

## 12. GLOSSARY, ACRONYMS AND REFERENCES

Term / Acronym	Description
Air quality objective	Policy target generally expressed as a maximum ambient concentration to be achieved, either without exception or with a permitted number of exceedances within a specific timescale.
Air quality standard	The concentrations of pollutants in the atmosphere which can broadly be taken to achieve a certain level of environmental quality. The standards are based on the assessment of the effects of each pollutant on human health including the effects on sensitive sub groups (see also air quality objective).
ALC	Agricultural Land Classification
AW	Ancient Woodland
AOD (Above Ordnance Datum)	Baseline standard for measuring height usually measured in metres AOD (mAOD)
AONB	Area of Outstanding Natural Beauty
AQAP	Air Quality Action Plan
Appropriate Assessment	An assessment required by the Habitats Directive where a project (or plan) would be likely to have a significant effect on a European site, either alone or in combination with other plans or projects (part of the Habitats Regulations Assessment process in the UK under the Conservation of Habitats and Species Regulations 2017).
Biodiversity	The biological diversity of the earth's living resources. The variety and abundance of species, their genetic composition, and the natural communities, ecosystems, and landscapes in which they occur.
Birds Directive	EC Directive on the conservation of wild birds (2009/147/EC)
BMP	Biodiversity Management Plan
BMV	Best and Most Versatile (agricultural land). This is land that is most flexible, productive and efficient in response to inputs and which can best deliver future crops for food and non-food uses such as biomass, fibres and pharmaceuticals.
Cadw	Historic Environment Service of Welsh Government
Construction Environmental Management Plan (CEMP)	A site or project specific plan designed to ensure best practice and/or appropriate environmental management practices are applied throughout the construction, operation and/or demolition phases of a project.
Chartered Institute of Ecology and Environmental Management (CIEEM)	Professional body of which most professional consultant ecologists are members. Its aim is to raise the profile of professional ecological and environmental management and to promote the highest standards of practice for the benefit of nature and society.
Countryside and Rights of Way (CROW) Act 2000	Primarily relates to public access to the countryside, but also amended existing law (the Wildlife and Countryside Act) relating to nature conservation and the protection of wildlife under Part III, which is concerned with the introduction of improved

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	protection and management of Sites of Special Scientific Interest (SSSIs).
Conservation Area	Nearly always applies to an area (usually urban or the core of a village) considered worthy of preservation or enhancement because of its special architectural or historic interest.
Controlled Waters	Controlled waters are defined as virtually all freshwater including relevant territorial waters (extending 3 miles seawards from baseline), coastal waters (water inland of baseline), inland waters, surface water, public supply reservoirs and groundwater.
Construction Traffic Management Plan (CTMP)	Sets out how the construction phase (including deliveries to the Site) will be managed.
DCC	Denbighshire County Council
Design and Access Statement (DAS)	A statement accompanying an application that sets out the rationale for the design approach and how the Proposed Development would be accessed for a range of users.
Design Manual for Roads and Bridges (DMRB).	A comprehensive manual which accommodates all current standards, advice notes and other published documents relating to the design, assessment and operation of trunk roads.
Development of National Significance (DNS)	The Planning (Wales) Act 2015 established a new category of development named Development of National Significance (DNS). Provision in the Act came into force in March 2016 which requires the Welsh Minister to determine DNS projects, with applications being made directly to them. The process for applying for a Development of National Significance is set out by the Development of National Significance (Procedure) (Wales) Order 2016 and subsequent Regulations. The DNS application process is managed by Planning Inspectorate Wales on behalf of the Welsh Government. Decisions are made in the context of the Welsh Government's national planning policy and the local planning authority's Local Development Plan.
EA (Environmental Agency)	An executive non-departmental government body working with responsibilities to protect and improve the environment, including flood risk management.
Ecological Impact Assessment (EcIA)	Assesses the potential effects of a development on habitats and species, particularly those protected by national and international legislation or considered to be of particular nature conservation importance.
Ecological feature/receptor	An ecological feature is a living system or entity that exists because of specific limiting factors such as the soils and nutrients, availability of water, climate, etc. An ecological receptor is a feature that is sensitive to or has the potential to be affected by an impact.
EcoW	Ecological Clerk of Works
eDNA	Environmental DNA is DNA that is collected from a variety of environmental samples such as soil, seawater, or even air rather than directly sampled from an individual organism.
EIA (Environmental Impact Assessment)	Process for identifying the likely significance of environmental effects (beneficial or adverse) arising from a Proposed Development, by comparing the existing environmental

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	conditions prior to development (the baseline) with the environmental conditions during/following the construction, operational and decommissioning phases of a development should it proceed.
Environment (Wales) Act 2016	The Environment (Wales) Act 2016 provides legislation to plan and manage Wales' natural resources. Section 7 of the Act requires Ministers to publish and maintain lists of species and habitats in Wales that are regarded as being of 'principal importance' for the purpose of maintaining biodiversity (replacing the duty originally set out in Section 42 of the Natural Environment and Rural Communities (NERC) Act 2006). Section 6 provides an enhanced biodiversity duty on public authorities to maintain and enhance biodiversity and promote the resilience of ecosystems.
Energy Management System (EMS)	Continuously monitors heating and cooling.
EPS	European Protected Species
ESS	Energy Storage System
Extended Phase 1 Habitat Survey	A habitats survey method originally published by the Nature Conservancy Council in 1990. It is intended to rapidly provide a record of semi-natural vegetation and wildlife habitat over large areas of countryside. It has been modified slightly, or extended, for the purposes of carrying initial assessments as to the likely ecological value of a site and its potential to support protected or notable species.
FCA (Flood Consequences Assessment)	An assessment as to the current and future flood risk of an area where development is proposed. A FCA is supporting information for a planning application.
Floodplain	This land where water has to flow or be stored in times of flood.
GCN	Great Crested Newt
Geographical Information System (GIS)	A system designed to capture, store, manipulate, analyze, manage, and present spatial or geographic data.
GLVIA3	'Guidelines for Landscape and Visual Impact Assessment - Third Edition'. Published in April 2013 by the Landscape Institute and the Institute of Environmental Management and Assessment. Guidance providing advice on the process of assessing the landscape and visual effects of developments.
Groundwater	Water below the surface of the ground and in direct contact with the ground or found subsoil in cracks and spaces in soil, sand and rock.
Groundwater Daughter Directive	Clarifies certain objectives of the Water Framework Directive relating to prevention and control of groundwater pollution and establishes groundwater quality standards.
ha	Hectare – unit of measurement 100m x 100m, or 10,000m <sup>2</sup>
Habitat connectivity	Linkage between areas of habitats, such as corridors to allow dispersal of wildlife.
Habitats Directive	EC Directive on the conservation of natural habitats and of Wild Fauna and Flora (92/43/EEC)

Term / Acronym	Description
Habitat of Principal Importance	Identified as being the most threatened and requiring conservation action under the UK Biodiversity Action Plan (UK BAP). Statutory lists of priority habitats in England, are provided under Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006 (England) – see also Environment (Wales) Act 2016.
Habitat Suitability Index (HSI)	A numerical index that represents the capacity of a given habitat to support a selected species. Most commonly used for pond habitats and great crested newts following a method developed by Oldham et al. (2000)
Hard Standing	Ground surfaced with a hard material suitable for supporting vehicular movement (e.g. tarmac, compacted gravel, concrete).
IEMA (Institute of Environmental Management and Assessment)	Professional body for EIA and environmental practitioners.
Invasive Non-native species	An alien plant or animal which is listed under Schedule 9 of the Wildlife and Countryside Act, making it an offence to allow the species to be spread into the wild.
Local Biodiversity Action Plan (LBAP).	Local strategy for the conservation of biological resources, now largely succeeded by The 'UK Post-2010 Biodiversity Framework' but lists of priority species and habitats and forms the basis of much biodiversity work.
Landscape and Visual Impact Assessment (LVIA)	A tool used to identify and assess the likely significance of the effects of change resulting from development both on the landscape and as an environmental resource in its own right and on people's views and visual amenity (GLVIA 3, 2013 p157).
LCA (Landscape Character Area)	Single unique areas which are the discrete geographical areas of a particular landscape type. Each has its own individual character and identity, even though it shares the same generic characteristics with other types.
LCT (Landscape Character Type)	These are distinct types of landscape that are relatively homogeneous in character. They are generic in nature in that they may occur in different areas in different parts of the country, but wherever they occur they share broadly similar combinations of geology, topography, drainage patterns, vegetation, historical land use, and settlement pattern.
Listed Building	Marks and celebrates a building's special architectural and historic interest, and also brings it under the consideration of the planning system, so that it can be protected for future generations.
Local Planning Authority (LPA)	The Council (County, Borough or District) that is empowered by law to exercise statutory town planning functions for a particular area (administrative boundary) of the UK.
LNR	Local Nature Reserve
Local Wildlife Site (LWS)	Non statutory designated site identified and selected for their local nature conservation value and protected through planning policy.

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Main River	Main rivers are usually larger rivers and streams. The Environment Agency carries out maintenance, improvement or construction work on main rivers to manage flood risk.
MAGIC	'Multi Agency Geographic Information for the Countryside' website – Government sponsored website containing environmental data from several public bodies including Natural England, the Environment Agency, English Heritage, Forestry Commission, Marine Management Organisation and the Department for Environment, Food and Rural Affairs.
National Nature Reserve (NNR)	Established to protect the most significant areas of habitat and of geological formations. Natural Resources Wales selects and designates National Nature Reserves in Wales under the National Parks and Access to the Countryside Act 1949, or under the Wildlife and Countryside Act 1981.
NRW	Natural Resources Wales
Non-Technical Summary (NTS)	Summary document in a non-technical language
Ordinary watercourse	A watercourse that is not part of a Main River. All rivers and streams, ditches, drains, cuts, culverts, dikes, sluices, sewers (other than public sewers within the meaning of the Water Industry Act 1991) and passages, through which water flows.
Ordnance Survey	National mapping agency in the United Kingdom which covers the island of Great Britain
Phase 1 Habitat Survey	A habitats survey method originally published by the Nature Conservancy Council in 1990. It is intended to rapidly provide a record of semi-natural vegetation and wildlife habitat over large areas of countryside. It has been modified slightly, or extended, for the purposes of carrying initial assessments as to the likely ecological value of a site and its potential to support protected or notable species.
PPW	Planning Policy Wales
Public Right of Way (PRoW)	Footpath, bridleway or byways over which members of the public have a right to use.
Reasonable Avoidance Measures (RAMS)	Outlines how a task should be undertaken to avoid impacts on an ecological receptor.
Ramsar Site	A Ramsar site is a wetland site designated to be of international importance under the Ramsar Convention. The Convention on Wetlands, known as the Ramsar Convention, is an intergovernmental environmental treaty established in 1971 by UNESCO, which came into force in 1975.
Receptor	A location, feature (ground, watercourse) or individual (person, plant, bird, animal etc) upon which the effects of a proposed development is assessed, i.e. the receiving environment.
RoFRaS	Risk of Flooding from Rivers and Sea.
RoFSW	Risk of Flooding from Surface Water. Mapping which indicates areas susceptible to surface water flooding.
RPA	Root Protection Area.

Term / Acronym	Description
Royal Society for the Protection of Birds (RSPB)	Nature conservation charity engaged in managing reserves, undertaking research and working to improve the value and management of land for wildlife, with particular focus on birds.
Special Area of Conservation (SAC)	Sites chosen to conserve the natural habitat types and species of wild flora and fauna listed in Annex I and II of the Habitats Directive. They are the best areas to represent the range and variety of habitats and species within the European Union.
Scheduled Monument	"Nationally important" archaeological site or historic building, given protection against unauthorised change.
SD	Scoping Direction
Special Protection Area (SPA)	European Designation designated under Article 4 of the EC Directive on Conservation of Wild Birds (Directive 2009/147/EC) for the protection of rare or vulnerable birds (as listed on Annex I of the Directive) and for regularly occurring migratory species.
Site of Special Scientific Interest (SSSI)	Conservation designation denoting a protected area in the United Kingdom. An area of land of special interest by reason of its flora, fauna, geology or physiographical features notified under the Wildlife and Countryside Act 1981 (as amended).
Sustainable Drainage System (SuDS)	Management practices and control structures designed to drain surface water in a more sustainable fashion, mimicking natural processes.
Surface water runoff	Rainwater (including snow and other precipitation) which is on the surface of the ground and has not entered a watercourse, drainage system or public sewer.
Swale	A shallow vegetated channel designed to convey, treat or store surface water and facilitate infiltration.
The Town and Country Planning (EIA) Regulations 2017 (Wales) (as amended)	Regulations that assess the environmental consequences (positive and negative) of projects prior to a decision to move forward with a proposed development.
TAN	Technical Advice Note.
UKBAP	UK Biodiversity Action Plan (UKBAP), as succeeded by The 'UK Post-2010 Biodiversity Framework'. BAPs identify habitats and species of nature conservation priority on a UK (UK BAP) and Local (LBAP) scale. UK BAPs formed the basis for statutory lists of priority species and habitats in Wales under Section 7 of the Environment (Wales) Act 2016, and so are also relevant in the context of this legislation.
Water Framework Directive (WFD)	A European Union Directive which commits European Union member states to achieve good qualitative and quantitative status of all water bodies (including marine waters up to one nautical mile from shore) by 2015.
Water Resources Act 1991	An Act of the Parliament of the United Kingdom that regulates water resources, water quality and pollution, and flood defences.
WCA	Wildlife and Countryside Act (1981) (as amended). The primary legislation which protects animals, plants and habitats in the UK.

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Well-being Act	The Well-being of Future Generations (Wales) Act 2015 aims to deliver an improvement in all four aspects of well-being: social, economic, environmental and cultural. In order to demonstrate that appropriate consideration has been given to the Well-being goals and sustainable development principle in the decision-making process, public bodies are required to have regard to the 'five ways of working' contained in the Well-being Act. These require consideration of: involvement; collaboration; integration; prevention; and long term factors.
World Health Organisation (WHO)	Specialised agency of the United Nations that is concerned with international public health.
Zone of Influence (ZoI)	The areas/resources that may be affected by the biophysical changes caused by activities associated with a project.
Zone of Theoretical Visibility (ZTV)	A map, usually digitally produced, showing areas of land within which a development is theoretically visible. (GLVIA 3, 2013 p159). Used within Landscape and Visual Assessments (LVIAs) to identify areas of interest for further investigation and assessment.

## REFERENCES

### 1. INTRODUCTION

- 1.1 Development of National Significance (Procedure) (Wales) Order 2016.
- 1.2 The Town and Country Planning (Environmental Impact Assessment) (Wales) Regulations 2017 (as amended).
- 1.3 The Planning (Wales) Act 2015.

### 2. ASSESSMENT SCOPE AND METHODOLOGY

- 2.1 Planning Inspectorate. Environmental Impact Assessment Scoping Direction 3247619 Elwy Solar Farm (3<sup>rd</sup> June 2020).
- 2.2 Planning Policy Wales, Edition 10 (December 2018).
- 2.3 The Town and Country Planning (Environmental Impact Assessment) (Wales) Regulations 2017 (as amended).

### 3. THE APPLICATION SITE

- 3.1 Denbighshire County Council Replacement Local Development Plan 2018-2033 (Candidate Sites).

### 4. THE PROPOSED DEVELOPMENT AND ALTERNATIVES CONSIDERED

- 4.1 The Town and Country Planning Act 1990, Section 251.

### 5. LANDSCAPE AND VISUAL

- 5.1 Clwydian Range and Dee Valley Area of Outstanding Natural Beauty Supplementary Planning Guidance (June 2018).
- 5.2 Clwydian Range AONB Management Plan 2014 – 2019.
- 5.3 Denbighshire Local Development Plan 2006-2021.
- 5.4 Denbighshire Country Council Supplementary Planning Guidance on Renewable Energy (April 2016).
- 5.5 Guidelines for Landscape and Visual Impact Assessment (3rd Edition) - Landscape Institute / Institute of Environmental Management and Assessment (2013).
- 5.6 Landscape and Visual Appraisal (February 2020) – Pegasus Planning Group.
- 5.7 National Landscape Character Areas (NLCA) Published National Character Assessments.
- 5.8 Natural Resources Wales, LANDMAP Methodology Overview (June 2017).
- 5.9 Planning Policy Wales, Edition 10 (December 2018).
- 5.10 Technical Advice Note 8: Renewable Energy (2005).

## **6. BIODIVERSITY**

- 6.1 Birds of Conservation Concern in Wales 3' (Johnstone. I & Bladwell. S., 2016) and 'Birds of Conservation Concern 4' (Eaton et al., 2015).
- 6.2 Biodiversity Guidance for Solar Development. BRE (2014) Eds G E Parker and L Greene.
- 6.3 BS 5837:2012 Trees in relation to design, demolition and construction.
- 6.4 Conservation of Habitats and Species Regulations 2017 ('the Habitats Regulations').
- 6.5 Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019.
- 6.6 Countryside and Rights of Way (CROW) Act 2000.
- 6.7 Denbighshire Local Development Plan 2006-2021.
- 6.8 Denbighshire Supplementary Planning Guidance Note Conservation and Enhancement of Biodiversity (July 2016).
- 6.9 Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora (the 'Habitats Directive').
- 6.10 Directive 2009/147/EC of the European Parliament and of the Council on the conservation of wild birds (codified version of Directive 79/409/EEC as amended) (the 'Birds Directive').
- 6.11 Environment (Wales) Act 2016.
- 6.12 Guidelines for Ecological Impact Assessment in the UK and Ireland. Terrestrial, Freshwater, Coastal and Marine (CIEEM, 2018).

- 6.13 Hedgerows Regulations 1997.
- 6.14 MA, Aebischer NJ, Brown AF, Hearn RD, Lock L, Musgrove AJ, Noble DG, Stroud DA and Gregory RD. (2015). Birds of Conservation Concern 4: the population status of birds in the United Kingdom, Channel Islands and Isle of Man. British Birds 108, 708–746.
- 6.15 Nature Recovery Plan for Wales, December 2015.
- 6.16 Planning Policy Wales, Edition 10 (PPW10, 2018).
- 6.17 Protection of Badgers Act 1992.
- 6.18 UK Biodiversity Action Plan (UKBAP), as succeeded by The 'UK Post-2010 Biodiversity Framework'
- 6.19 Wildlife and Countryside Act 1981 (as amended).

## **7. TRAFFIC AND TRANSPORT**

- 7.1 Construction Traffic Management Plan, Pegasus Planning Group (July 2020) – See Appendix 7.1.

## **8. HUMAN HEALTH**

- 8.1 Air Quality Technical Note, Air Quality Consultants, (July 2020) – See Appendix 9.1.
- 8.2 Energy Storage Safety Management Plan, Solarcentury (June 2020) – See Appendix 10.1.
- 8.3 Noise assessment, LF Acoustics (June 2020) – See Appendix 8.1.
- 8.4 Town and Country Planning (Environmental Impact Assessment) (Wales) Regulations 2017.

## **9. AIR QUALITY**

- 9.1 Air Quality Technical Note, Air Quality Consultants, (July 2020) – See Appendix 9.1.
- 9.2 Design Manual for Roads and Bridges (DMRB) - DMRB LA 105 (Highways England, 2019)

## **10. RISK OF MAJOR ACCIDENTS**

- 10.1 Energy Storage Safety Management Plan, Solarcentury (June 2020) – See Appendix 10.1.
- 10.2 Town and Country Planning (Environmental Impact Assessment) (Wales) Regulations 2017.

## **11. SUMMARY**

11.1 No additional references not listed above.