

# Outline Ecological Protection and Mitigation Strategy

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#### 1 Introduction

- 1.1.1 This Outline Ecological Protection and Mitigation Strategy (EPMS) sets out the ecological protection measures for undertaking construction works associated with the proposed Lime Down Solar Farm, hereafter referred to as the Scheme, with the extent of the project being referred to as the Order Limits.
- 1.1.2 This Mitigation Strategy specifically deals with the protection of habitats and species during the construction phase, to include the construction of the Solar Photovoltaic (PV) Panels (and associated access tracks and substations), Battery Energy Storage System (BESS) and installation of cabling within the Cable Route Corridor. Information relating to the management of other environmental issues such as traffic movements, compound locations, site welfare, working hours, services and noise has been provided separately within the Outline Construction Environmental Management Plan (Outline CEMP) [EN010168/APP/7.12] which should be read alongside this document.
- 1.1.3 As this is an Outline EPMS, a final version, which will be more detailed but substantially in accordance with the measures and principles set out within this document, will be submitted to and approved by the relevant planning authorities pursuant to a requirement in the Development Consent Order (DCO) prior to the construction of the Scheme.
- 1.1.4 This Outline EPMS has been informed by extensive baseline ecological surveys carried out to support the Scheme and seeks to address the needs for ecological protection and mitigation within the construction phase as identified by the impact assessment of Environmental Statement (ES) Volume 1, Chapter 9: Ecology and Biodiversity [EN010168/APP/6.1].
- 1.1.5 The purpose of this Outline EPMS is to:
  - Plainly identify known risks to protected and notable species, and to preserve the integrity and/or the function of habitats within the construction phase;
  - Enable the implementation of the mitigation outlined in ES Volume 1,
     Chapter 9 Ecology and Biodiversity [EN010168/APP/6.1];
  - Identify ecologically sensitive areas and indicate where protective buffers/fencing is required;
  - Clearly set out when and where ecological supervision will be required; and
  - Identify roles and responsibilities for undertaking this protective/mitigation work during the construction phase.



- 1.1.6 This Outline EPMS follows the guidelines set out within the Biodiversity Code of Practice for Planning and Development (British Standard, 42020:2013).
- 1.1.7 A separate Outline Landscape and Ecological Management Plan (OLEMP) [EN010168/APP/7.18] has also been prepared for the Scheme, which covers the continued protection, management and enhancement of the ecological receptors, as well as habitat creation prescriptions.
- 1.1.8 A Hedgerow Removal Plan is provided within an Annex A at the end of this document. This plan provides the location and extent of all anticipated permanent and temporary hedgerow removal required as part of the Scheme.

#### 1.2 Responsible Personnel & Lines of Communication

1.2.1 Since this document is an Outline document, roles and responsibilities are not final at this stage. As a requirement in the DCO it will be the responsibility of Lime Down Solar Park Limited (the Applicant) to ensure that this document is complied with by the Principal Contractor.

#### 1.3 Site Manager(s)

1.3.1 The Applicant will be responsible for ensuring that a Site Manager is appointed to each of the Solar PV Sites and Cable Route Corridor teams and that this document has been provided to them. It will be the responsibility of the Site Manager(s) to ensure adequate communication of the applicable prescriptions set out within this Outline EPMS to construction staff and ensure sufficient liaison and forward planning with the Ecological Clerk(s) of Works (EcoCoWs).

#### 1.4 Ecological Clerk of Works

- 1.4.1 An EcoCoW will be appointed to each of the Solar PV Sites and Cable Route Corridor teams and will comprise a suitably qualified ecologist with at least five years' relevant experience. The EcoCoW(s) will assist and advise the Applicant and the Site Manager(s) in their adherence to the requirements of the final EPMS.
- 1.4.2 Typically, a permanent on-site presence is not required. Instead, an appropriately qualified ecologist will attend at pre-arranged and timetabled work stages as set out in this document, as well as being available via an 'on-call' basis throughout the construction phase. This will rely on adequate regular and ad-hoc communication between the Site Manager(s) and the EcoCoW(s). This will enable any rearranged or changed timetables to be accommodated, as well as a prompt response for dealing with any potential habitat or protected species protection and legal compliance issues that could arise during the course of construction.



1.4.3 The EcoCoW(s) will be contacted as early as possible in the unlikely event that any activities on site contravene the measures prescribed in the EPMS, for instance, should there be any unforeseen, but essential requirement to enter any of the Biodiversity Protection Zones. The EcoCoW will be consulted prior any such action being carried out unless in emergency situations.

#### 1.5 Contact Details

**Table 1: Key Contact Details** 

Personnel/ Contact	Company	Primary Contact	Address	Contact Details
Main Contractor	ТВС	TBC	TBC	Email: TBC Telephone: TBC
EcoCoW	TBC	TBC	ТВС	Email: mailto:TBC Telephone: TBC
Wildlife Rescue Centre	RSPCA Oak and Furrows	-	Blakehill Nature Reserve Leigh, Malmesbury Rd, Cricklade, SN6 6RH	Telephone: 01793 751412
Pollution Incident Contact	Environment Agency	ТВС	TBC	Telephone: 0800 807060

#### 1.6 Designated Sites

- 1.6.1 The following designated sites occur in close proximity (within 300 m) to the Order Limits (as discussed in **ES Volume 1, Chapter 9: Ecology and Biodiversity [EN010168/APP/6.1]**) and are of principal concern within this document:
  - Sites of Special Scientific Interest (SSSIs) within 300 m of Order Limits:
    - Harries Ground, Rodbourne SSSI.
  - Local Wildlife Sites (LWSs) within 300 m of Order Limits:
    - Chalkenhams LWS;
    - Brickyard Scrub LWS;
    - Bincombe Wood LWS;
    - Bradfield Wood LWS;
    - Lord's Wood LWS;
    - Rodbourne Plantation LWS;



- Seagry Wood and Oak Hill LWS;
- Surrendell Wood LWS;
- Bybrook Meadow LWS;
- Bristol Avon River LWS;
- Foxley Green LWS;
- West Park Wood East LWS;
- West Park Wood West LWS;
- Lower Easton Town Farm Meadows LWS;
- Lower Farm Meadows, Sherston LWS; and
- New House Farm Meadows LWS.

#### 1.7 Habitats

- 1.7.1 The following habitats occur within the Order Limits and are of principal concern within this document. All Method Statements refer to the protection of these habitats.
  - Woodland:
  - Scrub;
  - Hedgerows and Trees;
  - Grassland;
  - Traditional Orchard;
  - Ditches and Watercourses; and
  - Ponds.

#### 1.8 Species and Species Groups

- 1.8.1 The following species occur, or may occur, within the Order Limits and are of principal concern within this document:
  - Badgers Meles meles See Method Statement 8;
  - Bats See Method Statements 4, 5 & 6;
  - Dormice Muscardinus avellanarius See Method Statements 5, 6 & 13;
  - Otters Lutra lutra See Method Statements 3, 5, 6 & 9;
  - Water Voles Arvicola amphibius See Method Statements 3, 5, 6 & 9;

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- Beavers Castor fiber See Method Statements 3, 5 & 6;
- Brown Hares Lepus europaeus See Method Statements 3, 5 & 6;
- Harvest Mice *Micromys minutus* See Method Statements 3, 5 & 6;
- Hedgehog Erinaceus europaeus See Method Statements 3, 5 & 6;
- Polecats Mustela putorius See Method Statements 3, 5 & 6;
- Reptiles See Method Statements 3, 5 & 6;
- Amphibians See Method Statements 3, 5, 6 & 11;
- Breeding Birds (Including Ground Nesting Birds of Open Habitats) See Method Statements 5, 6 & 10;
- Overwintering Birds See Method Statements 5, 6 & 11;
- Invertebrates See Method Statements 3, 5 & 6;
- White-clawed Crayfish Austropotamobius pallipes See Method Statements 3, 5, 6, 7 & 14;
- Freshwater Fish See Method Statements 3, 5, 6 & 7; and
- Invasive Species See Method Statement 15.

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#### 2 Method Statement 1: Toolbox Talks

#### 2.1 Objectives

2.1.1 Toolbox Talks are important for communicating the location and nature of the legally protected and sensitive ecological features that are present within the Order Limits to all site staff and visitors. Toolbox Talks also set out the responsibilities of all site staff in avoiding and minimising harm to protected species and habitats, and will outline the relevant ecological legislation.

#### 2.2 Toolbox Talks

- 2.2.1 Prior to the commencement of works at any of the Solar PV Sites, or cable route installation, a toolbox talk will be provided by the EcoCoW to the Site Manager(s) and contractors. The toolbox talk will include details of the EPMS and will highlight the whereabouts and sensitivity of the various ecological features present within each area. The talk will establish the role of the EcoCoW and site personnel during works, and what to do if protected species/ecological constraints are found during works.
- 2.2.2 In the event a change in Site Management personnel occurs during construction or a pause in works of a period of more than 30 consecutive days occurs, a toolbox talk will need to be provided again by the appointed EcoCoW. The Site Manager(s) will inform the EcoCoW of any forthcoming management changes or breaks in the construction programme. The Site Manager(s) will be responsible for relaying information within the toolbox talks to all subsequent site staff during their initial site inductions.
- 2.2.3 The EcoCoW will provide the Site Manager(s) with materials and mapping which can be used to illustrate the whereabouts and nature of ecological features within site inductions.
- 2.2.4 The various Method Statements in this document contain further information to be included within toolbox talks specific to certain species or operations.



# Method Statement 2: Installation of Biodiversity Protection (Buffer) Fencing

#### 3.1 Objectives

- 3.1.1 The majority of the Scheme's valuable ecological features are contained within field boundaries. As such, it is essential that Biodiversity Protection Fencing (BPF) is installed at the onset of the construction phase to ensure damage and degradation to these features does not occur.
- 3.1.2 Installation of BPF contributes to the protection of all designated sites, important habitats and protected species listed in Sections 1.6 1.8 of this document.

#### 3.2 Toolbox Talk

- 3.2.1 Prior to the commencement of works within the Order Limits, a toolbox talk will be provided by the EcoCoW to the Site Manager and contractors. The toolbox talk will include details of the EPMS and the requirements for BPF contained below, highlighting ecological features within each area. The talk will establish the role of the EcoCoW and site personnel during works, and what to do if protected species/ecological constraints are found during works.
- 3.2.2 In the event a change in Site Management personnel occurs during construction or a pause in works of a period of more than 30 consecutive days occurs, the toolbox talk will need to be provided again by the appointed EcoCoW. The Site Manager will be responsible for relaying information within the toolbox talk to all subsequent site staff during their initial site inductions.

#### 3.3 Solar PV Sites

- 3.3.1 The design of the Scheme is such that buffer zones of between 8 and 50 m from each of the field boundaries have been incorporated into the layout of the Solar PV Panels, access tracks, inverters, substations and battery energy storage infrastructure. The buffer widths correspond to the ecological value of each boundary and/or its sensitivity to potential impacts. Therefore, construction-phase BPF will be installed in line with these buffer extents.
- 3.3.2 The locations and widths of all buffer zones are illustrated in **ES Volume 3**, **Appendix 9.9: Schedule of Protective Ecological Buffers**[EN010168/APP/6.3]. Biodiversity Protection Fencing will be installed as a priority during the mobilisation and preparation tasks in the construction phase. This will either comprise temporary 'Heras'-style fencing or, in the case of the 'external' or perimeter scheme boundaries, the operational security fence would serve the dual purposes of construction-phase protection and ongoing security. Consequently, practically all field boundaries will require the installation of construction phase BPF. Security fencing will comprise 2 m tall deer-proof fencing installed on wooden posts.



- 3.3.3 Biodiversity Protection Fencing will also be used to protect all individual infield mature trees as set out in **ES Volume 3, Appendix 10-1: Arboricultural Impact Assessment and Outline Method Statement**[EN010168/APP/6.3]. Tree protection fencing will be installed in accordance with British Standard 5837:2012 Trees in relation to design, demolition and construction.
- 3.3.4 The location of all BPF will be agreed and confirmed between the EcoCoW and Site Manager(s) prior to commencement of installation to ensure clarity on all buffer zone widths, access and fencing specification requirements. This will minimise the chance of any ad-hoc call-outs of the EcoCoW being required during the installation.
- 3.3.5 All installed BPF will be inspected by an EcoCoW during and/or on completion of installation to ensure it complies with the correct specification and is installed in the correct locations.
- 3.3.6 The fencing will be subject to regular checks by the EcoCoW as per Method Statement 17; however, it will be the responsibility of the Site Manager(s) to ensure the fence is appropriately maintained throughout the construction phase.
- 3.3.7 During construction, no site personnel or machinery shall enter the Buffer Zones by crossing the BPF and no equipment will be stored therein. The only exceptions will be where access for essential/unavoidable operations have been agreed in advance with the EcoCoW.
- 3.3.8 For reference, the BPF will be installed according to the following criteria which were used to determine buffer zone widths:
  - 8 m minimum from ditches;
  - 10 m minimum from ditches with signs of water vole, ponds where great crested newts (GCN) *Triturus cristatus* are absent, 'outlying' or 'annexe' badger setts, or individual trees;
  - 15 m minimum from all woodland, hedgerows, lines of trees, and designated sites, as well as some minor watercourses depending on their ecological value;
  - 30 m minimum from 'main' or 'subsidiary' badger setts;
  - 50 m from ponds with confirmed evidence of GCN, or where the presence of GCN has been assumed due to inconclusive results;
  - Other, bespoke buffers around bat roosts and the nesting sites of Schedule 1 birds will be implemented on a case-by-case basis, taking into account the specific species' requirements.



3.3.9 In areas where two or more such features are present, the largest set minimum buffer will be applied. For instance, where a hedgerow is present alongside the top of a ditch bank, a minimum undeveloped buffer of 15 m will be retained from the outer edge of the hedgerow which will also encompass the 8-10 m applicable ditch buffer.

#### 3.4 Cable Route Corridor

- 3.4.1 The cable installation work involves the open cutting of a trench to receive cable ducts and jointing bays through which cables are pulled into place. In order to facilitate this, a temporary haul route will be implemented alongside the cable route, together with intermittent site compounds and set-down areas and the opening of temporary accesses from nearby roadways. Where certain physical obstacles are present, or features of high ecological, heritage or landscape importance are present, Horizontal Directional Drilling (HDD) will be utilised to avoid damage. A schedule of crossings has been produced (see ES Volume 3, Appendix 11-1: Flood Risk Assessment and Drainage Strategy Covering Report [EN010168/APP/6.3]) to show which features will be crossed through open cut techniques or HDD. Measures relating to the use of HDD are provided in Method Statement 8. Where open cut trenching is utilised, gaps though boundaries/habitats will measure up to 12 m wide in order to accommodate a haul route and trench.
- In terms of BPF, it is necessary to minimise habitat impacts as far as possible, so that only the minimum length of habitat is removed at boundary crossings due to receive open cut trenches. To this end, fencing will be installed comprising two short lengths of Heras-style fencing (each approximately 2-4 panels, depending on the presence/width of boundary habitats as directed by the EcoCoW) installed at right angles on either side of the boundary feature to stop any encroachment beyond the 12 m gap width (see **Figure 1** below).
- 3.4.3 Where hedgerows lie within Wiltshire Impact Zones for Bat Species, the 12 m wide hedgerow breaches along the Cable Route Corridor will be narrowed to a maximum 10 m width. The locations of the Impact Zones for Bat Species in relation to the Cable Route Corridor are presented in ES Volume 2, Figure 9-1-4: Wiltshire Impact Zones for Bats, [EN010168/APP/6.2].



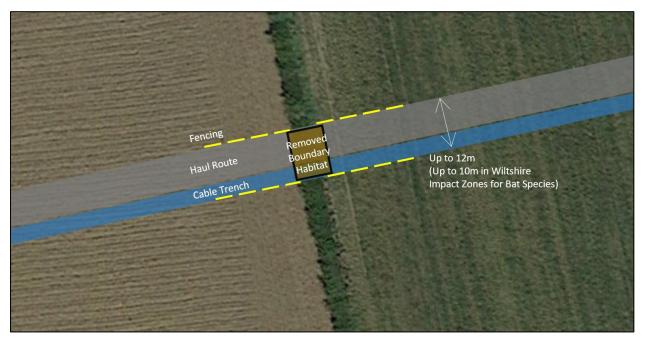


Figure 1: Indicative Layout of Protection Fencing at Boundary Habitat Crossings

- 3.4.4 The location of all BPF on the cable route will be agreed and confirmed between the EcoCoW and Site Manager(s) prior to commencement of installation at each crossing to ensure clarity on all fencing specification requirements.
- 3.4.5 All installed BPF will be inspected by an EcoCoW during and/or on completion of installation to ensure it complies with the correct specification and is installed in the correct locations. It will be the responsibility of the Site Manager(s) to ensure the fence is appropriately maintained throughout the construction phase.
- 3.4.6 During construction, no site personnel or machinery shall cross beyond the BPF nor shall any equipment be stored in there, unless considered essential and this has been discussed and agreed in advance with the EcoCoW.



## 4 Method Statement 3: Pollution Prevention Measures

#### 4.1 Objectives

- 4.1.1 The majority of the Scheme's valuable ecological features are contained within field boundaries, particularly hedgerows, ditches and watercourses. Other habitats are also located within the Order Limits, including ponds, woodland, unmanaged grassland and scrub. Additionally, designated sites in proximity to the Order Limits are listed in Section 1.6. Species groups at particular risk from pollution events are freshwater fish, terrestrial and aquatic invertebrates, amphibians, small mammals, otters and water voles.
- 4.1.2 Potential pollution events include the release of chemicals (including oils, fuels and cleaning agents), sediments (including mud, soil and silt) and dust (especially during dry weather). These pollutants can be released either in their own right or through excessive surface water runoff (e.g. during periods of prolonged rain, flooding or disruption of water courses/pipework).
- 4.1.3 The installation of BPF as set out in Method Statement 3 is considered to significantly reduce the likelihood of pollution events occurring through implementing a suitably wide offset between construction activities and sensitive habitats. However, the following additional pollution prevention measures will be adopted to aid further risk reduction.
- 4.1.4 All measures apply to the Solar PV, BESS and cable installation elements of the Scheme.
- 4.1.5 This Method Statement should be read in conjunction with the **Outline Construction Environmental Management Plan (Outline CEMP)**[EN010168/APP/7.8] produced for the Scheme which details general (i.e. not ecology-specific) pollution protection measures, including the protocols for responding to environmental incidents and emergencies

#### 4.2 Toolbox Talk

- 4.2.1 Prior to the commencement of works at any of the Solar PV Sites, or cable route installation, a toolbox talk will be provided by the EcoCoW to the Site Manager and contractors. The toolbox talk will include details of the EPMS, the sensitivity of ecological features to impacts from pollution, and the requirements for prevention measures contained below. Highly sensitive ecological habitats will be discussed and the need for any proportionate risk reduction measures. The talk will establish the role of the EcoCoW and site personnel during works, and what to do if protected species/ecological constraints are found during works.
- 4.2.2 In the event a change in Site Management personnel occurs during construction or a pause in works of a period of more than 30 consecutive



days occurs, the toolbox talk will need to be provided again by the appointed EcoCoW. The Site Manager will be responsible for relaying information within the toolbox talk to all subsequent site staff during their initial site inductions.

#### 4.3 Working During Prolonged Wet Weather

- 4.3.1 Work during periods of prolonged wet weather shall be avoided wherever possible to avoid churning of soils and the release of mud and sediments and/or excessive surface water runoff. The EcoCoW should be consulted should heavy rain on at least three consecutive days be forecast or occur in order to determine whether works should pause or be relocated to less sensitive areas, depending on construction progress and the location/proximity of particular sensitive ecological features.
- 4.3.2 The **Outline CEMP [EN010168/APP/7.12]** contains several measures which specifically deal with the mitigation of potential contamination of watercourses by surface runoff.

#### 4.4 Working During Prolonged Dry Weather

4.4.1 Working during extended dry periods risks dust deposition onto retained sensitive ecological features, including those beyond the Order Limits. As such, the Site Manager(s) should consider the use of sprayed water to dampen earthworks and/or access routes and other dust suppression measures, such as covering stockpiles as required in order to control this risk. The EcoCoW should also be consulted in order to advise on any particular ecological features which should be avoided entirely during such times, for example ponds, LWSs and major watercourses in proximity to the working areas.

#### 4.5 Minimisation of Water and Sediment Runoff

4.5.1 The **Outline CEMP [EN010168/APP/7.12]** contains several measures which specifically deal with the mitigation of potential water runoff and the prevention of potential discharge of contaminants into local watercourses. These include measures such as silt fencing, temporary attenuation, and designated washdown areas, developed in line with Environment Agency and Construction Industry Research and Information Association (CIRIA) guidance.

#### 4.6 Use and Storage of Chemicals, Fuels and Oils

4.6.1 The **Outline CEMP [EN010168/APP/7.12]** contains several measures which specifically deal with the avoidance of potential water runoff. These measures specifically deal with the minimisation of risk of chemical and contaminant release through their safe usage and storage, and use of spill kits etc. Additionally, as a rule, all refuelling and washing or plant/vehicles,



and storage of all potential contaminants will occur at least 20 m from all BPF.

#### 4.7 Compliance with Guidance for Pollution Prevention

4.7.1 The Site Manager(s) will ensure construction complies with Pollution Prevention for Businesses as prepared by Defra and the Environment Agency.

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#### **5** Method Statement 4: Construction Phase Lighting

#### 5.1 Objectives

5.1.1 Artificial lighting has the potential to adversely impact wildlife, including freshwater fish, aquatic and terrestrial invertebrates, small mammals and bats, and is not restricted to nocturnal species.

#### **5.2** Ecologically Sensitive Lighting Strategy

- 5.2.1 Artificial lighting at night may potentially be utilised during construction across the Scheme where night-time working is unavoidable. It is understood that night-time working will not be employed apart from specific activities including the delivery of abnormal loads and HDD.
- 5.2.2 Artificial working-area lighting in these exceptional operations will be minimised as far as possible between sunset and sunrise from the months of March to October inclusive during the construction phase of all elements of the Scheme. This aims to limit the potential for adverse impacts on the above species groups (especially bats) during the times of the year when they are most active and therefore sensitive.
- 5.2.3 Between the months of November and February inclusive, where lighting is considered essential, construction temporary site lighting in the form of mobile lighting towers will be positioned to ensure that light is directed onto the area of works only with as minimal light spillage onto the hedgerows/woodland as possible. The use of LED lighting and cowls, hoods and other similar screens will be adopted. Any working-area lighting requirements will be discussed and reviewed with the EcoCoW.
- 5.2.4 Any unavoidable artificial lighting during the hours of darkness required within the period March to October inclusive will only be permitted following consultation with the EcoCoW in order to determine the severity of potential impacts and appropriate mitigation steps, including agreed hours of operation and numbers/specification of luminaires.
- 5.2.5 Security lighting may be installed on temporary site compounds and permanent structures following consultation with the EcoCoW to establish appropriate locations. Security lighting will be limited to the minimum number of luminaires required, and based on the sensitivity of the habitats potentially affected and baseline lux levels. Security luminaires will be motion-sensitive and set on a short (less than2 minute) timer and oriented to reduce upward light spill as far as possible (i.e. horizontally oriented) in order to reduce the potential impact on light sensitive species such as bats.



# 6 Method Statement 5: Permanent Habitat Removal (Solar PV Sites) - including Avoidance of Impacts on Protected Species

#### **6.1** Objectives

- 6.1.1 Habitat removal will be necessary in a limited number of locations, for example to permit construction/operational access and the installation of the cable route.
- 6.1.2 Many habitats within the Order Limits support protected species or are important in their own right. Consequently, their removal whether temporary or permanent will require precautionary measures to mitigate the impacts of their loss and/or the potential for unlawful or detrimental impacts on the species they support.
- 6.1.3 Habitats which are of particular value include: hedgerows, ditches (dry or wet), woodland, individual trees, scrub, grassland, field margins, streams, rivers and ponds.

### **6.2 General Precautionary Approach to Habitat Removal Works**

- 6.2.1 The Site Manager(s) shall be responsible for liaising with the EcoCoW in order to agree locations and timings of advance inspections and clearance attendance, including all species-specific measures set out below, as necessary.
- 6.2.2 Habitat clearance, for example (but not limited to) the sections of hedgerow required for new construction accesses and cable installation within the Cable Route Corridor, should be undertaken during the months of March to October inclusive. This will avoid the principal hibernation season for species groups such as reptiles and amphibians and so avoid unlawful harm to these species. Should this not be possible, further precautions will be necessary, such as the possibility of taking any hibernating animals discovered during clearance into care over the winter, or translocation to suitable nearby receptor habitat or specially created hibernacula.
- Wherever the above habitats listed in bold are to be affected, an EcoCoW will be present and have undertaken an inspection in advance to ensure legal compliance and avoid undue harm to species potentially present.
- 6.2.4 Habitat clearance will be conducted under an EcoCoW-led ecological watching brief in order to ensure species such as nesting birds, reptiles, amphibians and small mammals are not harmed. Depending upon the nature and density of the vegetation, this inspection may include a combination of a fingertip inspection of vegetation and early morning surveillance of habitat for evidence of bird nesting behaviour. Further species-specific information is



- given in the sections below. The vegetation may also need to be cleared a small amount at a time to allow the EcoCoW to search the area thoroughly.
- 6.2.5 Habitat removal at wet ditches will observe good practice guidance on the use of temporary dams and sediment traps. The input of a hydrological engineer is advisable in order to minimise drainage disruption and localised flooding. All permanently breached ditches should remain interconnected via the use of culverts or clear-span crossings.

# 6.3 Tree and Building Inspections for Roosting Bats and Nesting Birds

- No works involving the removal of buildings are anticipated, however some unavoidable losses of trees may occur within the Cable Route Corridor. In the event that construction works require trees or buildings to be impacted, altered or removed, these will be thoroughly inspected by a suitably qualified (and licensed, in the case of bats) ecologist in advance. This includes where new or existing access tracks are to be used by heavy plant during construction within approximately 10 m of retained buildings, since significant noise and vibration could result in disturbance to strictly protected species such as bats and nesting barn owls.
- 6.3.2 Depending on the nature of proposals within a particular area and the potential for roosting bats to be present, further surveys may be recommended. In the event a bat roost is discovered which is likely to be impacted by works, a licence from Natural England may be required in order to proceed lawfully and ensure adequate compensation for roost losses is provided.
- 6.3.3 In the event that active bird nests are recorded, works may need to temporarily cease or be delayed until nesting is completed. Losses of nesting opportunities should be compensated as advised by the EcoCoW.

#### 6.4 Nesting Bird Surveys

- 6.4.1 Clearance of hedgerow, ditch, scrub, trees, woodland and tussocky grassland should be avoided between the months of March and August inclusive due to the risk of unlawful impacts on nesting birds. However, where work to suitable habitat within this period is absolutely unavoidable, a nesting bird check will be required. This will consist of one or more visual inspections of the habitat to be affected by an appropriate number of suitably experienced ecologists to look for signs of nesting behaviour or nests themselves. Such inspections will likely need to be carried out in the early morning prior to construction activities commencing on site for the day.
- 6.4.2 Where any active bird nests are found, a buffer zone of at least 10 m (actual distance dependent upon species and nest location, as advised by the EcoCoW) will be created around the nest, the buffer maintained and not



disturbed until the nest is no longer in use. Depending upon the location, protective fencing may be appropriate. The ecologist will be able to advise on the anticipated date of fledging based upon the status of the nest and the species involved. Regular inspections of the nest site by an EcoCoW around the anticipated date of fledging will be necessary to ensure works can continue once the birds have fledged.

6.4.3 This advice applies to species nesting in woody vegetation which includes the majority of British birds. However, specific advice on precautions for ground nesting birds which may be present within arable or pasture habitats where the majority of the Solar PV Panels, BESS and Cable Route Corridor are situated is contained in Method Statement 11, and precautions for large flocks of overwintering birds in Method Statement 12.

#### 6.5 Badgers

6.5.1 See Method Statement 9 for specific measures relating to badgers.

#### 6.6 Riparian Mammals

6.6.1 See Method Statement 10 for specific measures relating to riparian mammals.

#### 6.7 Dormice

6.7.1 See Method Statement 14 for specific measures relating to dormice.

## 6.8 Other Small Mammals - Including Polecat, Hedgehog, Brown Hare and Harvest Mouse

As it is an offence to cause harm to wild mammals, the EcoCoW will carry out a fingertip search of all habitat to be removed before and during the clearance operation as appropriate. Any burrows discovered will either be avoided where practicable through alteration of the location of works, or if unavoidable, be destructively searched by hand and in a methodical manner in order to ensure no animals are trapped underground or harmed. Any animals discovered during works will be relocated by hand, where collection is possible, to a suitable undisturbed location to be determined by the EcoCoW. Any injured animals should be taken to the nearest wildlife rescue service as given at the front of this document.

#### 6.9 Reptiles and Amphibians

- 6.9.1 See Method Statement 12 for specific measures relating to great crested newts.
- 6.9.2 Habitat clearance areas will also be thoroughly inspected by hand before and during works for widespread reptile and amphibians species such as toads *Bufo bufo* and slow worms *Anguis fragilis*, in order to remove any animals as



the clearance works progress. Any amphibians, reptiles or other animals will be hand released in suitable nearby retained habitat as determined by the EcoCoW.

- 6.9.3 The locations to be used for the creation of reptile hibernacula (as prescribed within the Outline Landscape and Ecological Management Plan (Outline LEMP) [EN010168/APP/7.18]) will be chosen for their proximity to and connectivity with nearby habitat suitable for reptiles, including tussocky grassland, scrub and hedgerows.
- 6.9.4 In order to avoid inadvertent mortality of reptiles during this process, the creation works will not take place within the winter months (November to February inclusive) or during temperatures below 8°C and all areas of the habitat mentioned above will be hand searched and removed with hand tools only once reasonable likelihood or absence of reptiles has been established. All such habitat creation work should be carried out by individuals with experience of identifying reptiles and their habitat.

#### 6.10 White-clawed crayfish

6.10.1 See Method Statement 15 for specific measures relating to white-clawed crayfish.

#### **6.11 Invasive Non-Native Species**

6.11.1 See Method Statement 16 for specific measures relating to Invasive Nonnative Species (INNS).



# 7 Method Statement 6: Temporary Habitat Removal and Reinstatement (Cable Route Corridor) - including Avoidance of Impacts on Protected Species

#### 7.1 Objectives

- 7.1.1 The installation of export cables within the Cable Route Corridor will involve the temporary removal and reinstatement of habitats such as grassland, hedgerows and ditches. These habitats are of value in themselves, but also have the potential to support protected species such as nesting birds, reptiles, amphibians, otters and water voles.
- 7.1.2 All precautions contained within Method Statement 6 will be followed in carrying out habitat removal works in relation to the Cable Route Corridor. Further steps set out below will be followed to ensure adequate habitat reinstatement. It is anticipated that the working width during cable route construction will measure approximately 25 m in width, comprising a haul route and the cable trench itself, with additional soil storage, intermittent jointing bays and set down areas/compounds. The working width will narrow to 10-12 m at hedgerow crossing points along the Cable Route Corridor. Habitat removal is anticipated to occur in all these locations, however temporary trackway matting or other temporary removable surfaces would aid the minimisation of habitat losses.
- 7.1.3 All habitat reinstatement works will be designed with input and site-specific knowledge from the EcoCoW and monitored for success by them thereafter.

#### 7.2 Grassland

- 7.2.1 Grassland occupies a proportion of the habitats within the Cable Route Corridor. Wherever possible, turf should be stripped and set aside during initial trench cutting for eventual replacement, where cable installation works are anticipated to be of a short enough duration for the turf to be successfully replaced.
- 7.2.2 Where this is not a viable option, backfilled trenches and disturbed ground will be prepared (topsoil application, rolled and harrowed as necessary) and grassland will be re-seeded over it. An appropriate seed mix will be used which will be in keeping with, or of greater diversity than, the habitat type and species assemblage as recorded during baseline habitat surveys.
- 7.2.3 All such habitat creation work should be carried out by suitably qualified or experienced landscaping contractors or ecologists.



#### 7.3 Hedgerows

- 7.3.1 Hedgerow sections to be cleared should be translocated wherever practicable. This will involve the removal of hedgerow plants to include their rootballs, to be set aside until they can be replanted in the original location. Translocation is likely only to be successful when undertaken during the autumn and winter months when plants are most dormant, and when the duration of trenching at a particular location is short enough to allow plants to survive being removed for this period. The decision of whether conditions allow for the translocation of hedgerow will be made by the EcoCoW, and will take into account any other risks associated with removing hedgerows during the autumn/winter months (such as the possibility of encountering great crested newts).
- 7.3.2 Where translocation is not possible, hedgerows will be replanted using whips of the same species as was removed, with the addition of a proportion of other locally appropriate species to increase diversity. Planting should be undertaken in the first planting season (autumn or winter) following removal to ensure a high degree of success and be planted with tree guards to protect against herbivore browsing.
- 7.3.3 All such habitat creation work should be carried out by suitably qualified or experienced landscaping contractors or ecologists.

#### 7.4 Rivers and Streams

- 7.4.1 Where open-cut trenching is used at cable route watercourse crossing points, standard best practice measures will be adopted, including the avoidance of works within key spawning seasons for salmonids (avoiding works between October to February inclusive). Additional measures may include the capture and translocation of fish from the working area to suitable habitats upstream or downstream, prior to the dewatering of the channel, as well as EcoCoW supervision of the work. Any lighting required at watercourse crossing points will also be installed to avoid light spill into the watercourse itself wherever possible, to avoid potential impacts to migrating and spawning fish which may be present.
- 7.4.2 Post-construction monitoring (as detailed in Method Statement 17) will also be conducted to ensure that the affected aquatic and terrestrial habitats are suitably reinstated and that any remedial measures required are identified.

#### 7.5 Ditches

7.5.1 Minor agricultural field drains and ditches will be subject to open cut trenching unless otherwise identified as being of particular ecological importance as to require HDD techniques. The majority of these ditches are only seasonally wet and are of relatively lower ecological value. Wherever possible, and where the duration of works at a particular location allows, any



- aquatic or marginal plants should be collected for later replanting to minimise the recovery of the habitat after completion of works.
- 7.5.2 All ditch impacting works will follow good practice guidance on the use of sediment/silt traps and temporary dams to minimise the risk of drainage disruption, sediment release and local flooding.
- 7.5.3 All such habitat creation work should be carried out by suitably qualified or experienced landscaping contractors or ecologists.

#### 7.6 Arable

7.6.1 Arable fields occupy the vast majority of land within the cable route corridor and are of little intrinsic ecological value, therefore no specific reinstatement protocol is required.

#### 7.7 Traditional Orchard

- 7.7.1 A small quantum (0.1 ha) of Traditional Orchard habitat is present within the Cable Route Corridor. This area contains a small number of remnant apple trees, most of which are outside of the Order Limits and will not be impacted. A single apple *Malux sp.* tree lying within the Order Limits may be impacted during cable route installation.
- 7.7.2 In the first instance, all effort will be made to avoid the removal of the fruit tree. However, where impacts cannot be avoided, then the below outline remedial measures will be followed. If it is deemed that impacts cannot be entirely avoided, these measures would be formalised in an Orchard Tree Remediation Plan document as part of the final EPMS.
- 7.7.3 A detailed survey of this habitat and the apple tree within the Order Limits will be carried out by the EcoCoW and, if necessary, an arboriculturist, prior to the finalisation of the EPMS, and prior to construction commencing in this section of the Cable Route Corridor. The intention of the survey would be to assess the suitability of the tree within the Order Limits to support protected species (such as bats and nesting birds), as well as to assess the structural integrity of the tree and the likelihood of success of translocating the tree to elsewhere within the habitat parcel.
- 7.7.4 If the tree is suitable for translocation, then this would be the favoured approach over the felling and removal of the tree. A strategy for the translocation of the tree would be prepared in collaboration with the arboriculturist prior to work commencing within this area, which may include measures to avoid/mitigate impacts on protected species such as bats and nesting birds (as detailed in Method Statement 6), should they potentially be present within the tree and/or the working area.
- 7.7.5 It is important to note that tree translocation (particularly of mature trees) is a specialist and technical operation, and there is a risk, even when taking all



necessary precautions, that the tree will not survive the translocation. Therefore, as a further measure, the Orchard Tree Remediation Plan would include the planting of additional fruit trees within the orchard area. These trees would either compensate for the loss of the single fruit tree (if the tree is not suitable for translocation and requires removal, or if the tree is translocated but does not survive), or would provide a minor habitat enhancement of the Traditional Orchard habitat (if the affected tree is translocated and survives).



# 8 Method Statement 7: Precautionary Horizontal Directional Drilling Methodology

#### 8.1 Objectives

8.1.1 The use of trenchless techniques such as HDD during cable installation will avoid direct habitat damage and degradation in particularly ecologically sensitive locations. However, there still remains the risk of damage through improper siting of entry/exit pits and the potential for excessive vibration to cause disturbance to species such as freshwater fish or release of sediments which could harm watercourses and aquatic invertebrates among other species.

#### 8.2 Precautionary Approach to HDD Works

- 8.2.1 The Site Manager will be responsible for liaising with the EcoCoW to agree timings and locations of HDD operations to ensure attendance at each event.
- 8.2.2 The EcoCoW will advise on the most appropriate locations for entry and exit pits as well as associated access and set down areas in order to avoid impacts on retained habitats of ecological value such as arable field margins, hedgerows and diverse grassland. The EcoCoW may undertake hand searches of habitat to be removed as necessary. Entry and exit pits will be set back from the bank tops of watercourse by a minimum of 10 m.
- 8.2.3 Where HDD is used under watercourses deemed suitable to regularly support migratory species such as eels Anguilla anguilla and sea trout Salmo trutta, including Gauze Brook, Gabriel's Well Brook, Pudding Brook, Pudding Brook Tributary and Byde Mill Brook, (the Crossing Schedule in Volume 3, Appendix 11.1: Flood Risk Assessment and Drainage Strategy - Covering Report [EN010168/APP/6.3] refers), the EcoCoW will discuss the risk of causing excessive vibration and the release of sediments with the operatives and engineers overseeing HDD works to ensure an adequate depth is used. A depth of no less than 5 m below the channel bed is to be used in these locations. Here, the EcoCoW will monitor the water column for sediment release during all stages of HDD work. Drilling may need to temporarily cease until depths and working methods can be adequately readjusted. Advice from the Environment Agency or a specialist hydrological engineer may be required in order to help contain sediments during works, including the use of silt traps.
- 8.2.4 Entry and exit pits will be covered overnight to avoid trapping species such as badgers and other small mammals (see Method Statement 9).



#### 9 Method Statement 8: Specific Measures for Avoidance of Impacts on Badgers

#### 9.1 Objectives

9.1.1 Multiple badger setts have been identified within and adjacent to the Order Limits. Badgers are also likely to use the land within the Order Limits for foraging and dispersal in various locations. Badgers are legally protected from disturbance and harm, as well as interference with their setts. Measures given here will ensure that development works proceed lawfully.

#### 9.2 Pre-commencement Survey

- 9.2.1 As badgers can excavate new setts in a relatively short time, an update survey for badger setts of land within the Order Limits prior to construction commencing will be necessary. This will specifically focus on all habitats potentially suitable for sett excavation by badgers on within the Order Limits, in particular hedgerows, field margins, scrub, tussocky grassland and woodland or groups of trees. The survey will pay close attention to locations of these habitats which are the subject of habitat loss or land use change under the works plans. The locations of new hedgerow gaps for construction access or cable trenching will be particularly key, but also locations where landscaping, access tracks, fencing, and other infrastructure will be installed within a 30 m radius of suitable habitats.
- 9.2.2 The survey will be carried out by an appropriately experienced ecologist (EcoCoW) who is an associate or full member of CIEEM with prior experience of surveying for badgers.
- 9.2.3 The survey will be carried out no more than 2 months prior to the commencement of construction activities within a particular area at the Solar PV Sites or section of Cable Route Corridor. The Site Manager(s) will liaise with the EcoCoW to ensure that this survey is completed in good time ahead of works in a particular location.
- 9.2.4 The survey will look for evidence of badger activity within the Order Limits, including setts, paths, hairs, footprints or faeces and record the location of and type of all setts present, as well as their activity status. Where necessary, should any new setts be identified, the BPF as detailed in Method Statement 3 will be adapted to incorporate a revised buffer zone around the identified entrances. Typically, 'outlying' or 'annexe' setts require a minimum 10 m buffer, while 'subsidiary' and 'main' setts require a minimum 30 m buffer.



9.2.5 The results of the survey/s will be communicated to the Site Manager(s) with any necessary recommendations for revised buffers or precautionary working methods and supervision.

#### 9.3 Toolbox Talk

- 9.3.1 Prior to the commencement of works at any of the Solar PV Sites, or cable route installation, a toolbox talk will be provided by the EcoCoW to the Site Manager and contractors. The toolbox talk will include details on the potential for encountering badger setts and other mammal burrows during works to suitable habitats, along with information on their legal obligations and what to do if a sett or burrow is discovered. The talk will establish the role of the EcoCoW and site personnel during works.
- 9.3.2 In the event a change in Site Management personnel occurs during construction or a pause in works of a period of more than 30 consecutive days occurs, the toolbox talk will need to be provided again by the appointed EcoCoW. The Site Manager will be responsible for relaying information within the toolbox talk to all subsequent site staff during their initial site inductions.

#### 9.4 Licensed Sett Closure

- 9.4.1 Any newly-discovered setts will ideally be avoided by construction works if practicable, under the advice of the EcoCoW.
- 9.4.2 In the event that an active sett is to be unavoidably impacted by construction activities, a licence from Natural England would likely be necessary to temporarily or permanently close the sett prior to works commencing. Works to badger setts can only be undertaken between July and November inclusive due to the possibility of dependent young being underground at other times of year. Outside of this licence period no works affecting the sett would be permitted and a buffer zone free of potentially disturbing activities (i.e. noise, damage or vibration), as informed by the EcoCoW, would be required. Work in other parts of the Order Limits, however, can continue as advised by the EcoCoW. It can take up to six weeks for a licence application to be determined by Natural England, depending on the licence type being applied for.

#### 9.5 Precautionary Approach to Excavations Left Overnight

9.5.1 It is likely that badgers (and other mammals) will move around within the Order Limits during the construction phase considering the open habitats present. Therefore, any pits or trenches dug during the construction phase (particularly during the cable installation works and use of HDD entry/exit



pits) must have a means of escape placed in them overnight for trapped badgers (and other animals) to use, or be covered overnight if possible. Examples include rough sawn planks or earth ramps. Similarly, all open ducting and pipework left within any pits or trenches must be temporarily capped off overnight. The use of these measures will be periodically checked by the EcoCoW and will be the responsibility of the Site Manager(s) to implement otherwise unlawful harm to badgers and wild mammals may result.



#### 10 Method Statement 9: Specific Measures for Avoidance of Impacts on Riparian Mammals

#### 10.1 Objectives

10.1.1 Evidence of the presence of otters and water voles has been confirmed at the Solar PV Sites, and the presence of both species has been assumed within all suitable habitats within the Cable Route Corridor, comprising regularly wet ditches and streams. This Method Statement must be followed during any works affecting the suitable habitats identified above, to ensure that unlawful impacts (such as killing/injury of individual otters and water voles, or the damage/destruction of their burrows, holts and resting sites) can be avoided.

#### 10.2 Toolbox Talk

- 10.2.1 Site operatives will be provided with a toolbox talk prior to commencing any work which affects ditches and watercourses within the Order Limits. Contractors will be provided with visual guides on the identification of otters, water voles, and their holt sites and burrows, in the unlikely event that any are encountered during the works.
- In the event a change in Site Management personnel occurs during construction or a pause in works of a period of more than 30 consecutive days occurs, the toolbox talk will need to be provided again by the appointed EcoCoW. The Site Manager will be responsible for relaying information within the toolbox talk to all subsequent site staff during their initial site inductions.

#### 10.3 Precautionary Approach to Works

- 10.3.1 Particular attention will be paid to any habitat removal works affecting, or within 30 m of, a watercourse for the potential presence of otters, water voles and other riparian mammal species, such as beaver.
- 10.3.2 All applicable habitat removal works will be preceded by a precommencement inspection of all accessible habitat at least 50 m upstream and 50 m downstream of the clearance extent to look for signs of these species and their sheltering sites. The inspection will be carried out one month in advance of works commencing by a suitably qualified ecologist.
- 10.3.3 Where the inspection results indicate no riparian mammals or their breeding/resting sites and shelters will be impacted, habitat removal will commence with the EcoCoW in attendance in a watching brief role.



- 10.3.4 In the event that burrows, holts or likely sheltering sites are found, the EcoCoW will discuss this with the Site Manager(s) and efforts to alter the location of the clearance to avoid direct impacts will be made in the first instance, for instance micrositing cable installation works to avoid impacting such features.
- 10.3.5 Should impacts upon holts, burrows or sheltering sites be unavoidable, it will be necessary to delay commencement until a mitigation licence from Natural England is obtained. Licences will be contingent on seasonal timing restrictions, sensitive working methods and habitat compensation.
- 10.3.6 Culverted or overbridged ditches and watercourses should be designed to permit the continued passage of water voles, otters, and other riparian mammal species. The advice of the EcoCoW should be sought in this instance.



# 11 Method Statement 10: Avoidance of Impacts on Ground Nesting Birds of Open Habitats

#### 11.1 Objectives

11.1.1 Skylark *Alauda arvensis*, yellow wagtail *Motacilla flava*, corn bunting *Emberiza calandra*, grey partridge *Perdix perdix* and quail *Coturnix coturnix* are all species of ground nesting birds that have been recorded within the Order Limits and which occupy open habitats such as arable and pasture grassland. As development operations will occupy large areas of these habitats, precautions will be necessary to avoid unlawful impacts on the birds and their nests.

#### 11.2 Nesting Bird Checks

- 11.2.1 Between the months of March and August inclusive, when undertaking construction works within arable or pasture fields, nesting bird checks will be carried out to ensure no nests are at risk of harm and that development works do not commit unlawful acts. As the species concerned are dependent on long, unbroken sightlines of between 75 m and 200 m for predator avoidance, they are unlikely to be present within close proximity to existing development activities. Therefore, nesting bird checks are most important when development activities progress into previously undeveloped fields during the nesting season. In order to minimise disruption to development activities, close communication on the development programme between the Site Manager(s) and the EcoCoW is essential. Habitat degradation, such as mowing vegetation to a short sward height, and dissuasion techniques, such as kite deterrents, may be employed in advance of the nesting season (and maintained up until the onset of development activities) in order to reduce the requirement for nesting bird checks.
- In the event a nest is discovered, its location shall be mapped and shared with the Site Manager(s) and the location will be avoided, and a buffer radius of at least 50 m observed, to be advised by the EcoCoW (depending on species). The nest location will be revisited around the time of predicted fledging (derived from the status of the nest upon discovery) to confirm fledging and inactivity, enabling development activities to resume.



#### 12 Method Statement 11: Avoidance of Impacts on Overwintering Birds

#### 12.1 Objectives

12.1.1 Flocks of overwintering birds such as fieldfare, redwing and finches have been recorded within the Order Limits during the winter months. Due to the numbers of birds within such flocks, unnecessary disturbance to them and displacement can be energetically costly and have an adverse impact on the local population. Precautions are given below to minimise this risk.

#### 12.2 Precautionary Approach to Works

- During the winter months of November to February inclusive, any significant commencement or re-commencement of development works within fields will be immediately preceded (in the morning) by an inspection for the presence of flocks of overwintering birds. The aim will be to ensure that flocks of overwintering birds are not subject to displacement and disturbance stresses at this vulnerable time of year. As these flocks move about within the landscape on a daily basis, it should be possible to postpone mobilisation into undeveloped fields which are occupied by them by approximately one day to avoid impacts.
- 12.2.2 The inspections will be carried out by the EcoCoW. The Site Manager(s) will be responsible for liaising with the EcoCoW in advance of mobilisation into previously undeveloped fields or fields where work is re-commencing during the winter months in order to avoid disturbance of overwintering flocks of birds.



#### 13 Method Statement 12: Specific Measures for Avoidance of Impacts on Great Crested Newts (Solar PV Sites)

#### 13.1 Objectives

- 13.1.1 The presence of GCN has been established in ponds within the Solar PV Sites and in the surrounding landscape, and ponds are also present near to the Solar PV Sites where GCN surveys have not yet been undertaken due to lack of access permission. Given the potential for GCN to be encountered within parts of the Solar PV Sites during their active period, this precautionary non-licensed Method Statement has been prepared to ensure that offences are not committed under wildlife legislation in relation to GCN.
- 13.1.2 This precautionary Method Statement restricts certain construction activities within particular areas of the Order Limits to occur when GCN are active. If these restricted work activities are likely to occur within the dates shown below, this will be discussed with the EcoCoW, as well as potentially Natural England and the Local Authority ecologist, and may result in a delay to construction works and a requirement for protected species mitigation licences prior to works commencing within the area.
- 13.1.3 It is proposed to register all works within the Cable Route Corridor under Natural England's District Level Licensing (DLL) scheme for GCN, to ensure legal compliance. Under the DLL scheme, mitigation/compensation for the anticipated impacts on GCN will generally be provided off-site, and therefore this Method Statement does not apply to the Cable Route Corridor, or other areas registered under the DLL scheme.

#### 13.2 Biodiversity Protection Fencing (BPF)

The BPF (as detailed in Method Statement 3) will include protective buffers of 10 m around all ponds, extending to 50 m for ponds with confirmed evidence of GCN or where the presence of GCN is assumed (for example where survey results are inconclusive or access permission could not be obtained to complete a survey). As with all other areas within the BPF, no site personnel or machinery shall enter the Buffer Zones by crossing the BPF and no equipment will be stored therein. The only exceptions will be where access for essential/unavoidable operations have been agreed in advance with the EcoCoW.



#### 13.3 Great Crested Newt Working Areas

- 13.3.1 This Method Statement will apply to all works including the installation of Solar PV Panels and associated works within a GCN Working Area, which extend 250 m from ponds which are either known to support GCN or have not been subject to GCN surveys (and therefore presence of GCN is assumed on a precautionary basis).
- The edge of the GCN Working Areas will be defined with semi-permanent high visibility marker posts installed in the ground. These would be installed at regular (approx. 50 m) intervals along the edge of a GCN Working Area so that operatives can see when they enter into a GCN Working Area and thus when additional consideration as to the presence of GCN and adherence to the requirements of this Method Statement is required.

#### 13.4 Toolbox Talk

- 13.4.1 Site operatives will be provided with a toolbox talk prior to commencing any work within the GCN Working Area. This will inform all operatives of the importance to restrict all working activities within suitable habitats which may support GCN. Contractors will be provided with visual guides on the identification of GCN in the unlikely event that any are encountered during the works. In the event that GCN are encountered, they will be left in-situ unless they are at risk of immediate harm. The Site Manager will ensure that the EcoCoW is contacted immediately, and any works within the GCN Working Area and 50 m from the area within which the newt was found must temporarily cease pending further advice from the EcoCoW. The recommencement of work may need to be delayed until a protected species mitigation licence can be obtained, as advised by the EcoCoW
- In the event a change in Site Management personnel occurs during construction or a pause in works of a period of more than 30 consecutive days occurs, the toolbox talk will need to be provided again by the appointed EcoCoW. The Site Manager will be responsible for relaying information within the toolbox talk to all subsequent site staff during their initial site inductions.

## 13.5 Precautionary Approach to Works within Great Crested Newt Working Area

#### **Pre-Construction Work**

13.5.1 Arable and grassland fields within the GCN Working Areas will be maintained as ploughed, grazed or mown short (sward height of less than 100 mm) until construction commences and for the duration of the



- construction phase, to maintain the sub-optimal nature of these habitats for amphibians and prevent colonisation of working areas during the construction phase.
- The GCN Working Areas will be subject to a walkover inspection by the EcoCoW within the GCN active period (01 March to 31 October) prior to any construction work commencing within a given GCN Working Area. Any discrete features (such as log piles, stone/rubble piles and cut brash) potentially suitable for use as shelter by GCN which are found to lie within a construction area will be subject to a fingertip search by the EcoCoW, and will then be removed from the working area under EcoCoW supervision.

## <u>Timing of Work and EcoCoW Supervision During</u> <u>Hedgerow Clearance</u>

13.5.3 Any removal of hedgerows or scrub habitat within the GCN 250 m Working Area must be completed under EcoCoW supervision. Hedgerows may be cut at any time of year (to a minimum height of 300 mm), however, in order to minimise the risk of impacting GCN, the removal of hedgerow rootballs and bases will be prohibited between November to February inclusive, as GCN will typically be hibernating and may be present within hedgerow root systems and other sheltering features at the bases of hedgerows during this period. The removal of hedgerow roots and stumps must therefore take place within the active season, comprising 01 March to 31 October inclusive, under EcoCoW supervision, unless this work is covered separately under a great crested newt mitigation licence.

#### **Materials and Site Compounds**

- Due to the confirmed/assumed presence of GCN within associated ponds, there is a small risk that any materials stored within a GCN Working Area may be used by newts as shelter overnight (specifically between March and October). If newts are subsequently encountered beneath materials stored within the GCN Working Area, the removal of these materials would risk disturbance and potentially injury of newts, and may therefore constitute an offence under the Wildlife & Countryside Act 1981 (as amended). Therefore, in order to avoid the risk of offences occurring, the storage of materials and erection of site compounds within GCN Working Areas will be avoided wherever possible.
- 13.5.5 Should the storage of materials or erection of site compounds be unavoidable within a GCN Working Area, then suitable habitats for GCN within an identified material storage/site compound area will first be subject to a destructive search under EcoCoW supervision, during the



active season (March to October inclusive). Following the removal of any suitable habitats or sheltering features for GCN, temporary herptile exclusion fencing will be erected around the perimeter of the temporary site/storage compound. The fencing will be hard plastic polypropylene fencing or similar and able to withstand all weather conditions. Wooden stakes will be used to support the fence and a plastic lip at the top of the fence will prevent animals from re-entering the works area. The fence will be at least 50 cm high and dug into the ground by no less than 20 cm. Fencing will remain in place for the duration of the use of the site compound/material storage area to prevent newts from re-colonising the working area. A removable panel, newt grid or similar feature will be fitted to any areas in which vehicle access is essential.

Once the temporary compound area is no longer required, the temporary exclusion fencing will be removed under the supervision of the EcoCoW.

#### **Monitoring of GCN Working Areas**

13.5.7 Given the ongoing risk to GCN during works within the GCN Working Areas, the EcoCoW will monitor the implementation of the GCN Working Areas, the associated exclusion fencing, and adherence to the precautionary working methods therein as part of the construction phase monitoring visits detailed in Method Statement 17.



## 14 Method Statement 13: Specific Measures for Avoidance of Impacts on Dormice

#### 14.1 Objectives

14.1.1 The presence of dormice has been assumed across all suitable habitats within the Order Limits, comprising hedgerows, scrub and woodlands. This Method Statement must be followed during any works affecting the suitable habitats identified above, to ensure that unlawful impacts (such as killing/injury of individual dormice, or the damage/destruction of their nests) can be avoided.

#### **14.2** Toolbox Talk

- 14.2.1 Site operatives will be provided with a toolbox talk prior to commencing any work which affects hedgerow, scrub or woodland habitats within the Order Limits. Contractors will be provided with visual guides on the identification of dormice and their nests in the unlikely event that any are encountered during the works when the EcoCoW is not present. In the event that dormice are encountered, they will be left in-situ unless they are at risk of immediate harm. The Site Manager will ensure that the EcoCoW is contacted immediately, and any associated works in the area within which the dormouse/nest was found must temporarily cease until further advice is sought from the EcoCoW.
- In the event a change in Site Management personnel occurs during construction or a pause in works of a period of more than 30 consecutive days occurs, the toolbox talk will need to be provided again by the appointed EcoCoW. The Site Manager will be responsible for relaying information within the toolbox talk to all subsequent site staff during their initial site inductions.

### 14.3 Precautionary Approach to Works

- 14.3.1 Prior to any removal of hedgerow or dense scrub, a suitably experienced and licensed EcoCoW will carry out a pre-commencement inspection to ensure that there are no dormice or dormouse nests present within the sections of vegetation due to be removed. This inspection will comprise a fingertip search of all vegetation to be removed, including the hedgerow bases, for signs of summer or winter hibernation dormouse nests.
- 14.3.2 Where no signs of dormice or their nests are found within a particular section, vegetation clearance can progress under the supervision and direction of the EcoCoW. In areas of dense vegetation, the EcoCoW may need to repeat the fingertip search as more areas become accessible, and it may be necessary to cut hedgerow to approximately 300 mm above



- ground level in the first instance to ensure that the hedgerow base is accessible and can be inspected by the EcoCoW prior to removal.
- 14.3.3 In the unlikely event that any dormouse nests are recorded in any section of hedgerow or scrub to be removed, all work must stop in the immediate vicinity until the EcoCoW has assessed the risk and evaluated the need for follow-up licensing and working restrictions.



## 15 Method Statement 14: Specific Measures for Avoidance of Impacts on White-clawed Crayfish

#### 15.1 Objectives

15.1.1 The presence of white-clawed crayfish has been assumed across all suitable habitats within the Order Limits, comprising regularly wet ditches and streams. This Method Statement must be followed during any works affecting the suitable habitats identified above, to ensure that harmful impacts on white-clawed crayfish (such as killing/injury of individuals) can be avoided.

#### **15.2** Toolbox Talk

- 15.2.1 Site operatives will be provided with a toolbox talk prior to commencing any work which affects wet ditches or watercourses within the Order Limits. Contractors will be provided with visual guides on the identification of white-clawed crayfish in the unlikely event that any are encountered during the works when the EcoCoW is not present. In the event that white-clawed crayfish are encountered, they will be left in-situ unless they are at risk of immediate harm. The Site Manager will ensure that the EcoCoW is contacted immediately, and any associated works in the area within which crayfish were found must temporarily cease until further advice is sought from the EcoCoW.
- In the event a change in Site Management personnel occurs during construction or a pause in works of a period of more than 30 consecutive days occurs, the toolbox talk will need to be provided again by the appointed EcoCoW. The Site Manager will be responsible for relaying information within the toolbox talk to all subsequent site staff during their initial site inductions.

## **15.3** Precautionary Approach to Works

- 15.3.1 Prior to any temporary works affecting ditches or watercourses for cable installation, a suitably experienced and qualified EcoCoW will carry out a pre-commencement inspection to ensure that there are no white-clawed crayfish present within the sections of ditch/watercourse to be removed. This inspection will comprise a hand search of all suitable refuges, such as cobbles, boulders and woody debris. These will be temporarily removed and subsequently replaced in the same position on completion of works.
- Where no signs of white-clawed crayfish are found within a particular section, habitat removal can progress under the direction of the EcoCoW. In the unlikely event that any white-clawed crayfish are recorded in any



- section of ditch or watercourse affected, all work must stop in the immediate vicinity until the EcoCoW has assessed the risk and evaluated the need for follow-up licensing and working restrictions.
- 15.3.3 White-clawed crayfish are particularly sensitive to impacts from silt/sediment deposition and introduction of non-native crayfish species. It is imperative therefore that the pollution prevention measures outlined in Method Statement 4 and biosecurity measures set out in Method Statement 16 are implemented in full.



# 16 Method Statement 15: Specific Measures for Invasive Non-Native Species

#### 16.1 Objectives

- 16.1.1 No invasive non-native plant species have been recorded within the Order Limits during baseline ecological surveys. However, it is possible that plant species such as Japanese knotweed *Reynoutria japonica* and Himalayan balsam *Impatiens glandulifera* may occur locally, as well as other invasive species such as American signal crayfish *Pacifastacus leniusculus* within ditches and watercourses.
- The objective of this Method Statement is to ensure that INNS are not released or allowed to escape into the wild, or inadvertently caused to spread (all of which may constitute an offence under the Wildlife & Countryside Act, the Invasive Alien Species (Enforcement) Regulations 2014, and/or the Environmental Protection Act 1990) as a result of the construction phase of the Scheme.

#### **16.2** Toolbox Talk

- The potential presence of INNS will form part of the Ecological Toolbox Talk (as per Method Statement 2), and will help site staff to identify some of these species most likely to be encountered (such as Himalayan balsam and Japanese knotweed) so that early reporting and remediation work can take place.
- In the event that INNS are encountered during the construction phase, contractors will be advised to leave them in-situ. The Site Manager will ensure that the EcoCoW is contacted immediately, and any associated works in the area within which the invasive species was found must temporarily cease pending further advice from the EcoCoW and specialist contractors, as required.
- In the event a change in Site Management personnel occurs during construction or a pause in works of a period of more than 30 consecutive days occurs, the toolbox talk will need to be provided again by the appointed EcoCoW. The Site Manager will be responsible for relaying information within the toolbox talk to all subsequent site staff during their initial site inductions.

#### **16.3** Biosecurity Measures

In order to prevent the accidental spread of invasive non-native plant species (as well as pests, diseases and native but undesirable species) into the Order Limits, as well as between areas, plant and wheel washing facilities will be provided and utilised when vehicles are moving into and



between working areas. Plant and wheel washing will only be carried out in designated areas at least 15 m from any watercourse, surface drain or potential pollution pathway, and will be constructed on an impermeable base with a collecting sump to prevent the potential spreading of contaminated material.

16.3.2 Any construction personnel working alongside or within watercourses (for instance when open-cut trenching) will check equipment and clothing for live organisms or plant fragments before leaving site. Wet or dry mud will be scraped off footwear, clothing and equipment before leaving site. Footwear/clothing and equipment that has come into contact with water will be disinfected with sodium hypochlorite and iodophores and should be allowed to dry thoroughly (less than 24 hours).

## 16.4 Precautionary Approach to Works and INNS Management

- 16.4.1 The EcoCoW will actively look for INNS during all supervision, survey work and monitoring visits, and report their presence to the Site Manager(s) as appropriate.
- Should any INNS be discovered by the EcoCoW or any construction staff, an INNS Management Plan will be developed by the EcoCoW, which will be tailored to the specific INNS and the relevant work operations. As it is an offence to release into the wild or cause to grow any non-native invasive plant species, works will be altered to avoid them in the first instance. If this is not possible, under the INNS Management Plan, remediation and eradication work carried out by a specialist company/consultant would be required as all parts of invasive plant species are considered contaminated waste under the Environmental Protection Act 1990. Until this occurs, the area will be clearly marked out and delineated with protective fencing, so as to not contribute to its spread locally.
- Any soil or other waste contaminated with INNS material must be removed from the Site and disposed of at a licensed landfill site or otherwise suitable disposal site. The EcoCoW will provide advice on the safe disposal of material as appropriate.
- 16.4.4 A detailed log of any INNS sightings within the Order Limits will be kept by the Site Manager (s) and will be maintained for the duration of the construction phase. Details of any remedial actions undertaken will also be kept. This log will be made available to the Environment Agency and Local Planning Authority as required.



## 17 Method Statement 16: Construction-Phase Monitoring

#### 17.1 Objectives

17.1.1 To ensure satisfactory achievement of all Method Statements and compliance with all relevant DCO requirements, ecological legislation and policy, periodic monitoring of construction activities and protective measures will be undertaken.

#### 17.2 Monitoring

- 17.2.1 Regular (weekly) inspections of the Site(s) and immediate surroundings will be undertaken by the Site Environmental Manager to monitor the integrity of the BPF as well as to look for any signs of silt deposition, dust deposition, flooding, runoff and litter arising from within the Order Limits which could impact off-site habitats. This inspection will be recorded within a logbook to be made available to the Local Planning Authority upon request. Remedial action which may be required as soon as an issue is identified by the Site Environmental Manager may include temporarily ceasing work, arranging litter picking, additional site hoarding, increased water spraying, and increased waste collection.
- 17.2.2 At least every month during the construction phase, the EcoCoW will inspect active working areas (where relevant) within the Order Limits to monitor compliance with the EPMS. This will include checking the following:
  - Correct installation of BPF;
  - Safeguarding of retained habitats;
  - Hedgerow and watercourse condition;
  - Implementation and adherence to precautionary working methods within GCN Working Areas;
  - Potential requirement for nesting bird monitoring for legal compliance;
  - Adherence to lighting restrictions; and
  - Status of badger activity (if relevant).
- 17.2.3 Following these inspections, the EcoCoW will discuss monitoring outcomes with the Site Manager(s) and provide a written proforma of findings identifying any remedial actions and timescales for actions to be implemented.
- 17.2.4 The EcoCoW will also be available on an "on call" basis during the construction period.



#### 17.3 Reporting

17.3.1 A quarterly report will be prepared by the EcoCoW, which will be made available to the Local Planning Authority upon request. The report will include a detailed log of monitoring activities by the Site Environmental Manager and EcoCoW. It will detail any breaches of the EPMS and the remedial steps taken.



APP/7.19

## **Annex A Hedgerow Removal Plan**

Planning Inspectorate Reference: EN010168

