligible suitability for hazel dormouse. Hedgerows present across the Site may provide suitable habitat to support this species and provide connectivity across the Site and within the wider landscape.
- 3.5.49 Areas of ancient woodland located outside of the Site likely offer suitable habitat to support this species, however such woodlands are small in size and sparsely located within the landscape scale reducing the likelihood of hazel dormouse presence.

White-clawed Crayfish

- 3.5.50 The combined data search returned no records of white-clawed crayfish during the previous ten years.

- 3.5.51 During the habitat surveys, several watercourses within and adjacent to the Site were considered suitable to support this species. Watercourses considered to be suitable include the River Kym, Pertenhall Brook, South Brook, Duloe Brook and an unnamed stream located within East Park Site B,
- 3.5.52 Two other watercourses, Honeydon Brook and Colmworth Brook identified from aerial imagery may also provide suitable habitat for the species. These watercourses which were not subjected to detailed surveyed due to access constraints.

Other Notable Species

Flora

- 3.5.53 Of the plant species returned in the combined data search, only bluebell was listed under Schedule 8 of the Wildlife and Countryside Act 1981 (as amended). A total of 13 records of bluebell were returned in the data search, with one record located within the Site itself. This included bluebell in a parcel of woodland situated in the centre of East Park Site A.
- 3.5.54 Bluebell was identified directly adjacent to the Site during the extended habitat surveys with the species recorded in woodlands neighbouring East Park Site B and C.

Fish

- 3.5.55 The combined data search returned no records of notable fish within 2km of the Site during the last ten years.
- 3.5.56 Watercourses identified within and adjacent to the Site are considered suitable for supporting notable species of fish, including bullhead and European eel. These include an unnamed stream in East Park Site B, Pertenhall Brook and the River Kym. Other potentially suitable watercourses may include Honeydon Brook, Colmworth Brook, South Brook and Duloe Brook.

Invertebrates

- 3.5.57 Of the invertebrate species returned in the combined data search, only Norfolk hawker *Aeshna isosceles*, purple emperor *Apatura iris* and white-letter hairstreak *Satyrrium w-album* are listed under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended).
- 3.5.58 Thirty records of Norfolk hawker were returned during the last ten years, with all records (dating between 2019 and 2022) situated outside the Site along the River Great Ouse in St. Neots. Purple emperor was recorded once in 2022 approximately 1.8km west of East Park Site A. White-letter hairstreak was recorded four times between 2018 and 2022, with all records located outside the Site. Two of these records were identified directly adjacent to the south-eastern boundary of East Park Site B (directly west of Little Staughton), along an elm-rich hedgerow which continues north along the Order Limits.
- 3.5.59 The data search also identified 37 invertebrate species (606 records) listed under Section 41 of the NERC Act/UK Biodiversity Action Plan within 2km of the Site over the last ten years. Of these, only four records were identified within the Site itself. These four records (dating between 2019 and 2020) all related to small heath situated within either East Park Site A or B. The remaining 36 priority species were distributed throughout the wider landscape. These include moths, butterflies and dragonflies, such as beaded chestnut, blood-vein, brindled beauty, brown-spot pinion, buff ermine, centre-barred sallow, cinnabar, crescent, deep-brown dart, dot moth, dusky thorn, ghost moth, green-brindled crescent, grey dagger, knot grass, lackey, large nutmeg, large wainscot, latticed heath, lunar yellow underwing, mottled rustic, mouse moth, Norfolk hawker, oak hook-tip, powdered quaker, rosy rustic, rustic, sallow, shaded broad-bar, shoulder-striped wainscot, small emerald, small phoenix, small square-spot, sprawler, white ermine and white-letter hairstreak.
- 3.5.60 The habitats within the Site are not considered to be of a floristic or structural quality which could support significant assemblages of invertebrates or

notable species. Although habitats present onsite including woodland, scrub, arable field margins and watercourses provide a range of habitats that may support a range of invertebrate species.

- 3.5.61 Unmanaged marshy riparian areas bordering onsite wetland habitats (e.g. watercourses and wet ditches) may have potential to support Norfolk hawker, whilst any sections of hedgerow containing high concentrations of elm may support white-letter hairstreak. On-Site woodlands dominated by oak (particularly ancient woodland) may also have potential to support purple emperor populations present in the wider landscape.

Mammals

- 3.5.62 The data search returned records of other notable mammal species including hedgehog and brown hare within 2km of the Site during the last ten years. Of these, none were identified within the Site itself.
- 3.5.63 The hedgerows, woodland, tree lines and grassland field margins within the Site provide the greatest opportunities for breeding, foraging and sheltering brown hare and hedgehog. Brown hare were frequently noted within the Site incidentally during surveys.


3.6 Invasive Non-native Species

- 3.6.1 The combined data search returned 12 records of invasive non-native plant species, as listed under Schedule 9 of the Wildlife and Countryside Act 1981 (as amended), within 2km of the Site during the last ten years. Of these, none were located within the Site itself. Species identified in the wider landscape include Himalayan balsam, Nuttall's waterweed, floating pennywort, wall cotoneaster, water fern and Japanese rose. The closest of these records relates to Himalayan balsam identified in 2014 approximately 700m south-east of Eaton Socon substation.
- 3.6.2 Invasive, non-native animals were returned in the data search. Multiple grey squirrel and Chinese muntjac records were identified throughout the wider landscape during the last ten years. Birds listed under Schedule 9 that were

returned in the data search include Egyptian goose, black swan, Canada goose, golden pheasant, Mandarin duck, red-crested pochard, barn owl, barnacle goose, red kite and white-tailed eagle.

- 3.6.3 No invasive, non-native species were identified within the Site during the habitat surveys.

ANNEX 1: PHOTOGRAPHS

Photographs	
	
Photograph 1: An example of an arable field situated within the Site.	Photograph 2: An example of an onsite grassland field margin. Pictured also is a woodland located adjacent to East Park Site C.
	
Photograph 3: An example of a typical managed and intact species-poor hedgerow located throughout the Site.	Photograph 4: Pictured is a wet field boundary ditch, here situated within East Park Site C.

Photographs



Photograph 5: An example of a typical crop field situated within the Site.



Photograph 6: An example of a typical access track, here situated along the grid connection.



Photograph 7: An example of modified grassland field margin situated within the Site.



Photograph 8: An example of arable field margins, here situated along the grid connection.



Photograph 9: An example of an access track bordered by arrhenatherum neutral grassland, here situated along the grid connection.



Photograph 10: An example of a field of modified grassland at the Site.

Photographs



Photograph 11: An example of a species-poor hedgerow with trees at the Site.



Photograph 12: An example of a recently ploughed field at the Site.



Photograph 13: An example of winter stubble at the Site.



Photograph 12: An example of an individual tree at the Site.



Photographs	
<p>Photograph 13: Pertenhall Brook situated within eastern extent of East Park Site A.</p>	<p>Photograph 14: The River Kym located adjacent to the northern Order Limits of East Park Site C.</p>
	
<p>Photograph 15: An example of a high bat roost potential ash tree recorded directly adjacent to the Site.</p>	<p>Photograph 16: TN8 – A barn owl box located on a pole approximately 50m north of East Park Site B.</p>
	
<p>Photograph 17: TN9 - An onsite building used for storage within East Park Site B.</p>	<p>Photograph 18: TN26 – One of two barns situated adjacent East Park Site A.</p>

Photographs



Photograph 19: Pertenhall Brook within western extent of East Park Site A



Photograph 20: Unnamed tributary of the Pertenhall Brook within East Park Site B