

CLUMP FARM SOLAR LIMITED

CLUMP FARM SOLAR - CABLE ROUTE, LEICESTERSHIRE

PRELIMINARY ECOLOGICAL APPRAISAL

JUNE 2024



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SUMMARY

Soltys Brewster Ecology (SBE) were commissioned by Clump Farm Solar Limited to undertake a preliminary appraisal of the proposed cable route between Clump Farm Solar and Enderby Substation located in Leicestershire. The cable route, approx. 7.1 km in length, follows Hinkley Road (A47) north-eastwards before turning right and heading south-eastwards along Desford Road (B582) to Enderby Substation. A plan showing the location of the planning application boundary for the proposed cable route, substation and the approved solar farm is included in Appendix I. To inform a planning application, a survey to establish the ecological baseline conditions along the proposed cable route is required. The ecological baseline conditions at the proposed site were established in February 2024 through a combination of desk study and UKHab Classification survey (pre-development).

Desk based consultation confirmed that the site does not form part of any statutory or non-statutory designation. Additionally, no statutory designated sites or Site of Special Scientific Interest (SSSI) impact risk zones are located within 1km of the proposed site. The data search did identify several protected species records of ecological relevance within the 1km radius of the site including records of foraging and commuting bats, Badger, protected and notable bird species and other notable mammalian species such as Water Vole and Otter.

An Extended Phase 1 Habitat survey undertaken in February 2024 identified a limited range of habitats within the proposed cable route corridor that are typically associated with agricultural land and roadside verges. This included an arable grassland field, modified grassland verges, a network of hedgerows, a small semi-natural broadleaved woodland, ditches and scattered trees. The arable field (which forms a small part of the cable route corridor) was considered likely to support ground-nesting bird species (e.g. Skylark) – Brown Hare was also observed at the site. The linear habitat features at the site (i.e. hedgerow network) were considered likely to support locally foraging and commuting bat species.

It is understood that the majority of features with most ecological value within the context of the site (e.g. hedgerow network and scattered trees) will be retained as part of the development layout, using Horizontal Directional Drilling (HDD) where required. Aside from the areas of hardstanding (existing highways), the areas of modified grassland verges and the small section of the arable field, although considered of local value to ground nesting birds and reptiles, are considered the areas of land most suited for the proposed cable route development. Based on the current understanding of the project (no hedgerow breaching and restoration of habitat type and conditions returned to baseline within two years of the initial impact) and the availability of similar habitats in the immediate and wider landscape, further bird surveys and bat activity surveys have not been recommended.

Any future vegetation clearance at the proposed site will also need to consider the presence of nesting birds and other protected species such as the avoidance of the nesting bird season (typically March – September).

1.0 INTRODUCTION

- 1.1 Soltys Brewster Ecology (SBE) were commissioned by Clump Farm Solar Limited to undertake a preliminary appraisal of the proposed cable route between Clump Solar Farm and Enderby Substation located in Leicestershire. The cable route, approx. 7.1 km in length, follows Hinkley Road (A47) north-eastwards before turning right and heading south-eastwards along Desford Road (B582) to the substation. A plan showing the location of the proposed cable route corridor, substation and the approved solar farm scheme is included in Appendix I. To inform a planning application, a survey to establish the ecological baseline conditions along the proposed cable route is required.
- 1.2 The proposed cable route development will be located within the 'Proposed Cable Route Planning Boundary' (Appendix I). Subject to confirmation from Leicestershire Highways (and utilities searches), the majority of the cable trench will be in the carriageway, with the exception of approx. 300m within the arable field located adjacent to the southernmost section of the cable route. The proposed cable trench will be approx. 920mm wide with its depth varying between approx. 900 and 1100mm based on its location either within the carriageway or within the aforementioned arable field. These trenches will then be backfilled with the soil associated with excavation of the trench.
- 1.3 The current report presents the findings a desk-based consultation and Extended Phase 1 Habitat survey undertaken at the proposed cable route in February 2024. The report describes the existing ecological conditions as well as identifying any potential ecological constraints/opportunities associated with the proposals.

2.0 METHODOLOGY

- 2.1 In order to establish the baseline ecological conditions along the proposed cable route and immediately adjacent land, a combination of desk-based consultation and Extended Phase 1 Habitat survey were undertaken in February 2024.

Desk study

- 2.2 The desk study involved consultation with the Leicestershire and Rutland Environmental Records Centre (LRERC) and DEFRA 'MAGIC' interactive mapping tool¹ to identify any records of rare, protected or notable flora and fauna within 1km of the proposed cable route. The search criteria also included information relating to the location and citation details (where available) for any sites designated for their nature conservation interest such as Sites of Special Scientific Interest (SSSIs), Special Areas of Conservations (SACs) or Local Wildlife Sites (LWSs).
- 2.3 The desk study also involved a review of previous ecological survey work undertaken by SBE in 2021 to inform the planning submissions for the solar farm.

UK Habitat Classification

- 2.4 The fieldwork was undertaken between 20th and 21st February 2024 by a suitably experienced ecologist² and assistant and followed the standard UK Habitat Survey protocol (Version 2.0)³. All habitats located along and immediately adjacent to the proposed cable route were classified and mapped as accurately as possible. Habitats considered to have potential to support rare, protected or otherwise notable species of flora and fauna were noted, as were any direct signs of these species (e.g. Eurasian Badger *Meles meles* setts and dung-pits). Incidental observations of birds on, or flying over, the site were also recorded and any incidence of invasive weed species (e.g. Japanese Knotweed *Fallopia japonica*) noted.
- 2.5 A map of habitats was drawn up and target notes were used to identify features of ecological interest. Where possible, habitats were cross-referenced to any relevant Section 41 Natural Environment and Rural Communities (NERC) Act or local priority habitats.
- 2.6 During the field survey any trees located along the proposed cable route were assessed for their potential to support roosting bats and were categorised in relation to the bat roosting features (BCT, 2023). The categories are as follows:

¹ Magic Map Application: <https://magic.defra.gov.uk/magicmap.aspx>

² Associate member of the Chartered Institute of Ecology and Environmental Management (CIEEM).

³ UKHab Ltd (2023) UK Habitat Classification Version 2.0. (at <https://www.ukhab.org>)

- **PRF-I** – Potential Roost Feature (PRF) is only suitable for individual bats or very small numbers of bats either due to their size or lack of suitable surrounding habitats;
- **PRF-M** – PRF is suitable for multiple bats and may therefore be used by a maternity colony;
- **Negligible** – Negligible habitat features on site likely to be used by roosting bat.

Limitations

2.7 The Extended Phase 1 survey was conducted at the end of February 2024 and whilst habitat characterisation was possible, some ground flora was not yet in flower and was instead identified vegetatively where possible. As such, a full assessment of the ground-flora species associated with the habitats at the site was not possible at the time of writing. However, this was not considered to affect the broad habitat categorisation and condition assessment and the overall recommendations included within the current appraisal. It is concluded that habitats present are of low ecological importance (e.g. modified grassland and arable land).

3.0 RESULTS

Desk Study

LRERC Records

3.1 Consultation with LRERC and MAGIC identified that there are no national statutory designated sites for nature conservation located within 2km of the proposed cable route. Enderby Warren Quarry SSSI is located approx. 1km south-east of Enderby Substation, however, this site is designated for geological features and is not considered of ecological relevance to the current proposal. Summary plans to illustrate the desk study records are included in Appendix II and summarised in Table 1. A summary of non-statutory, locally designated Local Wildlife Sites (LWS) is included in Table 1.

Table 1: Non-statutory site located within 2km of the site.

Designation/Site Name	Description	Distance from the site
New Haven Farm Paddock - LWS LCC Ref: [56688] 40SE 2	Mainly selected for its Mesotrophic grassland as it surpasses the minimum area threshold of 2500m ² . Additionally hosts a min of 8 species listed under Mesotrophic grassland List F, with occurrence ranging from occasional to dominant on the DAFOR scale (percentage cover).	Southern boundary of the LWS is directly adjacent to Hinckley Road and Dan's Lane along proposed cable route (approx. <25m from planning boundary)
Lubbesthorpe, hedgerows north of Next – Potential LWS Blaby (Lubbesthorpe) Ref no.: 92014	2no. species-rich hedgerows (Hedgerow 1 & 2) which both contained at least 7 native woody species.	Hedgerow 1 is located directly adjacent to the eastern extent of the site (within 25m). Hedgerow 2 located 250m south of the site
Kirby Muxloe Hedgerow – LWS Blaby Ref no: 23271	The Hedgerow (SK503028 to SK504026) meets LWS criteria, being at least 1.3m high and 150m long. It contains 7 locally native trees or shrubs per 30m from List A1. Additional habitat features include a ditch along one side, a bank supporting the hedge along half its length, standard trees or pollards averaging two per 100m with a girth of at least 15cm, and dead wood and old layers along at least 10% of its length. It is currently recognized as an ecologically significant hedgerow at the district level.	Approx. 650m northwest of the site
Un-named Hedgerow LWS	The Hedgerow qualifies as a LWS due to its height (at least 1.3m) and length (90m), with 7 locally native trees or shrubs	Approx. 700m north west of the site

Designation/Site Name	Description	Distance from the site
Blaby Ref no: 23264	per 30m. Additional features include a ditch along one side, a bank supporting the hedge along half its length, standard trees or pollards at an average of two per 100m, dead wood along at least 10% of the hedgerow, making it ecologically significant at the District level. See Appendix 1 for more details.	
Lubbesthorpe Ash, TN86 Candidate LWS Ref no: 90407	Mature Ash – 1050mm diameter. Maiden structure with major trunk cavities with decay holes and physical damage to trunk. Fungi present.	Located approx. 850m north east of the site's most eastern extent

Thurlaston Brook, Earl Shilton Candidate LWS Hinckley & Bosworth Ref no: 92131	The stretch of Thurlaston Brook maintains its natural features, including meanders and tree-lined banks dominated by Alder and Crack-Willow. It hosts characteristic streamside vegetation such as Branched Bur-reed and Water Forget-me-not, meeting the criteria for designation as a LWS. The adjacent banks boast diverse flora, including Great Willowherb and Meadowsweet, though they face challenges from Himalayan Balsam encroachment. Despite this, the varied habitats support a wide range of species and act as vital wildlife corridors. Water-crowfoot also present.	Located approx. 850m south west of the most southern point contained within the proposed site boundaries
Un-named Hedgerow LWS Blaby Ref: 23267	The hedgerow (SK503028 to SK504029) is designated a LWS meeting Primary Criteria, being at least 1.3m tall and continuous, spanning 170m. It contains an average of 6.16 locally native trees or shrubs per 30m, detailed in Appendix 1 Hedgerow survey form and Location Flora Report 113/004 [23267].	Located approx. 850m north of the proposed site
Lubbesthorpe Oak, TN 53 Candidate LWS Ref no: 90405	Large, mature oak with a diameter of 1450mm. Maiden structure with decay holes and large quantities of dead wood in canopy. Fungi present – holds a high aesthetic value.	Located approx. 875m northeast of the proposed site
Lubbesthorpe Oak, TN100 Candidate LWS Ref no: 90411	Large, mature oak with a diameter of 1380mm. Maiden structure with decay holes, fungi present holds a high aesthetic value.	Located approx. 900m north west from the most eastern extent of the proposed site
Hinckley road, Kirby Muxloe hedgerows Ref no: 92012	4no. hedgerows identified to contain over 7 native woody species within any 30m stretch. Species include Hawthorn, Ash, elder, blackthorn, field maple, rose, elm, crab apple, birch, and goat willow.	Located approx. 910m north of the proposed site

Lubbesthrope Oak, TN 103 Candidate LWS Ref no: 90412	Large, mature oak with a diameter of 1320mm. Maiden structure with decay holes and physical damage to trunk. High aesthetic value.	Located approx. 915m north east from the proposed site
Lubbesthorpe Ash, TN 97 Candidate LWS Ref no: 90410	1200mm diameter. Natural Pollard structure with major trunk cavities/progressive hollowing and decay holes. Large quantities of dead wood in canopy. Potential roost site for Bats.	Located approx. 970m north east from the proposed site
Hinckley Road Kirby Muxloe Toad Pond Candidate LWS Blaby Ref no: 92007	Small populations of smooth newt were recorded in all ponds surveyed and a large number of common toad recorded in pond P6 c. 164 individuals, suggesting that this is a breeding pond for this section 41 species.	Located approx. 990m north east from the proposed site

3.2 The data search returned a comprehensive list of protected species records within 1km of the proposed cable route including an extensive list of foraging and commuting bats including Common Pipistrelle *Pipistrellus pipistrellus*, Soprano Pipistrelle *Pipistrellus pygmaeus*, Brown Long-eared Bat *Plecotus auritus*, Noctule *Nyctalus noctula*, Leisler's Bat *Nyctalus leisleri*, Serotine *Eptesicus serotinus*, Natterer's Bat *Myotis nattereri*, and other unidentified *Pipistrellus*, *Nyctalus*, and *Myotis* species. The nearest records for bats were located approx. 85m south of the proposed cable route adjacent to Redcombe Farm which was recorded as likely being a summer roost. Furthermore, there are 7no. other known/recorded bat roosts within a 1km radius of the proposed cable route, the nearest known maternity roost being at a farm situated approx. 500m from the proposed cable route with species to be known roosting there including Soprano Pipistrelle, and Common Pipistrelle. The other roosts were situated further than 600m from the proposed cable route and were recorded as supporting unknown bat species, Common Pipistrelle, Soprano Pipistrelle, Lesser Horseshoe and Greater Horseshoe. Other S7 Priority listed mammal species identified within 1km of the site include records for Badger *Meles meles*, Eurasian Otter *Lutra lutra* and European Water Vole *Mustela putorius*. All records of Otter and Water Vole were situated at least 900m from the proposed site boundaries. However, multiple records for Badger were situated in close proximity to, or directly adjacent to, the proposed cable route.

3.3 The data search identified a number of herpetofauna (reptile and amphibian) records within 1km of the site, with the nearest record being situated approx. 450m away from the proposed cable route. Recent records include those for Grass Snake *Natrix natrix*, Common Frog *Rana temporaria*, Common Toad *Bufo bufo*, Smooth Newt *Lissotriton vulgaris*, and Great Crested Newt (GCN) *Triturus cristatus*. In total, 5no. records for GCN were located with these being situated over 650m (beyond the typical adult foraging distance) from the proposed cable route and were not connected to any areas of the proposed cable route via hydrological links.

3.4 The desk study identified a number of bird species listed under Schedule 1 of the Wildlife & Countryside Act (1981) (as amended) found within a 1km radius of the site including Barn Owl *Tyto alba*, Brambling *Fringilla*

montifringilla, Fieldfare *Turdus pilaris*, Green Sandpiper *Tringa ochropus*, Hobby *Falco subbuteo*, Kingfisher *Alcedo atthis*, Little Ringed Plover *Charadrius dubius*, Marsh Harrier *Circus aeruginosus*, Peregrine *Falco peregrinus*, Pintail *Anas acuta*, Red Kite *Milvus milvus*, and Redwing *Turdus iliacus*. While not all of the species listed above are considered of relevance to the site, the parcels of scattered scrub and trees may provide nesting opportunities for a variety of tree/scrub nesting species.

Previous ecological survey work

- 3.5 Sitework undertaken at the solar farm, which lie adjacent to the proposed cable route by SBE was reviewed. A PEA of both parcels of land was completed in 2021 and a range of habitats found to be contained within both. This primarily consisted of intensively managed Arable and Improved grassland field parcels within a network of native hedgerows with small areas of scrub, scattered trees, and running water. Numerous parcels of semi-natural broadleaved woodland were found adjacent to the Clump Farm site along sections of the eastern, southern and western site boundaries. Further, a single parcel of mixed plantation woodland was situated along this site's southern boundary with 3no. ponds further to the south and west (off-site). Samples of water from these ponds were assessed for their GCN occupancy using eDNA (environmental DNA) techniques which indicated the absence of GCN within all three ponds (Appendix VI).

UK Habitat Classification Survey (UK Habs)

- 3.6 The distribution and extent of habitats recorded at the proposed cable route are illustrated on UK Habitat Classification Plan with accompanying target notes in Appendix III. The proposed cable route supports a range of habitat types as described below:

Improved/modified grassland

- 3.7 The majority of the proposed cable route along the A47 and B582 carriageways support a narrow grassland strip on both sides of the road verge, the width of which varies between 2-3m with some narrower sections where the verge was <1m. Some wider sections, such as those at junctions to Desford Road, Dan's Lane and Peckleton Lane were also present along the proposed cable route where the verge extends >5m wide. The improved/modified grassland on these verges were characterised by a short, uniform sward length with a low botanical diversity. Evidence of damage to these verges were present, including physical damage by tracking vehicles and litter, containing occasional patches of bare ground.
- 3.8 The grassland verges were largely dominated by Perennial Rye Grass *Lolium perenne*, Annual Meadow grass *Poa annua*, Yorkshire Fog *Holcus lanatus* and Cock's Foot *Dactylis glomerata*. Broad-leaved dock *Rumex obtusifolius*, Spear Thistle *Cirsium vulgare*, Cow Parsley *Anthriscus sylvestris*, Garlic Mustard *Alliaria petiolata*, Dandelion *Taraxacum officinale*, Common Daisy *Bellis perennis*, Common Nettle *Urtica dioica*, Cleavers *Galium aparine*, Common Hogweed *Heracleum sphondylium*, Ribwort Plantain *Plantago lanceolata* and Creeping

Buttercup *Ranunculus repens* are also common. Less frequent and localised species include Yarrow *Achillea millefolium*, Germander Speedwell *Veronica chamaedrys* and Ground Ivy *Glechoma hederacea*.

- 3.9 The verges located towards the south-western extent of the proposed cable route (opposite Long Spinneys Wood) contain woodland indicator species including Creeping Soft-Grass *Holcus mollis*, Lesser Celandine *Ficaria verna*, Lord's and Ladies Arum *Arum maculatum*, Dog's Mercury *Mercurialis perennis* and Snowdrops *Galanthus spp.*.
- 3.10 Overall, the grassland verges were found to support on average <6 vascular plants per m² and show regular signs of physical damage (excluding small section at Dan's Lane Junction). As such, they were generally considered to be of poor condition as per the Habitat Condition Assessment guidelines. The small section at Dan's Lane supports a greater number of herbaceous species (in addition to those described above) including Red Fescue *Festuca rubra*, Creeping Bent *Agrostis stolonifera*, Yarrow, Creeping Cinquefoil *Potentilla reptans*, Red Clover *Trifolium pratense*, Hairy Bitter-Cress *Cardamine hirsute*, Common Knapweed *Centaurea nigra*, Common Ragwort *Jacobaea vulgaris* and Groundsel *Senecio vulgaris*. This section of grassland was classified as modified grassland of moderate condition.
- 3.11 The proposed cable route passes through approximately 300 m of agricultural land at Bracknell Farm (to the south-west of the cable route). The field parcel has been seeded with Perennial Rye Grass and is likely managed for hay/silage or grazing pasture. Other species present include White Clover *Trifolium repens* and Spear Thistle. This grassland field was classified as modified grassland of poor condition.

u1b Developed Land; Sealed Surface

- 3.12 A large portion of the proposed cable route is situated on the A47 and B582 carriageways. These roads are comprised of hard tarmacked surfaces bordered by the aforementioned grassland verges. The width of these roads varies between 7-10m with some wider sections present adjacent to any junctions with other roads or sections that contain lay-bys.

Broad-leaved semi-natural woodland

- 3.13 Narrow strips of broadleaved semi-natural woodland border sections of the cable route along Hinckley Rd. In total, 4no. separate parcels of broad-leaved semi-natural woodland exist along the proposed cable route, with three of these being located on the southbound side of Hinckley Rd. No areas of woodland were identified along the B582 (Desford Rd) carriageway. The parcels of woodland were predominantly comprised of Oak (dominant), Beech *Fagus sylvatica*, Sycamore *Acer pseudoplatanus*, Elm *Ulmus sp.*, Ash *Fraxinus excelsior*, and Beech trees. A large proportion of the trees identified within the woodlands were ivy covered.

Scattered trees and scrub

- 3.14 Scattered trees were present along many of the hedgerows with those assessed to have the potential to support a single or small number of roosting bats (PRF-I) identified in Appendix III, notably no trees were assessed to be suitable for multiple bats and may therefore be used by a maternity roost (PRF-M). Trees identified as having the potential to support roosting bats along these hedgerows tended to be ivy-covered, contained knot-holes, or desiccation features.

Plate 1 – Oak at edge of woodland parcel with overhanging branches over road (PRF-I)



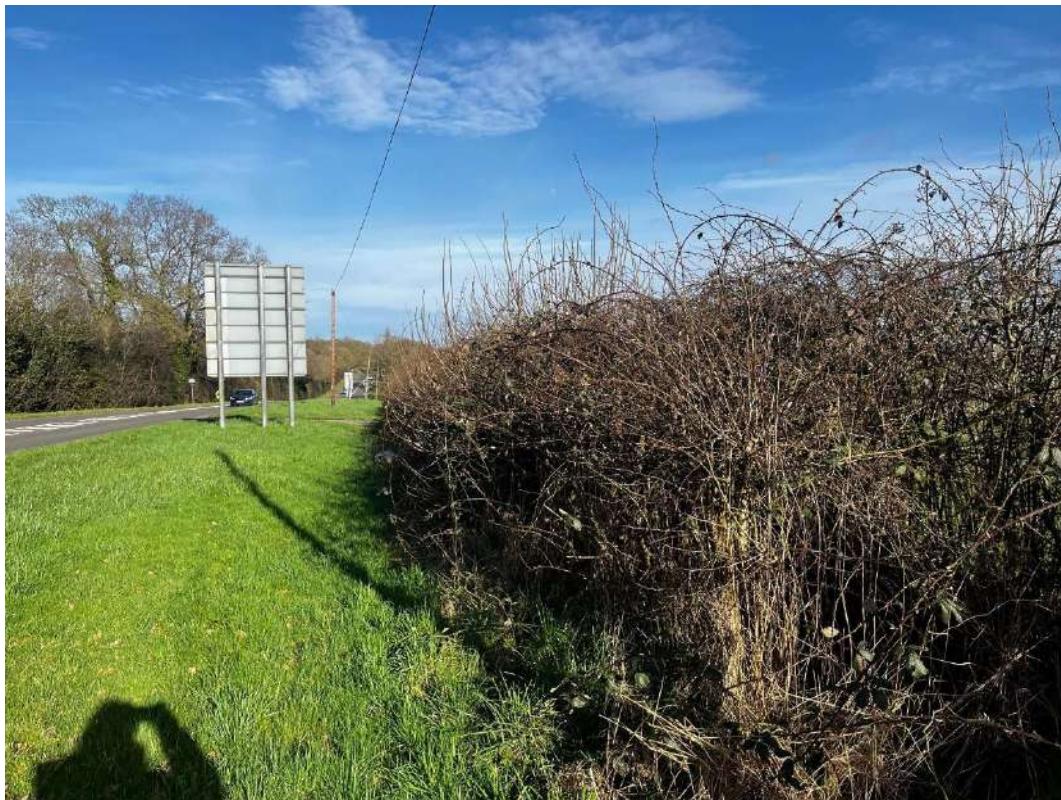
h2a Native Hedgerows (Priority habitat)

- 3.15 The site contains a number of hedgerows located along and immediately adjacent to the proposed cable route. This includes an intact 1.5m species-poor native hedgerow with trees (H1) which forms the northern boundary between Hinckley Rd and 'King Richards Lodges' as well as part of the northern boundary between the same road and an arable field just south of the lodges. This hedgerow was comprised of Hawthorn *Crataegus monogyna*, Dog Rose *Rosa Canina* and Bramble *Rubus fruticosus* with occasional Oak *Quercus sp.* trees (of negligible potential to support roosting bats). A ditch ran adjacent to this hedgerow and was dominated by Rosebay Willowherb at the time of the survey.

Intact species-rich hedgerow

- 3.16 In total 4no. intact species-rich hedgerows were identified on or directly adjacent to the proposed cable route. All of these hedgerows were of at least 1.5m in height and contained a number of native woody species. The first hedgerow that was assessed to be intact species-rich was H8 and was located just north of the adjoining section of the A47 and Desford Rd (north of 'East Midlands Landscaping'), this hedgerow was between 1.5-2m high and contained several native woody species including Bramble, Oak, Dog-Rose *Rosa Canina*, Hawthorn (abundant), Holly *Ilex aquifolium*, Alder *Alnus glutinosa*, and Dogwood *Cornus sanguinea*.
- 3.17 The second intact species-rich hedgerow along the proposed cable route was H21. This hedgerow had evidence of recent management (by flailing) and was similarly at a height of 1.5-2m although it was found to be considerably longer than the previous hedgerow. This hedgerow was located at 'Narborough wood park' along the B582 and ending at the junction to Forest Rd. Species identified within this hedgerow include Hawthorn, Beech, Elm, Blackthorn *Prunus spinosa*, Holly, Common Ivy *Hedera helix*, and Dog-Rose. These first two hedgerows were located southbound on the A47 (Hinckley Rd) and westbound on the B582 (Desford Rd), respectively.

Plate 2 – Intact species-rich hedgerow (h2a) comprised of Bramble, Oak, Dog-Rose, Hawthorn, Holly, Alder and Dogwood (H8)



- 3.18 The last two intact species-rich hedgerows were situated northbound on the A47. The first of these hedgerows (H37) was also located adjacent to a small woodland corridor and was identified to be approx. 1.5-2m in height

with recent evidence of management. The final intact species-rich hedgerow (H38) was an extension of H37 above, with some minor differences such as this hedgerow being assessed to be of 1.5m in height at the time of the survey, containing more gaps and with a more disturbed base.

Intact species-poor hedgerow

- 3.19 The areas of land directly adjacent to the proposed cable route contains several intact species-poor hedgerows including H2, H13, H14, which were all located adjacent to the southbound lane of the A47. The first of these hedgerows (H2) was comprised predominantly of Hawthorn with occasional Ash forming a short section of hedge/line of scrub in front of the boundary wall of 'King Richards Lodges' until the entrance to 'Bungalow Farm'. The further two hedgerows (H13 & H14) were situated directly south and north of 'The Bulls Head', respectively. These hedgerows were both less than 1.5m in height, displayed evidence of recent management and were comprised of Bramble, Hawthorn, Holly, and Blackthorn. Furthermore, H13 contained a ditch which ends at 'The Bulls Head' and starts again within H14.
- 3.20 Two further intact species-poor hedgerows, H19 and H24, were located adjacent to the westbound lane of the B582. The first of these hedgerows was located west of 'The Haute Atelier' and was assessed to be shorter than 1.5m in height, gappy in some areas and with a ditch adjacent to it. Species identified include Hazel, Ash, Elder, Blackthorn and Bramble. H24 was situated directly north of 'Redcomb Farm' and was also assessed to be at a height of less than 1.5m. This hedgerow had evidence of recent management by cutting and species include Holly, Hazel, Ash, Bramble and Hawthorn.
- 3.21 The last species-poor hedgerow was identified adjacent to the southbound lane of the A47, this hedgerow was approx. 1.5m in height, possessed evidence of recent management and was intact with no gaps found.

Defunct species-poor hedgerow

- 3.22 A single defunct species-poor hedgerow was identified along the proposed cable route. This hedgerow, H34 was situated along the eastbound lane of the B582. This hedgerow was approx. 1.5m tall and contained many gaps.

Species-rich hedgerow with trees

- 3.23 A large number of species-rich hedgerows with trees were identified along the proposed cable route. Almost all of these hedgerows were least 1.5m in height with trees ranging from 5-10m tall. The exception to this is H4 which was assessed to be less than 1.5m. The first species-rich hedgerow with trees situated along the proposed cable route was H3, this hedgerow supported a ditch along its length and a large number of native woody species. Species identified include Dog Rose, Holly, Hazel, and Hawthorn with common Ash and Oak trees. This hedgerow also supported a diverse ground flora with species such as Bluebell *Hyacinthoides non-*

scripta, Snowdrops *Galanthus nivalis*, Daffodil, Dog's Mercury, Lord's-and-Ladies, Lesser Celandine, Ivy, Cow Parsley, Common Hogweed and Nettle. This hedgerow formed one of four that were situated along the southbound lane of the A47 with the rest being made up of H4, H5 and H10. Hedgerow no. 4 was defunct/gappy in areas, had evidence of recent management and as previously mentioned was at a height of less than 1.5m. Native woody species identified within this hedgerow include Hawthorn, Hazel, Sycamore, Blackthorn, Bramble, and Elm, with occasional Beech, Ash and Oak trees.

- 3.24 The further two hedgerows that were located along the southbound lane of the A47 was H5 and H10. H5 begins at the lane situated northwest of 'The Paddocks Caravan Park' and ends at 'North Lodge'. This hedgerow was approx. 1.5m in height and contained several native woody species including Bramble, Hawthorn (dominant), Dog-Rose, Dogwood and Hazel, with Ash, Elm and Oak trees. There was also evidence to suggest that this hedgerow was recently managed by flailing. H10 was located directly east of 'Havenlea Cottage' and was identified to be at a height of approx. 2m with native woody species identified including Bramble, Holly, Hazel, Hawthorn, and Dog-Rose with scattered Oak trees and ornamental planting of Apricot *Prunus armeniaca*.

Plate 3 – Species-rich hedgerow (h2a) with trees located east of 'Havenlea Cottage' (H10).



- 3.25 A further 6no. species-rich hedgerows with trees were identified either along the northbound lane of the A47 or Eastbound along the B582. Three of these hedgerows were assessed to be at a height of 1.5m (H29, H31 & H35) with the remaining hedgerows (H28, H30 & H33) found to be at a height of at least 2m at the time of

the survey. All of the shorter hedgerows were identified to have been recently managed either by cutting or flailing. H29 was gappy in areas and was assessed to have been recently flailed and contained occasional mature Ash and Oak trees along its extent. Similarly, H31 also possessed evidence of recent flailing with sections of this hedgerow being gappy/defunct and again contained occasional mature Ash and Oak trees. The last of these shorter species-rich hedgerow with trees, H35, was a long connected hedgerow with over 5 native woody species and occasional mature Ash and Oak trees. Much the same as the previous two hedgerows, this hedgerow contained evidence of recent management.

- 3.26 Of the taller hedgerows (H28, H30 & H33), H28 was assessed to be tallest at the time of the survey with taller trees up to about 10m. This hedgerow was side trimmed and was entirely intact, trees identified within this hedgerow included mature Ash and Oak. At the time of the survey, H30 was assessed to be of approx. 2-3m in height, was similarly side trimmed and had an associated ditch running adjacent to it. This hedgerow was also identified to be intact with very few gaps throughout its length. Lastly, H33 was assessed to be at a height of up to 5m with this hedgerow being considerably scrubbier than the aforementioned hedgerows. This hedgerow did not have an associated ditch and no evidence of recent management was identified at the time of the survey.

Species-poor hedgerow with trees

- 3.27 Several species-poor hedgerows with trees were identified along the proposed cable route. Specifically, these hedgerows were located either southbound on the A47 or westbound on the B582. The first of these hedgerows, H1, was situated south of 'King Richard's Lodges' along the A47, contained evidence of recent management and had an associated ditch running its length dominated by Rosebay Willowherb. Woody species identified include Hawthorn, Dog-Rose, and Bramble with occasional Oak trees. The second species-poor hedgerow with trees was H6 which contained a traditionally lain hedgerow comprised of Hazel and Elm with Beech, Oak and Elm trees, this hedgerow was located just north of 'North Lodge' along the A47 Rd. Directly north of the aforementioned hedgerow was another species-poor hedgerow with trees at a height of approx. 2m. Native woody species identified include Bramble, Hawthorn and Dog-Rose with occasional Oak trees. The fourth species-poor hedgerow identified along the proposed cable route was H9 which was a small section of hedgerow comprised of Ash, Beech, Oak and Hawthorn located opposite 'Dan's Lane'. Another species-poor hedgerow located along the A47 was H12 which was comprised of Hawthorn, Hazel, Alder, and Bramble with evidence of recent management and at a height of approx. 1.5m at the time of the survey. The last species-poor hedgerow located along the A47 was H16, this was comprised of Elder, Hawthorn, Field Maple, Holly and Hazel and was assessed to be at a height of approx. 1.5m with trees at a height of approx. 4-5m.
- 3.28 A total of 4no. species-poor hedgerows with trees were identified along the B582 Rd with the first one, H17, being located just east of the junction with A47 (near Esso petrol station). This hedgerow was comprised of Beech, Holly, Hawthorn and Bramble and was assessed to be at a height of approx. 2m at the time of the

survey. Directly east of this hedgerow was H18 which was comprised of Dogwood, Hazel, Hawthorn and Field Maple and was at a height of approx. 1.5m with trees at a height of approx. 4-5m, this hedgerow contained evidence of recent management by flailing and with a ditch adjacent. The third species-poor hedgerow with trees along the B582 Rd was H20 which was at a height of between 1.5 and 2m and was comprised of Hazel (dominant), Bramble, Hawthorn, and Alder. Sections towards the west of this hedgerow contained numerous gaps. The last species-poor hedgerow with trees was located east of Forest Rd and was comprised of Holly, Hazel, Ash, Bramble and Hawthorn with a few mature Ash trees present towards its eastern extent with all trees being assessed to have Negligible potential.

h2b Non-Native and Ornamental Hedgerow

3.29 In total 3no. ornamental hedgerows were present along the proposed cable route. These hedgerows were all situated directly in front of commercial or residential properties, likely having been created to reduce noise from traffic on both the A57 and B582 Roads. H15 was located along the A47 forming a boundary between the A47 (Southbound) and the 'Mansfield Villa Farm'. This hedgerow was comprised of Hazel, Dogwood, Blackthorn, Hazel (dominant) and ornamental planting of Cedar *Cedrus sp.* and non-native conifers. The second ornamental hedgerow (H32) was found adjacent to the eastbound side of the B582 at its junction with the A47, this was comprised of ornamental hedges and fences outside of a residential property. This hedgerow was at a height of approx. 1.5m at the time of the survey, had evidence of recent management (by flailing) and contained occasional mature Beech and Oak trees. The final ornamental hedgerow was situated directly adjacent to 'Redcomb Farm' forming part of its boundary with the westbound section of the B582 Rd. This hedgerow (H23) was comprised of Dogwood, Hazel and Holly with ornamental planting of Cedar and conifers and was estimated to be at a height of approx. 3.5m at the time of the survey. A large Ash tree was also present within this hedgerow, however no PRFs that could be utilised by even a small or individual number of bats were present (Negligible Potential).

Plate 4 – Ornamental hedgerow (h2b) comprised of non-native conifers and Cedar (H15)



Invasive species

- 3.30 No invasive species, as listed under Schedule 9 of the Wildlife and Countryside Act (1981) (as amended), were identified during the course of the current survey. However, as noted within the survey limitations the fieldwork was conducted towards the end of the winter period when some species may not yet be in flower. As such, the presence of invasive plant species along the road verges cannot be precluded.

Fauna

- 3.31 Over the course of the survey, a search for field signs of protected or notable species was undertaken and the potential of the habitats to support these species considered. In the context of this report, these species meet any of the following criteria:

- Species protected by British or international law;
- Species listed on Section 41 of the NERC Act;
- Nationally rare or nationally scarce species;
- Species of Conservation Concern (e.g. JNCC Red List, RSPB/BTO Red or Amber Lists);

Those considered of relevance to the current proposals include:

Badgers

- 3.32 During the survey, a Badger sett was discovered within a hedgerow forming the eastern boundary of ‘Bungalow Farm’ (approximate grid reference: SP 48096 99415), with multiple well-used mammal pathways found

adjacent to this hedgerow. The hedgerow and sett are not located within the site boundary but located within 30m of the proposed works. No access to enter this hedgerow was possible due to dense scrub and thus assessment was made from a distance. This badger sett had a single entrance which was considered to be in at least occasional use as there was very little debris and bare ground/no vegetation cover around the entrance. Multiple well-used mammal pathways were present leading into the hedgerow and signs of digging/foraging activity nearby. Weather at the time of the survey was very wet with ground conditions being unfavourable too, reducing the likelihood that further evidence (i.e. latrines, footprints or guard hairs) would be identified. Based on the single entrance and limited field signs the sett was considered likely to be an outlier sett. Remains of a single dead Badger were also found during the survey, being situated on the roadside verge along the A47, it is likely that this was roadkill (TN 4).

Birds

- 3.33 During the survey, a total of 6no. bird species were seen or heard using the habitats present along the proposed cable route and included species considered typical of farmland and woodland environments. Species recorded include Wood Pigeon *Columba palumbus*, Jackdaw *Coloeus monedula*, Blackbird *Turdus merula*, Wren *Troglodytes troglodytes*, Skylark *Alauda arvensis* and Blue Tit *Cyanistes caeruleus*. None of which, are listed as protected Schedule 1 species and only Skylark being listed as a Section 41 priority species. The species present at the time of current survey would not be considered representative of the full range of species that the proposed site could potentially support (i.e., during the breeding season or over-wintering). Many of the habitats (i.e. hedgerows, sections of scrub and woodland) present at the proposed site were considered likely to support tree/shrub nesting bird species.

Skylark

- 3.34 A single Skylark was observed above an arable field adjacent to 'King Richard's Lodges' along the proposed cable route during the current survey (see TN 1). The open agricultural field and rough grassland strips likely provide suitable nesting opportunities for Skylark.

Great Crested Newt

- 3.35 Although no waterbodies are located within or directly adjacent to the proposed cable route boundary, the desk study returned 5no. positive GCN record (GCN Class Licence return data) within 1km of the proposed cable route. All of these records were located at least 650m from the proposed cable route, associated with the Leicester Forest East Kingstand Farm Golf Course. Whilst the majority of the terrestrial habitats along the proposed cable route were considered to be of negligible importance for GCN (e.g., open areas of arable field), the rank grassland margins, hedgerows and woodland parcels adjacent to the site were considered to provide 'good' terrestrial habitats for the species. Adult GCN are known to use terrestrial habitats within 250m of breeding ponds and may disperse further in search of higher value foraging habitats (e.g., woodland and

hedgerows) within arable landscapes (Langton *et al.*, 2001). As such, there is a Low potential for GCN to be present within their terrestrial phase within the hedgerow habitats located along the B582 (i.e., habitats closest to the positive GCN records).

- 3.36 While no ponds or suitable breeding habitats were identified adjacent to the proposed cable route boundary, previous surveys undertaken by SBE in 2021 did identify a series of pools/ponds in land adjacent to Clump Farm. These ponds were subjected to a Habitat Suitability Index (HSI) score assessment (included in Appendix V) in which all three ponds were scored as ‘poor quality’, indicating their limited potential of supporting GCN. These ponds were also subject to eDNA analysis (Included in Appendix VI) to detect the occupancy of any GCN that may be present with the samples from all 3no. ponds indicating the absence of GCN. The pools south of Clump Farm were heavily shaded and contained little to no aquatic vegetation, while the pond located north of the site also contained little aquatic vegetation but was also believed to contain fish. Over 100 Mallard were also recorded during the survey, most of which were seen near the pond north of the site, further reducing their potential to support GCN. Furthermore, the ploughed arable fields at the site represent sub-optimal terrestrial habitat for GCN and so it is considered unlikely that GCN would utilise the habitats within the central field areas at the proposed site during their terrestrial phase.

Hazel Dormouse

- 3.37 The hedgerow habitats at the proposed site and within the immediate surrounding area were considered of limited suitability to support Hazel Dormouse. Whilst these habitats support a diverse understorey layer and contain a number of food sources for dormouse (e.g., Hazel, Oak, Bramble, Hawthorn etc.), they are largely well-managed with evidence of regular trimming/pruning to heights of 1.5m. The linear habitat features along the proposed cable route are well-connected to other woodland parcels in the wider area, however, the desk study did not include any recent records of dormouse within 2km of the proposed site, and this species has been considered extirpated in the wider landscape since 1970 (Wembrige *et al.*, 2023). As such, the habitats (i.e. hedgerow network and adjacent woodland parcels) at the proposed site were considered to have a negligible potential to support dormouse.

Reptiles

- 3.38 The habitats at the proposed site (predominantly the grassy field margins and some of the larger grassland verges) were considered to have a low potential to support common reptiles. The areas of rough grassland located along the road verge, field and hedgerow margins are likely to provide suitable shelter and foraging resources for reptiles and could support small populations of common reptiles (e.g., Slow-Worm *Anguis fragilis*). However, these grassland areas were relatively isolated/fragmented within the wider arable landscape. The extensive open areas of arable field at the proposed site and surrounding landscape were considered to be of negligible value for reptiles (e.g., lack of protection from predators, basking spots, limited food resources etc).

Other Species

- 3.39 No desk study records for Hedgehog were identified from the desk study although the grassland and arable field margins were considered suitable to support foraging hedgehogs. The species is listed as a species of principle importance under Section 41 of the NERC Act.
- 3.40 During the current survey, a single Brown Hare was recorded at an arable field, associated with the arable fields and rough grassland margins. The desk study returned previous records of hare within the surrounding area. The arable fields are likely to provide suitable foraging resources for hare with the rough grassland buffers providing opportunities for protection and forms. The species is also listed under Section 41 of the NERC Act.

4.0 POLICIES AND PLANS

- 4.1 The following local and national planning policy relating to nature conservation and biodiversity are considered of relevance to the site.

Natural Environment and Rural Communities Act 2006

- 4.2 Section 40 of the Natural Environment and Rural Communities Act 2006 (the NERC Act) places a duty ('the biodiversity duty') on every public authority - including a local planning authority – to have regard to the purpose of conserving biodiversity (which also includes restoring or enhancing a population or habitat). Of the key principles, the most relevant to this site are those directed at maintaining and promoting biodiversity, as well as preventing harm to biodiversity.

National Planning Policy Framework (2023)

- 4.3 This revised framework set out the Government's planning policies for England and how these are expected to be applied. Chapter 15 deals with Conserving and Enhancing the Natural Environment and states:

"Planning policies and decisions should contribute to and enhance the natural and local environment by:

- *protecting and enhancing valued landscapes, geological conservation interests and soils;*
- *recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services – including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland;*
- *minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures;*
- *preventing new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of soil, air, water or noise pollution or land instability. Development should, wherever possible, help to improve local environmental conditions such as air and water quality, taking into account relevant information such as river basin management plans; and*
- *remediating and mitigating despoiled, degraded, derelict, contaminated and unstable land, where appropriate."*

Local Planning Policy

Blaby District Council

- 4.4 Blaby District Council's current planning policies are set out in the Local Plan (Core Strategy), adopted in February 2013. The Local Plan (Core Strategy) sets out the vision, objectives, strategy and core policies for the spatial planning of the District up to 2029. Core policies within the local plan relating to the protection of biodiversity are covered in CS14 – Green Infrastructure (GI) and CS19 – Biodiversity and geo-diversity. The following extracts were considered of relevance to the site.

Policy CS14 - Green Infrastructure (GI)

Blaby District Council and its partners will seek to protect existing, and provide new, 'networks of multifunctional green spaces'. This network will comprise public and privately owned land. Green Infrastructure can include formal open spaces for sport and recreation, green areas that can be used for informal recreation, areas that are valuable for their biodiversity (flora and fauna and network links), areas that are of cultural importance (heritage assets and their settings), areas that maintain natural and ecological processes (such as floodplains) and other areas that contribute to the health and quality of life of communities.

Opportunities to incorporate key landscape features such as woodlands, ponds, rivers and streams and the local topography should be used to create high quality design incorporating a wide range of high quality, functional and useful open spaces and links.

Policy CS19 - Biodiversity and geo-diversity

The District of Blaby has a number of sites of ecological and geological importance of national, regional and local level significance, which the Council will seek to safeguard and enhance.

Other sites within the District (including Regionally Important Geological Sites, Local Nature Reserves, Local Wildlife Sites and UK and local (Leicester, Leicestershire and Rutland) Bio-diversity Action Plan sites etc), will be protected and enhanced (where appropriate). The Council will seek to resist proposed development on, or affecting such sites, where the development could be alternatively located in less biodiverse / geologically sensitive areas. Where there are no alternative sites available, the designated sites should be retained with appropriate buffering and mitigation measures put in place to avoid / reduce any adverse impacts resulting from the proposal. Where this is not possible, compensatory measures should be sought, including provision of replacement habitats.

The Council will seek to maintain / extend networks of natural habitats to link sites of biodiversity importance by avoiding or repairing the fragmentation and isolation of natural habitats. These networks should be protected from development. Where development in these areas cannot be avoided, the networks of natural habitats should be strengthened by or integrated within the development. The Council recognises that networks

cross Local Authority boundaries, so will work with partners to ensure their maintenance and enhancement. In terms of species protection, the Council will protect those species which do not receive statutory protection under a range of legislative provisions, but have been identified as requiring conservation action as Blaby District Core Strategy - Adopted (February 2013) 87 a species of principal importance for the conservation of biodiversity nationally. Any development proposals should ensure that these species and their habitats are protected from the adverse effects of development through the use of appropriate mitigation measures. When considering development proposals of an appropriate type and scale, the Council will seek to ensure that opportunities to build in biodiversity or geological features are included as part of the design.

Hinckley & Bosworth Borough Council

4.5 This revised framework set out the Government's planning policies for England and how these are expected to be applied. Chapter 15 deals with Conserving and Enhancing the Natural Environment and states: The councils current planning policies are set out in the Local Plan 2006 – 2026, adopted in December 2009. The Local Plan 2006 to 2026 is made up of a series of development plan documents (DPDs) that set out the overarching strategy and core policies to guide the future development of the borough up to 2026. Core policies within the local plan relating to the protection of biodiversity are covered in the Site Allocations & Development Management Policies DPD under DM6 – Enhancement of Biodiversity and Geological Interest; and DM9 – safeguarding Natural and Semi-Natural Open Spaces. The following extracts were considered of relevance to the site.

DM6 - Enhancement of Biodiversity and Geological Interest

Development proposals must demonstrate how they conserve and enhance features of nature conservation and geological value including proposals for their long-term future management. Major developments in particular must include measures to deliver biodiversity gains through opportunities to restore, enhance and create valuable habitats, ecological networks and ecosystem services. Proposals where the primary objective is to conserve or enhance biodiversity or geological interest will be permitted where they comply with other relevant policies in the plan.

On site features should be retained, buffered and managed favourably to maintain their ecological value, connectivity and functionality in the long-term. The removal or damage of such features shall only be acceptable where it can be demonstrated the proposal will result in no net loss of biodiversity and where the integrity of local ecological networks can be secured. If the harm cannot be prevented, adequately mitigated against or appropriate compensation measures provided, planning permission will be refused.

DM9 - Safeguarding Natural and Semi-Natural Open Spaces

All developments within or affecting Natural and Semi-Natural Open Spaces should seek to retain and enhance the accessibility of the space and its recreational value whilst ensuring the biodiversity and conservation value

is also enhanced. Development within areas of Natural and Semi-Natural Open Space, as defined on the policies map, will only be considered appropriate where:

- a) The proposal relates to the enhancement of the area for recreational purposes and only where this does not lead to the loss or damage of the area's biodiversity value; or
- b) It relates to the enhancement of the area's biodiversity or conservation value; or
- c) It would promote the establishment and enhancement of pedestrian footpaths and cycle ways; or
- d) If within the National Forest, it contributes to the delivery of the National Forest Strategy in line with Core Strategy Policy 21; and
- e) If within a Green Wedge, it protects its role and function in line with Core Strategy policies 6 and 9.

Leicester, Leicestershire and Rutland Biodiversity Action Plan (2016 – 2026)

4.6 The county council's 'Space for Wildlife' BAP sets out objectives to promote restoration, management and creation of BAP Priority Habitats and new wildlife habitats in the wider countryside. Priority habitats and species with action plan summaries considered of relevance to the site are listed below:

Hedgerows

Action plan objectives

- Promote planting of new hedges
- Promote sympathetic management of existing ancient and species-rich hedges
- Prevent further loss of ancient and species-rich hedges

Field Margins

Action plan objectives

- Promote creation and management of field margin habitat for wildlife

Bats

Action plan objectives

- Maintain the known distribution of all bat species

Otter

Action plan objectives

- To restore breeding Otters to all catchments (Avon, Soar, Tame, Welland) by natural recolonisation

Water Vole

Action plan objectives

- *Maintain the current distribution in order to arrest the decline of the species in Leicestershire and*

Rutland

5.0 CONCLUSIONS AND RECOMMENDATIONS

- 5.1 The combination of desk study and Extended Phase 1 Habitat survey identified a limited range of habitats along the proposed cable route consistent with its current use as a road and with the southernmost section being in current use as an arable field. Habitats identified include improved/modified grassland verges, hedgerows and semi-natural broad-leaved woodland. Although the majority of the proposed cable route comprises of the existing highway and roadside verges, considered to be of negligible to low ecological value, the site does contain priority habitats listed under Section 41 of the NERC Act including hedgerows. Several mature trees and woodland parcels were also located along, or adjacent to, the proposed cable route. These habitat features were considered to be of high ecological value and of local importance.
- 5.2 The current survey identified the use of the habitats present at the proposed site by protected and priority species. The survey identified the location of 1 no. Badger sett adjacent to the proposed cable route (approx. 25m east of the most southern extent of the proposed cable route), as well as a number of well-used mammal paths within the arable field present on 'Bungalow Farm' (TN 2). An individual Skylark was also observed flying above this arable field, which was considered to be of suitability for breeding skylark. In addition, the habitats present along the proposed cable route were also considered likely to support roosting bats, foraging and commuting bats, breeding birds and to a lesser extent reptiles and GCN. Other priority species such as Brown Hare were also recorded along the proposed cable route during the current survey.
- 5.3 The proposed layout plan (Appendix I) and proposed works description indicates that the development will result in the temporary loss of areas of arable field and potentially improved grassland as well as potential impacts to hedgerows and scattered mature trees (to be determined when the exact location of the cable route is established). The following avoidance and mitigation measures are considered appropriate to the proposed cable development:

Badgers

- 5.4 The survey identified the presence of at least 1 no. Badger setts, the remains of a dead badger and multiple well-used mammal paths along the proposed cable route, or within the immediate surrounding area. The Badger sett is located off-site, within 30m of the proposed site boundary. Based on the evidence present at the site, it is likely the sett would be classified as a partially used outlier sett. The habitats present within the proposed site and immediate surroundings (i.e., grassed verges and adjacent woodland parcels) were considered suitable to support foraging and commuting badgers, as evidenced by the roadkill found at TN4
- 5.5 Based on the number and direction of the entrances, it is considered unlikely that any sett tunnels extend under the arable field and into the proposed site boundary.

- 5.6 Badgers and their setts are afforded legal protection under the Protection of Badgers Act (1992) meaning it is an offence to damage or destroy a badger sett, obstruct access to a sett or disturb a badger when it is occupying a sett. Disturbance to badgers can occur as a result of the use of (Natural England, 2007):
- Heavy machinery within 30m of an active sett entrance;
 - Light machinery (particularly for any digging operations) within 20m;
 - Light work such as use of hand-tools, hand digging or scrub clearance within 10m.
- 5.7 On a precautionary basis, it is recommended that the proposed cable route layout should include a buffer of 30m between the sett location and the proposed cable route so as to minimise disturbance during the construction phase of the development, this buffer could be reduced to 20m for any light machinery activity that may be undertaken and 10m for light works including the use of hand-tools, hand-digging or scrub clearance (English Nature, 2002). Any boundary security fencing should also include an appropriate access gap at the bottom to allow continued movement of badgers (and other mammals) throughout the site to allow free movement between feeding areas, territories and setts. During construction any open trenches or excavations should be covered overnight (or a means of escape provided) to minimise the risk of badgers (or other small mammals) becoming trapped.

Bats

- 5.8 The linear boundary features at the proposed site (e.g., hedgerow network and woodland margins) were considered likely to support locally foraging and commuting bat species. The proposed layout plan indicates that the majority of hedgerows will be retained as part of the final design with existing gaps utilised for access and all areas of woodland retained.
- 5.9 Based on the current likely development impacts (i.e., retention of linear habitat features and mature trees), further activity survey work would not be considered appropriate. However, if these plans were to change (e.g., permanent loss of hedgerows and mature trees) then further survey work would be required to establish the likely impacts on foraging and commuting bats. Based on the overall low suitability of the habitats present (majority of site comprises of improved grassland verges), the minimum level of a survey identified in the best practice guidelines (BCT, 2023) would be appropriate to achieve a representative sample of bat activity across the site. This would comprise of 2no. dusk survey visits in spring, summer and autumn in appropriate weather conditions for bats. Separate automated/statics surveys (minimum of 1 detector per transect) would also be required, with each session recording for 5 consecutive nights *in situ* per season. The locations of the static bat detectors (e.g. Anabat swift units) would be focused on the areas where bats are more likely to be present (e.g. along hedgerows, lines of trees and woodlands) . These surveys would only be required if proposals change, and the development requires the permanent loss of hedgerows and mature trees.

- 5.10 In addition, the survey assessed trees at the site, adjacent to the proposed boundary, with potential to support roosting bats. All UK bat species and their roosts are afforded protection under the Conservation of Habitats and Species Regulations (2017) and the Wildlife and Countryside Act (1981) (as amended). Therefore, if these trees were to be removed or pruned for development reasons or health and safety concerns, further survey work to establish the likely presence/absence of roosting bats will be required to inform any mitigation measures or licencing requirements. For trees with high bat roost potential (PRF-M) current best practice guidelines (BCT, 2023) recommend that 3no. dusk surveys are undertaken between May – September comprising of at least two undertaken between May - August. In the first instance, a potential roost feature (PRF) inspection survey could also be undertaken to determine the likely presence/absence of roosting bats (dependent on risk assessment). This would involve the use of an endoscope and ladder/tree-climbing equipment to access PRFs to assess more in detail their suitability to support roosting bats and search for any evidence of bats e.g. live or dead bats or droppings. This survey can be undertaken at any time of the year. These surveys would only be required if proposals change, and the development requires the permanent loss of hedgerows and mature trees.
- 5.11 A number of mature trees located within the hedgerows and woodland parcels adjacent to the proposed cable route were assessed for their potential to support roosting bats (see Appendix III) with all being assessed to be of low roost suitability or PRF-I. Further survey work (such as climbing inspections using rope access or a single dusk emergence surveys) would not be required for any trees assessed to be at the PRF-I level.

Birds

- 5.12 The habitats at the proposed site were considered likely to support both tree/shrub and ground-nesting bird species. During the survey, an individual Skylark was observed adjacent to the proposed site boundaries within an arable field that is considered suitable to support breeding skylark. Under the Wildlife and Countryside Act (1981 (as amended), all wild birds and their nests are protected against damage or destruction whilst in use or being built. Given the high likelihood of nesting birds being present, any future vegetation clearance at the site (including both woody vegetation and disturbance to habitat strips) would be subject to seasonal constraints and should be undertaken outside of the nesting bird season (between September – February).
- 5.13 Skylark is listed as priority species in England under Section 41 of the NERC Act. The NERC Act places duty on planning authorities (and developers) into maintaining and promoting biodiversity (including priority species and habitats). It is recommended that the loss of any suitable breeding habitat for Skylark and other priority ground-nesting bird species at the site is appropriately compensated for. However, the impacts to the arable field will be temporary (reinstated post-construction) and in combination with the availability of suitable

breeding habitats in the wider area, compensation for the temporary loss of arable field is not considered necessary.

Reptiles

- 5.14 The habitats at the proposed site were considered to have a low potential to support common reptiles. All UK reptiles are protected against intentional killing and injuring under Section 9(1) of the Wildlife and Countryside Act (1981) (as amended). Suitable areas for reptiles at the site were mainly restricted to the areas of rank grassland margins within the arable field, hedgerow bases and areas of dense scrub. The managed grassland buffers/verges along the proposed cable route are unlikely to be impacted by the proposed development and the heavy management by mowing means that these habitats are unsuitable for reptiles. As such, no further survey work to determine the presence/absence of reptiles is recommended. However, on a precautionary basis it is recommended that a sensitive approach is taken to any future vegetation works within the areas of dense scrub and at hedgerow bases to minimise any risks to reptiles that may be present. Any scrub/hedgerow base cutting undertaken within the active reptile period (typically March – October) should be undertaken via a directional two-stage process where an initial cut to 100-150mm is undertaken with the use of hand tools (strimmers/brush-cutters), followed by a second cut to ground level after a minimum period of 48hrs. Arisings should be removed immediately following each cut. The cutting should be directional, working towards retained habitats to allow any reptile present to leave.

Great Crested Newt

- 5.15 The majority of the habitats (hard standing and areas of modified grassland) located within the proposed site were considered to have a low potential to support GCN during their terrestrial phase. Although the hedgerows present along the proposed cable route may provide foraging and hibernacula opportunities for this species during its terrestrial phase, given the limited removal of this habitat (of approx. 10m) this was not considered to be an ecological constraint to the proposed development. However, it is still recommended that a precautionary approach to vegetation clearance be taken. This would involve avoidance of any hedgerow root system removal over the winter hibernation period (typically September – February).

Other species

- 5.16 The survey identified the use of the habitats present at the proposed site by Brown Hare. Although a common animal in the UK the species is listed under Section 41 of the NERC Act. The temporary loss of part of an arable field (foraging habitats) at the site is not considered significant based on the abundance of agricultural cropland in the wider landscape. However, the proposals should also include measures to minimise risks to Brown Hare during construction including the covering of any excavations overnight (or means of escape provided) and appropriate storage of building materials. As discussed in section 5.7, any security fencing should include also an access gap to allow the continued movement of hare throughout the development.

Biodiversity Net gain

- 5.17 The Environment Act 2021 sets out the mandatory biodiversity gain objectives for developers and planners. The biodiversity gain objectives for a new development are met when the post-development biodiversity value exceeds the pre-development biodiversity value of the onsite habitats by at least 10%. Biodiversity units attributable to the required 10% include biodiversity value delivered onsite, biodiversity value delivered at a registered offsite location and units delivered via purchased biodiversity credits.
- 5.18 Although the development type is not listed as an exemption to BNG⁴, all impacts associated with the proposed works will be temporary (<2 years). As per the current BNG User Guidelines (DEFRA, 2024), all impacts to baseline habitats (e.g., developed land and modified grassland) are expected to be temporary and will be restored to both the same baseline habitat type and condition within 2 years of the initial impact. In addition to above, as most of the land within the planning application boundary is public highway and / or verge, it is not within the applicant's control (i.e., no habitat creation or management actions for BNG can be secured in the long-term). Furthermore, a BNG assessment for the solar farm has been approved via the planning process and positive net-gain will be achieved for the long-term duration of the project.
- 5.19 A baseline BNG assessment was undertaken as part of the preliminary ecological appraisal. The assessment followed the current BNG User Guidelines (DEFRA, 2024) with the condition of baseline habitats determined via the use of the Statutory biodiversity metric condition assessment sheets. The BNG assessment included all land within the red-line application boundary (with the exemption of the land within Enderby PowerStation – no access). The baseline habitats mainly comprise of u1b developed land sealed surface, g4 modified grassland and linear hedgerow features. However, the red-line application boundary supports smaller areas of medium to high distinctiveness habitats such as h3 dense scrub, w1f lowland mixed deciduous woodland and w1h other woodland; broad-leaved. A baseline BNG assessment indicates that the site supports 30.31 habitat units and 81.41 hedgerow units.
- 5.20 As discussed above (section 5.18), no on-site habitat creation or enhancement options are possible within the long-term as the land is not within the applicant's control. Therefore the current BNG metric accompanying this report currently shows a 0% gain for both habitat and hedgerow units, with a deficit of 3.03 and 8.14 habitat and hedgerow units, respectively (see Figure 1). The BNG assessments undertaken for both planning applications at Clump Solar Farm and Hill Solar Farm (planning reference: 21/1386/FUL) secured long-term net-gain for habitat and hedgerow units (using the 3.0 Metric tool). The approved metric for Clump Solar Farm illustrated a net-gain of 100.21 habitat units and 5.91 hedgerow units, with the approved metric for Hill Solar Farm providing a net-gain of 56.14 habitat units and 9.24 hedgerow units (i.e., in excess to the unit shortfall for the current application). Based on the temporary impacts associated with the current application and no

⁴ Biodiversity net gain: exempt developments - GOV.UK (www.gov.uk)

option for on-site mitigation it is considered that the positive net-gain secured for each respective solar farm application could provide an overall net-gain in habitat and hedgerow units within the local area (in combination with the current application).

Figure 1: Headline results BNG assessment

FINAL RESULTS				
Total net unit change (Including all on-site & off-site habitat retention, creation & enhancement)		Habitat units	0.00	
		Hedgerow units	0.00	
		Watercourse units	0.00	
Total net % change (Including all on-site & off-site habitat retention, creation & enhancement)		Habitat units	0.00%	
		Hedgerow units	0.00%	
		Watercourse units	0.00%	
Trading rules satisfied?		Yes ✓		
Unit Type	Target	Baseline Units	Units Required	Unit Deficit
Habitat units	10.00%	30.31	33.34	3.03
Hedgerow units	10.00%	81.41	89.55	8.14
Watercourse units	10.00%	0.00	0.00	0.00

Priority habitats and LWSs

5.21 The proposed cable route and immediately adjacent land support ‘hedgerows’ which are of principle importance, as listed under S41 of the NERC Act. It is recommended that priority habitats at the site are retained, or any loss minimised as far as practicable. The previous layout indicated that a short section (approx. 10m) of hedgerow that forms the northern boundary of the arable field within ‘Bungalow Farm’ (H1) likely would need to be temporarily removed to accommodate access during the construction period. Through discussions with the developer, it has been indicated that Horizontal Directional Drilling (HDD) will instead be used to go under any hedgerows that would need to be crossed. This in turn means that no hedgerow will require removal if needing to be crossed. If however, any future plans indicated that a section of hedgerow would require removal as per local and national planning policy, the loss of any priority habitat should be appropriately compensated for. It is anticipated that if HDD was unable to be carried out and a small section of hedgerow would be removed this impact would only be temporary (i.e., restored within 2 years) with any removed shrubs replaced within the next available planting window. Furthermore, as per BNG policy no loss of habitats is recorded should the baseline habitat type and baseline conditions be restored within 2 years of the initial impact. The final location of this access point should utilise any natural gaps in the hedge as far as possible.

5.22 In addition, 2no. LWSs are located immediately adjacent to the proposed site boundary. This includes New Haven Farm Paddock LWS (located adjacent to Dan's Lane along the proposed site boundary) and Lubbesthorpe Hedgerows north of Next (Potential) LWS (located adjacent to the most eastern extent of the proposed cable route). Given the minor impacts associated with the development of the proposed cable route (i.e., minor trench excavation and no permanent habitat removal), it is highly unlikely that any LWS or potential LWS would be impacted by the proposed works, and were not considered of ecological relevance to the proposals.

Avoidance, mitigation and enhancement

5.23 The avoidance, mitigation and described in the sections above are summarised below. Should the proposals change, additional measures may be required following further survey work relating to badgers and the presence/absence of roosting bats :

Avoidance

- Retention of S41 priority habitats as far as practicable;
- Retention and protection of woodland habitats;
- Retention of trees with potential to support roosting bats;
- Vegetation clearance (hedgerow and shrubs) to avoid nesting bird season and be undertaken over the winter period (between September – February);
- Works within arable field (of suitability to support breeding Skylark) to be undertaken over the winter period, as above;

Mitigation

- Covering of any excavations overnight or means of escape provided during construction phase to minimise risks to badger, brown hare, deer and any other small mammals that may become trapped;
- Security fencing to include an access gap at the bottom to allow continued connectivity for badger and other small mammals during development;
- Layout to include 30m buffer between sett locations and the extent of the cable trench for any heavy machinery works and a 20m buffer for any light machinery works (no tracking vehicles/only wheeled vehicles);
- Sensitive approach to scrub and hedgerow clearance to minimise any risks to GCN and reptiles that may be present (vegetation to be cleared via a directional two-stage process between April and October);
- Restoration of baseline habitat type and baseline conditions within two years of the initial impact so as to conform to BNG Policy;

Enhancement

- Habitats to be restored to baseline habitat type and baseline conditions and hence, enhancements are not relevant to this project;
- Enhancements were provided as part of the separate solar farm development.

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APPENDIX I PROPOSED LAYOUT PLAN

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- Proposed Cable Route Planning Boundary
- Clump Farm Planning Boundary
- Hill Farm Planning Boundary

NOTES:	FIGURE REF: EDY4.v6	
	DATE OF ISSUE: 10/01/2023	
	1:25,000 @ A3	PRODUCED: MCE ISSUED TO: AGY

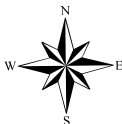
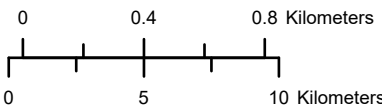


FIGURE:
Proposed Cable Route

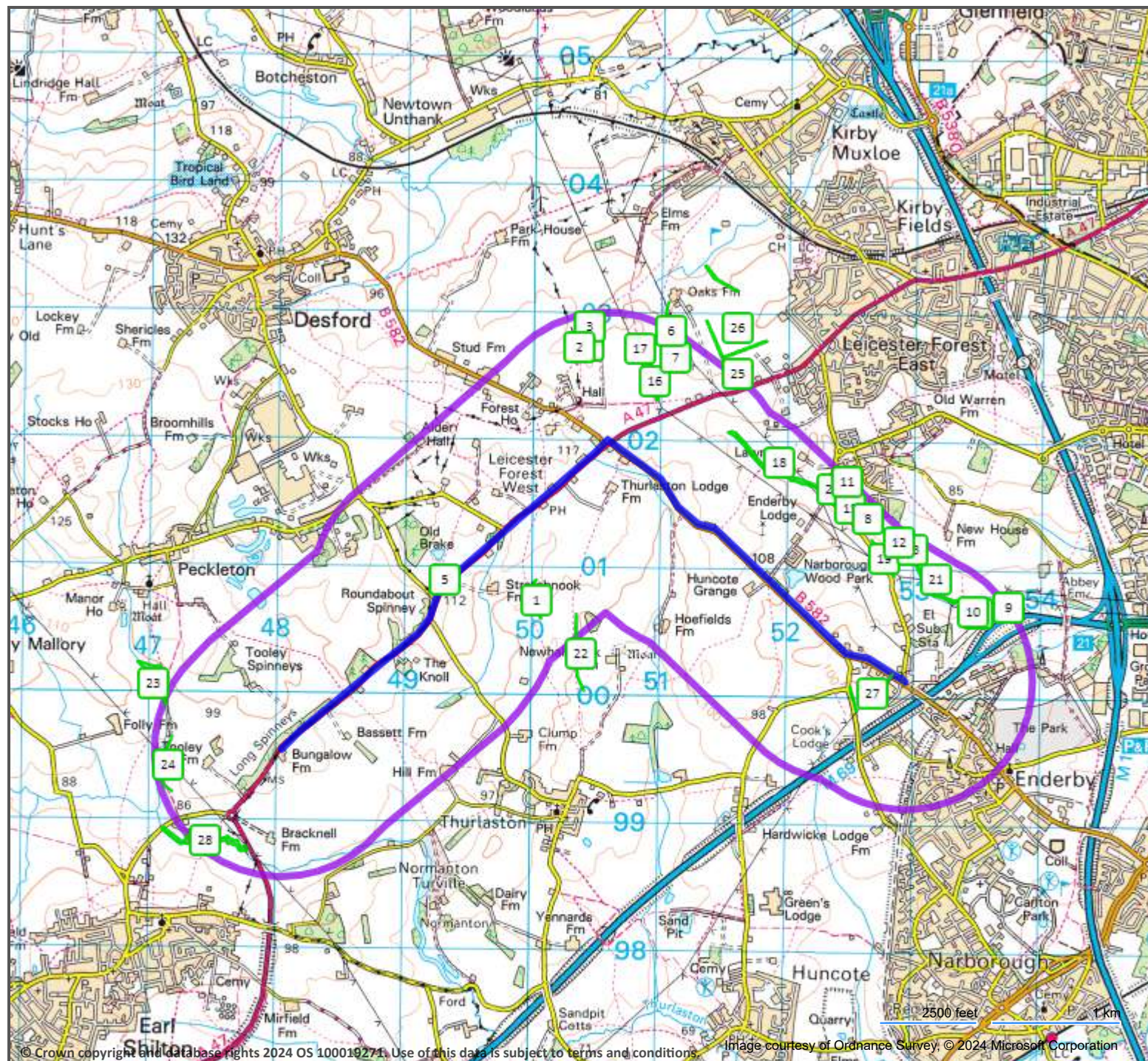


PROJECT:
Enderby

Spatial Reference:
Name: British National Grid
PCS: British National Grid
GCS: GCS OSGB 1936
Projection: Transverse Mercator



APPENDIX II LRERC AND MAGIC DESK STUDY RECORDS



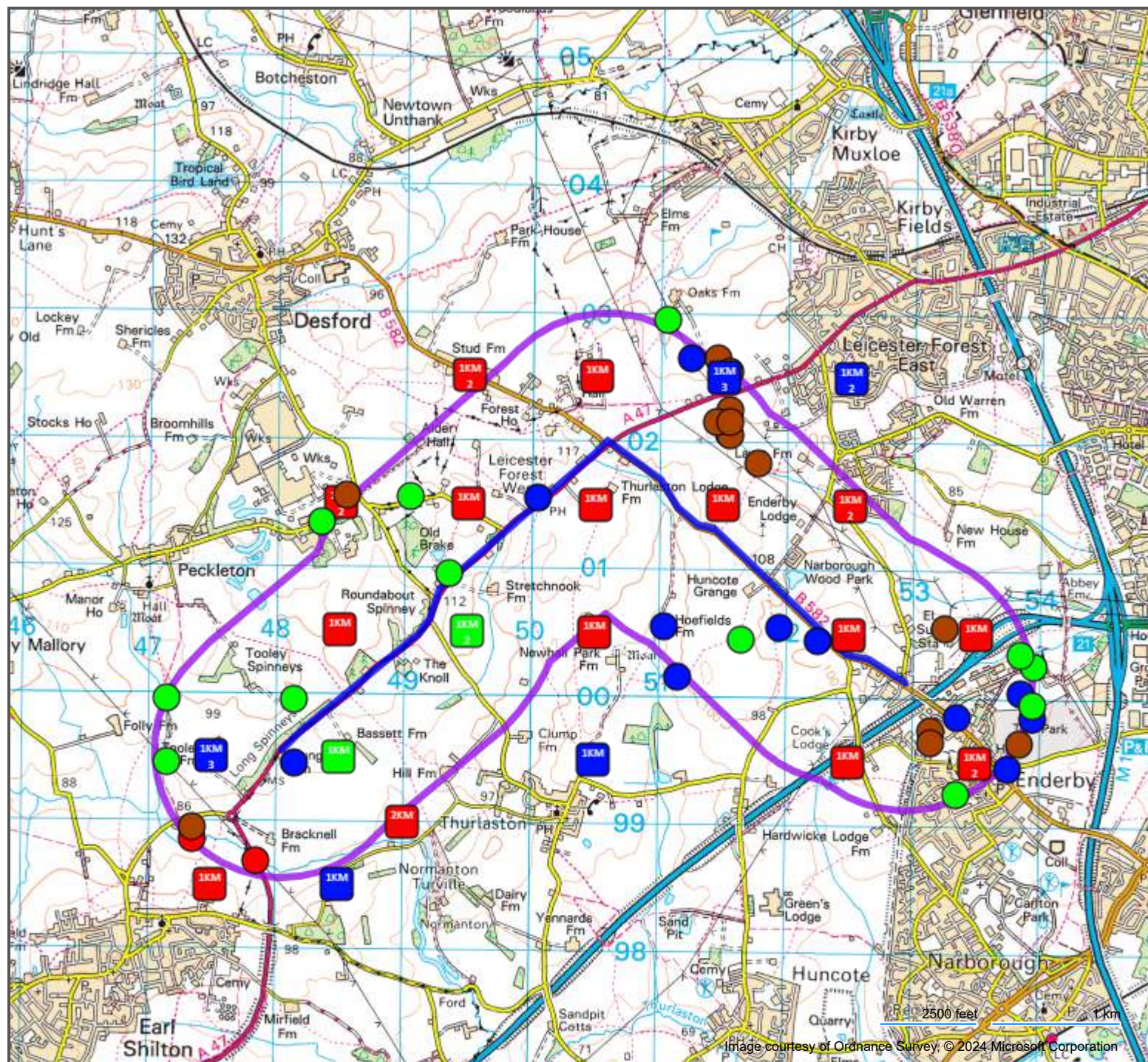
**Leicestershire
& Rutland**
environmental records centre

Printed from eMapper for LRERC on 05/02/2024
LR/E02853 | Hill & Clump Farm Route | E24121001
This map may be released into the public domain

Sites

- Search Location
- Search Buffer (1000m)

■ LWS



**Leicestershire
& Rutland**
environmental records centre

Printed from eMapper for LRERC on 05/02/2024

LR/E02853 | Hill & Clump Farm Route | E24121001

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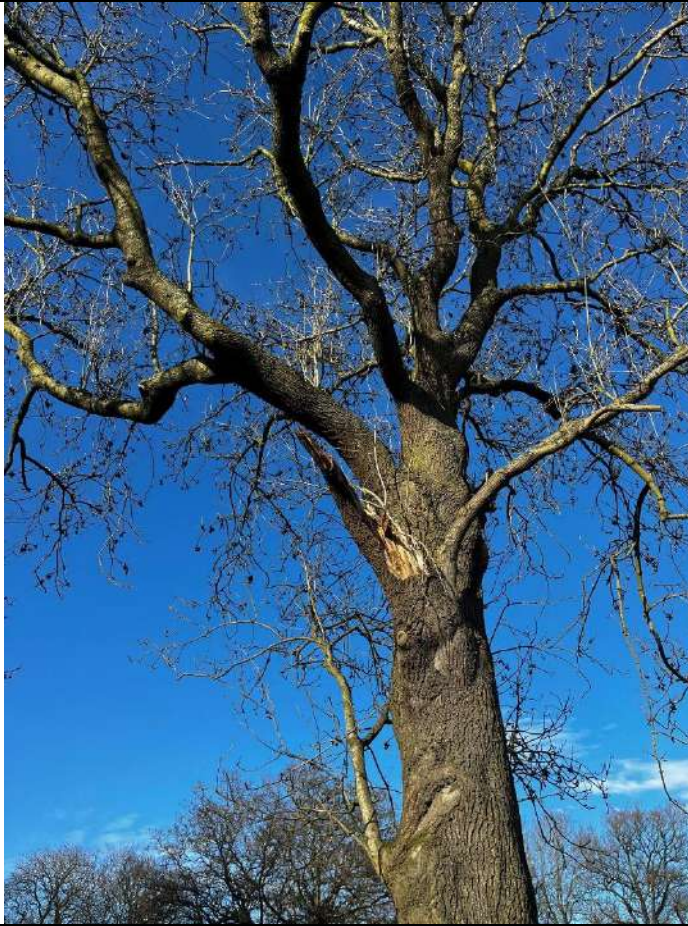
Species

- Search Location
- Search Buffer (1000m)
- Birds
- Higher Plants
- Mammals
- Reptiles & Amphibians

APPENDIX III UK HABS SURVEY PLAN & TARGET NOTES

Target Note	Description
1	Skylark sighting above arable field.
2	Likely Badger sett (Outlier) on opposite side of hedgerow bank. This was located approx. 25m east of the site's southern boundary. Single entrance appears recently used from distance. Multiple well-used mammal paths through hedge and signs of digging/foraging activity nearby. No latrine, footprints or guard hairs found along hedge. However, this is likely due to the very wet weather and ground conditions. No access to entrance due to dense scrub. 
3	Oak at edge of woodland parcel with overhanging branches over road. Tree supports small PRFs including desiccation fissures and knot-holes. Assessed to be of PRF-I potential. 
4	Remains of dead Badger at side of road verge, likely roadkill.
5	Mature oak tree at edge of road verge. Evidence of previous pruning, dense ivy cover. Assessed to be of PRF-I potential.

		
6	Mature oak tree at edge of road verge. Tree supports small PRFs including desiccation fissures and knot-holes. Assessed to be of PRF-I potential.	
7	Brown Hare sighting in adjacent field parcel.	
8	Large, mature ash with branches overhanging Hinckley Rd – Assessed as PRF-I due to small knot-holes present and a cracked limb	



9

3x mature Ash trees all assessed as PRF-I trees due to dense ivy cover, fissures and knotholes present. Initial tree is largest and contains larger roost features though still likely only enough to support indiv/small number bats.





Key

- Site Boundary
- UKHabitat Classification
 - Individual trees
 - g - grassland
 - g4 - modified grassland
 - w - woodland
 - w1f - lowland mixed deciduous woodland
 - w1h - other woodland mixed
 - h - heathland and shrub
 - h3 - dense scrub
 - c - cropland
 - c - cropland
 - u - urban
 - u1b - developed land, sealed surface
 - Linear features
 - h2a - hedgerow
 - Target Notes

Satellite imagery © Google 2024



Clump Farm Solar Ltd		UK Habitat Classification Plan		
Proposed Cable Route				
E24121001/DR01 Page 1		DJ	MW	09 April 2024

PRELIMINARY

PLANNING

DESIGN

TENDER

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- Target Notes

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APPENDIX IV EXAMPLE CONDITION ASSESSMENT SHEETS

BASELINE HABITATS

Condition Assessment Sheet 8 (Hedgerows)

h2a Native hedgerows

Hedgerow favourable condition attributes			Criterion passes (Yes or No)
Attributes and functional groupings (A, B, C, D and E)	Criteria - the minimum requirements for 'favourable condition'	Criteria description	Hedgerow 1 (H1)
A1 – Height	>1.5 m average along length	The average height of woody growth estimated from base of stem to the top of the shoots, excluding any bank beneath the hedgerow, any gaps or isolated trees. Newly laid or coppiced hedgerows are indicative of good management and pass this criterion for up to a maximum of four years (if undertaken according to good practice). A newly planted hedgerow does not pass this criterion (unless it is >1.5 m height).	Yes
A2 – Width	>1.5 m average along length	The average width of woody growth estimated at the widest point of the canopy, excluding gaps and isolated trees. Outgrowths (such as blackthorn suckers) are only included in the width estimate when they are >0.5 m in height. Laid, coppiced, cut and newly planted hedgerows are indicative of good management and pass this criterion for up to a maximum of four years (if undertaken according to good practice).	Yes
B1 – Gap – hedge base	Gap between ground and base of canopy <0.5 m for >90% of length	This is the vertical 'gappiness' of the woody component of the hedgerow, and its distance from the ground to the lowest leafy growth. Certain exceptions to this criterion are acceptable (see page 65 of the Hedgerow Survey Handbook).	Yes
B2 – Gap – hedge canopy continuity	Gaps make up <10% of total length; and No canopy gaps >5 m	This is the horizontal 'gappiness' of the woody component of the hedgerow. Gaps are complete breaks in the woody canopy (no matter how small). Access points and gates contribute to the overall 'gappiness' but are not subject to the >5 m criterion (as this is the typical size of a gate).	Yes
C1 – Undisturbed ground and perennial vegetation	>1 m width of undisturbed ground with perennial herbaceous vegetation for >90% of length: • Measured from outer edge of hedgerow; and • Is present on one side of the hedgerow (at least).	This is the level of disturbance (excluding wildlife disturbance) at the base of the hedgerow. Undisturbed ground is present for at least 90% of the hedgerow length, greater than 1 m in width and must be present along at least one side of the hedgerow. This criterion recognises the value of the hedgerow base as a boundary habitat with the capacity to support a wide range of species. Cultivation, heavily trodden footpaths, poached ground etc. can limit available habitat niches.	No
C2 – Nutrient-enriched perennial vegetation	Plant species indicative of nutrient enrichment of soils dominate <20% cover of the area of undisturbed ground.	The indicator species used are nettles <i>Urtica spp.</i> , cleavers <i>Galium aparine</i> and docks <i>Rumex spp.</i> Their presence, either singly or together, does not exceed the 20% cover threshold.	No
D1 – Invasive and neophyte species	>90% of the hedgerow and undisturbed ground is free of invasive non-native plant species (including those listed on Schedule 9 of WCA3) and recently introduced species.	Recently introduced species refer to plants that have naturalised in the UK since AD 1500 (neophytes). Archaeophytes count as natives. For information on archaeophytes and neophytes see the JNCC website ⁴ , as well as the BSBI website ⁵ where the 'Online Atlas of the British and Irish Flora' ⁶ contains an up-to-date list of the status of species. For information on invasive non-native species see the GB Non-Native Secretariat website ⁷ .	Yes

D2 – Current damage	>90% of the hedgerow or undisturbed ground is free of damage caused by human activities.	This criterion addresses damaging activities that may have led to or lead to deterioration in other attributes. This could include evidence of pollution, piles of manure or rubble, or inappropriate management practices (for example, excessive hedgerow cutting).	No
---------------------	--	---	----

Condition categories for hedgerows without trees		
Category	Category Requirements	Metric score
		H1
Good	No more than 2 failures in total; AND No more than 1 failure in any functional group.	
Moderate	No more than 4 failures in total; AND Does not fail both attributes in more than one functional group (for example, fails attributes A1, A2, B1 and C2 = Moderate condition).	✓
Poor	"Fails a total of more than 4 attributes; OR Fails both attributes in more than one functional group (for example, fails attributes A1, A2, B1 and B2 = Poor condition)."	

Condition Assessment Sheet 5 (Grassland – Low)

g4 Modified grassland

Condition Assessment Criteria		g4 modified grassland
		Condition Achieved (Yes/No)
A	There are 6-8 vascular plant species per m² present, including at least 2 forbs (this may include those listed in Footnote 1). Note - this criterion is essential for achieving Moderate or Good condition. Where the vascular plant species present are characteristic of medium, high or very high distinctiveness grassland, or there are 9 or more of these characteristic species per m² (excluding those listed in Footnote 1), please review the full UKHab description to assess whether the grassland should instead be classified as a higher distinctiveness grassland. Where a grassland is classed as medium, high, or very high distinctiveness, please use the relevant condition sheet.	No
B	Sward height is varied (at least 20% of the sward is less than 7 cm and at least 20% is more than 7 cm) creating microclimates which provide opportunities for vertebrates and invertebrates to live and breed.	No
C	Any scrub present accounts for less than 20% of the total grassland area. (Some scattered scrub such as bramble <i>Rubus fruticosus</i> agg. may be present). Note - patches of scrub with continuous (more than 90%) cover should be classified as the relevant scrub habitat type.	Yes
D	Physical damage is evident in less than 5% of total grassland area. Examples of physical damage include excessive poaching, damage from machinery use or storage, erosion caused by high levels of access, or any other damaging management activities.	Yes
E	Cover of bare ground is between 1% and 10%, including localised areas (for example, a concentration of rabbit warrens).	Yes
F	Cover of bracken <i>Pteridium aquilinum</i> is less than 20%.	Yes
G	There is an absence of invasive non-native plant species ³ (as listed on Schedule 9 of WCA4).	Yes

Condition Assessment Result (out of 7 criteria)	Condition Assessment Score	Score Achieved */✓
Passes 6 or 7 criteria including passing essential criterion A	Good (3)	
Passes 4 or 5 criteria including passing essential criterion A	Moderate (2)	
Passes 3 or fewer criteria; OR Passes 4 - 6 criteria (excluding criterion A)	Poor (1)	✓

APPENDIX V HABITAT SUITABILITY INDEX SCORES FOR 3NO. PONDS WITHIN CLUMP FARM BOUNDARIES

Waterbody Reference	HIS Score	Zone	Pond Area	Pond Drying	Water Quality	Pond Shade	Waterfowl	Fish	Ponds within 1km	Terrestrial Habitat	Macrophytes
Target Note 1	0.4681	A	50-100m ²	Sometimes dries	Poor	91-95%	Minor	Absent	3	Moderate	1-5%
Target Note 2	0.3751	A	100m ²	Never dries	Bad	91-95%	Minor	Absent	3	Moderate	1-5%
Target Note 3	0.3908	A	500-700m ²	Sometimes dries	Poor	0-60%	Major	Possible	3	Poor	1-5%

APPENDIX VI eDNA ASSESSMENT SCORES

DNA Analysis Report - Commercial in Confidence



Customer: Soltys Brewster Ecology Ltd
Address: 4 Stangate House
Stanwell Road
Penarth
Vale of Glamorgan
CF64 2AA
Contact: Fiona Bennett
Email: daniel.jones@soltysbrewster.co.uk
Tel: 033 00 13 00 12
Report date: 07-May-2021
Order Number: GCN21-1342
Samples: Pond Water
Analysis requested: Detection of Great Crested Newt eDNA from pond water.

Thank you for submitting your samples for analysis with the Fera eDNA testing service. The details of the analysis are as follows:

Method:

The method detects pond occupancy from great crested newts (GCN) using traces of DNA shed into the pond environment (eDNA). The detection of GCN eDNA is carried out using real time PCR to amplify part of the cytochrome 1 gene found in mitochondrial DNA. The method followed is detailed in Biggs J., et al, (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.

The limits of this method are as follows: 1) the results are based on analyses of the samples supplied by the client and as received by the laboratory, 2) any variation between the characteristics of this sample and a batch will depend on the sampling procedure used. 3) the method is qualitative and therefore the levels given in the score are for information only, they do not constitute the quantification of GCN DNA against a calibration curve, 4) a 'not detected' result does not exclude presence at levels below the limit of detection.

The results are defined as follows:

- Positive:** DNA from the species was detected.
eDNA Score: Number of positive replicates from a series of twelve.
Negative: DNA from the species was not detected; in the case of negative samples the DNA extract is further tested for PCR inhibitors and degradation of the sample.
Inconclusive: Controls indicate degradation or inhibition of the sample, therefore the lack of detection of GCN DNA is not conclusive evidence for determining the absence of the species in the sample provided.

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CustomerReference	Fera Reference	GCN Detection	eDNA Score	Inhibition	Degradation
-	S21-011965	Negative	0	No	No
-	S21-011966	Negative	0	No	No
-	S21-011967	Negative	0	No	No

The results indicate that eDNA for great crested newts was not detected in any of the samples submitted. Analysis was conducted in the presence of the following controls: 1) extraction blank, 2) appropriate positive and negative PCR controls for each of the TaqMan assays (GCN, Inhibition, and Degradation). All controls performed as expected.

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