BEACON FEN ENERGY PARK

Planning Inspectorate Reference: EN010151

~~Appendix 6.7 —~~ Outline Landscape and Ecological Management Plan ~~(Change Request)~~

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~~April~~ December 2025

The Planning Act 2008

The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 - Regulation 5(2)(q)

Quality information

Prepared by	Checked by	Verified by	Approved by
DS	LG	DS	SR

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Revision	Revision date	Details	Authorized	Name	Position
1.0	April 2025	Original Submission	SR	SR	TD
2.0	December 2025	Updates to Bicker Fen Substation section to reflect the Proposed Change	SR	SR	TD

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Appendix 6.7 Outline Landscape and Ecological Management Plan

2.1 Introduction

2.1.1 This document comprises the Outline Landscape and Ecological Management Plan (OLEMP) for a proposed solar and battery storage park on land approximately 6.5 km northeast of Sleaford and 2.5 km north of Heckington, Lincolnshire. The proposals comprise of above ground solar photovoltaic (PV), and Battery Energy Storage System (BESS) infrastructure connected by a cable route of around 13 km length to the National Grid Bicker Fen 400 kV substation ('Bicker Fen substation') (the 'Proposed Development').

2.1.2 The Proposed Development is described fully in **Chapter 2 - Proposed Development (6.2 ES Volume 1, 6.2.2)** but, in summary, it comprises the Solar Array Area, the Cable Route Corridor and the Bespoke Access Corridor.

2.1.3 The Solar Array Area is approximately 529 hectares (ha) in size and located to the north of Heckington, centred at the National Grid Reference (NGR) 514682 347825. The existing landscape within the Site predominantly comprises arable land use defined by drainage channels or hedgerows. There are several small areas of woodland within the Solar Array Area, such as Fox Covert. These individual areas of woodland are partially interconnected by linear scrub belts and hedgerows. The northern, western and southern Site boundaries are defined by partially intact hedgerow with some gaps. Similarly, there is a hedgerow with trees and linear belts of scrub associated with the Hodge Dike which bisects the Site.

2.1.4 The Cable Route Corridor is approximately 183 ha in size comprising predominantly agricultural land and extends c. 13km south-east from the Solar Array Area to Bicker Fen substation, at NGR TF 19684 38599. Land use and land cover within the Cable Route Corridor is similar to the Solar Array Area. Predominantly arable field units are present within a mosaic of small, medium, and large fields separated by either hedgerows, scrub often associated with drainage channels or, more frequently only by drainage channels. Woodland cover is sparse and comprises small to medium size woodlands.

2.1.5 The Bespoke Access Corridor comprises an area of 45.4 ha which connects with the west of the Solar Array Area; it is within this corridor that the Bespoke Access Road will be located. The area principally comprises agricultural fields frequently defined by largely intact hedgerows. There is limited woodland or scrub cover although there are some woodland areas in proximity to the Site.

2.1.6 This report sets out the approach and outline specification for the management and maintenance of retained and proposed landscape elements, habitats and ecological mitigation measures.

2.1.7 Measures required to avoid or mitigate potential effects associated with the Proposed Development are identified and set out in the following documents:

- **Chapter 6: Landscape and Visual (Document Ref: 6.2 ES Vol. 1, 6.2.6)**;

- **Figure 6.31: Landscape Strategy Plan (Document Ref: 6.4 ES Vol.3, 6.4.42)**;
- **Appendix 6.6: Arboricultural Impact Assessment (Document Ref: 6.3 ES Vol. 2, 6.3.18)**;
- **Appendix 7.3: Preliminary Ecological Appraisal (Document Ref: 6.3 ES Vol.2, 6.3.22)**;
- **Appendix 7.11: Botanical Survey report (Solar Array Area) (Document Ref: 6.3 ES Vol.2, 6.3.30)**; and
- **Biodiversity Net Gain Strategy (Document Ref: 7.3).**

2.1.8 Compliance with these mitigation measures is required to ensure that the Proposed Development is implemented and managed to comply with relevant policy. This policy includes; National Policy Statements for Energy (EN-1) and (EN-3) landscape statements of environmental opportunities and published British Standards (2013) BS 42020:2013 Biodiversity - Code of practice for planning and development.

2.1.9 This document has been prepared in accordance with relevant British Standards including:

- BS 4428:1989 Code of practice for general landscape operations, British Standard (BS 5837:2012);
- BS 42020:2013 Biodiversity - Code of practice for planning and development;
- BS 3998: 2010: Tree Work – Recommendations; and
- BD 5837:2012 Trees in Relation to Design, Demolition and Construction – Recommendations.

2.1.10 The requirements set out in the OLEMP will be used to secure the mitigation measures including compliance with policy and standards identified above.

2.2 Objectives of the OLEMP

2.2.1 This OLEMP should be read in conjunction with **Chapter 6: Landscape and Visual (Document Ref: 6.2 ES Vol. 1, 6.2.6)**, **Figure 6.31: Landscape Strategy Plan (Document Ref: 6.4 ES Vol.3, 6.4.42, Chapter 7: Ecology (Document Ref: 6.2 ES Vol. 1, 6.2.7)** and **Appendix 7.3: Preliminary Ecological Appraisal (Document Ref: 6.3 ES Vol.2, 6.3.22)**; prepared for the Proposed Development which report the baseline status and condition of features in the Site of relevance to the content of the OLEMP. These documents also identify the need for mitigation measures to avoid and reduce likely significant effects resulting from the construction, operation/maintenance and decommissioning of the Proposed Development.

2.2.2 The Landscape and Visual Impact Assessment (LVIA)**, Chapter 6: Landscape and Visual (Document Ref: 6.2 ES Vol. 1, 6.2.6)** identifies embedded mitigation measures which require the implementation of the measures set out in this OLEMP (via delivery of the detailed LEMP(s) as secured by a requirement in the **Draft DCO (Document Ref: 3.1)**.

2.2.3 The broad objectives include the following:

- To protect, retain and enhance existing vegetation cover including, trees, woodland and hedgerows during construction, operation and

decommissioning. There will be a minimum 10m offset from areas of woodland to the solar photovoltaic PV arrays;

- Introduce landscape and biodiversity enhancement areas around the Solar Array Area perimeter and within the Solar Array Area to provide visual assimilation, reduce landscape impacts, and provide a net gain for biodiversity;
- Native shrub planting (typically belts 8-12m in width) will be introduced to the site perimeter and within the Solar Array Area to screen views where specific adverse visual effects have been identified and provide landscape assimilation;
- Introduce new hedgerow planting to enhance biodiversity and provide visual assimilation and screening;
- Neutral grassland will be introduced to the Solar Array Area as general surface vegetation cover;
- Introduce lowland meadow and floodplain grazing marsh areas to provide biodiversity and landscape enhancements;
- Existing ponds and waterbodies will be retained and integrated into the wider landscape;
- Establish and maintain newly created habitats;
- Maintain and enhance species populations;
- Reinstate vegetation within the Cable Route Corridor following the construction phase subject to easement restrictions and within the Bespoke Access Route following decommissioning;
- Introduce a linear topsoil soil bund seeded with neutral grassland to the Bespoke Access Corridor; and
- Contribute to local and national objectives by enhancing the habitats to achieve Biodiversity Net Gain.

2.3 Scope of OLEMP

Scope

2.3.1 The OLEMP sets out the landscape and habitat management requirements for the following proposed and retained landscape elements and habitats:

Proposed Landscape Elements and Habitat

- Native Hedgerow;
- Native Shrub Mix with Trees;
- Neutral Grassland; and
- Lowland Meadow including Floodplain Grazing Marsh.

Retained Landscape Elements and Habitat

- Hedgerow;
- Trees/woodland;
- Scrub;
- Grassland; and
- Ditches and Drainage Channels.

2.3.2 This Outline Landscape and Ecology Management Plan (OLEMP) also sets out species restoration and enhancement measures for different fauna,

including bats, water voles and otters, breeding and roosting birds, reptiles, hedgehogs and invertebrates.

2.3.3 The purpose of an OLEMP is to demonstrate that the broad landscape and ecological mitigation measures, as set out in the landscape and ecology submission documents, are achievable.

2.3.4 The design of the proposed mitigation measures will be further refined at the detailed design stage should the DCO be granted for the Proposed Development.

2.3.5 The obligation to prepare the detailed LEMP(s) and have this/these approved by the relevant planning authority, is secured through a requirement in Schedule 2 to the **Draft DCO (Document Ref: 3.1)**. The detailed LEMP(s) will be developed from the principles set out in this OLEMP as it/they must be substantially in accordance with this OLEMP. The LEMP(s) will include information on establishment and long-term operational management of the landscape and ecological resource. The LEMP(s) will also describe the long-term management of ecological habitats required to achieve biodiversity net gain units.

2.3.6 The **Biodiversity Net Gain Strategy (Document Ref: 7.3)** reports that the BNG figures that the Proposed Development is presently expected to deliver.

2.3.7 Measures proposed within the Solar Array Area will include the following:

- The creation of approximately 2.78km of species rich native hedgerow;
- Approximately 3ha of the Solar Array Area will be planted with mixed scrub (Native shrubs with Trees);
- Approximately 486ha of arable land currently under cultivation, will undergo arable reversion to neutral grassland The grassland management regime or grazing schedule within these areas will allow for the site to offer approximately 17 ha of enhanced pollinator resource; and
- Enhancements to approximately 12.58km of ditch. It is also intended for the ditch network present within the Solar Array Area to be buffered by approximately 28 ha of species rich grassland.

2.3.8 Through delivery of these measures, the Applicant is committing to delivering at least 30% biodiversity net gain for habitat units; at least 10% biodiversity net gain for hedgerow units; and at least 10% biodiversity net gain for watercourse units, calculated using The Statutory Biodiversity Metric published by the Department for Environment, Food and Rural Affairs on [July 2024]. The delivery of these measures will be monitored for no less than 30 years as part of a wider package of landscaping and habitat proposals described in this document. Notwithstanding the commitment to delivery of the stated percentages of BNG, it is anticipated that, in reality, a higher percentage of BNG will be deliverable, which will be confirmed at the detailed design stage of the Proposed Development.

2.4 Vegetation Retention, Protection and Removal

2.4.1 This section sets out the approach to vegetation retention and removal within the respective parts of the Proposed Development. Documents which have informed the provisions in this chapter are:

- **Appendix 6.3: Arboricultural Impact Assessment (Document Ref: 6.3 ES Vol.2, 6.3.18);**
- **Figure 6.32: Vegetation Removal Plan (Document Ref: 6.4 ES Vol.3, 6.4.43);** and
- **Vegetation Removal Schedule (Document Ref: 6.4 ES Vol.3, 6.4.43)**.

2.4.2 The general approach during design development has been to minimise the requirement for vegetation removal through the use of existing field access arrangements and by utilising existing gaps in hedgerows and other vegetation types where this is feasible and retain existing woodland blocks. The Solar Array Area has been designed to maintain and integrate existing field pattern and associated boundary features including hedgerows, trees and scrub as far as feasible. The approach to the design of the Bespoke Access Road also involves utilising existing field access points as well as aligning the route towards field edges to minimise fragmentation of field units and minimise hedgerow removal. A similar approach aimed at reducing the extent of vegetation removal and field unit fragmentation has been adopted within the Cable Route Corridor.

2.4.1 The establishment of appropriate vegetation protection measures and areas for removal will be inspected by an Ecological Clerk of Works (ECoW) and / or the Arboricultural Clerk of Works (ACoW) to ensure compliance with the Arboricultural Method Statement and Tree Protection Plans developed at detailed design stage.

2.4.2 Potential vegetation removal is indicated on **Figure 6.32: Vegetation Removal Plan (Document Ref: 6.4 ES Vol.3, 6.4.43)** and the **Vegetation Removal Schedule (Document Ref: 6.4 ES Vol.3, 6.4.43).** Specific requirements in relation to the Solar Array Area, The Cable Route Corridor (including the Bicker Fen Substation Extension) and the Bespoke Access Road are described below.

2.4.3 **Appendix 6.3: Arboricultural Impact Assessment (Document Ref: 6.3 ES Vol.2, 6.3.18)** sets out the requirements for the identification and protection of retained woody vegetation (individual trees, tree groups, woodlands, hedgerows and scrub) during the construction, operation and decommissioning phases of the Proposed Development. These requirements will be set out and secured through the detailed Construction Environmental Management Plan (CEMP) and the detailed Decommissioning Environmental Management Plan (DEMP).

2.4.4 The proposed vegetation retention and removal proposals associated with the Proposed Development are shown on the **Figure 6.32: Vegetation Removal Plan (Document Ref: 6.4 ES Vol.3, 6.4.43)**. Within the Solar Array Area vegetation removal will include the removal of six individual trees, one tree group and parts of another two tree groups, one hedgerow and sections from a further ten hedgerows and some areas of scrub. A total of approximately 105m of hedgerow removal and 80m^2 will be required in the Solar Array Area.

2.4.5 Some aspects of the design have not been finalised particularly in relation to the design and alignment of the Cable Route and Bespoke Access Road, therefore, the plans indicate 'potential vegetation removal' within the Order Limits to provide design flexibility. The precise extent and locations of vegetation removal will be confirmed following DCO consent, as part of the preparation and approval of the detailed LEMP(s) and CEMP(s). No vegetation removal can take place until a detailed LEMP and CEMP have been approved by the relevant planning authority, as secured by Requirement 7 of Schedule 2 to the Draft **DCO (Document Ref: 3.1)**. All vegetation removal works will be undertaken in accordance with the approved LEMP (or LEMPs) and CEMP (or CEMPs).

2.4.6 **Figure 6.32: Vegetation Removal Plan (Document Ref: 6.4 ES Vol.3, 6.4.43)** shows all areas where vegetation may need to be removed within the respective route corridors. However, in preparing the Environmental Statement (and particularly the ecology and LVIA chapters and this OLEMP), assumptions have been made about the maximum amounts of vegetation removal at specific locations. The specific areas where vegetation will need to be removed will be confirmed at the detailed design stage **Figure 6.32: Vegetation Removal Plan (Document Ref: 6.4 ES Vol.3, 6.4.43)**. Within the Cable Route Corridor there will be a maximum vegetation removal width of up to 30m in each place where the cable route crosses vegetation to accommodate the installation of the Cable Route including any associated infrastructure such as the haul road, however only the extent reasonably required for construction of the Cable Route will be required. Within the Bespoke Access Corridor a maximum vegetation removal width of 15m in each instance the route crosses vegetation will be required to accommodate the proposed Bespoke Access Road and junction arrangements where the road crosses existing roads.

Bicker Fen Substation Extension

2.4.7 National Grid propose to undertake further works to the Bicker Fen Substation located to the southern extent of the Cable Route Corridor, the 'Bicker Fen Sub Station Extension'. At this stage two design options are being considered for this substation extension, including; an Air Insulated System (AIS) and a Gas Insulated System (GIS).

2.4.8 The AIS will require the greatest extent of vegetation removal and this option has, therefore, been used to inform a worst case scenario in terms of assessment assumptions.

2.4.9 To facilitate the introduction of the AIS option the following vegetation removal is anticipated:

- Tree groups G1212, G1213, G1214, G1215, G1230 located immediately to the southwest and northwest of the Bicker Fen Substation would be removed resulting in a loss of approximately 3,462m^2 of tree group area;
- Woodland W1009 is located to the south of the Bicker Fen Substation; and the western sections of this semi-mature to early-mature woodland requires removal resulting in approximately 4,580m² of woodland removal.

2.4.10 Large areas of existing vegetation to the southeastern and northeastern boundaries of the substation area will be retained and protected. Notably this will include the extensive woodland to the east (W1006) and to the north (W1007 and W1008).

Bicker Fen Substation Extension Change Request

2.4.11 The Proposed Change reflects an updated design that has been provided by National Grid Electricity Transmission plc ('NGET') to the Applicant for the proposed extension to Bicker Fen Substation. This Proposed Change will affect work areas 4A, 5C and 5D, principally affecting the southeastern extent of the Substation Site.

2.4.12 The inclusion of the Proposed Change as part of the Proposed Development will result in the requirement for further vegetation removal including; approximately 1010m^2 of tree/shrub cover and 20 linear metres of roadside vegetation within the Bicker Fen Substation Site.

2.4.13 These changes have been assessed, it is not considered that they would give rise to any materially new or different significant environmental effects as compared to the assessment presented in **ES Chapter 6: Landscape and Visual (APP-057)** meaning that, in EIA and planning terms, it is not considered that any additional mitigation compared to that already committed to is required to make the development acceptable in planning or EIA terms. However, following representations in the Local Impact Report (LIR) from the South and East Lincolnshire Councils Partnership – Boston Borough Council **(REP1-059)** and discussions with Boston Borough Council on the 31 October 2025, the Applicant has agreed to introduce further landscape and ecological enhancement measures within the Bicker Fen Substation area. These measures have been developed further in relation to the provision of enhancement for the Proposed Change and are illustrated in an updated version of **Figure 6.31 Landscape Strategy Plan (6.4.42a to 6.4.42c).**

2.4.14 In summary the landscape enhancement proposals comprise the following measures:

- Areas of woodland to the north of the substation area will be retained and further woodland and scrub will be introduced to fill gaps in this cover to provide stronger visual enclosure of the northwestern boundary of the substation site. A total of 8120m^2 of additional planting is proposed for this northern area;
- A mosaic habitat of scrub and neutral grassland will be created and existing woodland will be managed to enhance biodiversity and ecological value; and
- Smaller areas of woodland will be introduced to the southeast corner of the substation area where constraints allow (the area to the south is more constrained due to it hosting the substation extension itself, existing utilities with easement restrictions, and the Cable Route Corridor). A total of 1627m^2 of additional planting is proposed for this southeastern area.

2.5 Landscape Implementation and Habitat Creation, Establishment and Management

Introduction

2.5.1 The following landscape and habitat creation and management prescriptions have been prepared with respect to the nature of the development proposals, the need for landscape mitigation and Biodiversity Net Gain assessment objectives.

Planting Implementation – General Specification

2.5.2 All works will be undertaken in accordance with recognised horticultural good practice and all plants and planting operations are to comply with the requirements and recommendations of current relevant British Standards and National Plant Specifications including:

- The handling of plants to be in accordance with National Plant Specification 'Handling and Establishing Landscape Plants';
- BS 8545 - Trees: From Nursery to Independence in the Landscape;
- BS 3936-1:1992 - Nursery stock. Specification for trees and shrubs;
- BS 3882:2015 - Specification for topsoil;
- BS 4428:1989 - Code of practice for general landscape operations (excluding hard surfaces) (AMD 6784); and
- BS 5837: 2012 - Trees in relation to design, demolition and construction.

2.5.3 The works are to be carried out by a specialist landscape contractor in accordance with the specification requirements set out below:

- The contractor will review the existing and proposed services drawings before commencement of the landscape works to locate utilities and protect personnel during works;
- Prior to the commencement of construction works, topsoil and subsoil are to be stripped, stored separately and placed in accordance with recognised good practice including the *Construction Code of Practice for the Sustainable Use of Soils on Construction Sites* (DEFRA 2009)[1];
- All areas of proposed planting and seeding affected by construction works are to be relieved of compaction by ripping to a depth of 600mm, in two directions;
- Topsoil depth for woodland and native planting areas will replicate natural soil profiles in the immediate landscape and be a minimum of 300mm depth;
- Wildflower areas will be sown directly into existing weed free soil / subsoil which has been cultivated to provide a seed bed;
- Trees and shrubs will be planted during the winter season between the months of November and March. The planting of trees and shrubs shall be timed to avoid periods of frost, drought or strong winds. Trees and shrubs will not be planted during periods when the ground is waterlogged;

[1] https://assets.publishing.service.gov.uk/media/5b2264ff40f0b634cfb50650/pb13298-code-of-practice-090910.pdf

- Feathered trees will be planted in pits 800x800x450mm or dimensions of rootball, whichever is greater. Tree to be supported by a single stake (1500mm long, per tree, 600mm above ground, 75mm diameter), and a single bio-degradable tie;
- Whips and transplants will be notch planted into undisturbed ground or pit planted into areas of imported/replaced soils; and
- All native plants will be protected with rabbit proof fencing installed prior to planting or individual tree shelters are not used.

Proposed Native Hedgerow Creation

Implementation

2.5.4 There is an existing network of hedgerows within the Site and to the northern, western and southern boundaries of the Solar Array Area as shown in **Figure 6.32: Vegetation Removal Plan (Document Ref: 6.4 ES Vol.3, 6.4.43)**. In places there are gaps in the hedgerow which will be 'gapped up' with new hedgerow planting. Elsewhere, new native hedgerows will be introduced to connect with the existing hedgerow network and other existing habitats and provide visual mitigation within the Solar Array Area.

2.5.5 Specifically, native hedgerows will be introduced to the north of Gashes Barn to provide visual separation from solar PV arrays. The native hedgerows will comprise of at least 80% native woody species for the canopy cover (see Table 1.1.for the proposed species list). Native hedgerows will include five native woody species in each 30 m section. The location of proposed hedgerows is illustrated in **Figure 6.31: Landscape Strategy Plan (Document Ref: 6.4 ES Vol.3, 6.4.42).**

2.5.6 Within the Cable Route Corridor and Bespoke Access Corridor reinstatement planting will be implemented, principally to replace sections of hedgerow removed during the construction phase to install the Cable Route and lay out the Bespoke Access Road respectively.

2.5.7 The outline specification for hedgerow planting is set out as follows:

- Within the Solar Array Area hedgerows will comprise transplants planted in triple staggered rows offset by 0.5m and at a density of 0.3m centres in same species groups of 2-7 plants;
- Within the Cable Route Corridor and Bespoke Access Route hedgerows will comprise transplants planted in double staggered rows offset by 0.5m and at a density of 0.3m centres in same species groups of 2-7 plants;
- Transplants will be planted during the dormant season (November-February), but not during prolonged cold spells where the ground is frozen; and
- Rabbit protection, new hedgerows to be protected by biodegradable tree guards and/or rabbit proof fencing which should be 900mm high galvanised mesh and timber stakes (mesh to be buried 150mm below ground with 150mm angled away from planting).

2.5.8 Hedgerows planted in all areas of the Proposed Development (Solar Array Area, Cable Route Corridor and Bespoke Access Corridor) will include a mix of native species including those native to the region. The proposed species

mix is set out in Table 1.1:

Table 1.1 Specification for Native Hedgerow

SPECIES	SPECIFICATION	DENSITY	HEIGHT	% MIX
Acer campestre (Field Maple)	1+1: Transplant - seed raised: B	0.3Ctr Double or triple Staggered at 0.5m offset	60-80cm	2%
Corylus avellana (Hazel)	1+1: Transplant - seed raised: Branched: 3 brks: B	0.3Ctr Double or triple Staggered at 0.5m offset	60-80cm	10%
Crataegus monogyna (Hawthorn)	1+2: Transplant - seed raised: Branched: 3 brks: B	0.3Ctr Double Staggered at 0.5m offset	60-80cm	50%
Ilex aquifolium (Holly)	Leader with Laterals: C	0.3Ctr Double Staggered at 0.5m offset	40-60cm	5%
Ligustrum vulgare (Common Privet)	0/2: Cutting: Branched: 3 brks: B	0.3Ctr Double Staggered at 0.5m offset	40-60cm	2%
Malus sylvestris (Crab Apple)	1+1: Transplant - seed raised: B	0.3Ctr Double Staggered at 0.5m offset	60-80cm	2%
Prunus spinosa (Blackthorn)	1+1: Transplant - seed raised: Branched: 2 brks: B	0.3Ctr Double Staggered at 0.5m offset	60-80cm	20%
Rosa canina (Dog rose)	1+1: Transplant - seed raised: Branched: 2 brks: B	0.3Ctr Double Staggered at 0.5m offset	60-80cm	5%

Establishment and Aftercare of Planted Hedgerows

2.5.9 The specification for maintenance and aftercare of newly planted hedgerows during the 5 year establishment period will be as follows:

- Hedge planting will be checked on a quarterly basis over the first five years to check for weeds, drought and damage or disease;
- Hedgerows will be maintained free of weeds during the establishment period (5 years) along the length of the triple or double staggered row and for an overall width of 1 metre (m) using mulch to avoid the

requirement for herbicide use. Residual weeds will be controlled by hand pulling for two years following planting. This weed control will be important to enable the transplants/whips to grow and mature effectively. Following establishment, weed control will not be required to allow the establishment of wildflowers;

- Damaged and diseased plants will be removed and replaced with healthy transplants/whips;
- A first light trim of all side branches may be done in the spring after the first growing season using hand tools;
- A first light cut with a mechanical flail will be undertaken in year 3;
- Specimens will be firmed and watered as necessary; and
- Any dead or diseased planting will be removed and replanted in the next season.

Management (Year 5 Onwards)

2.5.10 Following the five year establishment maintenance period following planting the long term management of new hedgerow habitat within the Site will have the aim to improve the structure and quality as follows:

2.5.11 Hedgerows within the Site will be trimmed on a 3-year rotation to encourage flower and berry production, incrementally raising the cutting height each year to ultimately achieve 3.5m in height. this approach will also encourage a dense form aiding visual mitigation. Maintenance works will be undertaken in line with Natural England advice[2], as follows:

- Works will be undertaken in January and February to avoid the peak nesting bird season and following berry production which is a valuable resource for birds and mammals;
- No hedge cutting will occur during the bird breeding season (1st March – 31st July). All wild birds, their eggs, young and nests are protected by the Wildlife and Countryside Act 1981;
- One side of each hedge will be left uncut every year to leave nuts and berries as winter food for birds and other wildlife;
- Arisings will be grouped and used to create brash piles in discrete areas at the base of the hedgerow. These will provide natural refugia for invertebrates, amphibians and small mammals; and
- Once planting is established, generally from Year 3 onwards, stakes and guards may be removed. All stakes and guards will be removed by the end of Year 5.

Native Shrub Mix with Trees – Proposed Habitat Creation

Implementation

2.5.12 Areas of native shrub mix with trees will generally be planted in linear belts 8 - 12m wide within the Solar Array Area to provide visual mitigation for residential receptors, enhance connections with existing woodland, scrub and hedgerows within the Site and provide biodiversity enhancements as well as the integration of energy infrastructure within the wider landscape context. A 12m planting belt is proposed to the west of the Onsite Substation and BESS

[2] file:///N:/ST/ST19595%20-%20Solar%20PV%20DCO%20Bicker%20Fen/04%20-%20Reports/0003%20Environmental%20Statement/06%20Landscape%20&%20Visual/Background/Natural%20England%20hedgerows8%20(1).pdf

area to screen these taller elements of the Proposed Development in relation to views from the west. The location of these areas is shown in **Figure 6.31: Landscape Strategy Plan (Document Ref: 6.4 ES Vol.3, 6.4.42.**

2.5.1 Planting would consist of a mix of tree and shrub species informed by existing species present on site and within the wider area which are considered to be characteristic of the landscape. Trees species include: *Alnus glutinosa, Betula pendula, Prunus avium, Quercus robur and Sorbus aucuparia and* Shrub species include; *Acer campestre, Corylus avellana, Crataegus monogyna, Ilex aquifolium, Malus sylvestris, Prunus spinosa,* and *Viburnum opulus. S*hrub planting will be concentrated towards the edges of the planting areas and tree species more centrally. Tree species to include; *Alnus glutinosa, Betula pendula, Prunus avium, Quercus robur and Sorbus aucuparia.* Shrub species include; *Corylus avellana, Crataegus monogyna, Malus sylvestris, Ilex aquifolium, Prunus spinosa,* and *Viburnum opulus.*

2.5.2 An indicative native shrub mix with trees specification is provided in Table 1.2 below.

Table 1.2 Specification for Native Shrub Mix with Trees

SPECIES	SPECIFICATION	DENSITY	HEIGHT	% MIX
Acer campestre (Field Maple)	1+1: Transplant - seed raised: B	1.5m Ctr	60-80cm	5%
Alnus glutinosa (Common Alder)	1+1: Transplant - seed raised: B	1.5m Ctr	60-80cm	10%
Betula pendula (Silver Birch)	1+1: Transplant - seed raised: B	1.5m Ctr	60-80cm	10%
Corylus avellana (Hazel)	1+1: Transplant - seed raised: Branched: 3 brks: B	1.5m Ctr	60-80cm	15%
Crataegus monogyna (Hawthorn)	1+2: Transplant - seed raised: Branched: 3 brks: B	1.5m Ctr	60-80cm	10%
Ilex aquifolium (Holly)	Leader with Laterals: C	1.5m Ctr	40-60cm	5%
Malus sylvestris (Crab Apple)	1+1: Transplant - seed raised: B	1.5m Ctr	60-80cm	5%
Prunus avium (Wild Cherry)	1+1: Transplant - seed raised: B	1.5m Ctr	60-80cm	10%
Prunus spinosa (Blackthorn)	1+1: Transplant - seed raised: Branched: 2 brks: B	1.5m Ctr	60-80cm	15%
Quercus robur (Oak)	1+2: Transplant - seed raised: B	1.5m Ctr	60-80cm	10%
Viburnum opulus (Guelder Rose)	1+2: Transplant - seed raised: Branched: 3 brks: B	1.5m Ctr	60-80cm	5%

2.5.3 The outline specification for woodland planting is set out as follows:

- Topsoil depth to replicate existing soil profiles anticipated to be 150 - 300mm and subsoil depth to be 300mm where the land has been affected by construction activity the placing of stored soils is required. In areas unaffected by construction works, planting can take place directly into undisturbed ground following weed control measures;
- Trees will be planted at 1.5m centres in single species groups of 3 – 7 plants;
- Transplants will be planted during the dormant season (November-February), but not during prolonged cold spells where the ground is frozen;

- Bark mulch is to be applied to a 0.5m diameter area around each plant to supress weeds; and
- New woodland planting is to be protected from rabbit damage by either biodegradable tree guards and/or rabbit proof fencing which will be 900mm high galvanised mesh and timber stakes (mesh to be buried 150mm below ground with 150mm angled away from planting).

Establishment and Management (Years 1-5)

2.5.4 Early management objectives will focus on the requirement to protect newly planted woodland and allow the planting to quickly establish. The following operations will be carried out during this period:

- A weed free area (minimum diameter of 0.5m) will be maintained around each tree, through maintenance of the bark mulch and hand weeding of weeds growing within and around the shelters to minimise the requirement to use herbicides The top up mulch layer will maintain the required depth of 75mm;
- Watering as required to maintain healthy growth during establishment period;
- Refirming after strong winds, frost heave and other disturbances by treading around the base of affected trees until firmly bedded;
- Removal of dead and diseased plant material and reinstatement;
- Adjust, refix or replace loose or defective tree shelters to original specification and to prevent chafing; and
- Removal of dead and diseased trees and replanting.

2.5.5 Regular maintenance visits will be carried out during this period identifying the requirement for remedial measures including replacement planting which will take place during the next suitable planting season to the original specification or amended specification as agreed with the ECoW or [the] Landscape Architect.

Management (Year 5 Onwards)

2.5.6 Long term management of woodland habitats within the Site will be through a process of thinning in year 5 to remove any plants which are dead, dying, diseased or subject to poor growth. No more than one-third of trees and shrubs will be removed in any one season to ensure that sufficient habitat is retained whilst allowing the remaining trees enough canopy space to develop healthy growth and crowns.

2.5.7 Woodland will be managed to ensure there is a diverse structure to ground, understory and canopy layers as follows:

- Selective thinning and targeting coppicing will take place at 5-year intervals;
- Any felled timber will be used to create habitat piles. These refugia are to be created near to the wetland and within the woodland, where they will be particularly valuable to amphibians, invertebrates and small mammals; and
- Works will be carried out during the dormant season and outside the bird nesting season between November and February.

Neutral Grassland

Implementation

2.5.8 New areas of neutral grassland will be created predominantly in areas where solar PV arrays are proposed which in most cases will replace arable farmland. The mix will generally be introduced to areas of the Site formerly used for arable agriculture. The location of these areas is shown in **Figure 6.31: Landscape Strategy Plan (Document Ref: 6.4 ES Vol.3, 6.4.42).**

2.5.9 Once existing and colonising vegetation has been controlled and a sterile seed bed is created, the area will be cultivated to a depth of 150mm (except within 4m of any existing tree stem) and harrowed / raked to produce a medium tilth, appropriate for seeding.

2.5.10 A General Purpose Meadow Grass Mixture EG1 will be utilised and sown in either in autumn or spring where there is sufficient warmth and moisture.

Establishment and Management

2.5.11 During the first year of establishment, all areas will be cut regularly to 40-60mm through the growing season to prevent slower-growing grasses being smothered by fast growing weeds. Cuttings should be removed if dense to reduce the potential for excessive nutrient enrichment.

2.5.12 The option of utilising sheep for low intensity conservation grazing will be explored, however, this will be determined at the detailed design stage. If this option is not implemented, the management of neutral grassland will be in accordance with the requirements of paragraph 1.5.11.

2.5.13 A 2m high deer fence will be installed around the perimeter of the grassland creation areas to prevent overgrazing.

Management (Year 2 Onwards)

2.5.14 From the second year onwards, traditional meadow management techniques will be utilised which will include the following measures:

- Future management can be achieved through a single late summer/early autumn (late August to early September) hay cut after plants have finished flowering, to approximately 50mm leaving the cuttings to dry and shed seed for 1-7 days. Following this, all the arisings will be collected and composted around the Site in piles. The grassland will then be mown through to late autumn/winter to keep the vegetation at 50mm;
- Annual cuts of wildflower meadow grassland will be continued for the operational life of the Proposed Development (40 years);
- Some areas will be left uncut for several years to create rank, tussocky vegetation to increase suitability for small mammals and their predators;
- Management of invasive weeds such as docks (Rumex spp.) and thistles (Cirsium spp.), will be managed annually; and
- Any areas that fail to germinate will be reseeded in the next suitable sowing season.

Lowland Meadow (including Floodplain Grazing Meadows)

Implementation

2.5.15 New areas of Lowland Meadow and Floodplain Grazing Meadow are proposed within the Solar Array Area.

2.5.16 Lowland Meadow is proposed for several areas within the Solar Array Area including:

- On the land adjoining the access approach to Gashes Barn and land surrounding the residential property itself; and
- Within the field unit to the northwestern extent of the Solar Array Area excluded from housing solar PV arrays for archaeological reasons.

2.5.17 Floodplain Grazing Marsh is proposed for a single area to the northeastern extent of the Proposed Development within an area adjacent to the River Slea which is prone to flooding.

2.5.18 Introduction of Lowland Meadow and Floodplain Grazing Marsh is primarily intended to provide enhanced biodiversity on the Site whilst also contributing to an appropriate naturalistic landscape setting for the Proposed Development. Guidance in relation to species selection and management has been informed by the UK Hab guidance for (g3a) Lowland Meadows and the guidance document, Lowland Meadows: A guide to management (Greater Lincolnshire Nature Partnership)[3].

2.5.19 Species will be selected from the following list, with a greater proportion of *priority floodplain meadow indicator* species being selected for the Floodplain Grazing Marsh:

Agrimony, Autumn hawkbit (priority floodplain meadow indicator), Betony Bird's-foot-trefoil, Bitter-vetch, Black knapweed, Bugle, Burnet saxifrage, Common bistort (priority floodplain meadow indicator), Common meadow-rue (priority floodplain meadow indicator), Corky-fruited water-dropwort, Cowslip, Devil's-bit scabious (priority floodplain meadow indicator), Dyer's greenweed, Eyebright, Field scabious, Globeflower (priority floodplain meadow indicator), Goat's-beard, Great burnet (priority floodplain meadow indicator), Greater bird's-foot-trefoil, Jointed rushes, Lady's bedstraw, Lady's-mantles, Lesser spearwort, Marsh arrowgrass (local), Marsh or fen bedstraw, Marsh marigold (priority floodplain meadow indicator), Meadow saxifrage, Marsh speedwell, Marsh valerian, Meadow thistle, Meadow vetchling, Meadowsweet (priority floodplain meadow indicator), Milkworts, Narrow-leaved water- dropwort (priority floodplain meadow indicator), Orchids, Ox-eye daisy, Pepper-saxifrage (priority floodplain meadow indicator), Pignut, Ragged robin, Rough hawkbit, Salad burnet, Saw-wort, Small to medium blue-green sedges (glaucous, common, carnation), Snake's-head fritillary (local), Sneezewort, Tormentil, Tubular water-dropwort (priority floodplain meadow indicator), Water avens, Water mint, Wood anemone, Yellow rattle.

[3]https://glnp.org.uk/images/uploads/services/local-sites/LWS%20Management%20Leaflets/Lowland%20meadows.pdf

Establishment and Management

2.5.20 Establishment and management will be as in accordance with the outline specification for Neutral Grassland.

2.6 Retained Habitat Enhancement Measures

Introduction

2.6.1 Habitats which are to be retained on Site will be managed in accordance with the condition assessment and subsequent habitat management recommendations stated within the **Biodiversity Net Gain Strategy (Document Ref: 7.3)**. Specific measures for each habitat are outlined in the sections below.

2.6.2 Buffers from key habitat features are to be established to ensure design maintain appropriate distance from receptors. The following buffers have been used wherever possible:

- A minimum 15 m buffer around woodlands;
- A minimum 5 m buffer around watercourses;
- A minimum 5 m buffer between working areas and hedgerows;
- A minimum 5 m offset from all infrastructure (including fencing) from bank top of all riparian boundaries and watercourses;
- All trees within hedgerows and individual trees – protected by clearly defined root protection areas, concordant with the requirements for each individual tree;
- A minimum 9 m buffer from waterbodies; and
- Badger setts subject to 30 m buffer.

Native Hedgerow

2.6.3 Existing hedgerows are present across the Site bordering the arable fields and are currently dominated by woody species such as hawthorn, blackthorn, hazel, sycamore (*Acer pseudoplatanus*), pedunculate oak (*Quercus robur*) and goat willow with a ground layer being made up of various species such as meadowsweet (*Filipendula ulmaria*), bramble (*Rubus fruticosus*), bracken (*Pteridium aquilinum*), occasional red campion (*Silene dioica*), coarse grasses and tall ruderals. Although the majority of hedgerows have been classified as native hedge, small sections are classified as native hedge with trees. The location of these retained hedgerows is shown on **Figure 6.31: Landscape Strategy Plan (Document Ref: 6.4 ES Vol.3, 6.4.42).**

2.6.4 Through the delivery of the detailed CEMP(s) during the construction phase of the Proposed Development, the measures set out in the Outline Construction Environmental Management Plan (OCEMP), **Appendix 2.4: Outline Construction Environment Management Plan (Document Ref: 6.3.7 ES Vol.2, 6.3.7)** will be implemented to protect the hedgerows from pollution or from direct damage during the construction and operation phases. Such measures will include designating an appropriate buffer zone from all retained hedgerows, protection fencing, designated storage areas and dust suppression measures. Full details of how the retained hedgerows will be protected during construction is set out in the OCEMP, sections 6.7.5, 6.14.2 and 6.14.9.

2.6.5 The retained hedgerow field layers will be enhanced with proposed sowing of the Lowland Meadow mix discussed in section 1.5.14 above. Much of the tall herb vegetation with low plant species diversity dominated by, for example, common nettle *Urtica dioica* and thistle species *Cirsium* spp, will be replaced by the Lowland Meadow mix.

2.6.6 Long term management and management of the hedgerows will involve the controlled cutting to thicken and regenerate growth, improve their structural diversity and increase their visual mitigation effectiveness. This will be done on rotation, allowing some sections to flower and fruit whilst others are cut in any given year. Hedges will be cut in later winter where possible to allow berries to be eaten by birds over the winter period and to avoid the nesting bird season (March to August inclusive).

2.6.7 Hedgerows will be predominantly managed to allow growth to approximately 3.5m in height to provide habitat enhancement and visual mitigation. Approximately every 50m a tree/shrub will be left to grow out of the hedgerow to develop into a tree, provided the orientation is such that it will not result in shading of the solar PV arrays.

Arboricultural works to rejuvenate trees in poor condition

2.6.8 The felling and clearance of diseased trees will only be undertaken following consultation with, and under direction of the ACOW. There may be the opportunity to create veteran tree features such holes, splits, cavities in existing poor-quality trees to create habitat for invertebrates, nesting birds and bats. This should be carried out under the supervision and guidance of the ACOW.

2.6.9 Physical damage will be minimised by provision of a suitable buffer during the construction phase, as well as the creation and enhancement of grassland margins between the arrays and hedgerows, to ensure damage can be avoided during the operational phase.

Neutral Grassland

2.6.10 A strip of neutral grassland (g3c UKHab) which borders the northern hedgerow will be retained and enhanced on Site. The location of this retained area of grassland has been incorporated into the grassland mix areas shown on **Figure 6.31: Landscape Strategy Plan (Document Ref: 6.4 ES Vol.3, 6.4.42)**.

2.6.11 This retained area of other neutral grassland will be enhanced in condition to reduce the presence and spread of undesirable perennial vegetation such as docks and thistles.

2.6.12 Management will include seasonal cutting or grazing, as set out in paragraph 1.5.12, to maintain a varied sward height throughout the season which will benefit invertebrates and provide foraging for a range of wildlife.

2.6.13 Traditional meadow management will be employed which is as follows:

- Future management can be achieved through a single late summer/early autumn (late August to early September) hay cut after

plants have finished flowering, to approximately 50mm leaving the cuttings to dry and shed seed for 1-7 days. Following this, all the arisings will be collected and composted around the Site in piles. The grassland will then be mown through to late autumn/winter to keep the vegetation at 50mm;

- Annual cuts of wildflower meadow grassland will be continued for a period of 40 years; and
- Sediment/vegetation management within the Solar Array Area including periodic visual monitoring and sediment management measures (silt fencing, settlement tanks etc.) and reseeding will be undertaken where required. Rainfall on the angled panels may cause erosion beneath the lower edge of each panel, resulting in erosion and sediment laden runoff. This will principally affect areas of Neutral Grassland.

2.6.14 Over time the retained area of grassland will be incorporated into the newly sown and managed areas of grassland.

Broadleaved Woodland and Scattered Trees

2.6.15 Areas of broadleaved woodland which resides inside the Solar Array Area will be retained. Specific scattered mature and semi-mature individual trees of high ecological value will be retained across the Site. The location of retained woodland and scattered trees are shown on **Figure 6.31: Landscape Strategy Plan (Document Ref: 6.4 ES Vol. 3, 6.4.42)**.

2.6.16 Tree management will be carried out from November to February to promote deadwood habitats, retain standing over-mature trees, and promote biodiversity throughout the Site.

2.6.17 Mature and semi-mature trees to be retained have been identified in **Appendix 6.6: Arboricultural Impact Assessment (Document Ref: 6.3 ES Vol. 2, 6.3.18)** with the root protection area for each retained tree. These areas are to be protected, and no construction activities will occur within these areas as set out in **Appendix 2.4: Outline Construction Environment Management Plan (Document Ref: 6.3.7 ES Vol.2, 6.3.7),** sections 6.6.5, 6.7.5 and 6.14.15

2.6.18 Areas of woodland to be retained have been identified in **Appendix 6.6: Arboricultural Impact Assessment (Document Ref: 6.3 ES Vol. 2, 6.3.18).** Woodland will be protected during the construction phases. Protection measures will include designating an appropriate buffer zone from woodland, appropriate root protection zones and tree protection fencing as set out in the OCEMP (**Appendix 2.4: Outline Construction Environment Management Plan (Document Ref: 6.3.7 ES Vol.2, 6.3.7)**), sections 6.7.5 and 6.14.15.

2.6.19 During the operation phase woodland will be managed as a low-intervention zone. Management will include:

- Removal of limbs overhanging the Solar Array Area
- Any arisings will be used to create log piles within the woodland or within the wider Solar Array Area;
- The felling of senescent or diseased trees; and
- Fallen deadwood will be retained within the woodland areas to provide habitat for invertebrates and woodland fungi.

2.6.20 Retained scattered trees will be managed to rejuvenate trees in poor condition as follows:

The felling and clearance of diseased trees will only occur where there is a clear risk of disease or pest transmission. This will only be undertaken following consultation with, and under the direction of, the Forestry Commission and the Animal and Plant Health Agency, where appropriate;

- Creation of veteran tree features such holes, splits, cavities in existing poor-quality trees will be undertaken to create habitat for invertebrates, nesting birds and bats;
- Limited selective thinning of trees, established groups of trees / woodland and coppicing of selected species will be undertaken to introduce stand diversity and to benefit the growth of other trees and habitats; and
- Selective thinning of naturally regenerated juvenile trees will be undertaken to improve the growth of the trees to be retained.

Ditches and Drainage Channels

2.6.21 Ditches are characteristic of the host landscape and are prevalent within the Solar Array Area. The approach to ditch management will prioritise an ecologically sensitive approach in accordance with guidance set out in the Drainage Channel Biodiversity Manual[4] and the measures below:

- Ditches will be inspected regularly, and clearance works will take place on a 2 – 5 year cycle so that undisturbed areas remain annually, of the objective being to ensure there is a mosaic of habitat maturity across the Order Limits at all times. This will be carried out in accordance with a planned timetable to provide a successional approach allowing areas to reach different states of maturity and allowing areas of bare ground and tussocky grassland to develop;
- Maintenance of water crossings will be incorporated into the management programme including periodic visual monitoring to ensure crossings are not blocked; and
- Management activity would not take place during the bird nesting season (March and August inclusive).

Protected Species Enhancement Measures

Badger & Hedgehog

2.6.22 The hedgerows on Site were deemed sub-optimal for badger *Meles meles* and hedgehog *Erinaceus europaeus* foraging.

2.6.23 As shown on **Figure 6.32: Vegetation Retention and Removal Plan (Document Ref: 6.4 ES Vol.3, 6.4.43)** a combined total of approximately 10m of hedgerow will need to be removed to facilitate access between field parcels within the Solar Array Area. These vegetation removal works be supervised by the ECoW following a pre-construction check conducted by that ecologist. This will minimise the risk of incidental harm to any badgers and/or hedgehogs, or damage to setts.

[4] https://www.ada.org.uk/downloads/publications/the_drainage_channel_biodiversity_manual.pdf

2.6.24 Through the retention of the woodland and remaining hedgerows (section 1.6 of this OLEMP), together with the creation of new hedgerows (section 1.5 of this OLEMP), it is predicted that there will be sufficient suitable habitat operational period of the Proposed Development to support continued badger and hedgehog foraging.

2.6.25 Additionally, two log/brash piles will be created to enhance habitat for hedgehogs from any type of vegetation removal or tree removal that has occurred within the Solar Array Area

Bats

2.6.26 Linear features such as the woodland margins and hedgerows on Site are likely to provide foraging and commuting corridors for bats and will be largely retained and enhanced. New sections of hedgerows are proposed which will increase habitat connectivity and in turn foraging and commuting potential.

2.6.27 Foraging potential will also be enhanced by the creation of new species rich grassland areas (as set out in section 1.5) that will support a variety of invertebrates to act as a rich food source for bats.

2.6.28 All of the mature and semi-mature native trees scattered across the Site will be retained and protected. This retention of mature and semi-mature trees and supplementary planting of new native trees will protect existing potential roosting and foraging sites and over time create new ones.

2.6.29 During construction artificial lighting has been minimised, so no light spill is likely to occur in suitable habitats as set out in **Appendix 2.4: Outline Construction Environment Management Plan (Document Ref: 6.3.7 ES Vol.2, 6.3.7)**, paragraphs 3.7.1 and 6.6.4. During operation motion detection security lighting will be used along with infrared lighting provided by the CCTV security system and lighting at the BESS and Onsite Substation will be passive infrared (PIR) to minimise the operational period of lighting. All visible lighting will be 50W, installed at a maximum height of 4m with downward light fittings to prevent light spillage. At the decommissioning phase light spill will be controlled through the measures set out in the DCEMP, **Appendix 2.5: Decommissioning Environmental Management Plan (Document Ref: 6.3.8 ES Vol.2, 6.3.8)**, Table 1.1, section 1.9 and Table 1.2.

Birds

2.6.30 Minor sections of hedgerow are proposed to be removed to allow access between fields within the Solar Array Area, Cable Route Corridor and Bespoke Access Corridor, so potential nests could be impacted by the construction works. To avoid this impact, site clearance works will be undertaken where possible outside of the active nesting season (taken to be March to August inclusive). In the event that such timescales cannot be accommodated, a check for the presence of active nests will be undertaken by the ECoW prior to commencement of works. Any active nests recorded would be identified and protected until the nesting attempt is complete.

2.6.31 The woodland margin, scattered trees and the majority of the hedgerows which harbour the potential to support nesting birds will be retained and enhanced. This will increase nesting/foraging suitability across the Site.

2.6.32 Along with the habitats being retained, newly created habitats will provide further nesting and foraging opportunities. With the proposed newly created areas of species-rich grassland, hedgerow and native shrubs with trees, it is anticipated that the Site could support a more varied bird assemblage as these habitats develop over time.

Reptiles

2.6.33 The woodland/hedgerow edges may provide widespread foraging and hibernating habitat for reptiles.

2.6.34 In order to avoid adversely impacting upon any reptiles present on the Site, all works within the Site will be undertaken under the guidance of a Precautionary Working Method Statement (PWMS). Measures will include timing the initial habitat clearance works to avoid the hibernation period when reptiles are more sensitive to incidental harm.

2.6.35 The ECoW will be present to supervise the removal of 'optimal' habitat features. The PWMS will be prepared as part of the detailed LEMP(s) submitted for approval by the relevant planning authority, as secured through the **Draft DCO (Document Ref: 3.1)**.

2.6.36 With the retention of the neutral grassland and the creation of species-rich grassland, in particular between the solar arrays and hedgerows, the habitat available to reptiles will be enhanced on Site.

2.6.37 Additionally, two log/brash piles will be created to enhance habitat for reptiles from any type of vegetation removal or tree removal that has occurred on Site.

Maintenance and Implementation

Key personnel and Responsibilities

2.6.38 The Contractors will be responsible for the preparation and implementation of the detailed LEMP(s), which must be substantially in accordance with this OLEMP, during the construction, operation and decommissioning periods of the Proposed Development.

2.6.39 The ECoW will be responsible for the implementation of the landscape mitigation and ecological enhancement proposals and for the monitoring of habitats and species and for ensuring that all construction works are undertaken in accordance with the species licences and / or relevant method statements. The detailed LEMP(s) will include the requirements for the monitoring and maintenance of created habitats.

2.6.40 The ACoW will be responsible for the management of the risks to trees and hedgerows to be retained during construction (and subsequent decommissioning) works at the Site, including advising on the protection and management of the arboricultural resource on the site.

2.6.41 To ensure that maintenance activities do not impact on the generating capacity of the Proposed Development, site maintenance will take place to ensure that no undue shading of solar PV panels or other site management issues occur.

Works Schedule

2.6.42 Table 1.3 describes the actions and indicative schedule which will be followed to maintain and enhance the landscape elements and nature conservation value of the Site.

Monitoring

2.6.43 A full monitoring programme will be developed and agreed as part of the application and included within the detailed LEMP(s). The basis for this programme is set out in this section as follows.

2.6.44 During the establishment aftercare, proposed mitigation planting will be routinely inspected in accordance with the requirements stipulated in the detailed LEMP(s). Inspection will ensure management and maintenance of landscape elements, as identified in the detailed LEMP(s), are undertaken and that the proposed planting achieve their intended environmental function and objective. Monitoring of the establishment, growth and maintenance of landscape planting will be undertaken during the establishment aftercare period to ensure its successful establishment. This will include walkover surveys across the Order Limits to be undertaken between April and June in years 1, 3, 5. Following the establishment maintenance period the surveys will be conducted every 5 years post-construction until year 40. The surveys will involve an inspection of the woodland, hedgerows, grassland, and wetland habitats to ensure that they are being managed effectively.

2.6.45 The monitoring is required to ensure that the objectives set out in this OLEMP are being achieved and whether any remedial management actions are required. The effectiveness of the monitoring will be measured against the pre-construction-baseline survey data.

2.6.46 An annual maintenance check of wildlife boxes would be made each winter to ensure that all boxes are still in position and secure. Some refitting of boxes, repairs and replacements are likely to be required over the life of the Proposed Development.

Table 1.3: Indicative Landscape and Ecological Establishment Management Plan Work Schedule

TABLE 1: LANDSCAPE AND ECOLOGICAL MANAGEMENT PLAN WORK SCHEDULE																				
	Year 1				Year 2				Year 3				Year 4				Year 5			
Task	Dec -Feb	Mar-May	Jun - Aug	Sep - Nov	Dec -Feb	Mar-May	Jun - Aug	Sep - Nov	Dec -Feb	Mar-May	Jun - Aug	Sep - Nov	Dec -Feb	Mar-May	Jun - Aug	Sep - Nov	Dec -Feb	Mar-May	Jun - Aug	Sep - Nov
Identify dead or failing plants and replace with replacement species as directed.						x				x				x				x		
Water new planting as necessary		x	x			x	x			x	x			x	x			x	x	
Tree planting	x	x	x	x																
Tree inspection and management																	x			
Sow grass mix to establish		x		x																
Grassland management		x	x	x			x	x			x	x			x	x			x	x
Waterbody creation	x	x	x	x																
Waterbody Management								x	x			x	x			x	x			x
Hedgerow planting	x	x																		
Hedgerow management									x											