Bodelwyddan Solar and Energy Storage

Green Infrastructure Statement

Prepared by:
The Environmental Dimension Partnership Ltd

On behalf of:
Bodelwyddan Solar and Energy Storage Ltd

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APPENDICES

Section 1
Introduction

1.1 This Green Infrastructure (GI) Statement has been prepared by The Environmental Dimension Partnership Ltd (EDP) on behalf of Bodelwyddan Solar and Energy Storage Limited (hereafter referred to as 'the Applicant') in relation to the Proposed Development comprising the Solar Site and the Battery and Energy Storage System (BESS) Site (also referred to jointly as 'the Site').

1.2 EDP is an independent environmental planning consultancy with offices in Cardiff, Cirencester and Cheltenham. The practice provides advice to private and public sector clients throughout the UK in the fields of landscape, ecology, archaeology, cultural heritage, arboriculture, rights of way and masterplanning. Details of the practice can be obtained at our website (www.edp-uk.co.uk).

PLANNING POLICY

Planning Policy Wales

1.3 *Planning Policy Wales* Edition 12, published in February 2024 (PPW), defines GI as:

"…the network of natural and semi-natural features, green spaces, rivers and lakes that intersperse and connect places."

1.4 PPW requires that all planning applications are supported with a GI Statement. Paragraph 6.2.12 states:

"A green infrastructure statement should be submitted with all planning applications. This will be proportionate to the scale and nature of the development proposed and will describe how green infrastructure has been incorporated into the proposal. In the case of minor development this will be a short description and should not be an onerous requirement for applicants. The green infrastructure statement will be an effective way of demonstrating positive multi-functional outcomes which are appropriate to the site in question and must be used for demonstrating how the step-wise approach (Paragraph 6.4.15) has been applied."

1.5 At paragraph 6.4.12, PPW 12 further states:

"Having worked iteratively, in line with Figure 12, through the stages of the step-wise approach below, and providing evidence in the Green Infrastructure Statement that the step-wise approach has been followed, a scheme of enhancements must be provided to ensure a net benefit for biodiversity.

Where biodiversity enhancement proportionate to the scale and nature of the development is not proposed as part of an application, significant weight will be given to its absence, and unless other significant material considerations indicate otherwise, it will be necessary to refuse permission."

1.6 As noted above, paragraph 6.2.12 suggests that GI Statements should be submitted alongside all planning applications. In line with this requirement, this document will therefore identify how GI has been incorporated into the proposals discussed herein. The Statement will highlight the most relevant surveys and assessments and provide the relevant avoidance, mitigation and/or compensation measures incorporated into the design to allow the continued functioning of GI assets both within and adjacent to the Site.

1.7 The purpose of this Statement is to demonstrate the positive multifunctional outcomes of the proposed development from a GI perspective. Biodiversity benefits and ecosystem resilience will be delivered through a considered approach to GI and this Statement will demonstrate how the step-wise approach (paragraph 6.4.15) has been applied.

1.8 The Site lies partly within Denbighshire and partly within Conwy Borough Council local authority areas. Key information from the Green Infrastructure Assessments (GIAs) for each is set out below.

1.9 The Denbighshire GIA (June 2024) supports the delivery of Denbighshire's Local Development Plan (LDP) by identifying a GI evidence base. The GIA sets out strategic objectives which should be used to facilitate strategic planning of the network across the county. These strategic objectives contribute to key national and local priorities also, such as improving health and wellbeing, enhancing biodiversity, supporting climate resilience and encouraging sustainable development. The GIA identifies opportunities for improvement and sets out recommendations on how to deliver GI enhancements at difference levels. GI opportunities for the county are listed in Chapter 5; these GI opportunities are location specific and none of those short listed in the GIA are applicable to the Site. The strategic objectives which are relevant to the site are as follows:

- *"SO1: Improve the quality and resilience of habitats across the County, targeting efforts at the lowland focal habitat network;*
- *SO3: Increase woodland canopy cover across Denbighshire, particularly in the most deprived areas of the County and where it would have benefits for biodiversity, carbon sequestration, NFM and air and water quality to help inform strategic site allocations in the replacement LDP;*
- *SO5: Carefully plan and design GI within new development to retain local character…".*

1.10 Denbighshire's Policy VOE 10: Renewable Energy Technologies supports appropriate renewable energy proposals while protecting landscape, residential amenity, biodiversity, and cultural heritage.

1.11 Conwy Borough Council's GIA (October 2020) is an integral part of the evidence base for their LDP. It sets out five priorities:

1. Protect, enhance, create and restore habitats to create a resilient wildlife and biodiversity network;
2. Enable a thriving blue environment;

3. Promote sustainable growth and economic development through GI;

4. Encourage, enable and promote healthy lifestyles and enhance wellbeing; and

5. Improve connectivity.

1.12 This document also sets out its vision for the GIA as:

"By 2033, Conwy will be an even greener and more prosperous place to live, work, visit and invest. Green infrastructure will deliver benefits to health and wellbeing, support sustainable growth of the economy, underpin the county's response to climate change and provide connected and resilient ecological networks".

1.13 Furthermore, Conwy's Good Practice Guide for Green Infrastructure Statements for Larger Developments (2025) sets out recommendations preparing GI Statements and states that a step wise approach must be demonstrated.

1.14 All major development proposals must integrate, protect and enhance existing GI, and demonstrate this through providing a GI Statement such as this report, as alluded to within PPW 12, referenced above. The document suggests that GI should rightly be a central consideration in the site selection, design and long-term management with any unavoidable losses mitigated appropriately.

Section 2
The Site and Proposed Development

THE SITE

2.1 The Site comprises two parcels of land, a Solar Site and a BESS Site, and a Cable Corridor connecting the two. The Site is delineated in red on the Site Location Plan Ref. 01 (Appendix A.1 of the Environmental Statement (ES)).

2.2 The Solar Site is comprised c.168.95 ha of low lying, flat agricultural fields and dissected by the A547/Rhuddlan Road. There are hedgerows and ditches (wet and dry) which demarcate some boundaries; fencing is common throughout while is delineated by a stone wall that fronts onto Rhuddlan Road. There are trees planted sparsely, mostly along hedgerow or field boundaries. A designated Restored Ancient Woodland Site (RAWS) abuts the Solar Site.

2.3 The BESS Site measures c.6.52 hectare (ha) and is comprised of two agricultural fields (improved grassland) with no public access and lies south of St Asaph Business Park and west of Bodelwyddan substation. The boundaries are comprised of hedgerows of varying condition. There are numerous Category A and B trees planted within these field boundaries however, and of note, there is one veteran tree (T262) located on the south-western boundary.

2.4 The Cable Corridor is approximately 8km in length and 10m wide with a total area of 8.29 ha. It represents the area of land within which the underground electrical cables will be laid into trenches.

2.5 There is no public access across the Site.

THE PROPOSED DEVELOPMENT

2.6 The proposed solar development would generate up to 110 MW of electricity; the BESS would store up to 110 MW of electricity. The Proposed Development would have a construction phase of 12 to 24 months and an operational period of up to 40 years. The Site would be decommissioned thereafter with all built form removed and the land returned to its current agricultural uses.

2.7 The Proposed Development is illustrated on the Proposed Site Layout Plans [drawing ref. 02, 03 and 04] incorporated into the ES. The illustrative Landscape and Ecology Strategies are included in **Appendices EDP 1** and **2**, respectively.

2.8 A range of outputs have been prepared to fully understand Site circumstances in relation to ecology, drainage, landscape, heritage and arboriculture. This GI Statement should therefore be read in conjunction with the associated appendices and the following reports which have been prepared to accompany the planning application:

- ES Chapter 10: Biodiversity and Chapter 11: Landscape and Visual (report reference: edp8841_r008);
- Technical Appendix F.2: Shadow Habitats Regulations Assessment Report (report reference: edp8841_r009);
- Technical Appendix F.3: Outline Ecological Construction Method Statement (oECMS; report reference: edp8841_r011);
- Technical Appendix F.4: Outline Landscape and Environmental Management Plan (oLEMP) (report reference: edp8841_r013); and
- Arboricultural Impact Assessment (report reference: edp8841_r007).

2.9 To inform the above, site visits were undertaken and published character assessments and relevant documentation, namely LANDMAP, were reviewed to establish the key characteristics onsite and in the wider area of control, with the physical and perceptual findings used to inform the layout of the scheme proposed.

2.10 The layout presented therefore demonstrates a good design response to the environmental opportunities and constraints, with the layout assimilated congruently with the already established GI framework. The Illustrative Landscape and Ecology Strategies are provided at **Appendices EDP 1** and **2**.

Section 3
Ecology and Green Infrastructure

3.1 This GI Statement has been informed by the Biodiversity ES Chapter (Chapter 10) of the ES which assesses the results of the ecological surveys of the Site.

3.2 The baseline ecological conditions within and around the Site, including the Solar Site, Cable Corridor and BESS Site, were established through a desk study data search together with range of field surveys during 2024 and 2025, namely: habitat surveys including a hedgerow survey; breeding bird survey; wintering bird survey; bat surveys; otter (*Lutra lutra*) survey; water vole (*Arvicola amphibicus*) survey; badger (*Meles meles*) survey; and great crested newt (*Triturus cristatus*) surveys.

3.3 The full details of these baseline surveys are presented in the Ecological Baseline Report (report reference: edp8841_r003), submitted as Technical Appendix F.1 to the Biodiversity Chapter of the ES. The Baseline Report also details the findings of the surveys, a summary of which is provided below.

3.4 The assessment found that the Site boundary is not covered by any statutory designations for nature conservation. However, eight international statutory designations (including the Dee Estuary, which is covered by three different designations and supports internationally important assemblages of wintering birds) are located within 15 km of the Site. One national statutory designation, Coedydd ac Ogofau Elwy a Meirchion Site of Special Scientific Interest (SSSI), is also located within 2km of the Site.

3.5 In relation to non-statutory designations, there are two candidate Wildlife Sites present within the northern section of the Solar Site: Abergele Grazing Marsh Wildlife Site (Candidate), and Morfa Rhuddlan Wildlife Site (Candidate), both of which are designated for grazing marsh. Furthermore, the proposed Cable Corridor linking the Solar Site to the BESS Site passes through Coed Parc Kinmel (Candidate) Wildlife Site, designated for its coniferous woodland habitat. There are a further 29 Wildlife Sites present within 2km of the Solar Site, and 11 Wildlife Sites within 2km of the BESS Site.

3.6 The habitats on-site comprise predominantly agricultural fields dominated by improved grassland subject to grazing and/or cropped for silage (both of which are of limited inherent ecological importance) or arable land, also of limited ecological importance. The Solar Site and BESS Site are delineated by a network of managed native hedgerows and dry and wet ditches, which are of up to Local ecological importance. Furthermore, the grassland and ditch habitats within part of the Solar Site is classified as coastal floodplain and grazing marsh, albeit a poor example of this habitat type due to the limited condition of the habitats present. Other habitats present within the Site include standing water (a single pond within the Solar Site) and mature trees, in addition to small patches of dense and scattered scrub. The Cable Corridor runs through a number of woodlands and a section of priority habitat - wood-pasture and parkland – although the Cable Corridor will utilise existing bare ground trackways and grass areas to avoid impacts upon mature trees. Additionally, a number of woodlands are immediately adjacent to, and overhang, the Solar Site boundary, including restored and plantation ancient woodland sites located immediately adjacent to

the southern Solar Site boundary and adjacent to parts of the Cable Corridor. These areas will not be affected by the Proposed Development.

3.7 These habitats have been found to support the following protected/notable species:

- A relatively diverse breeding bird assemblage, with a number of breeding pairs of skylark (*Alauda arvensis*);
- A diverse assemblage of wintering birds, including some larger flocks of wetland waterfowl; most notably this included a large population of teal (*Anas creca*) associated with the wet ditches on and adjacent to the Site which is precautionarily assessed as having potential functional linkage with the nearby Dee Estuary Special Protection Areas (SPAs)/Ramsar;
- A number of mature trees with bat roost potential;
- A typical assemblage of foraging and commuting bats primarily composed of widespread species but with some rarer species in smaller numbers;
- Presence of badger activity within the Site, however no setts have been found;
- Potential occasional presence of otter utilising the wet ditches across the Solar Site;
- A population of water vole within the Solar Site, utilising the wet ditch habitat for foraging, commuting and refuge;
- Presence of great crested newt within ponds near to the Site boundaries and therefore potentially present within suitable terrestrial habitat across the Site, although the single pond within the Solar Site tested negative for this species; and
- Likely presence of common reptile species within the suitable habitats on-site, restricted to the field margins and ditches.

3.8 With regards to the tree stock onsite, the following summarises the baseline position.

3.9 The arboricultural survey identified 232 individual trees, 51 groups of trees, 190 hedgerows and 19 woodlands, totalling 492 items. Of these 492 items, 84 have been categorised as A, of high quality; 90 have been categorised as B, of moderate quality; and 276 have been categorised as C and are of low quality. In addition, 42 items have been categorised as U and are considered unsuitable for retention.

3.10 Overall, the items identified across the Site are primarily of low quality, with the exception of 84 category A (high quality) items and 90 category B (moderate quality) items.

3.11 The age distribution of tree stock on-site is varied, ranging from young to veteran specimens. The most prevalent species onsite include common hawthorn (*Crataegus monogyna*), Prunus species (*Prunus* sp.) and English oak (*Quercus robur*).

3.12 In line with the RAVEN method (Recognition of Ancient, Veteran and Notable trees), known as RAVEN 2[1], 13 veteran trees were identified during the survey process. The Site contains, or is directly adjacent to, three restored ancient woodlands (RAWS) and plantations on ancient woodlands (PAWS) - Coed Kinmel, Hen Wern, and Coed y Drive. Furthermore, two Tree Preservation Orders (TPOs) fall within the Site – TPO No. 29 1991 and TPO No. D3 (W10) 1947.

3.13 These items have all been discussed further within the Arboricultural Impact Assessment (report reference: edp8841_r007).

[1] FLAC (2025) Second edition of RAVEN, https://www.flac.uk.com/second-edition-of-raven (Accessed 19 June 2025).

Section 4
Proposed Development and Green Infrastructure Strategy

PROPOSED DEVELOPMENT

4.1 The Proposed Development would result in a long-term change to the character of the Site area through the introduction of the built form proposed. The scheme is fully reversible and there are no landscape features of note within the Site, with the exception of veteran trees within the BESS Site. Ancient woodland lies adjacent to the Solar Site and suitable buffers have been applied so the surrounding area remains a development free zone. Hedgerows on-site are generally gappy or defunct with low ecological importance – the field patterns would be strengthened through the retention and enhancement of the existing GI network by gapping up and in some instances, new hedgerow planting would be implemented on open boundaries. The existing GI network onsite will be respected by maintaining and improving links on-site.

4.2 Changes to the agricultural character and habitat loss required is relatively minimal given the light footprint of the development. See the ES Chapter 10: Biodiversity for the assessment of effects anticipated as a result of the scheme assessed. Improved grassland would be enhanced to meadow, whilst blue infrastructure of the Site would be retained and improved by the measures proposed, including provision of an extensive ditch network and a pond. Tree and hedgerow planting have been provided to mitigate for any loss, which is mainly limited to the footprint of the ancillary development and built form associated with the BESS Site.

GREEN INFRASTRUCTURE STRATEGY

4.3 In respect of the GI resource present within and adjacent to the Site, the Proposed Development proposed has been designed to retain and protect the valued resources listed above. Of the residual effects reported on the character of the Site, as well as on the ecological resource of the Site, none were found to have significant adverse effects in Environmental Impact Assessment (EIA) terms. Proposed habitat retention and creation features secured through the oECMS and oLEMP are illustrated on **Appendix EDP 2**, and the benefits they provide to the GI network, include:

- **Enhancement of Agricultural Land to Meadow Grassland**. The entirety of the Solar Site which contains existing arable and pastoral land will be enhanced through sowing with species-rich meadow grassland mixes. Meadow management will support pollinators, ground-nesting birds, and invertebrates. Sensitive cutting and/or low-intensity grazing will maintain sward diversity and structure;

- **Ditch Restoration and Wetland Habitat Creation**. Existing dry ditches will be enhanced to form seasonal or permanent wet ditches, using minor re-profiling and hydrological intervention. These will be actively managed for water vole, with the inclusion of marginal planting and retained bankside vegetation. Where feasible, new scrapes and wetland fringes will be added to increase habitat heterogeneity;

Retained and Proposed Hedgerow and Tree Planting. Retention of vegetation has been prioritised onsite, including suitable offsets from quality offsite vegetation such as Kinmel Avenue. Where there are opportunities or need to minimise views from roads and residences for example, new native hedgerows will be planted along Site boundaries and internal field edges. This will also reinforce the historic field pattern. Gapping-up of existing field boundaries using native whip planting (e.g., hawthorn (*Crataegus monogyna*), blackthorn (*Prunus spinosa*), dogwood (*Cornus sanguinea*), hazel (*Corylus avellana*)) and enhancement of linear features (green and blue) will provide a connected network for wildlife movement across the Site. This will also increase shelter, foraging and nesting opportunities. Where possible, connectivity with off-site woodland and open habitats will be enhanced through boundary planting and buffer zones;

- **Central Ecological Enhancement and Mitigation Area**. An ecological haven measuring 10 ha will be created to the west of Kinmel Avenue area of restored ancient woodland site. This ecological area will be free from built panels and ancillary development, and will be specifically designed to support breeding and foraging habitats for farmland and wetland birds such as skylark, teal, and other farmland and migratory species. Key components of this area will include fallow land, managed on a rotation to support ground-nesting birds; shallow scrapes to create ephemeral wetland for amphibians and waders; wildlife ponds with vegetated margins; and regenerative wetland areas suitable of slowing ruff off and providing water filtration. The management of this area will be secured for the 40-year lifespan of the Proposed Development;

- **Net Benefit for Biodiversity and Sustainable Land Use**. A biodiversity assessment has been undertaken within this document to demonstrate the net benefits for biodiversity achieved. The strategy aligns with the goals of PPW 12, promoting multifunctional land use that supports climate resilience, ecosystem services, and sustainable energy generation. The shift from intensive agriculture to diverse, semi-natural habitats will contribute to soil recovery, water retention, and long-term environmental resilience; and

- **Visual Integration and Landscape Character**. The Site design includes embedded mitigation measures, such as offsets from the most sensitive receptors; panels with anti-glare finishes; avoidance of key view corridors identified within designated landscapes; strategic placement of planting zones to minimise visual impact; and the proposed planting reflects the local character and visual structure of the area, strengthening the sense of place and minimising landscape harm to acceptable levels.

Section 5
Development Effects – Step-wise Summary

5.1 PPW 12 requires a step-wise approach to be taken in regard to the mitigation of effects on biodiversity. This entails mitigation measures being employed in the following order:

1. **Avoid** – development should seek to avoid valuable habitats and species wherever possible;

2. **Minimise** – where avoidance is not possible, development should seek to minimise the effects on identified habitats and species;

3. **Mitigate** – where impacts on biodiversity remain after Steps 1 and 2, mitigation should be provided to balance the harm and provide an overall biodiversity benefit;

4. **Compensate** – where adequate mitigation cannot be provided on-site, it may be possible to off-set this as compensatory measures offsite. This should preferably be immediately adjacent or close to the Site; and

5. **Long-term Management** – all GI, retained and proposed, needs to be subject to long-term management so its value is delivered and maintained.

5.2 Each of these steps is considered under the following sub-headings, summarising the measures incorporated within the proposals.

AVOID

5.3 The Site has the ability to deliver a significant number of benefits whilst delivering a viable renewable energy scheme. In balancing the delivery of such a scheme whilst limiting the environmental impacts of the scheme, aspects of the ecological and GI baseline which have been avoided include:

i. Retention of the vast majority of hedgerows across the Solar and BESS Sites, further protected with a 5m buffer, with only small extents of loss proposed for the unavoidable widening of some existing field gateways, the creation of a new access point into the northern part of the Solar Site, and an operational track into the southernmost field at the BESS;

ii. Retention of all wet and dry ditches across the Solar Site with a 5m buffer (no wet or dry ditches located at the BESS Site);

iii. Retention of the entirety of the main running water ditch along northern Solar Site boundary (known as Bodoryn Cut) with a 10m buffer;

iv. Protection of the adjacent ancient woodland parcel with a 15m buffer;

v. Protection of the adjacent other woodland parcels with 10m buffer;

vi. Retention of all mature trees with a 10m buffer;

vii. Retention of the single pond within the Solar Site with a 30m buffer, and this buffer also applied to nearby ponds outside of the Solar Site boundary;

viii. The Cable Corridor has been carefully routed in association with ecological and arboricultural consultants to follow existing tracks and roads as far as possible, thereby avoiding impacts on important habitats and mature trees;

ix. Avoidance of potential impacts from light spill by keeping lighting requirements within the Proposed Development to a minimum, such that the only lighting required is small lights at the entrance doors of the BESS equipment and the substation compound which will be motion-sensitive and therefore only switched on infrequently; and

x. Implementation of additional avoidance measures throughout the pre-construction and construction phases in accordance with the Construction Environment Management Plan (CEMP) and ECMS, including pre-commencement surveys and precautionary working measures.

5.4 The above avoidance measures demonstrate that the Proposed Development has been designed in accordance with Step 1 of the step-wise approach set out in PPW 12. At the outset, the scheme has prioritised the avoidance of harm to biodiversity and GI assets by retaining, buffering, and protecting key ecological features such as hedgerows, ditches, woodland, mature trees, and ponds. In doing so, the development not only prevents adverse effects but also provides a framework for ecological and visual amenity enhancement through the creation of new habitats and improved ecological connectivity across the Site, described further at the following steps.

5.5 In this context, and in line with PPW 12, it is not necessary to consider alternative sites, as the Proposed Development achieves the delivery of renewable energy in a manner that avoids harm and allows enhancements to biodiversity within the chosen location.

MINIMISE

5.6 The impacts on the onsite features such as key corridors and habitats of ecological value are primarily limited to a small amount of hedgerow loss, which totals approximately 1,170m across the entirety of the Site. This has been minimised through sensitive layout design to utilise existing field access points where possible, whilst minimising the number of breaks required to facilitate access. All vegetation clearance impacts will be further minimised through the use of method statements, toolbox talks and ecological supervision.

5.7 The layout also incorporates buffers between the equipment anticipated to cause some noise and important habitats to minimise noise disturbance upon commuting and foraging areas for wildlife.

5.8 Additional minimisation measures will be followed throughout the pre-construction and construction phases in accordance with the CEMP and ECMS, including pre-commencement surveys and precautionary working measures.

5.9 In line with the step-wise approach set out in PPW 12, these measures demonstrate that the Proposed Development goes beyond minimising harm and delivers clear opportunities for ecological enhancement. By reducing habitat loss to the lowest necessary level and minimising potential for accidental habitat damage or species impacts such as injury/disturbance, the scheme provides a strong foundation for positive habitat management and species conservation, enabling the restoration of retained features and improved ecosystem resilience.

MITIGATE

5.10 Some loss of habitat of value within the Site is unavoidable. These effects are more than mitigated through measures which include the creation of new habitats and enhancements for those retained; these measures are further summarised below.

5.11 Furthermore, the landscape scale change from intensively managed agricultural land to sensitively managed habitats within a solar farm development will have numerous inherent benefits to biodiversity as a result of the cessation of regular ploughing, harvesting, intensive grazing and high use of pesticides/herbicides/fertilisers which disturb soils and wildlife and reduces habitat structure/diversity, invertebrate abundance and water quality.

5.12 Of those habitats retained within the Solar Site, where feasible the currently degraded and dry ditches will be restored and enhanced to form seasonal or permanent wet ditches, using minor re-profiling and hydrological intervention (subject to consultation with Natural Resource Wales (NRW) and any necessary consents). Furthermore, the retained hedgerows will be enhanced with additional species-rich tree and whip planting where necessary and sensitive management, whilst the onsite pond and its marginal habitats will be enhanced.

5.13 Of those habitats retained within the BESS Site, the boundary hedgerows will be enhanced with additional species-rich tree and whip planting.

5.14 In addition, the following habitat creation measures are proposed:

- The creation of a number of green corridors throughout the Solar Site along various existing underground utilities easements (which restrict the placement of solar arrays), which will comprise species-rich meadow grassland creation;

- The establishment of species-rich meadow grassland across the entirety of the Solar Site under the solar arrays, and within the fields of the BESS Site outside of the footprint of the BESS equipment/access track;

- Planting of new species-rich hedgerows across the Solar Site boundaries and internal field edges, in addition to along several of the underground utilities' easements to improve green corridors across the Solar Site, in particular connectivity with the off-site woodland parcels. The length of proposed new hedgerow across the Site totals approximately 8,200m, which is approximately seven times more than the quantum of hedgerow lost to the Proposed Development;

- New tree planting in certain areas to minimise views from roads and residences; and
- The creation of an Ecological Mitigation and Enhancement Area, totalling approximately 10 ha, which has been designed to provide enhanced habitat for a range of species, particularly targeting overwintering birds and ground nesting farmland birds. This area will provide enhanced year-round foraging and breeding opportunities for the farmland bird assemblage potentially displaced from the Solar Site, and is located immediately to the south of it (parcel no. 6 as shown on the Illustrative Landscape and Ecology Strategy). This area will include:
    - Creation of wildlife ponds, surrounded by meadow grassland, within the c. 2.5ha field adjacent to the off-site ancient woodland belt;
    - Within the field to the west of the central ditch further from the woodland edge, a series of shallow, temporary ponds, also known as wader scrapes will be provided;
    - Within the westernmost parcel of the Ecological Mitigation and Enhancement Area, a 50/50 rotation of wild bird crops in accordance with the Sustainable Farming Scheme 2026 habitat type '*Unfertilised, unsprayed and unharvested cereal or linseed headlands'* and fallow land (aiming to provide habitat for ground nesting birds such as lapwings (*Vanellus vanellus*)) to be brought forward each year; and
    - In addition, the existing dry ditch will be enhanced to provide further foraging opportunities for birds whilst also becoming more favourable for use by water vole.

5.15 Furthermore, the following species-specific features will be incorporated into the development proposals to further enhance retained habitats for protected/notable species such as birds, amphibians, common reptiles and invertebrates:

- Two barn owl (*Tyto alba*) boxes;
- Two 32mm nest boxes suitable for small birds such as great tit (*Parus major*), tree sparrow (*Passer montanus*), pied flycatcher (*Ficedula hypoleuca*) and redstart (*Phoenicurus phoenicurus*);
- Two woodpecker (*Picus* sp. and *Dendrocopos* sp.) boxes; and
- Four hibernacula features for amphibians and reptiles.

COMPENSATE

5.16 All compensation requirements will be accommodated on-site.

5.17 For every tree or part of woodland group lost, a 3:1 replacement tree planting strategy or similar as a minimum would be applied in accordance with PPW 12, to be delivered onsite (i.e. in excess of like for like). New tree planting will be incorporated across the Site, to include the provision of individual tree standards, small woodland copses, and infill planting

to further strengthen the existing hedgerow network, in line with the character of the wider area.

LONG-TERM MANAGEMENT

5.18 An oLEMP has been included with the application, setting out how the mitigation and enhancement measures proposed will be delivered and can achieve the ecological ecosystem and GI improvements deemed commensurate with the Proposed Development which has been the subject of the assessment work presented in the application pack. For example:

- Implementation of a CEMP, informed by the oCEMP, during the construction stage to put appropriate management and operational systems in place to avoid or minimise adverse pollution effects;

- Application of an ECMS, informed by the oECMS, detailing measures to be implemented to protect important ecological features during the construction phase of the proposed development, overseen by an appointed Ecological Clerk of Works (ECoW); and

- The appropriate management and maintenance of all retained and newly created habitats/features proposed over the lifetime of the development through implementation of a LEMP, informed by the oLEMP, to deliver a net benefit to biodiversity.

5.19 These will allow the retained and created habitats within the Site to be futureproofed against climate change and other environmental issues which could otherwise affect the health and longevity of all onsite habitats and those connected to it in the wider landscape. Such a comprehensive approach would be considered to fully meet the requirements of Step 5 of the step-wise approach, ensuring the long-term longevity of the on-site habitats though monitoring, reporting and remedial management.

Section 6
Summary and Conclusions

6.1 EDP provided proposals to avoid the impact on valuable habitat, as well as suggesting enhancements, mitigation and compensation for any predicted impacts, including the management of retained vegetation, grassland, wetland and ditch habitats, the inclusion of new habitats in the Ecological Mitigation and Enhancement Area, bird and owl boxes, and reptile/amphibian hibernacula, as shown on the Illustrative Landscape and Ecology Strategy (see **Appendices EDP 1** and **2**). These proposals are in addition to the inherent benefits to biodiversity as a result of conversion of intensively managed agricultural land to a solar farm development in terms of reduced soil and wildlife disturbance, increased habitat structure/diversity, and cessation of the high use of pesticides/herbicides/fertilisers which are detrimental to invertebrate abundance and water quality.

6.2 All vegetation clearance impacts are to be minimised through the use of method statements and ecological supervision.

6.3 Overall, the Proposed Development would result in the removal of predominantly improved grassland and arable land, with an unavoidable loss of a small amount of hedgerow within the Site boundary (totalling approximately 1,170m), with subsequent impacts upon the existing GI resource. On balance, the strategy proposed will therefore provide a net benefit for biodiversity overall due to the habitat provisions and enhancements described when mitigation and enhancement measures are considered within the Site boundary. This includes the provision of new hedgerow (totalling approximately 8,200m) far exceeding that lost and provision of the Ecological Mitigation and Enhancement Area to enhance year-round foraging and breeding opportunities for the farmland bird assemblage potentially displaced from the Solar Site, in addition to providing habitats of value to a range of other species. Inherent within the GI Strategy is the retention of the main GI framework on-site (north to south, and east to west connections), and the protection of adjacent woodland and trees, including the Kinmel Avenue area of ancient woodland. Such retention, enhancement, protection and subsequent long-term management will futureproof these GI assets on a long-term basis, with compensation planting further strengthening the ecological connectivity between on-site and off-site habitats.

6.4 Where loss is unavoidable (i.e., improved grassland, arable land and hedgerow), this will be compensated for through the provision of more diverse habitat features including: enhanced grassland to meadow; restoring of dry ditches and marginal planting along these features; retention and enhancement of the onsite pond; new hedgerow planting; individual tree planting; and an enhanced GI framework that strengthens connections north to south and east to west through the Site. The GI corridors, grassland meadows and Ecological Mitigation and Enhancement Area would have multiple functions for wildlife, delivering benefits to biodiversity as well as visual amenity, character and connectivity.

6.5 Subject to the delivery of the GI and Biodiversity Strategy set out herein, key measures of which includes a net gain of approximately 7,030m of hedgerow, delivery of a central Ecological Enhancement and Mitigation Area, and creation of large areas of meadow grassland across land that is currently arable or structurally/species poor improved

grassland, which would be implemented in combination with the delivery of a considered scheme, this could provide an enhanced GI offering with respect to better mitigation of landscape character effects and habitat quality and variation. Furthermore, there will be inherent benefits to biodiversity from the conversion of intensively managed agricultural land to a solar farm development in terms of reduced soil and wildlife disturbance, increased habitat structure/diversity and cessation of the high use of pesticides/herbicides/fertilisers which are detrimental to invertebrate abundance and water quality. The outcome is considered to deliver ecosystem resilience as well as a net biodiversity benefit onsite in the longer term. New planting would also enhance the age and species diversity of the tree stock onsite and within the area of wider control. Long-term management of all GI assets (existing and proposed) could be secured through condition and the overall impact on GI would be a positive one, certainly more beneficial than if the Site were to remain in its current use.

Appendix EDP 1
Illustrative Landscape and Ecology Strategy (Solar Site)
(edp8841_d044c 27 August 2025 HEl/MDu)

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0 500m

- Site Boundary
- Proposed Area for Panels
- Proposed 33kv Sub-distribution Switchroom
- Proposed Inverters
- Proposed Access Tracks
- Enhancement to Meadow Grassland
- Enhancement of Existing Hedgerows
- Proposed Species-rich Hedgerows
- Proposed Woodland Copse
- Proposed Trees
- Existing Vegetation
- Existing Pond Retained and Enhanced
- Public Right of Way (PRoW)
- Proposed Deer Fencing
- Existing Ditch
- Existing Dry Ditch
- Enhanced Ditch
- Proposed Barn Owl Box
- Proposed Tit/Woodpecker Box
- Hibernacula

Ecological Enhancement & Mitigation Area

- Wildlife Ponds
- Scrapes
- Bird Crop / Fallow Land Rotation

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Registered office: 01285 740427 - www.edp-uk.co.uk - info@edp-uk.co.uk

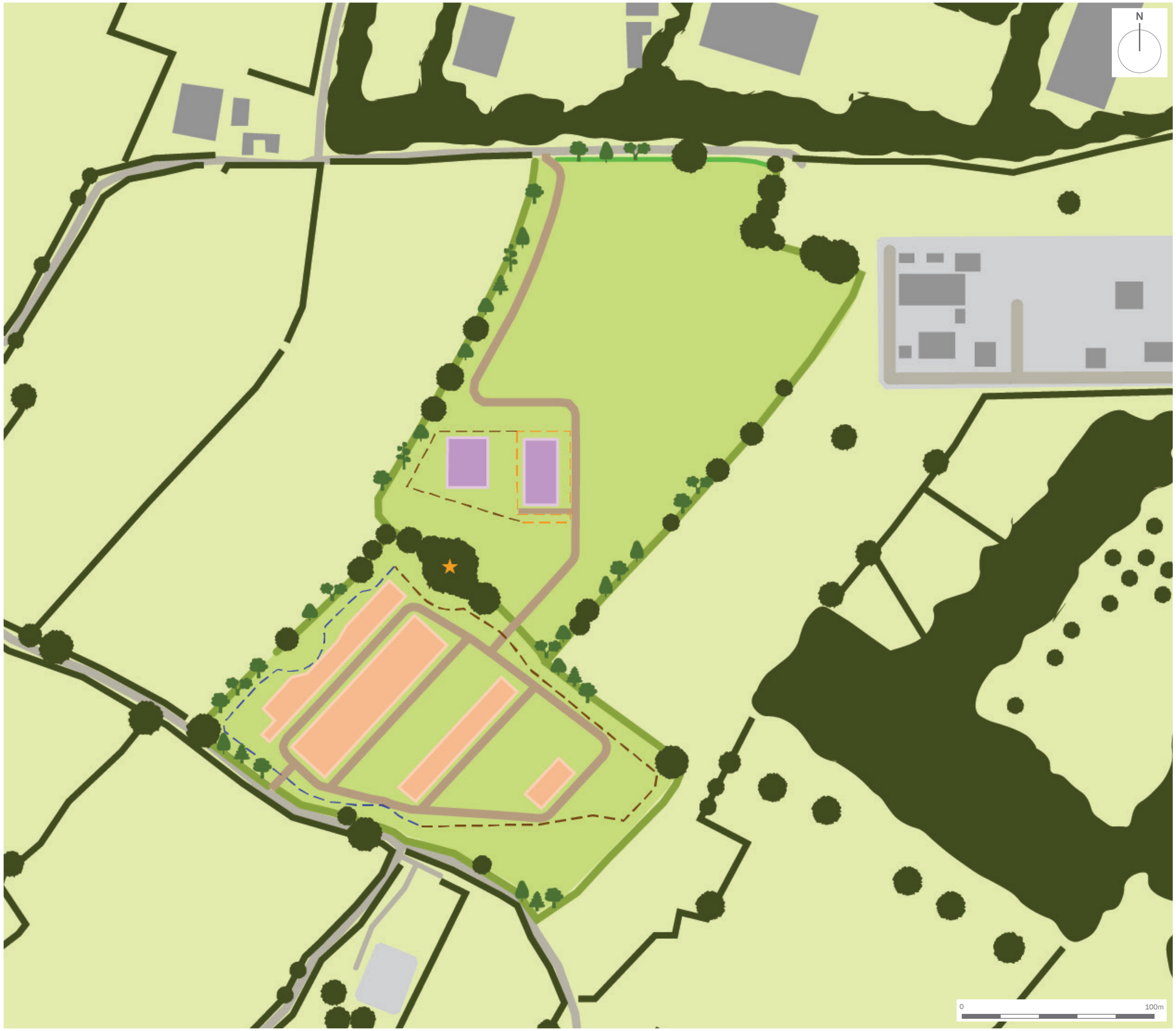
date	27 AUGUST 2025
drawing number	edp8841_d044c
scale	1:3,000 @ A0
drawn by	HEI
checked	MDu
QA	JFr

client
Bodelwyddan Solar and Energy Storage Limited

project title
Bodelwyddan Solar and Battery Storage

drawing title
Figure 11.7: Illustrative Landscape and Ecology Strategy

Appendix EDP 2
Illustrative Landscape and Ecology Strategy (BESS Site)
(edp8841_d050b 27 August 2025 JHa/MDu)



- Existing Trees
- Existing Tree Group/Woodland
- Existing Hedgerow
- Proposed Enhanced Hedgerow
- Proposed Species-Rich Hedgerow
- Proposed Tree Planting
- Development Access Track
- Enhanced Meadow Grassland
- Proposed BESS Compound
- Proposed Substation Compound
- Weldmesh Fence
- Noise Barrier
- Metal Palisade
- Existing Veteran Tree (T262)

client

Bodelwyddan Solar and Energy Storage Limited

project title

Bodelwyddan Solar and Energy Storage

drawing title

Figure 11.8: Illustrative Landscape and Ecology Strategy (BESS Site)

date	**27 AUGUST 2025**	drawn by	**JHa**
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scale	**Refer to scale bar @ A2**	QA	**JFr**

the environmental dimension partnership

Registered office: 01285 740427 - www.edp-uk.co.uk - info@edp-uk.co.uk

edp | the environmental dimension partnership

CARDIFF
02921 671900

CHELTENHAM
01242 903110

CIRENCESTER
01285 740427

info@edp-uk.co.uk
www.edp-uk.co.uk

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