Site Search Statement

DOC 06

Development of National Significance

Alaw Môn Solar Farm

Land west of the B5112, 415m south of Llyn Alaw, 500m east of Llantrisant and 1.5km west of Llannerch-y-Medd, Anglesey

February 2024

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1.0 INTRODUCTION

1.1 This document represents sets out the site selection strategy for Alaw Mon Solar Farm. This serves to demonstrate the appropriateness of the development site to accommodate the development proposal. Whilst the absence of a grid connection in the locality would be a potential technical or economic reason for a project not proceeding, its presence does not override the policy considerations on whether this is a suitable site in planning and environmental terms which the Applicant has rigorously tested during the formulation of its proposals.

1.2 The remaining chapters of this Report are divided into:

Chapter 2 – Planning Policy Context

1.3 Chapter 2 provides the planning policy context for selecting DNS renewable energy sites.

Chapter 3 – Review of Site Search Methodology

1.4 This chapter provides a review of renewable energy site search toolkits prepared by Welsh Government, Isle of Anglesey County Council and other advisory bodies.

Chapter 4 – Methodology and Assessment for Mon Alaw Solar Farm

1.5 Chapter 4 provides the Applicant's criteria for assessing the suitability of the site for development.

Chapter 5 – Conclusions

1.6 Chapter 5 provides a summary and conclusions of the site selection process.

2.0 PLANNING POLICY CONTEXT

Future Wales (2021)

2.1 Future Wales, published in February 2021, provides a spatial context for facilitating the delivery of development in Wales over the next 20 years. The First Minister of Wales's Ministerial Foreword makes an early and important reference to the climate emergency faced by Wales. There is a recognised need for Wales to focus on generating the energy it needs to support its communities and industries over the next twenty years.

2.2 Future Wales sets the direction of how Wales should be investing in infrastructure and development for the greater good of Wales and its people - the provision of renewable energy is firmly embedded in this future direction. In terms of the specific policies in Future Wales, Policies 17 and 18 contain strategic spatial and detailed criteria-based policies respectively and should be considered together in the determination of applications, along with detailed advice on assessing benefits and impacts in Planning Policy Wales.

2.3 Future Wales is split into four regions, namely North, Mid Wales, the South West and the South East. The Site is located within the North Wales Coastal regional growth area (Policy 21). Page 118 of Future Wales identifies sets out how the provision of renewable energy is vital for the North Wales to play its role in decarbonising. It states (inter alia) (own emphasis underlined and in bold) ***"It is vital the region plays its role in decarbonisation and supports the realisation of renewable energy. Policies 17 and 18 set out Future Wales' approach to renewable energy generation across Wales****. There is strong potential for wind, marine and solar energy generation…****The Welsh Government wishes to see energy generation, storage and management play a role in supporting the regional economy in the North****."*

2.4 Policy 5, of Future Wales, sets out how the Welsh Government will seek to support rural communities. The policy states (inter alia with own emphasis in bold) "*The Welsh Government also strongly supports development of innovative and emerging technology businesses and sectors to help* ***rural areas unlock their full potential****, broadening the economic base, and creating higher paid jobs*". The amplification to the policy, at page 70 of Future Wales, is specifically pertinent to Alaw Mon Solar Farm and states *"****Rural areas are the base for many innovative technology based companies and there is potential to expand this aspect of the economy****. The sector includes research and development, defence and security, animal health and veterinary science, bio-*

*technology and agri-tech, and **energy**"*[1] This s also consistent to the local vision as set out by the IACC's Energy Island Programme and the North Wales Energy Strategy.

2.5 On the issue of alternatives to on-shore renewable and low carbon energy developments, page 97 of Future Wales states (inter alia) *"The Welsh Ministers have considered alternatives to the need for new large-scale electricity generation infrastructure, including building-mounted installations and energy efficiency measures. Although we believe that these measures have an important part to play in meeting our energy, decarbonisation and climate change targets, they will not enable us to meet these objectives on their own"*. Opportunities to deliver on-shore renewable and low carbon energy developments should therefore be explored wherever possible.

2.6 In term of site selection, reference is made to the approved scheme at Llanfihangel yn Nhowyn and to the south and south-east of Bryngwran, Anglesey (DNS/3217391 – Trafwll Solar Farm), the Inspector's Report notes at paragraph 311 *"Future Wales does not direct solar development to specific areas but relies on the criteria set out in Policy 18*".

Planning Policy Wales (Edition 12, published February 2024)

2.7 The primary objective of Planning Policy Wales (PPW) is to ensure that the planning system contributes towards the delivery of sustainable development and improves the social, economic, environmental and cultural well-being of Wales, as required by the Planning (Wales) Act 2015, the Well-being of Future Generations (Wales) Act 2015 and other key legislation and resultant duties such as the Socio-economic Duty. A well-functioning planning system is fundamental for sustainable development and achieving sustainable places. PPW promotes action at all levels of the planning process which is conducive to maximising its contribution to the well-being of Wales and its communities.

2.8 Under the heading of 'Supporting Infrastructure', Paragraph 3.61 sets out how adequate and efficient electrical infrastructure is critical for economic, social and environmental sustainability. Paragraph 3.63 goes on to state: *"Development should be located so that it can be well serviced by existing or planned infrastructure. In general this will involve maximising the use of existing infrastructure or considering how the provision of infrastructure can be effectively co-ordinated to support development plans. Infrastructure choices should support decarbonisation, socially and*

[1] Future Wales, page 70, 4th paragraph.

economically connected places…"

2.9 Subsection 5.9 provides support for renewable and low carbon development. Paragraph 5.9.14 sets out how *"Planning authorities should support and guide renewable and low carbon energy development to ensure their area's potential is maximised. Planning authorities should assess the opportunities for renewable and low carbon energy in the area, and use this evidence to establish spatial policies in their development plan which identify the most appropriate locations for development"*. Paragraph 5.9.15 goes on to identify how outside identified areas, *"planning applications for renewable and low carbon energy developments should be determined based on the merits of the individual proposal. The local need for a particular scheme is not a material consideration, as energy generation is of national significance and there is a recognised need to optimise renewable and low carbon energy generation. Planning authorities should seek to ensure their area's renewable and low carbon energy potential is achieved and have policies with the criteria against which planning applications outside of identified areas will be determined*".

2.10 With regards to need PPW states that, in all cases, considerable weight should be attached to the need to produce more energy from renewable and low carbon sources in order for Wales to meet its carbon and renewable targets. The Welsh Government's target includes the need to generate 70% of its electricity consumption from renewable energy by 2030. Wales also has a legally binding target to reduce greenhouse gas emissions by at least 80% by 2050, and the Government has also announced that it will reach net-zero greenhouse gas emissions by 2050 in response to the recommendations by the Committee on Climate Change given in June 2019. It is noted that PPW hasn't been updated to acknowledge how 100% of Wales' annual electricity consumption from renewable sources is required by 2035.

2.11 Page 75 of PPW sets out the Welsh Government's trends and issues in regard to productive and enterprising places. Criteria two states "*promoting and diversifying our rural economy to ensure it is fit for the future and economically sustainable while ensuring that unnecessary development in the countryside is controlled*".

3.0 REVIEW OF SITE SEARCH METHODOLOGIES

3.1 Whilst the overarching policy tests for DNS solar projects are now set out in Policies 17 & 18 of Future Wales, a number of high-level toolkits have been published over the years which provide a methodology or guidance for solar farms site search. These are discussed within this document. The document under review are: -

- Welsh Government Practice Guidance - Planning for Renewable and Low Carbon Energy - A Toolkit for Planners 2015 edition
- BRE Planning Guidance for the Development of Large Scale Ground Mounted Solar Systems. (undated)[2]
- Welsh Government Assessment of onshore wind and solar energy potential in Wales (March 2019)
- Anglesey and Gwynedd Joint Local Development Plan 2011-2026

3.2 Before turning to the various toolkits, it is prudent to review PPW on the matter. Paragraph 5.9.21 of PPW provides the following guidance for renewable energy schemes ***"Prior to an application being submitted, developers for renewable and low carbon energy developments should, wherever possible, consider how to avoid, or otherwise minimise, adverse impacts through careful consideration of location, scale, design and other measures"***. The applicant notes PPW's reference to '***wherever possible***'. The Welsh Government therefore accepts there may be circumstances where little can be done to mitigate the direct effects of that scheme. However, for this application, the applicant has sought to avoid in the first instance and minimise effects by the application of effective design principles, including amending the layout of the project pre-submission to PEDW to address stakeholder comments and to adhere to the ecological stepwise approach.

3.3 Paragraph 5.9.9 identify how "*Welsh Government Practice Guidance: Planning for Renewable and Low Carbon Energy – A Toolkit for Planners provides guidance on how an evidence base can be developed. It includes guidance on developing a Renewable Energy Assessment, Energy Opportunities Plan and Strategic Sites Assessment, and how this can be translated into planning policies. It also stresses the importance of working corporately across local government and other*

[2] https://www.bre.co.uk/filelibrary/nsc/Documents%20Library/NSC%20Publications/NSC-publication-planning-guidance.pdf

public services. However, this suggested approach should be adapted to local circumstances to enable renewable electricity and heat opportunities to be maximised, and methodological assumptions should not be used to constrain the identified resource". The toolkit is discussed further below in this chapter.

3.4 The applicant also makes reference to Paragraph 6.4.15 of PPW states (inter alia) *"The first priority for planning authorities is to avoid damage to biodiversity in its widest sense (i.e. the variety of species and habitats and their abundance) and ecosystem functioning. Where there may be harmful environmental effects, planning authorities will need to be satisfied that any reasonable alternative sites (including alternative siting and design options) that would result in less harm, no harm or benefit have been fully considered"*.

Welsh Government Practice Guidance - Planning for Renewable and Low Carbon Energy - A Toolkit for Planners 2015 edition

3.5 The "Planning for Renewable and Low Carbon Energy: A Toolkit for Planners" project was originally commissioned by the Welsh Government in November 2008. Supported by a steering group comprised of the Welsh Government and the Energy Saving Trust, the toolkit was developed by AECOM, with Pembrokeshire County Council selected for a pilot study. Environment Agency Wales and Countryside Council for Wales (now Natural Resources Wales) were key providers of data. The purpose of the 2008 edition was to, amongst other things, provide a "useable framework methodology for local planning authorities to help with the production of local renewable energy assessments which have clear linkages to renewable energy technologies, energy efficiency, energy conservation and low carbon, in order for them to write meaningful policies in their Local Development Plans"[3]. However, the document did not provide a specific methodology for large scale solar array developments. This was introduced through the 2015 edition.

3.6 Paragraph 1.1.2 of the toolkit 2015 edition states *"in the case of wind or solar farm developments, it [the toolkit] can assist officers in understanding why a developer has chosen a particular location to develop a scheme*".

[3] Welsh Government Practice Guidance - Planning for Renewable and Low Carbon Energy - A Toolkit for Planners, section 1.2

3.7 Welsh Government's intention for the toolkit is therefore relevant to:

- Planning policy – preparing planning policies which guide appropriate renewable and low carbon energy development through their Local Development Plans (LDPs).
- Development management – taking decisions on planning applications submitted to the local planning authority for development; as well as preparing Local Impact Assessments for schemes which are determined by the Planning Inspectorate

3.8 Large scale stand-alone solar farms are specifically covered by the toolkit. Solar resource is discussed at section E1.7, it identifies how:

> As part of their REA, local authorities should identify and allocate areas for potential PV farm projects. Solar PV farms, by nature, are most usually situated in rural settings away from residential settlements and where the solar resource is least constrained.
>
> This can mean that there is often no opportunity to utilise the power generated in buildings, therefore, an economically viable (relatively short distance from the solar array to an appropriate connection point) route to the electricity grid is required.

3.9 'Project Sheet K' of the 2015 toolkit, deals specifically deals with solar arrays, it sets off by acknowledging again how **"there is currently no standard agreed approach to constraints mapping for Solar PV Farms. This section therefore provides a potential approach on how to undertake a high level assessment of the potential solar resource from 'stand-alone' PV farms in your local authority area"**.

3.10 It presents a stepped approach to enable local authorities to assess the available/potential solar PV resource within their administrative area and this summarised in the table below. The project sheet notes how the methodology facilitates a visual representation of 'usable' land resource for largescale 'stand-alone' PV developments. It also acknowledges how: -

- Land indicated as suitable through GIS mapping may prove to be technically and/or financially unviable

- Detailed assessment of a particular site may reveal proposed PV farm impacts to be manageable and to meet regulatory and policy requirements.

3.11 The toolkit states how it is not appropriate to consider all site level issues as part of this high level assessment of potential resource. Other more detailed steps may be best assessed at the planning application stage for an individual site. Such activities might include: landscape sensitivity analysis; distance to the nearest appropriate electricity grid connection, if electricity is to be exported; and proximity to public rights of way, bridle ways. The toolkit is presented in the table below.

3.12 **Table 3.1 2015 Toolkit Methodology**

Step 1	Map locations of built-up areas and infrastructure - The location of built-up areas and existing infrastructure will significantly constrain any deployment of large-scale stand-alone PV farms
Step 2	Map environmental and heritage constraints – the guidance provides the following list of constraints: Woodland area; Extent of lakes and rivers; Special Protection Area (SPA); Special Area of Conservations (SAC); Candidate Special Area of Conservation (cSAC); RAMSAR sites; National Nature Reserves (NNR); Local Nature Reserves (LNR); Site of Special Scientific Interest (SSSI); Marine Nature Reserves (MNR); Scheduled Ancient Monuments (SAM); and Areas of Outstanding Natural Beauty. The toolkit advises that for the purpose of assessment, that there is no potential for large scale solar PV farm developments in these areas; although in practice some of these sites may not be constrained. It also identifies how the above list is not intended to be exhaustive and where additional environmental and/or heritage constraints exist they should also be taken into consideration.
Step 3	Map areas of suitable slope and topology - The performance of a photovoltaic panel system is directly related to the inclination, orientation and shading and thus individual site surveys are ideal when determining site suitability. For the purposes of this high level assessment however, it is necessary to make assumptions on the

	suitability of slope gradient and orientation for large-scale PV deployment.
Step 4	Addressing cumulative impact - The output from the above steps will give an estimate of the maximum accessible solar PV resource within the administrative area, and at this point the LPA should consider cumulative impacts.
Step 5	Assess potential installed capacity and energy output - According to the DECC UK Solar PV Strategy Part 1: Roadmap to a Brighter Future the land area required for a 1MW fixed-tilt PV array is approximately 6 acres (or 2.4Ha or 0.024km2). This figure should be used to determine the potential installed capacity of each site. It is recommended that a cut off equivalent to 0.5MW (i.e. 3 acres, 1.2Ha or 0.012km2) is applied, as any sites smaller than this are less likely to be viable (commercially speaking) for development.
Step 6	Map locations of suitable Agricultural Land Classification and apply further constraints as necessary – the toolkit identifies how the aim of this step is to protect best and most versatile agricultural land, however it goes on to state how diversification helps to support agricultural based business and promotes multi-functional land uses in some cases. Suitability would be assessed on a case by case basis where necessary.

BRE Planning Guidance for the Development of Large Scale Ground Mounted Solar Systems.

3.13 The BRE national guidance provides best practice planning guidance in respect of how large ground mounted arrays are developed setting out planning considerations and requirements. Whilst the BRE guidance relates to the planning policy framework for England, it identifies how the planning considerations are similar for Wales, Scotland and Northern Ireland.

3.14 The guidance provides focused advice with regards to site selection process, page 5 of the guidance identifies how Ground Mounted Solar PV projects should ideally utilise previously developed land, brownfield land, contaminated land, industrial land or agricultural land preferably of classification 3b, 4, and 5 (avoiding the use of “Best and Most Versatile” cropland where

possible). Land selected should aim to avoid affecting the visual aspect of landscapes, maintain the natural beauty and should be predominantly flat, well screened by hedges, tree lines, etc and not cause undue impact to nearby domestic properties or roads. With regards to BMV, the guidance identifies if the site is grade 3a, the developer proposals should provide an explanation of why the development needs to be located on the site and cannot be located on a site of lesser agricultural land classification within the area. If grade 1 or 2, the guidance required the addition of clear justification on the benefits the development would have for the land to be taken out of full agricultural use.

Welsh Government Assessment of Onshore Wind and Solar Energy Potential in Wales (March 2019)

3.15 Welsh Government commissioned Arup and Partners Ltd. (Arup) to undertake research into the onshore wind and solar energy development opportunities and constraints in Wales to inform the preparation of an Energy Atlas for Wales and the National Development Framework/ Future Wales. This was achieved by producing an interactive tool to indicate the potential output of onshore wind and solar energy across Wales against specific technical, environmental and landscape constraints. The objective of the study included the identification of appropriate locations for a range of scales of onshore wind and solar energy development in Wales (community scale to Developments of National Significance and Nationally Significant Infrastructure Projects).

3.16 The methodology developed by Arup followed an iterative process, with input from stakeholder workshops, Arup experts, stakeholder engagement, and meetings with the Welsh Government core team. The methodology is based on various constraints that were identified through stakeholder engagement at workshops and through a range of other sources including the Welsh Government Practice Guidance: Planning for Renewable and Low Carbon Energy – A Toolkit for Planners and TAN 8. Constraints and opportunities were set on the following themes: Landscape and visual; Technical; Environmental; Cumulative impacts and wider benefits. The assessment was split into two stages.

3.17 Stage 1 dealt with the development of an interactive tool with variables and assumptions defined at a national level in collaboration with Welsh Government and wider stakeholders. Key steps in stage one were:-

- Initial definition of constraints and opportunities, working with stakeholders and experts
- Initial development of digital tool
- Development and analysis of options, working closely with stakeholders to test and refine these
- Development of initial priority areas for wind and solar refinement
- Development and analysis of policy options, recognising that the areas could be subject to a range of approaches to policy

3.18 Stage 2 applied further analysis in the broad areas identified in order to further refine Priority Areas for Solar and Wind Energy, considering in further detail certain constraints, as follows:

- Landscape and visual assessment
- Centres of population
- Vehicular access
- Ecosystem services and resilience
- Historic environment

3.19 Stage 1 was split into four steps, namely:

- Step 1 – define high risk areas
- Step 2 – define low risk and medium risk areas.
- Step 3 – Overlay DNO & NG infrastructure
- Step 4 – anticipated energy outputs from priority search areas.

3.20 The fourth step is not relevant to the site search discussion so is not further considered in this report.

3.21 For step 1, the Arup methodology applied constraints that would cause an area to be unsuitable for any scale of solar development. These constraints were set to provide a base layer of high risk areas for wind and solar. These constraints are provided in the table blow.

3.22 **Table 3.2 Stage 1 Step 1 – Define High Risk Areas**

Stage 1 Step 1 – High level constraints as a base layer.	
Environment	Ramsar, world heritage sites, special protection areas, special areas of conservations, ancient woodland, AONB, national Parks and Conservation Areas.
Infrastructure	NATS, airport and runways and urban regions.

3.23 For step 2, the Arup methodology applied technology specific and user defined constraints in order to identify medium and low risk areas for solar development. The user-variable constraints for solar are set out below:

3.24 **Table 3.3 Stage 1 Step 2 – Define Low Risk and Medium Risk Areas**

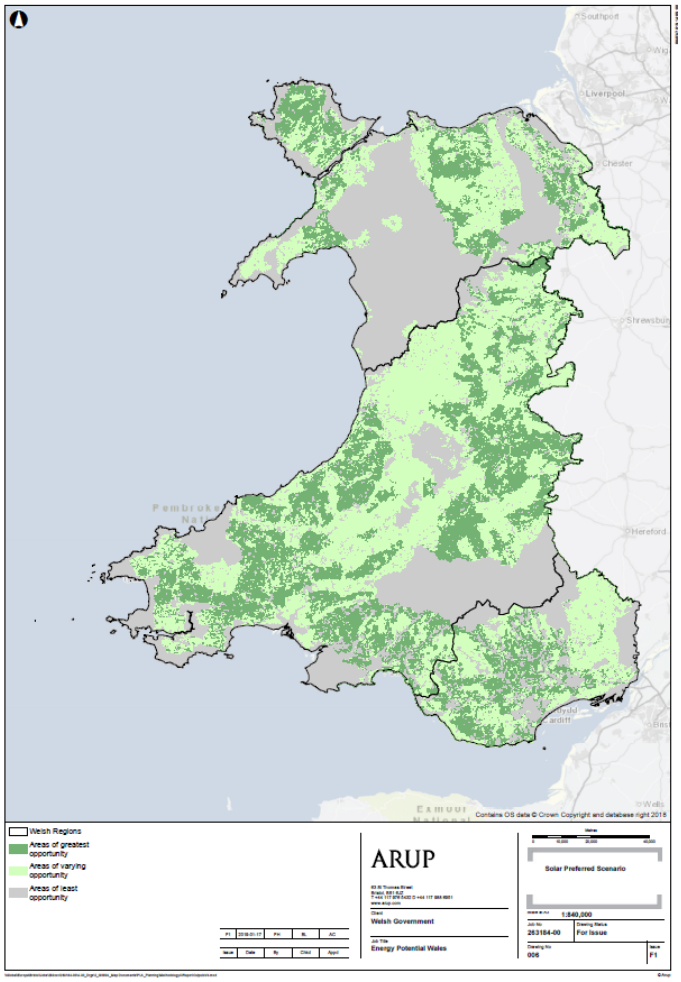
Stage 1 Step 2 - User-variable constraints applied to create user defined high risk areas, which are added to the high risk base layer.	
Terrain	Inland waters (excluding rivers & canals).
Environment	Woodland, peat deeper than 45cm, SSSI, Predictive agricultural land classification, National nature reserves, landmap Visual sensory, open access, historic landscapes, regionally important geological and geomorphological sites, geo parks and UNESCO biosphere.
Infrastructure	Allocated major developments.

3.25 The remaining areas were then defined as follows: -

- If a constraint is potentially applicable to the area but has not been selected by the user, then it will be defined as medium risk and highlighted light green.
- If there are no identified constraints applicable to the area, the area will be defined as low risk and highlighted dark green.

3.26 Arup's output from Stage 1, steps 1 & 2, is shown in the illustration 3.1 below. It is noted how the application site, is deemed as an area of greatest and varying opportunity for solar development. The coastal areas of Anglesey are assessed as being the least appropriate for solar development. It is notable that significant areas of North Wales are also deemed to be least appropriate for solar. The output is based on the utilisation of preferred scenarios and a final list of constraints.

Illustration 3.1 – ARUP Solar Preferred Scenario

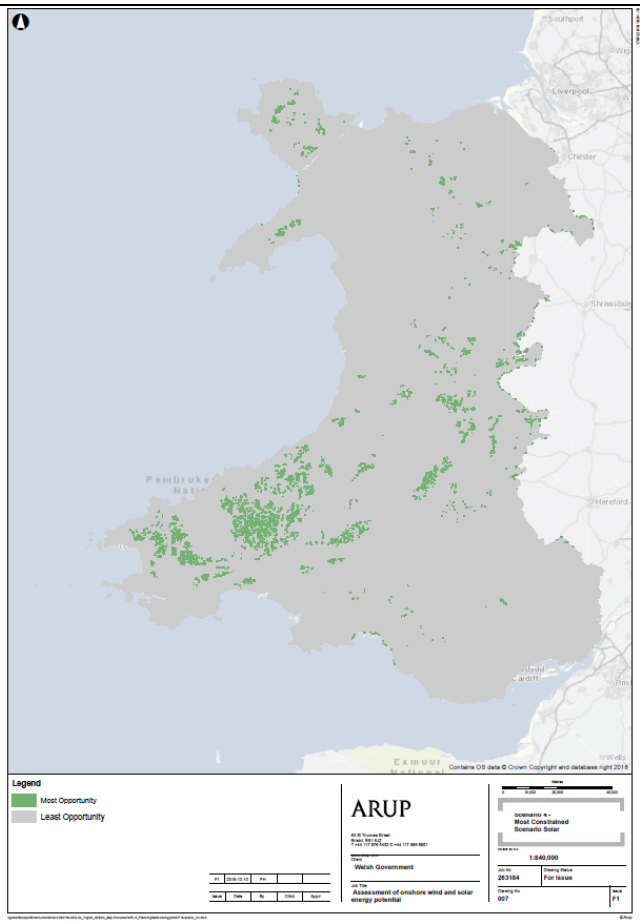


3.27 For reference, the Arup Assessment also sets out a stricter scenario which effectively excludes all

development from any constrained area (i.e., placing an embargo on all potential development if a constraint applies, including ALC, SSSI, AONB etc). This is provided in the illustration 3.2 below. The mapping identifies limited land for solar and where the Welsh Government would be least likely to procure and deliver their renewable energy targets.

3.28 The Applicant notes how part of the application site falls within land which is assessed to have the best opportunity to accommodate solar development, when assessed against this hypothetical stricter site selection regime.

Illustration 3.2 – ARUP Most Constrained Scenario Solar



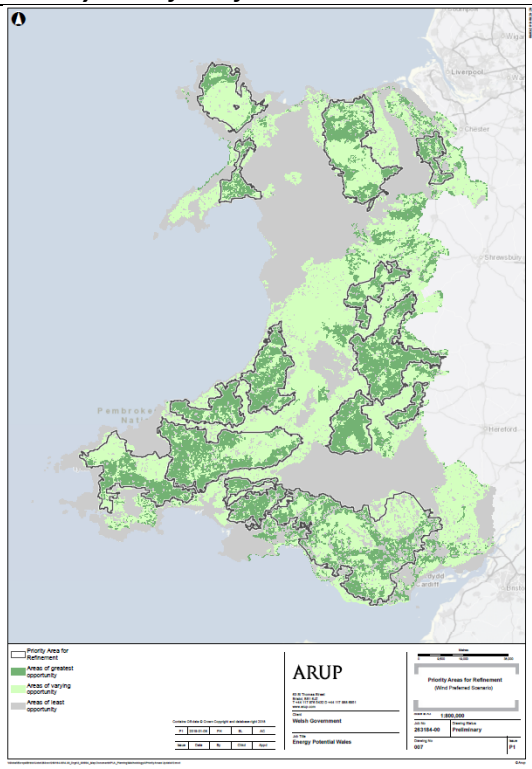
3.29 From the above illustration, the Applicant notes how a 'fixed' approach to constraints cannot be applied to ensure the prerequisite rollout of new renewable energy infrastructure across Wales to meet the Welsh Government targets. A balanced and pragmatic approach should be followed to ensure that Welsh Government's targets for renewable energy can be timely delivered in all areas of Wales.

3.30 Turning to the third step of the Arup methodology, Arup then applied a refinement to the priority areas based on the following primary factors:

- Grid – capacity and cost of connection;
- Landscape;
- Access; and
- Ownership.

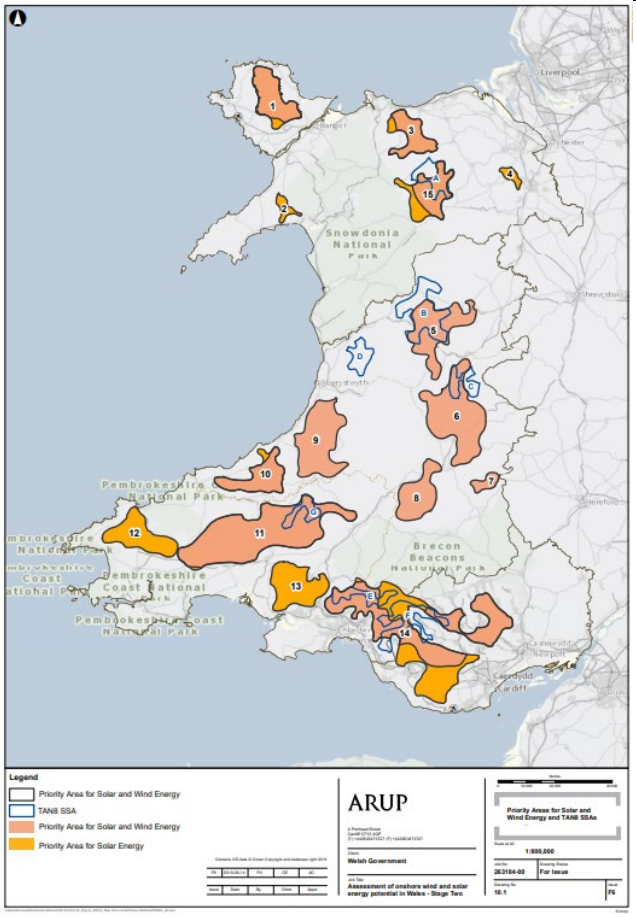
3.31 The outcome was the identification of '14 priority areas for refinement'. This is shown on the illustration 3.3 below.

Illustration 3.3 – ARUP Priority Areas for Refinement



3.32 The development of initial priority areas for solar were then refined as part of **Stage 2**, this included a refinement to take into account landscape impact of AONBs. The outcome is set out in the below illustration 3.4 below.

Illustration 3.4 – ARUP Priority Areas for Solar and Wind Energy TANS SSAs



3.33 The rational for the revisions undertaken during Stage 2 is discussed below[4]:

- *"Anglesey AONB surrounding this area is important due to the views outwards across the sea rather than into the priority area. On this basis, we have given the intervisibility analysis less weight. Nevertheless, the Priority Area for Wind and Solar Energy has been refined to include a buffer area around the AONB.*

[4] Relevant extract from Table 5 'Rational for revision' from The Welsh Government Assessment of onshore wind and solar energy potential in Wales Stage 2 - Refinement of Priority Areas for Wind and Solar Energy

- *The southern edge of this Priority Area for Wind and Solar Energy has been reduced to reduce impact on Grade 1 parks and gardens and guardianship monuments.*
- *This Priority Area for Wind and Solar Energy originally contained a doughnut shape around a settlement in the centre of the area. However, the area has been re-introduced in the Priority Area for Wind and Solar Energy for consistency with other centres of population.*
- *The section of this Priority Area for Wind and Solar Energy south of the A55 has been identified for solar only due to the sensitive Malltraeth estuary and coastal level landscape"*

3.34 It is noted that Alaw Mon Solar Farm is located within Priority Area No 1, for solar and wind development.

3.35 However, the Welsh Government ultimately decided not to carry forward the solar priority area into Future Wales. The Welsh Government Consultation Report which provided their response to the Draft National Framework, dated September 2020, explains why the pre-assessed solar areas were removed from the final publication of Future Wales. The reason was to provide greater flexibility for developers to bring forward solar sites. Paragraph 4.6.38 of the Consultation Report stated ***"The solar industry has pointed out to the need in flexibility in the policy position as it is more agile in responding to the grid capacity and applications for solar farms do not have as much impact on the wider landscape as wind turbines. The Welsh Government accepts this and has therefore decided to delete the areas identified for solar development from the NDF"***. An important takeaway from the Arup assessment is the implementation of an appropriate buffer between the priority area and the Island's AONB.

3.36 Overall, the method is based on constraints identified through stakeholder engagement in the process. The constraints identified were landscape and visual; technical; environmental; and cumulative impacts and wider benefits. The assessment identified the application site as being appropriate for solar development.

Anglesey and Gwynedd Joint Local Development Plan 2011-2026 (JLDP)

3.37 The JLDP identifies 11 opportunities for renewable energy development within its plan area. The JLDP discusses how the search areas were identified based upon the methodology outlined within Planning for Renewable and Low Carbon Energy – A Toolkit for Planners (2015) by the Welsh

Government.[5] Of the 11 sites, 9 are located within Anglesey. From the applicant's review of all 9 sites located within Anglesey, a clear precedence has been set for the need and acceptability to utilise best and most versatile agricultural land for the delivery of ground mounted solar schemes on the Island, as explored in the table below.

JLDP Site No.	**Location of area (nearest settlement)**	**Does search area comprise best and most versatile agricultural land**
S3	Llangefni	Yes, the majority of the site comprises grade 2 agricultural land (as per predictive ALC Map 2).
S4	Pentraeth	Yes, the majority of site comprises grade 3a agricultural land (as per predictive ALC Map 2)
S5	Pentraeth	Yes, the majority of the site comprises grade 3a and grade 2 agricultural land (as per predictive ALC Map 2).
S6	Gwalchmai	Yes, site comprises grade 2 agricultural (as per predictive ALC Map 2). Noted that c. 70% of site is grade 3b.
S7	Gwalchmai	The majority of the site comprises grade 3b, with small pockets of grade 2 (as per predictive ALC Map 2).
S8	Llanddeusant	Yes, area includes swathes of grade 2 and grade 3a agricultural land.
S9	Llanddeusant	Yes, area includes swathes of grade 2 and grade 3a agricultural land

[5] Source JDLP, paragraph 6.2.34.

S10	Caergeiliog	Yes, site comprises large swathes of grade 2 agricultural land (as per predictive ALC Map 2).
S11	Caergeiliog	Yes, site comprises grade 3a agricultural land (as per predictive ALC Map 2).

3.38 Insofar as the need to consider the JLDP's sites ahead of the application site, reference is made to the approved scheme at Llanfihangel yn Nhowyn and to the south and south-east of Bryngwran, Anglesey (DNS/3217391 - Trafwll Solar Farm), the Inspector's Report notes at paragraph 311 *"Future Wales does not direct solar development to specific areas but relies on the criteria set out in Policy 18. Thus, the JLDP's requirement to site solar development in potential search areas no longer carries any weight".*

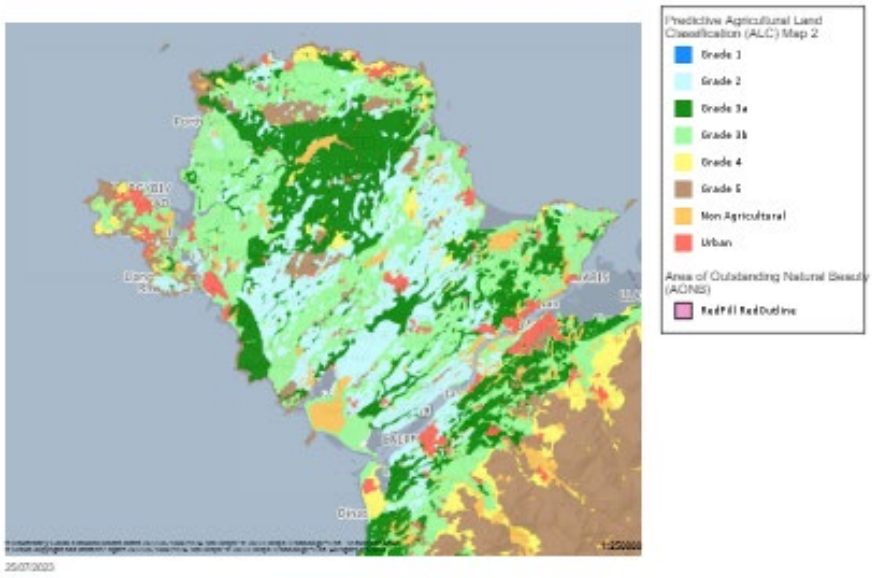
3.39 The above demonstrates a precedence and overriding need for the use of BMV within Anglesey to accommodate ground mounted solar schemes. The Applicant notes that JLDP has not identified any brownfield sites for ground mounted solar project.

3.40 IACC are therefore in agreement with the applicant that there is an overriding need to use best and most versatile agricultural land to deliver renewable energy development within the Island.

3.41 The 2018-2019 Soil Evidence Programme produced by ADAS on behalf of the Welsh Government estimated up to 296,96015 hectares of BMV land in Wales, comprising 12,133 hectares of Grade 1, 110,274 hectares of Grade 2 land, and 174,553 hectares of Grade 3a land. This equates to 17.63% of the total agricultural land in Wales. Chapter 13 of the accompanying draft Alaw Mon Solar Farm Environmental Statement identifies how 53% of agricultural land across Anglesey is predicted to be of best and most versatile quality. The land quality position for Anglesey is therefore almost the polar opposite in comparison to the Welsh average.

3.42 The Predictive ALC Map 2 for Anglesey is set out below (illustration 3.5).

Illustartion 3.5: Predictive ALC Map 2 for Anglesey

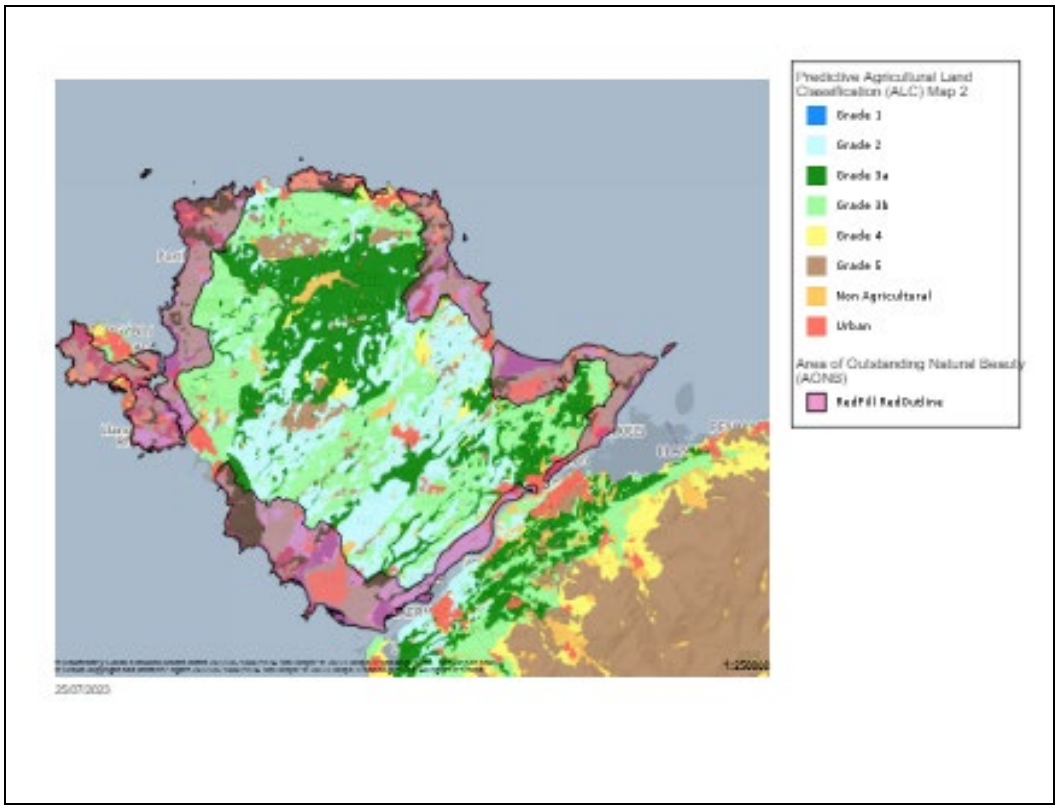


3.43 It is noted how lower quality agricultural land is typically found around the coastal edges of Anglesey and this unfortunately washed over by the Island's National Landscape designation (previously known as Isle of Anglesey Area of Outstanding Natural Beauty designation). The policy provisions set out in Future Wales places an embargo on the use of such land for DNS renewable energy projects[6][7]. This position is consistent with the Arup report which also deemed how the coastal areas of the Island as being the least appropriate for solar development.

3.44 Illustration 3.6 shows the predicted map overlayed with the AONB designation.

Illustration 3.6: ***Predictive ALC Map 2 for Anglesey with AONB overlay***

[6] Policy 17 of Future Wales excludes the use of AONB land for DNS renewable energy developments.
[7] Policy 18 excludes the use of land that would have an unacceptable impact on the setting of the AONB (this strategically excludes the land adjoining the AONB).



3.45 The limited sections of land along the coastline which do not form part of the National Landscapes/AONB are also unavailable for solar, as noted below: -

- land between Rhosneigr & Llanfairyneubwll – this land relates to either common land or land within the control of the RAF Valley. It is not available to the Applicant.
- land to the west of Cemaes – this land relates to the Wylfa Power Station and provides the point of connection to the national grid for the development proposal.
- land north of Benllech – this land is dominated by holiday development / touring / tent pitches.
- Urban areas of Holyhead, Menai Bridge and Amlwch[8].

3.46 Accordingly, the availability of BMV land within Anglesey (which is significantly higher than the national average) coupled with the need to discount lower grade land within and adjoining the National Lanfscapes/AONB, contribute towards demonstrating the overriding need for the use of higher quality land for solar development within Anglesey. The applicant position is therefore

[8] Note that the land north of Amlwch Port is safeguarded for employment.

substantiated and falls in line with the approaches set out in both the JDLP and Arup Assessment.

3.47 In addition, a letter issued by Lesley Griffiths (the then Cabinet Secretary for Environment and Rural Affairs) dated 7th August 2017 which states that (our emphasis): *'**the over-riding** imperatives to produce more renewable energy to reduce the impact of climate change and meet our decarbonisation targets are crucial in this regard'*.

3.48 It is therefore clear that the need for renewable energy deployment to combat climate change cannot be viewed as anything other than **overriding**. This position was accepted by the Planning Inspector as part of her consideration of the Traffwll Solar Parc.[9]

3.49 PPW states that *"Land in grades 1, 2 and 3a should only be developed if there is an overriding need for the development, and either previously developed land or land in lower agricultural grade is unavailable*". The overriding need for the development has been demonstrated and as such the use of higher quality and is accessible.

3.50 A detailed ALC survey was carried out in April 2021, using the MAFF methodology. The results are provided in the table below: -

ALC Grade/Sensitivity of Receptor	Total Area Identified in Survey (Ha)	Total (% of the Site)
Grade 1 (Excellent) – Very High Sensitivity	0	0
Grade 2 (Very Good) – Very High Sensitivity	36.7	13.7%
Subgrade 3a (Good) – High Sensitivity	122.3	45.5%
Subgrade 3b (Moderate) – Medium Sensitivity	87.5	32.6%

[9] Inspectors report to Parc Solar Traffwrdd, DNS/3217391, paragraph 268.

Grade 4 (Poor) – Low Sensitivity	6.5	2.4%
Grade 5 (Very Poor) low Sensitivity	0	0
Other Land / Disturbed Land	7.2	2.7%
Grid Corridor (consisting of non-agricultural/temporary reversible)	8.6	3.2%
Total	**268.8**	**100**

3.51 The terrain, despite the ALC grade, is suited to grassland and grazing rather than to arable production. Rock outcrops, rocks close to the surface, steep slopes and small gateways all provide challenges to mechanical activity, such as the examples below. Many fields have a variety of land classifications within each field, reflecting limitations. There are many areas where surface rocks will significantly limit mechanical use.

3.52 Grade 2 agricultural land (high sensitivity) is limited by (i) an overall climate limitation, (ii) exposure to wind in the western parts of the Site, and by (iii) soil wetness where well drained soil profiles (Wetness Class) have medium clay loam or medium silty clay loam topsoils. This grade of land generally occurs at higher elevations in the western, southern and eastern parts of the Site.

3.53 Subgrade 3a agricultural land (high sensitivity) is limited by soil wetness, where soil profiles with medium clay loam or medium silty clay loam topsoils are slightly seasonally waterlogged (Wetness Class II) or seasonally waterlogged (Wetness Class III). This grade of land generally occurs on upper and middle slopes across the Solar PV Site.

3.54 Subgrade 3b agricultural land (medium sensitivity) is limited by (i) slopes with gradients between 7° and 11°, and (ii) soil wetness, where soil profiles with medium clay loam or medium silty clay loam topsoils are slowly permeable and seasonally waterlogged for long periods over the winter (Wetness Class IV). This grade of land tends to occur at the base of slopes and in the bottom of valleys. It is readily identified on the Site by the presence of many soft rushes in the grassland.

3.55 Grade 4 agricultural land (low sensitivity) is limited by (i) soil wetness in the western end of the Site, where there are some soil profiles with heavy silty clay loam topsoil in Wetness Class IV, and (ii) by slopes with gradients between 11° and 18° in the south-western part of the Site.

Applicant's Response to Welsh Government Methodologies

3.56 It is clear that the various toolkits prepared by Welsh Government and IACC require a degree of judgement to be exercised as opposed to applying a 'hard stop' position to all constraints. Where a stepped approach is applied to toolkit methodology, then the emphasis placed by the Welsh Government is firstly given to the identification of environmental constraints (such as AONB, National Parks, SSI etc); before applying other technical constraints (such as ALC considerations). This approach is consistent with Paragraph 6.4.21 of PPW which states "***The first priority for planning authorities is to avoid damage to biodiversity and ecosystem functioning."***

3.57 The toolkits also make reference to the importance of grid availability and connectivity, accepting that the connection route/location is now a key material consideration to renewable energy proposals. The Applicant agrees that a major limiting factor in the location of DNS scale renewable energy projects is the availability of a financially viable grid connection with capacity. The Applicant has applied this constraint as the appropriate starting point for the search area as an unviable grid connection precludes a scheme and site from being progressed.

3.58 PPW advises, at paragraph 5.9.21, that prior to an application being submitted, developers for renewable and low carbon energy developments should, wherever possible, consider how to avoid, or otherwise minimise, adverse impacts through careful consideration of location, scale, design and other measures. However, PPW does not provide detailed guidance on how a search area for such developments should be defined or how potential sites should be selected.

3.59 In the report on the Penprgwm Solar Farm application (Ref DNS/3252305), the Inspector acknowledges, at paragraph 252, the *'absence of a set methodology or detailed guidance within PPW on how potential sites should be selected'*.

3.60 In the report on the Blackberry Lane application (Ref: DNS/3245065) the Inspector considered, with regard to site selection, that *'the approach to be taken is one for individual developers to determine based on the requirements of national planning policy and consideration of the relevant practical, social, economic and environmental issues.*' However, in term of site selection, the more

recent decision for Parc Solar Traffwrdd, the Inspector's Report notes at paragraph 311 *"Future Wales does not direct solar development to specific areas but relies on the criteria set out in Policy 18*".

3.61 The applicant agrees that the criteria set out through Policy 18 presents a suitable methodology for assessing the suitability of sites for DNS renewable energy schemes.

3.62 The applicant also makes reference to the Report for Ty Croes (Ref DNS/3227364), the Inspector notes at paragraph 167 *"Future Wales would be the primary source of policy where there is any conflict"*.

3.63 The Applicant's site assessment therefore focuses on the criteria set out through Policies 17 & 18 of Future Wales.

3.64 Policies 17 and 18 contain strategically spatial and detailed criteria-based policies respectively and should be considered together in the determination of applications. These are : -

- Applications for large-scale wind and solar will not be permitted in National Parks and Areas of Outstanding Natural Beauty
- Outside of the Pre-Assessed Areas for wind developments and everywhere for all other technologies, the proposal does not have an unacceptable adverse impact on the surrounding landscape (particularly on the setting of National Parks and Areas of Outstanding Natural Beauty).
- There are no unacceptable adverse visual impacts on nearby communities and individual dwellings.
- There are no adverse effects on the integrity of Internationally designated sites (including National Site Network sites and Ramsar sites) and the features for which they have been designated (unless there are no alternative solutions, Imperative Reasons of Overriding Public Interest (IROPI) and appropriate compensatory measures have been secured).
- There are no unacceptable adverse impacts on national statutory designated sites for nature conservation (and the features for which they have been designated), protected habitats and species.
- The proposal includes biodiversity enhancement measures to provide a net benefit for biodiversity.
- There are no unacceptable adverse impacts on statutorily protected built heritage assets.

- There are no unacceptable adverse impacts by way of shadow flicker, noise, reflected light, air quality or electromagnetic disturbance.
- There are no unacceptable impacts on the operations of defence facilities and operations (including aviation and radar) or the Mid Wales Low Flying Tactical Training Area (TTA-7T)[10];
- There are no unacceptable adverse impacts on the transport network through the transportation of components or source fuels during its construction and/or ongoing operation.
- The proposal includes consideration of the materials needed or generated by the development to ensure the sustainable use and management of resources.
- There are acceptable provisions relating to the decommissioning of the development at the end of its lifetime, including the removal of infrastructure and effective restoration.
- The cumulative impacts of existing and consented renewable energy schemes should also be considered.

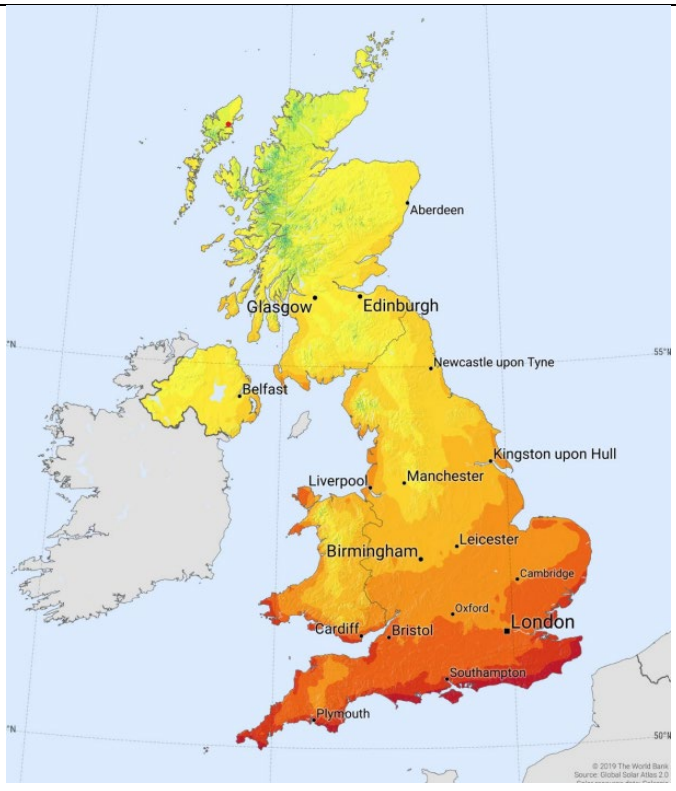
[10] Applicant notes that this criterion is not applicable to ground mounted solar.

4.0 METHODOLOGY AND ASSESSMENT FOR ALAW MON SOLAR FARM

4.1 The Applicant is working across the England, Scotland and Wales identifying sites it considers suitable for renewable energy development. Given the need to significantly increase renewable electricity to meet local, devolved and national carbon targets set to tackle the climate change emergency, the Applicant looks to progress all suitable sites.

4.2 Anglesey represents a particularly favourable area for solar deployment because of the high levels of solar irradiation through its proximity to the coastline UK irradiation levels are illustrated below in Figure 4.1. It shows how the north west of Anglesey (where the site is located) receives some of the highest amounts of sunshine within North Wales. This presents a particularly favourable area for solar development as it allows for significantly more electricity generation than other site locations within Wales, and is comparable to Pembrokeshire and the Llyn Peninsular (significant parts of Pembrokeshire and the Llyn Peninsula are embargoed from development due to their respected National Park and AONB designations).

Illustration 4.1. UK irradiation levels



Grid Capacity Availability

4.3 One of the biggest constraints which has to be considered when developing a renewable led energy scheme is securing a viable point of connection to the electricity network. Securing a grid connection is very difficult and problematic for energy proposals and this is consistently identified by stakeholders as a major barrier to achieving renewable energy targets in Wales[11]. The availability of grid capacity and the ability to connect at a viable cost is therefore a material consideration in the site selection process[12].

4.4 With regards to the electricity grid network, Planning Policy Wales states *"Planning authorities and the energy industry, including National Grid and Distribution System Operators, should engage with each other to ensure development plans take grid infrastructure issues into account. This can also ensure investment plans for transmission and distribution align with the identified potential for renewable and low carbon energy as well as the future challenges of increasing electrification of transport and heat".* Grid connection is an important consideration for applicants wishing to construct generation plant; and this consideration is an important element for any renewable energy project which is seeking to connect to the national electricity infrastructure.

4.5 In the market-led system, the Applicant must ensure that there will be the necessary infrastructure and capacity within the electricity network to accommodate the power generated from an energy project. The availability of feasible grid connections allows projects to come forward meaning the location of the grid connection must be a material consideration in the site selection process.

4.6 The Applicant undertook a regional study with regards to grid connection capabilities in North Wales. The study was carried out prior to the identification of the site and prior to any grid application being made. The applicant subsequently secured a grid connection to the National Grid for 160MW at the Wylfa Power Station. This is the only offer available to the applicant for this scheme, and the only location whereby the applicant can connect a renewable energy project on the Island. There are no other National Grid substations within the Island. The nearest National Grid substations are at Pentir and Dinorwig, Llanberis. Additionally, the applicant encountered limited opportunities to connect to existing overhead power lines. Overall, these limitations in the

[11] https://committees.parliament.uk/publications/6995/documents/72868/default/ (page 22)
[12] https://www.ft.com/content/7c674f56-9028-48a3-8cbf-c1c8b10868ba

area in relation to possible connection points demonstrates the only available site for renewable energy generation on Anglesey.

Site Selection and Length of Connection

4.7 No national or local guidance is available which provides clarification regarding the extent of the area in which suitable sites should be assessed. Professional judgement was therefore used to determine a suitable area in which this study should focus. Having established the area's potential to accommodate the development it was then necessary to investigate whether sufficient land would be available to allow the development to proceed. To this end, discussions were held with local landowners to determine interest, the following areas were not considered as appropriate to pursue:

- Land located within Anglesey's AONB.
- Land within close proximity to the Island's AONB. For consistency, the applicant was mindful of the AONB's development buffer set out within the Arup's report. This excluded a significant amount of lower grade agricultural and located between Llyn Alaw and Llanfachraeth.
- Land located within the Island's Special Landscape Area was excluded, this includes significant amount of lower grade agricultural land located in between Cemaes and Llyn Alaw, which extends from Mynydd Mechell to Carreglefn.
- Built Up Areas and Settlements
- Any areas containing large bodies of water.
- Land located within RAMSAR sites.
- Special Areas of Conservation
- Local Nature Reserves
- Wildlife Sites
- Areas located within extensive Flood Warning Areas
- Recreational & Open Access land (including public access land provided by the Countryside and Rights of Way Act 2000)

4.8 Commercial terms have been agreed with the four farming enterprises for the construction and operation of a solar farm subject to the necessary consents. This established the fundamental deliverability of the development. As a general rule, the further the point of connection from the development site the greater the costs for development, this is due to the additional costs

associated with cables, their installation, greater third-party landowner negotiations, environmental management and mitigation. This is offset by increasing the project capacity. For Alaw Mon, a viable project to the applicant necessitates the involvement of four farming enterprises and this equates to a land holding of the sites size.

Site Assessment

4.9 The assessment of the site against polices 17 and 18 of Future Wales are detailed in the Planning Statement and are repeated below.

Criteria 1: Outside of the Pre-Assessed Areas for wind developments and everywhere for all other technologies, the proposal does not have an unacceptable adverse impact on the surrounding landscape (particularly on the setting of National Parks and Areas of Outstanding Natural Beauty)

4.10 As stated in section 3 of this report, it is noted that Alaw Mon Solar Farm was located within a priority area for solar in accordance with the earlier draft version of Future Wales. However, the Welsh Government ultimately decided not to carry forward the solar priority area into the published Future Wales. The Welsh Government Consultation Report which provided their response to the Draft National Framework, dated September 2020, explains why the pre-assessed solar areas were removed from the final publication of Future Wales. The reason was to provide greater flexibility for developers to bring forward solar sites. Paragraph 4.6.38 of the Consultation Report stated ***"The solar industry has pointed out to the need in flexibility in the policy position as it is more agile in responding to the grid capacity and applications for solar farms do not have as much impact on the wider landscape as wind turbines. The Welsh Government accepts this and has therefore decided to delete the areas identified for solar development from the NDF"***.

4.11 The site is not located within a statutory protected landscape designation such as a National Park or an Area of Outstanding Natural Beauty of national importance. The proposals would inevitably change the character of the site from undulating pastoral farmland to a solar PV development, however, the arrangement of the proposed solar farm responds positively to the landform and field pattern with the existing hedgerow vegetation being retained and strengthened, where appropriate, meaning that overall no unacceptable adverse impact will be caused in this regard. Landscape and visual considerations are fully assessed within Chapter 7 of the accompanying Environmental Statement.

Criteria 2: There are no unacceptable adverse visual impacts on nearby communities and individual dwellings

4.12 A Residential Visual Amenity Assessment (RVAA) supports the application submission and is presented as technical appendix 7.6 to the Landscape and Visual Chapter, Chapter 7, of the Environmental Statement. The salient points are discussed below.

4.13 Whilst changes in views and visual amenity are a material consideration in the planning process, and views from private locations may be considered as part of a Landscape and Visual Impact Assessment (LVIA), nobody has 'a right to a view'. However, there are situations where the effect on the outlook / visual amenity of a residential property is so great that it is not generally considered to be in the public interest to permit such conditions to occur where they did not exist before. The RVAA sets out judgements in respect of Residential Visual Amenity and assesses whether the effect of the Development on Residential Visual Amenity is of such a nature and / or magnitude that it potentially affects 'living conditions' or Residential Amenity, i.e. whether the Residential Visual Amenity Threshold has been reached.

4.14 This threshold regarding the acceptability of visual effects on the living conditions of residential properties in the public interest has become widely known within the renewables sector as the 'Lavender Test'. The RVAA seeks to determine whether or not the proposed Alaw Mon Solar Farm would give rise to significant visual effects on the surrounding residential properties and whether the proposed infrastructure and new planting would appear oppressive, overbearing or overwhelming on living conditions as a matter for the public interest.

4.15 In the evaluation of the effects on views and the visual amenity of the identified residential receptors, the magnitude of visual effect (change) is typically described with reference to:

4.16 Distance of property from the Development having regard to its size / scale and location relative to the property (e.g. on higher or lower ground);

4.17 Type and nature of the available views (e.g. panoramic, open, framed, enclosed, focused etc.) and how they may be affected, having regard to seasonal and diurnal variations;

4.18 Direction of view / aspect of property affected, having regard to both the main / primary and peripheral / secondary views from the property;

4.19 Extent to which the Development / landscape changes would be visible from the property (or parts of) having regard to views from principal rooms, the domestic curtilage (i.e. garden) and the private access route, taking into account seasonal and diurnal variations;

4.20 Scale of change in views having regard to such factors as the loss or addition of features and compositional changes including the proportion of view occupied by the Development, taking account of seasonal and diurnal variations;

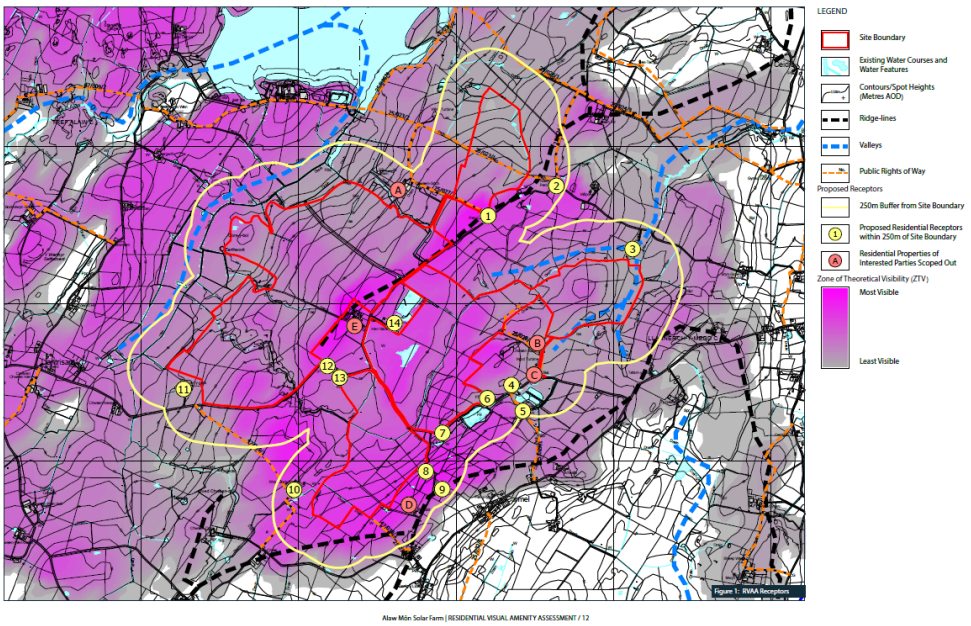
4.21 Degree of contrast or integration of new features or changes in the landscape compared to the existing situation in terms of form, scale and mass, line, height, colour and texture, having regard to seasonal and diurnal variations;

4.22 Duration and nature of the changes, whether temporary or permanent, intermittent or continuous, reversible or irreversible etc.; and

4.23 Mitigation opportunities – consider implications of both embedded and potential further mitigation.

4.24 The RVAA confirms how the majority of the Development comprises solar panels that range in height from 0.8m above the ground level to 2.5m, and are therefore of limited height. However, due to the size of the Site and the nature of its context, residential properties within 250m of the Site boundary have been scoped into the RVAA, although this is likely to include properties that will not experience significant visual affects as a result of the Development. In total 14 properties were included within the RVAA, with the remaining residential properties scoped out as they are the residential properties of interested parties. The following Zone of Theoretical Visibility (ZTV) plan shows that all of the residential properties have potential intervisibility with the Development, based on a bare earth ZTV which does not account for the screening effects of existing built form and/or vegetation.

FIGURE 1a: STUDY AREA WITH ZTV AND PROPERTY LOCATIONS



4.25 None of the above identified significantly affected properties have been judged to fail the test of overbearing effects i.e no major significant effects are predicted. In other words, the properties would continue to provide an attractive outlook and good living environment, from a visual point of view, albeit affected by the proposed development. The residents would continue to benefit from views in other directions, gained from the remaining unaffected elevations, and parts of their curtilage not affected by the proposed development. The properties would remain an attractive place to live when judged objectively, and would not be subject to any overbearing effects.

4.26 At year 1 Moderate adverse Significant effects on residential and visual amenity are predicted at Properties 7: Pennant and 13: Gorsgoch. However as mitigation planting establishes over time these effects are predicted to reduce to become not Significant by year 15. The detailed analysis of each property provided in Appendix 2a demonstrates that the Development would not reach the Residential Visual Amenity Threshold at year 1. The scale of the development is such that it would not be overbearing, although it would introduce a noticeable change in the views primarily from the second floor which is not considered to be a primary living space.

4.27 For the reasons set out above, it is considered that with the development in place, there would be no unacceptable adverse visual impacts on nearby communities and individual dwellings. Accordingly. the proposal does not conflict with the requirements of criteria 2 of Policy 18 of Future Wales.

Criteria 3 - There are no adverse effects on the integrity of Internationally designated sites (including National Site Network sites and Ramsar sites) and the features for which they have been designated (unless there are no alternative solutions, Imperative Reasons of Overriding Public Interest (IROPI) and appropriate compensatory measures have been secured)

4.28 Chapter 8 of the Environmental Statement deals with ecological considerations and confirms that there are four internationally designated sites within 10km of the main development site. The internationally designated sites are the following:

- Anglesey Fens SAC – Located 6km from the site
- Anglesey and Llyn Fens Ramsar – Located 6km from the site
- Llyn Dinam SAC – Located 9.5km from the site
- North Anglesey Marine SAC – Located 9.5km from the site.

4.29 As there are four internationally designated sites within 10km of the site, the Environmental Statement identifies that there are no likely significant effects from the development and as such a No Significant Effects Report (NSER) accompanies the application submission. These ecological features were scoped out of the Environmental Impact Assessment set out in Chapter 8 of the Environmental Statement.

4.30 As there are no adverse effects on the integrity of Internationally designated sites no mitigation measures are required, and the proposal is in accordance with Criteria 3 of Policy 18.

Criteria 4 - there are no unacceptable adverse impacts on national statutory designated sites for nature conservation (and the features for which they have been designated), protected habitats and species

4.31 Chapter 8 of the environmental Statement identifies four Site of Specific Scientific Interest within or up to 2km of the main development site. These are-

Nantanog SSSI

4.32 Nantannog ravine is of special interest for its geology. The exposure features a bedded sequence of shales and sandstones of the Nantannog Formation, with shelly and graptolitic faunas. The Site contains excellent exposures, illustrative of the sedimentation and stratigraphy of Anglesey in the Lower Ordovician. It is important to clarify that this is not a biological SSSI, therefore significant ecological impacts is not anticipated.

4.33 The planning application boundary (red line) encompasses the Nantanog SSSI, but following the ecological stepwise principles, the physical development is on either side of the SSSI and outside of the SSSI boundary. During the construction phase of the Development no effects on Nantanog SSSI are anticipated. In accordance to the stepwise principles, a 10m buffer which has been agreed through consultation with NRW will protect the site's interest features. The measures required to protect the area will be set out in a Construction Environmental Management Plan (CEMP). During operation of the scheme, it is considered that scrub encroachment is likely to occur within the SSSI if grazing is prevented by fencing around the solar array. This is deemed not to be damaging on the geological SSSI and will not give rise to a significant ecological impact, but potentially may affect the ability to view the geological interest features. The approach identified in consultation with NRW will require vegetation management and will be included in the Landscape Environmental Management Plan (LEMP).

4.34 Therefore, no ecological impact on the SSSI is anticipated. Enhancement is proposed through scrub management of the SSSI, however, the overall impact on the SSSI would be neutral.

Llyn Alaw SSSI

4.35 A large area of mesotrophic open water. 'It has considerable ornithological interest especially for overwintering wildfowl; numbers of teal Anas crecca, shoveler Anas clypeata and whooper swans Cygnus cygnus can be around 1% of the British population.' A range of other wildfowl and waders occur seasonally, and the uncommon slender spike rush Eleocharis acicularis occurs in the reservoir margins.

4.36 The SSSI is located 350m to the north of the main development site. The Environmental Statement confirms that direct impact on Llyn Alaw SSSI will not occur. The level of use of the site by key bird species listed on the SSSI citation is minor (teal), negligible (shoveler) or has not been recorded (whooper swan). The main development site is not assessed to be important for the key species referred to in the SSSI citation.

Tyddyn Gyrfer SSSI

4.37 This Site is of special interest for its Precambrian geology and lies within the largest outcrop of gneisses in southern Britain. The Site provides a small but informative exposure of interleaved paragneisses and amphibolites that are representative of the upper amphibolite facies Central

Anglesey Gneisses in the late Neoproterozoic Coedana Complex.'

4.38 The SSSI is located 1.53km to the south of the main development site. This is not an ecological receptor but included here for reference. The development will have no direct impact on Tyddyn Gyrfer SSSI.

Llyn Llywenan SSSI

4.39 Llyn Llywenan is selected as an example of a moderately base-rich lowland lake in West Gwynedd; it is primarily of biological interest. The flora of the lake includes a range of submerged, floating and emergent macrophyte species. A variety of overwintering wildfowl species frequent Llyn Llywenan, including mallard, teal, wigeon, shoveler, tufted duck and pochard; it also supports an interesting breeding bird community.'

4.40 The SSSI is located 2.1km to the south-west of the development site and 1.6km from the land for the underground cabling for the Development's connection to the National Grid Substation at Wylfa. No ecological impact on the SSSI is anticipated from the operational phase of the Development. The residual impact significance from the operational phase of the Development is Neutral.

The Werthyr SSSI

4.41 The Werthyr SSSI is assessed within Chapter 11 of the Environmental Statement. This wetland site has developed at the head of a short shallow valley running in a northerly direction to the Afon Caradog. It is a relatively intact example of a mesotrophic valley mire or 'poor fen' and has a high water table. Vegetation communities characteristic of this type of habitat are very well represented and include large stands of rushes e.g. the blunt flowered rush Juncus subnodulosus, a variety of sedges e.g. the bottle sedge Carex rostrata and the slender sedge Carex lasiocarpa as well as a range of wetland herbs such as the marsh cinquefoil Potentilla palustris and bogbean Menyanthes trifoliata. There is also a well developed brophyte layer in which various mosses, particularly Acrocladium spp. are abundant. Among the less common species present, the greater spearwort Ranunculus lingua is widely distributed within the site.

4.42 The Y Werthyr SSSI is the only designated site within 20m of any roads which have been identified

to be used by the Development's construction vehicles. The Werthyr SSSI is 4.5km southeast of the site and approximately 80m from the B5112. The Environmental Statement has considered the impacts of the construction vehicles on this designated site. The impacts of traffic generated by the construction phase of the Development on designated ecological sites have been assessed. The impacts are anticipated to be 'not significant'.

4.43 For the reasons sect out above it is considered that there are no unacceptable adverse impacts from the development upon national statutory designated sites for nature conservation, protected habitats and species.

Criteria 5 – The proposal includes biodiversity enhancement measures to provide a net benefit for biodiversity

4.44 The Environment (Wales) Act 2016, the Well-Being of Future Generations Act (Wales) 2015, and the Chief Planner's letter (30th December 2022) frame biodiversity with respect to its contribution to achieving "ecosystem resilience". The policy position was consolidates and reinforced through the publication of PPW 12 edition. The Environment (Wales) Act 2016 Section 6 duty is referenced throughout the national planning policy guidance.

4.45 National Resource Wales (NRW) has developed a framework for evaluating ecosystem resilience based on five attributes and properties specified in the Environment (Wales) Act 2016. This is referred to as 'DECCA': Diversity, Extent, Condition, Connectivity and Aspects of ecosystem resilience. NRW works to the definition of ecosystem resilience published in its State of Natural Resources Report in 2020, which is: 'An environment that can respond to pressures by resisting, recovering or adapting to change; and is able to continue to provide natural resources and benefits to people.' When assessing planning applications, PPW instructs planning authorities to take account of and promote the resilience of ecosystems, in particular the five attributes of ecosystem resilience.

4.46 Chapter 8 of the Environmental Statement lists the attributes have been considered in in the Development's layout design and the landscape strategy. A summary of the DECCA attributes (from PPW, 2024) is presented within Chapter 8 of the Environmental Statement. A summary of the DECCA attributes (from CIEEM, 2022) is set out below, together with a summary of how each attribute has been considered and achieved in the Development's design.

DECCA attributes (summarised)	How this has been achieved within the Development's design
Diversity: underpins biodiversity, resilient ecosystems, their functioning and the delivery of ecosystem services. More diverse ecosystems are more resilient to external influences. Strategic planning and individual development proposals should avoid negative impacts on biodiversity by considering how biodiversity assets can be maintained and enhanced	The fields within the main site support heavily-grazed improved grassland or species-poor semi-improved grassland. This grassland will be retained within the solar PV arrays, other areas of the Site will be protected and enhanced through the Development's landscape strategy. Existing ecological features (hedgerows, woodland, wetland habitat and scrub) within the site have been retained and incorporated into the design of the Development. New habitats will be created (woodland, grassland, scrub, and ponds) throughout the site, around the proposed solar PV arrays. This will increase the diversity of habitats within the site.
Extent: strategic planning and individual development proposals must avoid loss in the extent of biodiversity and incorporate measures to appropriately maintain and enlarge existing habitats, through habitat restoration and creation with adjoining and nearby areas, green infrastructure features and networks.	The landscape strategy for the Development has been designed to complement and strengthen the existing ecological features, which are largely defined by field boundaries and adjacent features around the site's periphery. These features are buffered within the design, throughout the Site with new areas of habitat; linkages between habitats both within and around the application site will be improved. Examples of improvements are given within the bullet points below. Given the scale of the Development, this means that the design will include: 6.21 ha of new woodland planting,

DECCA attributes (summarised)	How this has been achieved within the Development's design
	1.69 ha of new native scrub planting, 6.85 ha of meadow grassland, 52.59 ha Grassland around the perimeter develop a taller sward, with some tussocks allowed to develop, 4,304 m of additional hedgerow (both infilling gaps and new sections of hedgerow)[13], 14 (0.23ha) of new ponds and wetland/marginal vegetation. Existing grassland will be retained within the solar PV arrays.
Condition: Ecosystems and biodiversity assets need to be in a healthy condition to function effectively, to deliver a range of important ecosystem services and be more resilient to external influences. Good condition requires sufficient scale and functioning natural processes or appropriate management to provide structural complexity and sustain diverse mosaics of habitats. Strategic planning and individual development	Ecological features adjacent to the Site will be buffered from the Development, and new habitats (meadow grassland and scrub) to be created in these areas, which are currently heavily grazed pasture. The buffer areas around the retained features will therefore improve in ecological condition through the implementation of the Development's landscape strategy. Additional ponds will be created, in clusters, surrounded by areas of longer grassland and scrub, which will increase the suitability of the Site for amphibians, increase the network of ponds available.

[13] The existing boundary features will be retained through the Development's design. Existing access points will be used to avoid the need to create new openings in hedgerows; there may be some minor widening to increase the width of any narrower gaps. The removal of nine 2m sections (amounting 18m in total) is required to facilitate installation of perimeter fencing, but this is not considered to require any further assessment, given the minor nature of this work, and the inherent design which gives rise to a significant net increase in hedgerows (4,304m increase).

DECCA attributes (summarised)	How this has been achieved within the Development's design
proposals must not compromise the condition of ecosystems. Planning for and securing the long-term management of retained habitats is key to maintaining condition.	These habitats will be managed to ensure they reach the desired condition and maintain their value for wildlife for the 40-year lifespan of the Development. Details will be set out in the LEMP.
Connectivity: take opportunities to develop functional and physical connectivity of biodiversity and ecological networks within and between ecosystems and across landscapes, building on existing connectivity and quality and encouraging habitat creation, restoration and appropriate management, Individual development proposals should identify and incorporate measures which enable appropriate links to be made between the site and its surroundings so as to improve connectivity.	The Development's landscape strategy has been designed around the existing ecological features, which are largely defined by field boundaries and adjacent features around the Site's periphery. These features are buffered and strengthened within the design (i.e. hedgerow gapping up, new hedgerows, and creation of meadow grassland in buffer areas adjacent to field boundaries) meaning that linkages between habitats both within and around the Site will be improved. Additional ponds will increase the suitability of the Site for amphibians, by increasing the network of high-quality ponds available. The most suitable habitat for birds is primarily restricted to the field boundaries; the creation of new hedgerows and buffering of existing hedgerows with meadow grassland, together will new woodland and scrub planting, will increase the value of the Site for birds and a range of other wildlife through the provision of additional foraging resources and cover.
Adaptability to change: resistance and recovery from pressures arise when the attributes of ecosystem resilience – diversity, extent, condition and connectivity of	The Development's landscape strategy has been designed to buffer and reinforce the existing features, and to improve habitat connectivity within the Site. It is therefore considered likely to also increase ecosystem resilience within the site, by increasing habitat area, linkages and opportunities for wildlife

DECCA attributes (summarised)	How this has been achieved within the Development's design
ecosystems - are in good condition. Strategic planning and individual development proposals should identify impacts to the ecosystem resilience attributes of biodiversity	in various areas of the site.

4.47 New habitat features will be incorporated into the design including native woodland planting, native scrub planting, meadow creation and improved grassland management for wildlife, the creation of areas of rough grassland, hedgerow enhancement (i.e. gapping up/creating a grass-margin/buffer). 14 new ponds will be also created.

4.48 Existing access points will be used to avoid the need to create new openings in hedgerows; there may be some minor widening to increase the width of any narrower gaps.

4.49 The connection will be provided by underground cabling located within the adopted highway of local roads and will not affect vegetated areas (with the exception of three short and very narrow sections of verge that will be slightly widened on the road between B5112 and Chwaen Bach, to allow for slightly wider passing places).

4.50 Buffer areas will be incorporated into the design of the Development to protect Nantanog (geological SSSI, Cors-y-bol LWS and Tir Pori Traian LWS, to protect these sites and to provide space for habitat enhancement and management. The buffer for the Nantanog (geological) SSSI will be 10m-wide, as agreed with NRW at the DPAS virtual meeting on 23rd June 2021 (refer to Appendix 8.5 of the Environmental Statement). The buffer from Cors-y-bol and the perimeter fence will be at least 15m-wide.

4.51 A 50m-wide buffer will be incorporated between the fence and Pond 11 to provide an open area of grassland for birds around the pond, which will be grazed/mown on a regular rotation, to maintain short-sward, open habitat conditions suitable for grazing wildfowl. The nearest solar PV panels will be over 50m from the edge of the pond.

4.52 New habitat features will be incorporated into the design including native woodland planting, native scrub planting, meadow creation and improved grassland management for wildlife, the creation of areas of rough grassland, hedgerow enhancement (i.e. gapping up/creating a grass-margin/buffer). 14 new ponds will be also created.

4.53 The design of the habitat features will increase habitat connectivity throughout the Site (and promote the resilience of ecosystems, in line with the requirements of PPW). It is also noted that the new features (including new ponds and grassland management) will also improve habitats for great crested newt, in line with local conservation objectives for this species (source: DPAS virtual meeting with NRW on 23rd June 2021, refer to meeting minutes in Appendix 8.5 of the Environmental Statement). These elements of the application proposal have been designed through close liaison with the project Landscape consultant and wider project team.

4.54 The landscape strategy for the application proposal is shown on the Landscape Strategy Plan, these are presented at Figures 7.13 to 7.16 of the Environmental Statement, and described in the Planting Schedule and Notes, Figure 7.17 of the Environmental Statement, and summarised below.

Summary of New Habitat Features	Area /length	Notes
Native woodland planting	6.21ha	A range of locally appropriate native species will be used in the planting scheme.
Native scrub planting	1.69ha	A range of locally appropriate native species will be used in the planting scheme.
Meadow grassland (fields) - Specific Landscape Area 2	4.31ha	Grassland areas will be re-seeded and managed using hay meadow-style management (mowing and removal of arisings in late July/August / aftermath grazing in autumn, using an appropriate seed mix, such as Emorsgate EM2 or equivalent).

Summary of New Habitat Features	Area /length	Notes
Meadow grassland (fields) - Specific Landscape Area 3	2.54ha	In addition, this habitat type includes Specific Landscape Area 3 – this is an additional 2.52ha.
Grassland management (for wildlife) outside perimeter fence. - Specific Landscape Area 1	46.64ha	Existing grassland outside perimeter fence to be allowed to develop a taller sward, with some tussocks allowed to develop in the margins; cut no more than once annually.
Grassland management (for wildlife) outside perimeter fence – additional area	5.95ha	In addition, this habitat type includes Specific Landscape Area 1 (which includes some gorse clearance to maintain open habitat around Nantanog [geological] SSSI) – this is an additional 5.95ha.
New hedgerow, and existing hedgerow enhancement (gapping up)	4,304m	Locally appropriate native species will be used in the planting scheme.
New ponds	14 no. (0.23ha)	14 new ponds will be created in clusters of 2-3 ponds (equating to 0.23ha of pond habitat). This will be located adjacent to areas of less frequently managed grassland and scrub. Hibernacula will be created nearby to provide additional habitat for

Summary of New Habitat Features	Area /length	Notes
		reptiles and amphibians. Marginal / riparian planting around pond margins will include c. 0.16ha of additional habitat.
Other areas of retained habitats		
Grassland within proposed perimeter fence	181.51ha	This will be retained grassland between the panels – this is not new habitat. It will be managed by grazing or mowing, or a combination of both.
Specific Landscape Management Area 2	3.5ha	A 50m wide buffer between the perimeter fence and Pond 11 to provide an open area of grassland which will be grazed/mown on a regular rotation, to maintain short-sward, open habitat conditions suitable for grazing wildfowl. This is not new habitat and will be managed and maintained during the lifetime of development
Specific Landscape Management Area 4	0.48ha	Cors-y-Bol Scheduled Monument buffer – existing grassland to be maintained as a short sward, cut six times annually. This is not new habitat and will be managed and maintained during the lifetime of development.

4.55 A Biodiversity Gain Assessment has also been undertaken to support the application submission. Biodiversity Gain Assessment derives from the Environment Act 2021, which from January 2024 will require new development (in England) to achieve a 10% net gain in biodiversity; it requires

the use of a metric to calculate gains and losses.

4.56 The assessment is made using the Biodiversity Metric 4.0 Calculation Tool (Defra, April 2023). The calculation of the baseline biodiversity value of the Site is based on area (ha) coverage of habitats within the site (and in kilometres for linear features i.e. hedgerows).

4.57 The pre-development baseline calculation uses existing habitat areas and condition scores. This is used to derive the biodiversity value of the Site, which is expressed in biodiversity units. The post-development calculation takes into account habitat loss and any habitat retention, enhancement and creation measures.

4.58 Post-construction, there would be a significant increase in habitat units: 197.77 habitat units are gained as result of the development. Overall, there is a percentage change improvement of 31.94% in habitat units. There would be a significant increase in hedgerow units: 24.17 units are gained as result of the development. Overall, there is a percentage change improvement of 41.53% in hedgerow units. These Biodiversity Net Gain calculations demonstrate how a significant contribution will be made towards biodiversity when compared against the existing baseline conditions.

4.59 For the reasons set out above, the scheme satisfies the requirements of Criteria 5 of Policy 18.

Criteria 6 - There are no unacceptable adverse impacts on statutorily protected built heritage assets

4.60 Chapter 6 of the Environmental Statement considers cultural heritage. The chapter considers the potential effects upon the significance of Cultural Heritage receptors. Buried archaeological remains, earthworks, structures, landscapes, and all other aspects of the historic environment have been considered. The salient point of the chapter are discussed below.

4.61 There are no designated historic assets located within the site. Known and potential non-designated historic assets located within the site comprise: undated but possibly-prehistoric curvilinear and discrete features in the western, northern and eastern parts of the site; small rectilinear enclosures and post-holes in the central part of the site, and other pits and postholes elsewhere across the site; parallel and perpendicular linear ditch features representing former field boundaries and drainage features associated with historic land management across the site;

and the ruins of the 19th-century farm buildings of Tyddyn-bâch in the eastern part of the site.

4.62 There is no evidence to suggest that any of these remains are of the highest heritage significance in and of themselves. The curvilinear and discrete features in the western part of the Site, and the ruins of Tyddyn-bâch, are retained within the design of the Development.

Scheduled Monument of Cors-y-Bol Bronze Age Burial Mound

4.63 Cors-y-Bol, which abuts the north-western part of the Site boundary, comprises a low circular bank up to 20m in diameter, with some stones visible at the surface on the north side and a possible raised area at the centre. Discovered in 1956, it is generally believed to be the remains of a Bronze Age burial mound. However, studies published in 2003 and 2004 suggested that it could be the remains of a Neolithic henge or a small, enclosed Bronze Age hut circle group.

4.64 As a Scheduled Monument, it is a designated historic asset of the highest significance. Its significance is principally derived from the evidential value of its buried archaeological and palaeoenvironmental deposits, which will provide information on chronology and building techniques and have the potential to enhance our knowledge of prehistoric ritual and funerary practices.

4.65 It occupies a low-lying position within the landscape, less than 100m from the watercourse of the same name, at what is now the interface between marshland and farmland. Another mound of similar morphology but uncertain origin is recorded approximately 350m to its north. The geophysical survey of the adjacent field within the Site did not detect any anomalies suggestive of buried archaeological remains of features potentially associated with Cors-y-Bol. The Scheduled Monument can only be experienced at close-range. The very low form of the earthwork, and the undulating topography of the field within which it has been incorporated, means that it is not readily identifiable beyond approximately 100m to its east. It is only from within the designated area and its immediate curtilage that the low banks and stones of the asset are discernible.

4.66 Scrubby marshland surrounds it on the north, west and south sides and limits long-ranging views in these directions. Looking west, it is possible to see the high ground to the rear of Bodnolwyn Hir, but not the hill and hillfort of Y Werthyr beyond it. Open views are directed east across the adjacent field outside of the Site boundary and allow for an appreciation of the topographical context of the monument even though the landscape character is evidently modern.

4.67 It is considered that the western half of the adjacent pasture field within the site contributes to the significance of the asset, in being the location from where its surviving above-ground remains and its topographical situation can be discerned and appreciated. The Development's layout accommodates a 60m buffer from the asset to the built edge of the Development. Gwynedd Archaeological Planning Service confirmed that a 60M buffer is acceptable part of their consultee response to the statutory pre-application consultation. This is intended to preserve the open, close-ranging westerly views towards the asset within its low-lying marshland context. The change of landscape character of the remaining western part of this field will result in minor harm to the overall significance of the Scheduled Monument. The effect of the Development is 'Not Significant'.

Scheduled Monument of Y Werthyr Iron Age Hillfort

4.68 Y Werthyr, which lies c.1.2km west of the Site, represents a small Iron Age bivallate hillfort. The perimeter banks and ditches are best-preserved on the south and east sides, with a possible entrance to the north-east and an annex enclosure to the north. Geophysical surveys have detected anomalies suggestive of at least seven hut circles within its interior and three in the annex. As a Scheduled Monument, it is a designated historic asset of the highest significance. Its significance is principally derived from the evidential value of its buried archaeological and palaeoenvironmental deposits, which will provide information on chronology, layout, building techniques and functional detail, and have the potential to enhance our knowledge of enhance our knowledge of later prehistoric defensive organisation and settlement.

4.69 Y Werthyr occupies a rounded hill that is not especially elevated (the land within the Site is higher) but does comprise a locally-high point of ground within the valley floor of Afon Alaw (which flows c.550m to the north-west of Y Werthyr). There is evidence of Late Neolithic to Early Bronze Age activity within the site, approximately 1.2km to the east of Y Werthyr (see 6.61 and 6.63); and the Bronze Age burial mounds of Cors-y-Bol and Bedd Branwen lie c.1km to the east and c.600m to the north respectively. No other evidence of Iron Age activity is recorded in the immediate locality of Y Werthyr.

4.70 The hillfort earthworks will be best appreciated at close range, by walking the perimeter and interior of the monument. There is no public access, and efforts to locate the legal landowner and gain their permission were not successful. The surviving banks and ditches of the hillfort are said to be best preserved on the south and east sides, and are visible from the section of lane between

Bodnolwyn Hir and Bronwen to the east. No clear views of Y Werthyr were identified from within the Site during the walkover survey.

4.71 Most hillforts seem to have been designed to be seen from and to see across the wider landscape. It is assumed that Y Werthyr affords fairly long-ranging views in all directions. Those views are expected to feature moorland, farmland, buildings, wind turbines, and the Llyn Alaw Reservoir. A 'Reverse' Zone of Theoretical Visibility model, which accompanies the Environmental Statement ,at Appendix 6.4, which indicates somewhat patchy visibility of the surrounding landscape from the summit of Y Werthyr: most of the land in the south-western and western parts of the Site is visible, there is intermittent visibility of the north of the site.

4.72 There is nothing to suggest that a hillfort was established at Y Werthyr to ensure visibility of or from the site, and while there is evidence of later prehistoric activity within the Site, there is nothing to suggest this was contemporary with or otherwise associated with activity at the hillfort. The landscape around Y Werthyr, including the site, is much changed from when the hillfort was built and used. Nonetheless, the openness and rural character of the western and northern parts of the Site, visible from the hillfort, assists in imagining the 'undeveloped' Iron Age landscape, and as such, is considered to make a small contribution through setting to the significance of the hillfort.

4.73 The solar arrays in the (south)western and northern parts of the site are expected to be visible in the mid-ground of north-easterly through to south-easterly panoramic views from the hillfort. The introduction of this modern built form will alter, and erode to some degree, a component of the currently open and rural character of the landscape setting of the hillfort as experienced in those views. This is considered to result in minor harm to the significance of Y Werthyr. The effect of the Development is 'Not Significant'.

4.74 There is no potential for the significance of any other historic assets to be harmed as a result of changes to setting from the Development. This includes all other designated historic assets located within a 5km radius of the Site boundary, as shown on Figure 6.4.

4.75 The lack of any material inter-visibility between these assets and the Site on account of intervening distance and/or topography, the lack of any relevant non-visual association(s) between them and the Site, and the lack of any ‘third points’ from which both would be visible within the same viewshed, negates the potential for the Development within the Site to adversely affect their

heritage significance.

4.76 Similarly, the ability to appreciate the significance of those assets would be unaffected by development within the Site of the nature and on the scale proposed for the Development. The key contributing heritage values to the significance of those historic assets, the ability to appreciate their significance, and the key views towards, from and including them, would be preserved. As such, the Development would cause no harm to the significance of these assets.

4.77 For purposes of this assessment, the indirect effect of the Development upon the heritage significance of all other historic assets identified as potentially susceptible to indirect harm would be considered 'Not Significant'. Archaeological monitoring would be undertaken for the installation of grid connection cabling within the public highway from the Site to the Wylfa National Grid Substation.

4.78 Overall, the proposed development is not considered to alter the setting of any of these assets. It would therefore not be contrary to Section 66(1) of the Planning (Listed Buildings and Conservation Areas) Act, 1990 and to the 'desirability of preserving an ancient monument and its setting' and the 'desirability of preserving the building, or its setting' of Planning Policy Wales; and criteria 6 of Policy 18 of Future Wales.

Criteria 7 - There are no unacceptable adverse impacts by way of shadow flicker, noise, reflected light, air quality or electromagnetic disturbance

4.79 Criteria 7 sets out the development management considerations for both wind and ground mounted solar. Shadow and flicker are constraint pertinent only to wind turbines and are therefore not relevant in relation to the proposed development.

4.80 Noise and vibration are considered through chapter 12 of the Environmental Statement. The salient points are discussed below.

4.81 The development has been designed, such that all noise generating plant is optimally located and distributed throughout the Site, such that acoustic effects at sensitive receptors are minimised. This approach, coupled to the use of candidate plant specifications, to be adopted as design targets effectively designs out the operational noise effects of the development.

4.82 The construction techniques to be used for the development have been specifically selected, such that the noise and vibration effects at all sensitive receptors are appropriately managed and minimised. Predicted noise levels have been based on a worst-case scenario, where the noisiest item of construction plant is located at the closest point of the proposed construction works to the sensitive off-site receptors. The predictions assume no screening between the source and receiver, so represent a worst-case scenario.

4.83 The results of the noise predictions are presented in Table below.

Receptor	Predicted LAeq,T - dB		
	Site Preparation	Foundations	Structure
Nantanog	50	45	44
Chwaen Goch	54	49	48
Maen Hir	46	41	40
Wilpol	45	40	39
Ty Newydd Penbryn	49	44	43
Pen Lidiard	51	46	45
Traian	58	53	52
Chwaen Bach	55	50	49
Parc Newydd	48	43	42

Ffridd	54	49	48
Pennant	54	49	48
Cefn Gribyn	57	52	51
Plas Carmel	52	47	46
Tan Rallt	54	49	48
Rhiw Goch Fawr	52	47	46
Ty Newydd	62	57	56
Glan y Gors	56	51	50
Brynsannan	41	36	35
Caerwrli	42	37	36

4.84 The predictions presented in the table above identify that noise levels are not predicted to exceed the adopted 65 dB(A) limit when works are undertaken at the closest point of the works to the closest off-site sensitive receptor, equating to a temporary effect of negligible to minor adverse significance which is not significant. Consequently, mitigation measures are not considered necessary.

4.85 Turning to the operational phase, the Environmental Statement asserts that the development is expected to have a negligible effect on the amenity of the nearest residential receptors and no mitigation measures are considered necessary. However, a range of measures have been set out within the Outline CEMP, which will ensure that all construction noise and vibration effects will be kept to an absolute minimum.

4.86 The tables below shows the predicted specific sound levels at the nearest residential receptors. The results demonstrate that the operation of the development would occur without affecting the amenity of the nearest residential receptors. The rating sound level, as calculated from the predicted specific sound level, has been assessed in accordance with BS4142:2014+A1:2019, at all residential noise sensitive receptors.

Table: Daytime BS4142 Assessment Summary			
Receptor	Rating Sound Level - dB	Daytime Background Sound Level – dB(A)	Excess of Rating over Daytime Background Sound Level - dB
Nantanog	21	29	-8
Chwaen Goch	18	29	-11
Maen Hir	7	29	-22
Wilpol	10	29	-19
Ty Newydd Penbryn	12	29	-17
Pen Lidiard	17	29	-12
Traian	10	28	-18
Chwaen Bach	16	26	-10
Parc Newydd	13	26	-13
Ffridd	15	26	-11

Pennant	17	26	-9
Cefn Gribyn	16	26	-10
Plas Carmel	14	26	-12
Tan Rallt	15	26	-11
Rhiw Goch Fawr	15	26	-11
Ty Newydd	16	23	-7
Glan y Gors	17	23	-6
Brynsannan	15	23	-8
Caerwrli	14	23	-9

Table: Night-time BS4142 Assessment Summary			
Receptor	Rating Sound Level - dB	Night-time Background Sound Level – dB(A)	Excess of Rating over Night-time Background Sound Level - dB
Nantanog	21	21	0
Chwaen Goch	18	21	-3
Maen Hir	7	21	-14

Wilpol	10	21	-11
Ty Newydd Penbryn	12	21	-9
Pen Lidiard	17	21	-4
Traian	10	25	-15
Chwaen Bach	16	20	-4
Parc Newydd	13	20	-7
Ffridd	15	20	-5
Pennant	17	20	-3
Cefn Gribyn	16	20	-4
Plas Carmel	14	20	-6
Tan Rallt	15	20	-5
Rhiw Goch Fawr	21	20	-5
Ty Newydd	18	20	-4
Glan y Gors	7	20	-3
Brynsannan	10	20	-5

Caerwrli	12	20	-6

4.87 Overall, the scheme has been designed, such that all noise generating plant is optimally distributed throughout the site, such that acoustic effects at sensitive receptors are minimised. This approach coupled to the use of candidate plant specifications, to be adopted as design targets effectively designs out the operational noise effects of the proposal. Consequently, the whole ethos of the scheme has been derived in order for it to give rise to a minimal level of acoustic effect at all sensitive noise receptors, both during construction and operation. It is considered that there are no noise-related issues associated with the proposed development which would prevent the granting of full planning permission. No mitigation measures are considered necessary on this basis. However, a range of measures have been set out within the Outline CEMP, which will ensure that all construction noise and vibration effects will be kept to an absolute minimum.

4.88 In terms of reflected light a 'Glint and Glare Assessment' has been undertaken to assess the potential impacts. The study assesses the potential effects arising from the development on surrounding receptors including road users, aviation and residents.

4.89 There are low impacts predicted 1 receptor in relation to road users once mitigation is implemented. There will be none for all other 57 road users receptors. The study concludes that there are no impacts on road users.

4.90 In relation to aviation, no impact were found at all on the runways or air traffic control towers of RAF Valley and RAF Mona. Therefore, impacts on aviation receptors are none.

4.91 The 'Glint and Glare' assessment assessed 49 residential receptors that solar reflections are possible. Low impacts are expected at 4 residential receptors, with all others being none. The study concluded that there are low impacts on residential receptors.

4.92 Overall, the study found that there were no impacts on aviation and road users, and only low impacts on residential receptors. Therefore there are no significant adverse impacts on road users, aviation and residential receptors resulting from the proposal.

4.93 Turning to air quality considerations, the application site is not located near any Air Quality Management Area as per Wales Airborne Pollution Map. The construction impacts associated with the proposed development would likely generate a small magnitude of dust and PM10. Impacts from dust emissions during the construction phase would be not significant, which is supported by the low levels of annual mean emissions. It is considered that despite there not being a defined risk present, it is still advisable that a number of good practice measures are implemented, such as considerate traffic speed and observing minimal dust dispersion where at all possible during construction and transport activities and these can be incorporated in a final Construction Environmental Management Plan.

4.94 Maintenance vehicles are only expected to visit the application site periodically. Therefore, it is unlikely that the number of vehicle movements during the operational phase will exceed those of the construction phase. As a result, operational phase impacts associated with road traffic emissions are deemed to be not significant. The Outline Construction Environmental Management Plan, details appropriate housekeeping and mitigation measures that would be followed at the construction and operational stages to minimise any adverse impact on air quality.

4.95 There are no designated ecological sites within relevant screening distances of the Development and therefore it is not necessary to consider the impact of construction dust. Impacts from dust emissions during the construction phase would be not significant, which is supported by the low levels of annual mean emissions. It is considered that despite there not being a defined risk present, it is still advisable that a number of good practice measures are implemented, such as the spraying of areas with water supplied as and when conditions dictate to prevent the spread of dust.

4.96 Maintenance vehicles are only expected to visit the application site periodically. Therefore, it is unlikely that the number of vehicle movements during the operational phase will exceed those of the construction phase. As a result, operational phase impacts associated with road traffic emissions are deemed to be not significant. Air quality is considered in detail through chapter 11 of the Environmental Statement. As specified in the EIA Scoping Direction, the scope of the chapter is limited to the impacts of the Development's construction vehicle emissions on designated ecological sites.

4.97 With regards to electromagnetic disturbance, all equipment that generates, distributes or uses electricity produces electric and magnetic fields (EMFs). The technical specifications of the

proposed substation accompanying the application identifies how the proposed development complies with EMF exposure guidelines. The main potential source of interference is the substation. Solar panels and underground cables do not in general produce any significant radio-frequency emissions. The substation would operate in accordance with the management practices of the DNO, when operating under a full load, the field levels located at the boundary of the compound would be significantly less than the EC Council Recommendation 1999 (EC 1999) Reference Levels which form the UK Guidance for electromagnetic field limits. Therefore, it is expected that the electromagnetic fields produced by the proposed development would not present a hazard to members of the public in accessible areas outside of the site boundary and along the public footpath.

4.98 For the reasons set out above it is considered that the proposed development duly accords with the requirements of criteria 7 of Policy 18 Future Wales.

Criteria 8 - There are no unacceptable impacts on the operations of defence facilities and operations (including aviation and radar) or the Mid Wales Low Flying Tactical Training Area (TTA-7T)

4.99 As with shadow flicker, aviation and radar considerations are only pertinent to wind farms and as such are not relevant to this proposal. There are no identified defence facilities or operations within the vicinity of the site, and the scheme will not result in unacceptable impacts on the Mid Wales Low Flying Tactical Training Area (TTA 7T). Accordingly, there is no conflict with regard to criteria 8 of Policy 18 Future Wales.

Criteria 9 - There are no unacceptable adverse impacts on the transport network through the transportation of components or source fuels during its construction and/or ongoing operation

4.100 Chapter 10 of the Environmental Statement considers transport and access and is supported by the additions of a Transport Statement and Outline Construction Traffic Management Plan. These are presented at appendices 10.1 and 10.2 of the Environmental Statement.

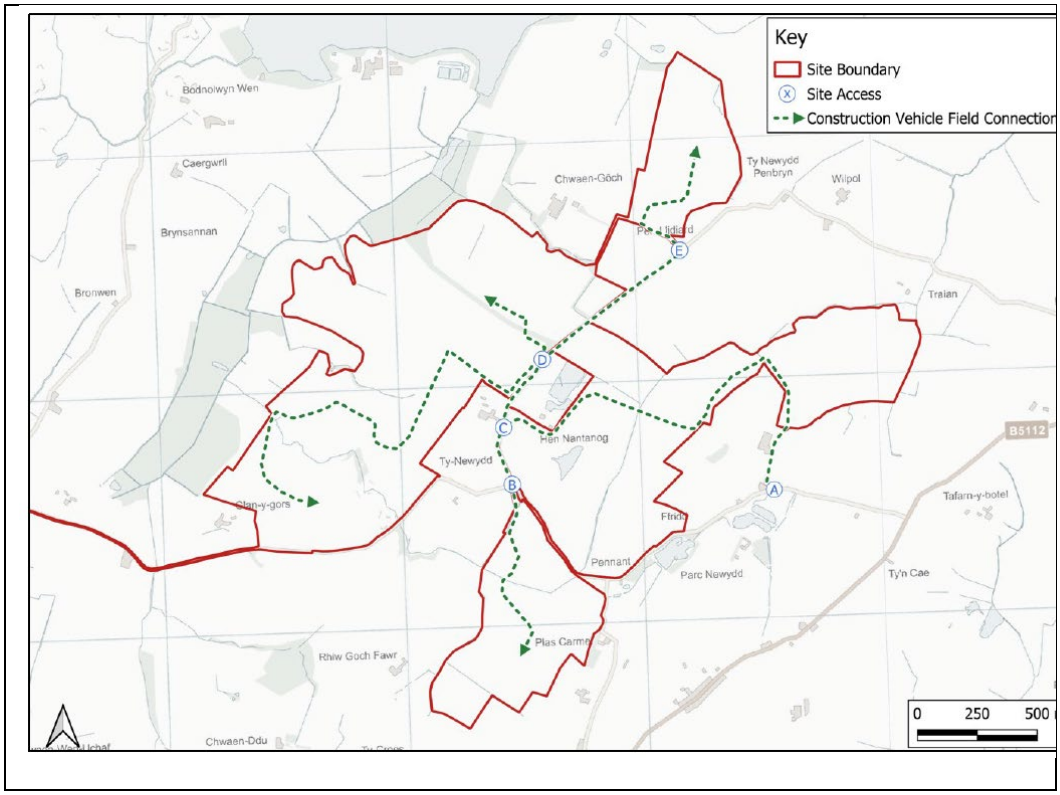
4.101 The salient points of the report are set out below.

4.102 The proposed construction and operation traffic route to the site comprises the following links: A55 (North Wales Expressway, B5112 and site access approach on an unnamed road between the B5112 and the site compound access. The A55 is the main road in North Wales, connecting Chester with Holyhead. Most of the road is a dual carriageway. The B5112 connects the A55 with

the site. The B5112 is rural in nature, but for the majority of its length is wide enough for vehicles to pass.

4.103 The site access approach is a narrow road and rural in nature. This road has a low baseline traffic flow, which includes agricultural vehicles.

4.104 All vehicles will access the Site via Access A (see illustration below), which is the closest access point to the B5112. An internal access track will be constructed to connect to other land parcels that make up the site. Due to topography and ecological constraints, not all land parcels can be reached directly from Access A and the northern section of the unclassified road will need to be used. However, the access strategy does remove the need for construction vehicles to use the narrowest section of the unclassified road, around the bend.



4.105 In total, there will be five accesses; -

- Access A – Existing access to be used by all construction vehicles;
- Access B – Existing access to south western parcel of land;
- Access C – Access from main parcel of land to unnamed road;

- Access D – Access from unnamed road to north-western parcel of land;
- Access E – Access from unnamed road to north-eastern parcel of land.

4.106 During the construction phase, banksmen will be deployed at each access whenever construction vehicles are accessing or egressing the Site. This will ensure the safe movement of construction vehicles in and out of the site.

4.107 The location of where staff will travel from is unknown at this stage, as this will depend on the appointed contractor. However, it is envisaged that a number of the non-local workforce will stay at local accommodation and be transported to the Site by minibuses to minimise the impact on the strategic and local highway network. In addition, a Construction Worker Travel Plan will form part of the CTMP. This will aim to encourage workers to travel to the Site as sustainably as possible (e.g. minibus, car share etc). As a robust judgement, it is assumed that there could be 50 vehicle arrivals and 50 vehicle departures associated with construction workers per day by car/LGV (100 two-way trips). Transport impacts during construction will be mitigated via final Construction Traffic Management Plan which submitted to IACC prior to the start of construction. The final CTMP will follow and build upon the measures set out in the Outline CEMP. It is envisaged that most construction workers will be transported to site via minibuses which will reduce private car use to and from the site, contributing to sustainable transport. During the operational phase of the development access to the site will be limited to maintenance and will not impact the highway network.

4.108 For the reasons summarised above, the proposed development will not have any unacceptable adverse impacts on the transport network and, therefore, duly accords with the requirements of criteria 9 of Policy 18.

4.109 The grid connection element of the construction phase will involve the installation of a cable into a trench in the highway as the cable route predominantly forms the public highway to the point of connection at Wylfa. There may be some localised delay to drivers whilst this occurs. All appropriate licences will be obtained, including a Section 50 licence. Through this process, any required traffic management will be agreed with IACC.

4.110 Once operational, the development would generate very few vehicle movements and have no material effect on the local transport network. It is anticipated a maintenance vehicle, likely a transit van or similar, will visit the site approximately twice per month. Whilst the contractor's

compound will have been removed, space will remain within the site and on the access tracks for a vehicle to turn around to ensure that reversing will not occur onto the highway.

4.111 Overall it is considered that the application proposal is acceptable from a transport perspective. In accordance with Future Wales Policy 18 criteria 9, there are no unacceptable adverse impacts on the transport network through the transportation of components or source fuels during its construction and/or ongoing operation.

Criteria 10 - the proposal includes consideration of the materials needed or generated by the development to ensure the sustainable use and management of resources

4.112 The outline Construction Environmental Management Plan details the appropriate pollution protection techniques that will be adopted by the appointed contractor team. The purpose of the document is to demonstrate the measures that could be used during the build out phase to adequately protect the environmental resources including potential impact upon human receptors. The detailed CEMP will be submitted for approval subject to whether the scheme is granted permission.

Criteria 11 - There are acceptable provisions relating to the decommissioning of the development at the end of its lifetime, including the removal of infrastructure and effective restoration

4.113 Following a 40 year generation period, the development will enter into a decommissioning stage and this can be secured by a suitably worded planning condition.

4.114 The applicant will either be insured or enter into a bond to guarantee that the scheme is decommissioned at the end of its operational lifespan. The applicant has therefore made acceptable provisions for the decommissioning of the scheme.

4.115 Depending on the ecological value of the habitats that develop over the lifespan of the scheme, it is possible that certain areas of the site may need to be retained due to their value for wildlife on decommissioning. It cannot reasonably be foreseen what legislative protection will be afforded to particular wildlife species at the end of the scheme's lifespan. Further surveys for protected species which could be impacted by decommissioning would also be expected. No less than 12 months before the 40th anniversary of the first export date, a decommissioning and site restoration scheme would be submitted to the relevant planning authority for approval. The decommissioning strategy would detail how plant and equipment located within the application site would be removed.

4.116 Overall, the Alaw Mon Solar Farm duly accords with the 11 principles set out in Policy 18 of Future Wales and when weighed against the benefits, the proposal favour approval.

Consideration of Alternatives

4.117 The Development must be located near to an existing grid connection to ensure that a viable development capable of generating renewable electricity that can be exported to the grid can be realised. The Applicant has a Bilateral Connection Agreement and Construction Agreement with National Grid which allows for the connection of a solar and battery project to the point of connection at the Wylfa nuclear substation. This agreement secures the capacity available on the grid at the substation for a fixed period of years for this form of generation. The Site has been considered acceptable for the Development following the site selection assessment upon when the Applicant undertook a rigorous assessment of land available in close proximity to the point of connection that balanced both environmental constraints and the ability to deliver a large-scale solar facility, consistent with the opportunity provided by the existing point of connection and agreement. The process involved a review of land availability and suitability in the area surrounding the point of connection, a selection and assembly of land and refinement of land to produce the Site. It is clear from national policy that renewable energy is urgently required and is supportive of renewable energy development including solar.

4.118 During the informal consultation event held in July 2023, some respondent noted if consideration should first be given to the use of rooftops instead of greenfield sites. Commercial rooftops have not been considered because (i) there are no known rooftops of sufficient size in the area and (ii) it is considered that assessing the potential for development of multiple rooftops is not comparable or realistic when considered relative to a ground-mounted solar farm. In addition, PPW acknowledges that the deployment of solar on commercial rooftops will be insufficient to meet Welsh renewable energy targets.

4.119 Future Wales has also considered alternatives to on-shore renewable and low carbon energy development, page 97 of states "*"The Welsh Ministers have considered alternatives to the need for new large-scale electricity generation infrastructure, including building-mounted installations and energy efficiency measures. Although we believe that these measures have an important part to play in meeting our energy, decarbonisation and climate change targets, they will not enable us to meet these objectives on their own".* Future Wales therefore seeks that opportunities to deliver on-shore renewable and low carbon energy developments should therefore be explored wherever

possible.

4.120 With regards to the use of lower quality agricultural land, it is discussed through section 3 of this document how IACC is specifically promoting best and most versatile agricultural land for the deployment of ground mounted solar schemes. All sites allocated by the IACC include Grade 2 agricultural land.

4.121 The applicant acknowledges how significant areas of lower grade agricultural land is located in between Cemaes and Llyn Alaw, and this extends between Mynydd Mechell and Carreglefn. However, the applicant has not considered this area due to its designation as a Special Landscape Area. The Inspectors Report to the JLDP identifies how *"There is local concern, partly in response to schemes that have already been developed, in particular wind turbines, that the character of some of the area's valued landscapes would be unacceptably damaged by renewable energy projects. The criteria of the specific policies provide appropriate safeguards, including affording suitable protection to nationally designated landscapes of the National Park and the Areas of Outstanding Natural Beauty and their setting and to the locally designated Special Landscape Areas. Subject to the proposed changes we find that the Plan's approach is robustly supported by the Councils' evidence base. The Plan strikes an appropriate balance between serving the wider public interest by facilitating the generation of renewable energy and protecting local visual and amenity interests" (IR para 9.12).*

4.122 The applicant has also not considered the swathes of lower quality land located in between Tref Alaw and Llanfachraeth. This follows the AONB buffer as presented within the Welsh Government Assessment of Onshore Wind and Solar Energy Potential in Wales.

4.123 As stated by the Inspector notes in the Inspector's Report in DNS Application ref: DNS/3217391 the Anglesey and Gwynedd Joint Development Plan direct solar farms of 5MW or greater to potential search areas identified on the Proposals Map. However, Future Wales (2021) has been published more recently which does not direct solar development to any particular areas. Therefore, the Anglesey and Gwynedd Joint Local Plan's requirement to direct solar development over 5MW to potential search areas no longer carries any weight.

Position Against other Sites

4.124 The Siet Search Report has already reached a number of conclusions including that: there are no

appropriate brownfield sites available to accommodate the application proposal within Anglesey; and there are no non-agricultural sites available (in their entirety) that could accommodate the proposal, and that there are no sites comprising lower grade land in their entirety suitable to accommodate the proposal. The applicant acknowledges that other energy sites are coming forward within the Island on greenfield sites and the most notable applications are :

Application Reference	Description	Current Status	Distance to Site
Maen Hir Solar and Energy Storage Project (Development Consent Order (DCO) case reference: EN010156)	Electricity Generating Station including solar photovoltaic panels with a generating capacity in excess of 350 MW, a Battery Energy Storage System (BESS), a new substation and other Associated Development.	Pre-Application. Request for EIA Scoping Opinion submitted to PINS.	From 3km north east
Carogg Ganol Battery Energy Storage System (Ref: FPL/2023/218 & validated on 15 August 2023)	Installation of battery energy storage system, together with substation, transformer stations, site accesses, internal access tracks, security measures, access gates,	Application validated on 15 August 2023, not yet determined.	6km north

	other ancillary infrastructure and landscaping and biodiversity enhancements.		

4.125 A comparison of the site attributes between the application site and the other proposals are presented on a selection of environmental & constraints plans provided at Appendix 1 to 4. To summarise, the application site compares favourably when considered against the other sites. In any event each application should be considered on their individual merits, site -specific characteristics and relevant policy context. In this instance, the application site, as a DNS project, would be considered against the criteria set out in Policy 198 of Future Wales. The Maen Hir proposal, as a DCO submission, would be determined against National Policy Statement EN1 and EN3. The Carogg Ganol scheme would be primarily assessed against the JLDP.

APPENDIX 1 Environmental Designation Plan

APPENDIX 2 FLOOD RISK

APPENDIX 3 - PREDICTIVE AGRICULTURAL LAND CLASSIFICATION

APPENDIX 4 – LOCAL PLAN DESIGNATIONS

Development design and alternative layout

4.126 Over the course of the design process, the applicant has continuously refined the design of the proposed development to encompass the Council's and other stakeholders' feedback at numerous junctures.

4.127 Chapter 5 of the Environmental Statement explains the design evolution. It explains how the initial concept designs were prepared and refined as the development boundary and proposals were progressed in its formulative stages up to the 'design freeze' for the pre-application consultation and subsequent application submission to PEDW. Within the original site boundary,

representing all land within the land assembled, the area and layout was initially defined based on the optimal solar PV arrangement considering the most efficient layout and orientation within the land holding that would maximise the output of the solar farm within the land assembled. From this position, the Site boundary and Development was refined, considering environmental constraints and opportunities. Numerous iterations to the Site layout, and more generally to specific elements of the design, have occurred as the development has evolved since conception. The site boundary has been amended to reflect design changes since the request for a Scoping Direction was submitted to the former Planning Inspectorate Wales now Planning and Environmental Decisions Wales.

4.128 The early layout iterations for the Development were prepared without inverters, access roads and associated infrastructure to allow for subsequent design inputs and amendments resulting from feedback from the consultant team, consultees and design team. The additional plant and equipment were added later in consideration of opportunities and constraints specific to the location of associated infrastructure (i.e. visual, noise or access). The Site boundary was considered and amended to reduce impacts of the Development, including consideration of opportunities and constraints. The local environment, and the character of the surrounding area and landscape, have informed the design of the Development inclusive of the embedded mitigation incorporated into the design. Examples of the changes to the site boundary include changes (reduction) in the total site extent, inclusion of the grid connection route, inclusion of landscape margin and internal cable route and removal of fields from development. Examples of the changes to the Development include relocation of the battery energy storage system and substation compound, adjustment to panel offsets and buffers for landscape, ecology, residential amenity and other technical design constraints. These changes also included the removal of fields from development and adjustment of the internal arrangements (notably fence line and access roads). The layout was amended to achieve opportunities identified and address findings of studies/reports prepared to support the draft Environmental Statement including residential amenity and, where possible, addressing consultee and public comments made during the two community consultations held in July 2021 and July 2023.

5.0 CONCLUSIONS

5.1 It has been demonstrated through the site selection criteria that the application site provides an appropriate location for the scheme. Notably: -

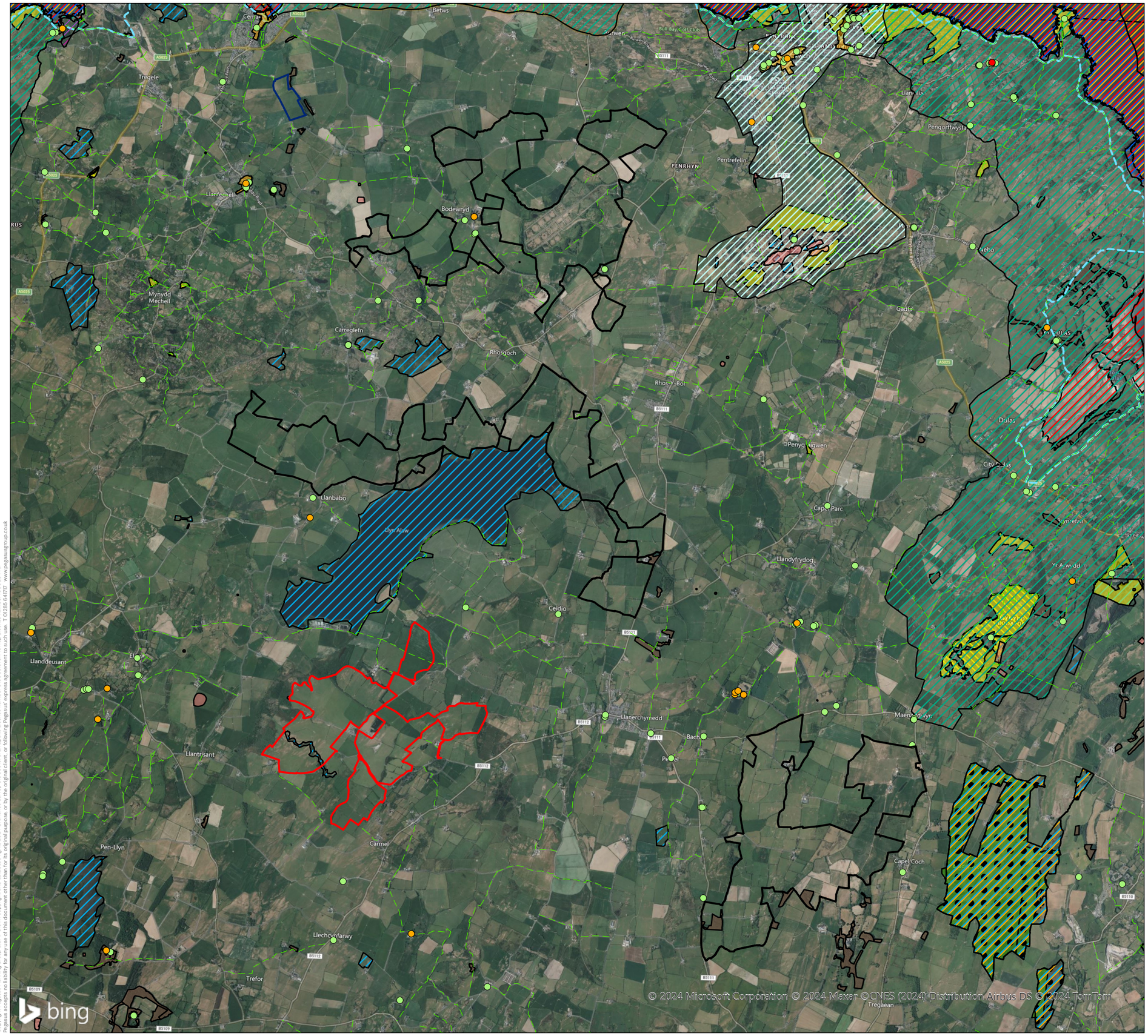
- There is no policy requirement to identify the 'best site' for development.
- It is noted that Alaw Mon Solar Farm was located within Priority Area No 1, for solar and wind development as set out in the Draft National Development Framework (the draft to Future Wales). However, the Welsh Government ultimately decided not to carry forward the solar priority area into Future Wales. The Welsh Government Consultation Report which provided their response to the Draft National Framework, dated September 2020, explains why the pre-assessed solar areas were removed from the final publication of Future Wales. Paragraph 4.6.38 stated *"The solar industry has pointed out to the need in flexibility in the policy position as it is more agile in responding to the grid capacity and applications for solar farms do not have as much impact on the wider landscape as wind turbines. The Welsh Government accepts this and has therefore decided to delete the areas identified for solar development from the NDF"*. The removal of the solar areas should therefore not be misconstrued that their locations are no longer acceptable. Baseline studies commissioned the Welsh Government confirmed that the application site is located within an area deemed acceptable for solar.
- A letter issued by Lesley Griffiths (the then Cabinet Secretary for Environment and Rural Affairs) dated 7th August 2017 which states that (our emphasis): *'the over-riding imperatives to produce more renewable energy to reduce the impact of climate change and meet our decarbonisation targets are crucial in this regard'.* It is therefore clear that the need for renewable energy deployment to combat climate change cannot be viewed as anything other than overriding. This position was accepted by the Planning Inspector as part of her consideration of the Traffwll Solar Parc.[14]
- Notwithstanding the above, the applicant acknowledges how PPW policy position on BMV land is set against the backdrop that only c. 17% of agricultural land in Wales is Best and most versatile. The local circumstance on Anglesey is different whereby 53% of all agricultural land on the Island is predicted to be best and most versatile. Furthermore, the local Anglesey context greatly restricts development land available, which does not include best and most versatile land, due to the environmental designations of the Area of Outstanding Natural Beauty and Special Landscape Areas. The terrain, despite the ALC

[14] Inspectors report to Parc Solar Traffwrdd, DNS/3217391, paragraph 268.

grade, is suited to grassland and grazing rather than to arable production. Rock outcrops, rocks close to the surface, steep slopes and small gateways all provide challenges to mechanical activity, such as the examples below. Many fields have a variety of land classifications within each field, reflecting limitations. There are many areas where surface rocks will significantly limit mechanical use.

- At the local level, the need to use land that contains best and most versatile land has been acknowledged by IACC through its suggested search areas for renewable developments which do contain best and most versatile agricultural land.
- By following the iterative design process for the identified site, the applicant has therefore demonstrated conformity to the requirements of Paragraph 5.9.21 of PPW by seeking to minimise impacts, wherever possible, through careful consideration of location, scale and design and other measures.
- The site design has been carefully developed to minimise any potential impacts on BMV and these will be further mitigated through best practise soil management plans and ongoing monitoring during construction, operational and decommissioning.

APPENDIX 1 – ENVIRONMENTAL DESIGNATION PLAN



KEY

- SITE BOUNDARY
- MAEN HIR SOLAR FARM AND ENERGY STORAGE PROJECT
- CARROG GANOL ENERGY STORAGE PROJECT

LISTED BUILDINGS

GRADE

- I
- II*
- II

- PUBLIC RIGHTS OF WAY
- WALES COASTAL PATH
- CONSERVATION AREAS
- HERITAGE COAST
- HISTORIC LANDSCAPE AREAS
- SCHEDULED MONUMENTS
- REGISTERED HISTORIC PARKS AND GARDENS
- AONB
- OPEN COUNTRY
- REGISTERED COMMON LAND
- SITES OF SPECIAL SCIENTIFIC INTEREST
- SPECIAL PROTECTION AREAS
- SPECIAL AREAS OF CONSERVATION
- RAMSAR
- NATIONAL NATURE RESERVE
- ANCIENT WOODLAND

REV	DATE	DESCRIPTION	DRAWN	APPROVED
-	-	-	-	-

1. ENVIRONMENTAL DESIGNATIONS PLAN

ALAW MON SOLAR FARM

CLIENT
WYLFA GREEN LIMITED

DATE	SCALE	TEAM/DRAWN	APPROVED
23/02/2024	1:50,000@A3	PR/RL	GR

SHEET	REV	N	0	1KM
-	-			

DRAWING NUMBER
P21-0032_PR_0001

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APPENDIX 2 – FLOOD RISK

KEY

- SITE BOUNDARY
- MAEN HIR SOLAR FARM AND ENERGY STORAGE PROJECT
- CARROG GANOL ENERGY STORAGE PROJECT

NRW FOOD ZONE

RISK

- FLOOD ZONE 2
- FLOOD ZONE 3

REV	DATE	DESCRIPTION	DRAWN	APPROVED
-	-	-	-	-

2. FLOOD RISK

ALAW MON SOLAR FARM

CLIENT
WYLFA GREEN LIMITED

DATE	SCALE	TEAM/DRAWN	APPROVED
23/02/2024	1:50,000@A3	PR/RL	GR

SHEET	REV	N	0	1KM
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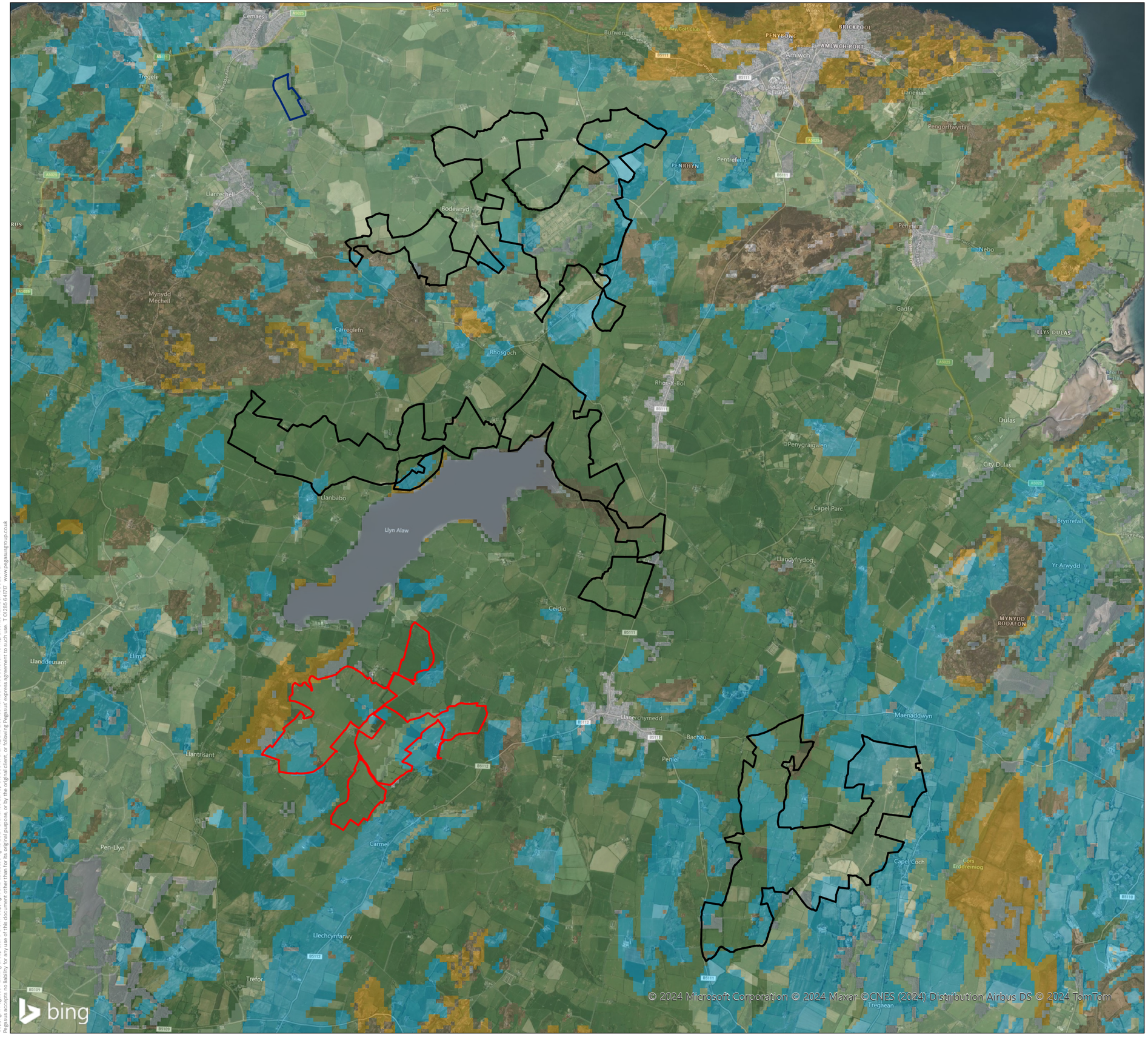
DRAWING NUMBER
P21-0032_PR_0002

PEGASUS GROUP

APPENDIX 3 – PREDICTIVE AGRICULTURAL LAND CLASSIFICATION



KEY

- SITE BOUNDARY
- MAEN HIR SOLAR FARM AND ENERGY STORAGE PROJECT
- CARROG GANOL ENERGY STORAGE PROJECT

PREDICTIVE AGRICULTURAL LAND CLASSIFICATION (MAP 2)

GRADE

- 2
- 3A
- 3B
- 4
- 5
- NA; U

REV	DATE	DESCRIPTION	DRAWN	APPROVED
-	-	-	-	-

3. PREDICTIVE AGRICULTURAL LAND CLASSIFICATION

ALAW MON SOLAR FARM

CLIENT
WYLFA GREEN LIMITED

DATE	SCALE	TEAM/DRAWN	APPROVED
23/02/2024	1:50,000@A3	PR/RL	GR

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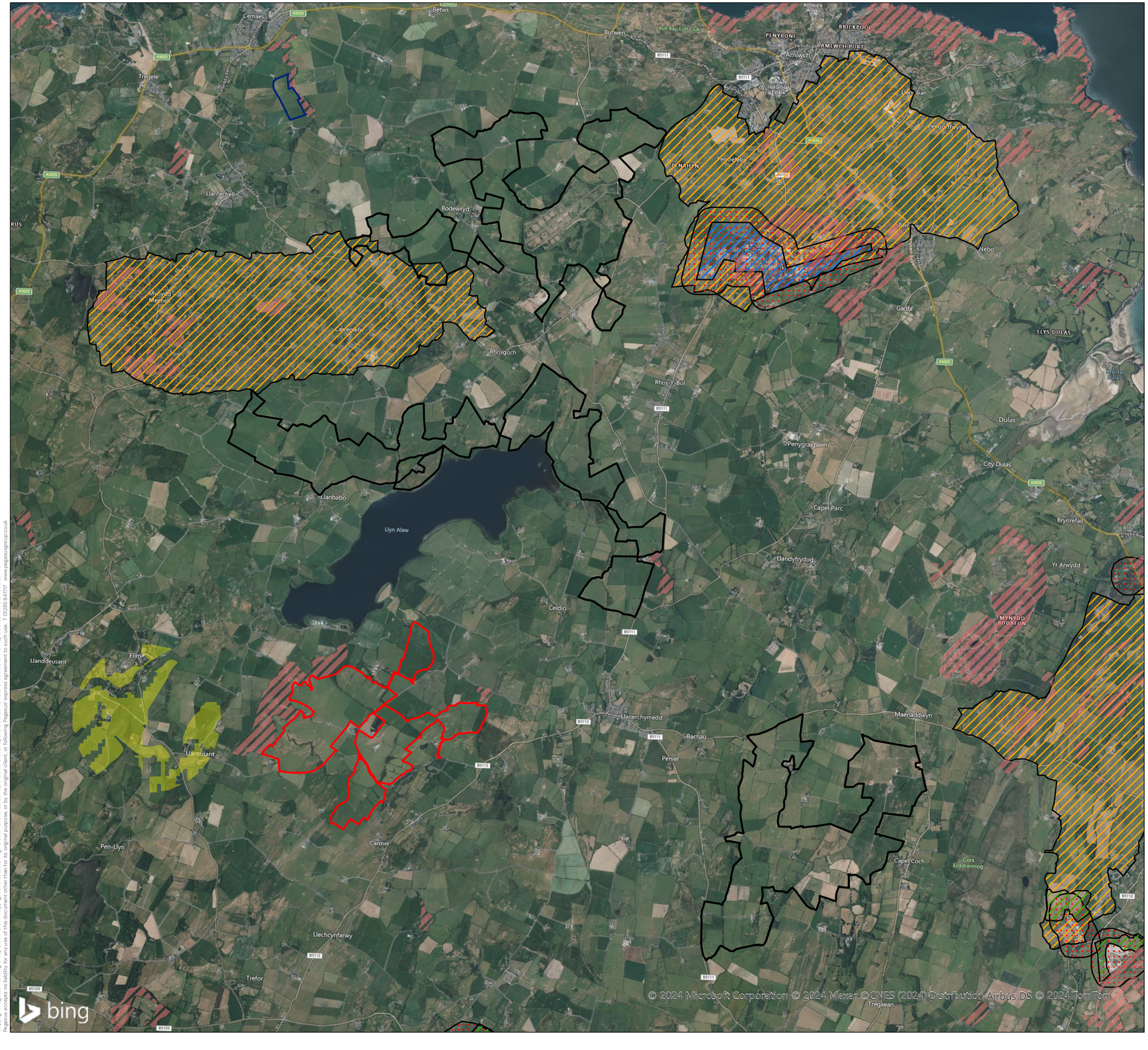
DRAWING NUMBER
P21-0032_PR_0003

PEGASUS GROUP

APPENDIX 4 – LOCAL PLAN DESIGNATIONS



KEY

- SITE BOUNDARY
- MAEN HIR SOLAR FARM AND ENERGY STORAGE PROJECT
- CARROG GANOL ENERGY STORAGE PROJECT
- SPECIAL LANDSCAPE AREA
- PARYS MOUNTAIN METALLIFEROUS SAFEGUARDING AREA
- MINERAL SITE BUFFER ZONE
- CRUSHED ROCK PREFERRED AREA
- SOLAR PV FARM SEARCH AREA
- WILDLIFE SITE

REV	DATE	DESCRIPTION	DRAWN	APPROVED
-	-	-	-	-

4. LOCAL PLAN DESIGNATIONS

ALAW MON SOLAR FARM

CLIENT
WYLFA GREEN LIMITED

DATE	SCALE	TEAM/DRAWN	APPROVED
23/02/2024	1:50,000@A3	PR/RL	GR

SHEET	REV	N	0	1KM
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DRAWING NUMBER
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