



Candwr Solar Farm

Pre-Application Consultation

Planning Statement

2 July 2026





Document Management.

Version	Date	Author	Checked/ Approved by:	Reason for revision
Issue 1	29.06.2026	GR	GR	



Contents.

1. Introduction.....	5
The Applicant and Dwr Cymru Welsh Water.....	5
Structure of Document.....	6
Supporting Documents.....	7
Statutory Requirements.....	8
Application Site.....	8
2. Application Proposal.....	9
Design Parameters and the Rochdale Envelope.....	10
Buffer Zones.....	11
Solar PV Panels and Framework.....	11
String Inverters, MV Stations and Transformers.....	12
Electrical Cabling.....	13
Substation Compound.....	13
Access.....	14
Access Tracks.....	14
Construction Phase.....	15
Operational Phase.....	15
Public Right of Ways (PRoW).....	15
Permissive Paths.....	16
Crossings.....	16
Fencing and Security.....	16
Temporary Construction Compounds.....	17
Drainage.....	17
Biodiversity and Landscaping.....	18
Construction Phase.....	19
Programme of Works.....	20
Operational Phase.....	20
Decommissioning Phase.....	21
3. Background and Renewable Energy in Wales and the UK.....	22
Welsh Commitment to Address Climate Change.....	22
Energy Generation in Wales 2022, published October 2023.....	23
Review of Wales' Renewable Energy Targets, published 24 January 2024.....	24
Local Area Action Plans.....	25
Torfaen Local Area Energy Plan.....	25
Monmouthshire County Local Area Energy Plan.....	27
Newport Local Energy Action Plan.....	27
UK OVERVIEW.....	28
Energy White Paper.....	29
Clean Growth Strategy.....	29
British Energy Security Strategy.....	30
Mission Zero – Independent Review of Net Zero (Rt Hon Chris Skidmore MP, January 2023).....	31
UK Energy Security Strategy (2022).....	33
The Growth Plan 2022, UK Government (September 2022).....	33



The Energy Price Guarantee, UK Government (Updated November 2022).....	34
Powering Up Britain: Energy Security Plan (March 2023).....	34
Connections Action Plan (November 2023).....	34
Clean Power 2030 Action Plan: A New Era of Clean Electricity (December 2024).....	35
Solar Roadmap: United Kingdom Powered by Solar (June 2025).....	36
 4. Application Site and Surrounds.....	 37
Land Parcel Context.....	37
Land Parcel One	37
Land Parcel Two.....	38
Land Parcel Three.....	38
Land Parcel Four.....	39
Land Parcel Five.....	39
Land Parcel Six.....	40
Land Parcel Seven.....	41
Land Parcel Eight	41
Land Parcel Nine.....	42
Land Parcel Ten.....	42
Land Parcel Eleven.....	43
Land Parcel Twelve.....	43
Land Parcel Thirteen.....	44
Land Parcel Fourteen.....	45
Land Parcel Fifteen.....	45
Land Parcel 16.....	46
Ecology & Biodiversity	46
Landscape.....	46
Heritage.....	47
Air Quality	48
Ground Conditions	48
Agricultural Land.....	49
Flood Risk	49
Noise.....	50
Transport.....	51
 5. Planning Policy Context.....	 52
Future Wales: The National Plan 2040 (February 2021).....	52
Planning Policy Wales (Ed, 12 published February 2024).....	56
Local Development Plans.....	62
Monmouthshire LDP	62
Torfaen LDP.....	63
Newport LDP	63
Local Strategy and Guidance	63
Supplementary Planning Documents	64
 6. Planning Assessment.....	 65
Principle of Development.....	65
How the development accords with Policy 18 of Future Wales	66



Sustainable Development.....	105
Welsh Language.....	107
7. Planning Balance	109
Context.....	109
Renewable and low carbon projections.....	110
Well-being and Future Generations (Wales) Act 2015	110
8. Conclusion.....	115

Appendices contents.

Appendix 1 Site Location Plan.....	117
Appendix 2 Land Parcel Plan.....	118
Appendix 3 Indicative Layout.....	119
Appendix 4 Ancillary Drawings	120

1. Introduction

- 1.1. Candwr Solar Farm Ltd (“the Applicant”) are proposing a renewable energy scheme comprising ground mounted solar arrays and associated works on land near the Dwr Cymru Welsh Water Court Farm Water Treatment Works, Court Farm, Ponthir, Caerleon. The proposed development is called Candwr Solar Farm. A Site Location Plan is provided at **Appendix 1**.
- 1.2. By virtue of its potential generating capacity, which stands at circa 46MWac [Megawatts], the proposed development constitutes a Development of National Significance (“DNS”). Therefore, instead of applying to the relevant Local Planning Authorities for Planning Permission, the application will be made to the Planning and Environment Decision Wales (PEDW). The application process is managed by PEDW on behalf of the Welsh Ministers.
- 1.3. This Planning Statement is being published to accompany a statutory pre-application consultation carried out under Articles 8 and 9 of the Development of National Significance (Procedure) (Wales) Order 2016. The pre-application consultation is a collaborative process between the applicant and the community consultees, specialist consultees, relevant persons and owners or occupiers of land adjoining the development site. Following the end of the consultation period, a Consultation Report must be prepared by the Applicant. This will be submitted with the final planning application and will provide details of the consultation process, the representations received and the applicant’s response to them.
- 1.4. The statutory pre-application consultation runs from Thursday 2 July 2026 to Thursday 20 August 2026.
- 1.5. Following the statutory consultation, the applicant expects to submit a formal planning application in Autumn 2026.

The Applicant and Dwr Cymru Welsh Water

- 1.6. Candwr Solar Farm Ltd (‘the Applicant’) is a part of TotalEnergies.
- 1.7. TotalEnergies are a global integrated energy company that produces and markets energies. TotalEnergies has been present in the UK for more than 60 years. TotalEnergies have reinvented and diversified their energy offering to promote renewable and decarbonised energies, as well as sparing, well considered use of fossil energies.
- 1.8. TotalEnergies are making major investments in solar and are developing projects across England and Wales, amounting to around 1GW of power. TotalEnergies have invested in several offshore wind developments in the UK which will have the capacity to deliver about 5GW of renewable power, including Seagreen (1.1GW) which became fully operational in 2023, West of Orkney (2GW) and Outer Dowsing (1.5GW).
- 1.9. TotalEnergies are one of the UK’s largest suppliers of gas and electricity to businesses and the public sector. We also offer electric vehicle charging solutions and market petroleum products including lubricants, aviation fuel, bitumen, and specialty fluids.
- 1.10. TotalEnergies is working in partnership with Dwr Cymru Welsh Water to decarbonise its operations through the delivery of this proposed development. Dwr Cymru Welsh Water will

purchase and consume 100% of the energy generated by Candwr Solar Farm, a proportion will be consumed directly at Court Farm Water Treatment Works, with the rest of the generated energy 'sleeved' to other Dwr Cymru Welsh Water sites around Wales via the National Grid. Dwr Cymru Welsh Water are not the Applicant for the proposed development.

- 1.11. Reducing Dwr Cymru Welsh Water's reliance on the National Grid also gives more control over operational costs. This would protect from fluctuating energy prices and helps manage customer bills at a time of rising costs thereby generating additional local benefits.
- 1.12. Dwr Cymru Welsh Water has committed to 90% carbon emission reduction by 2030 and 'Net-Zero' by 2040. This project would make a valuable contribution towards meeting these targets.
- 1.13. Reducing Welsh Water's reliance on the National Grid also gives more control over operational costs. This would protect Welsh Water from fluctuating energy prices and helps manage customer bills at a time of rising costs thereby generating additional local benefits.

Structure of Document

- 1.14. The issues relevant to the assessment of the draft application proposal are set out in this Statement. The subsequent sections of this Statement are divided into: –

Section 2: The Application Proposal

- 1.15. The section contains a description of the application proposal.

Section 3: Background for renewable energy schemes in Wales and the UK

- 1.16. The section summarises the key legislative background and support for standalone renewable energy schemes in Wales and the UK.

Section 4: Application Site and its Surrounds

- 1.17. This section contains a description of the application site and its environs.

Section 5: Planning Policy Context

- 1.18. The planning policy context for the application site includes both national policy guidance and the development plan which include Future Wales and Planning Policy Wales. Brief explanations of the key policies pertaining to the development proposal are contained within this section.

Section 6: Planning Assessment

- 1.19. This section provides an assessment of the draft proposal

Section 7: Planning Balance

- 1.20. This section establishes the planning balance for the development proposal.

Section 8: Conclusions

- 1.21. This section provides the concluding comments in relation to the application proposal.

Supporting Documents

- 1.22. The statutory pre-application consultation is supported by a draft planning application submission, which include the following documents: –

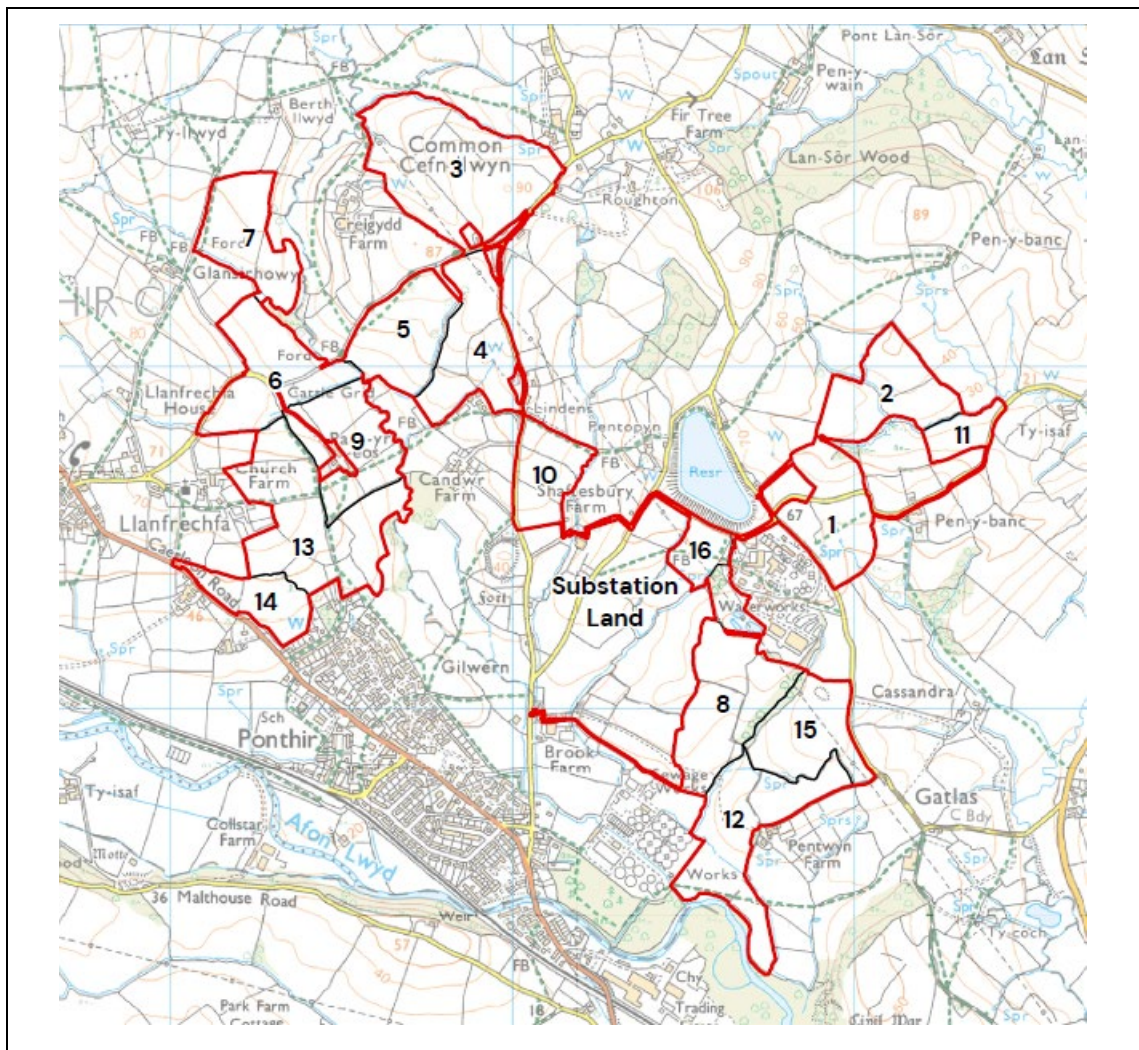
- Draft Planning Application Form
- Notice of consultation before applying for planning permission
- Planning Application Drawings
- Design and Access Statement
- Planning Statement (this document)
- Green Infrastructure Statement
- Noise Assessment
- Socio Economic Statement
- Outline Construction Traffic Management Plan
- Outline Construction Environmental Management Plan
- Environmental Statement, with technical chapters assessing: –
 - Landscape and Visual
 - Nature Conservation and Biodiversity
 - Glint & Glare
 - Agricultural Circumstances
 - Water Environment
 - Built Heritage
 - Transport and Access Transport Matters
 - Air Quality
- Environmental Statement Non-Technical Summary

Statutory Requirements

- 1.23. 1.14. In August 2025, the applicant submitted to PEDW a request, made under regulation 31(1) of the Town and Country Planning (Environmental Impact Assessment) (Wales) Regulations 2017 (as amended) ("the Regulations"), for the Welsh Ministers to make a screening direction as to whether or not the proposed development is "EIA Development" within the meaning of the Regulations. On 3 October 2025, a Screening Direction was adopted by PEDW, on behalf of the Welsh Ministers, confirming the proposal was EIA Development. Accordingly, a draft Environmental Statement has been prepared to support the statutory pre-application consultation.

Application Site

- 1.24. The Site is located at land at Court Farm, Ponthir, Monmouthshire and extends to approximately 131.62 hectares ("ha"), incorporating cable routes. The Site is comprised of agricultural land across sixteen land parcels which are spread across three Local Authority boundaries including Monmouthshire Council, Torfaen County Borough Council and Newport City Council. For ease of referencing and reporting, the sixteen land parcels are individually numbered, as shown at Appendix 2, and repeated below: –



2. Application Proposal

- 2.1. The main element of the application proposal is the construction, operation, maintenance and decommissioning of a ground mounted solar farm with an intended design generation capacity of circa 46 mega-watts alternating current (MWac). The electricity generated would be enough to power the equivalent of up to 17,265 typical family homes per year, helping to cut carbon emissions and support the transitions away from fossil fuels.
- 2.2. The proposed layout is provided at **Appendix 3, and the ancillary drawings are provided at Appendix 4.**
- 2.3. The primary objective for the proposal would be to supply Dwr Cymru Welsh Water Court Farm Water Treatment Works with renewable energy via a direct private wire connection. The remainder will be exported to the National Grid via connection to the existing 132kV overhead line at Dwr Cymru Welsh Water Court Farm Water Treatment Works. The complete project would provide 100% clean and stable energy directly to the grid for Dwr Cymru Welsh Water wider estate, helping to meet Government and company targets for carbon neutrality. The partnership with the Applicant will support the delivery of critical national infrastructure within the area by enabling Welsh Water to reduce reliance upon the National Grid and provide protection from fluctuating energy prices. The proposal will assist with mitigating customer bills at a time of high inflation.
- 2.4. It should be noted that the proposed development (the solar farm) does not constitute an enabler of, nor is it functionally interdependent with Dwr Cymru Welsh Water Court Farm Water Treatment Works. Dwr Cymru Welsh Water Court Farm Water Treatment Works is an existing, standalone operation that is capable of continuing to operate independently of the proposed development. Therefore, Dwr Cymru Welsh Water Court Farm Water Treatment Works does not form part of the proposed development.
- 2.5. Key components of the proposed development include:
 - Solar photovoltaic ("PV") fixed panels mounted on a simple metal framework,
 - Onsite supporting equipment including string inverters, transformers and MV Stations,
 - Onsite 132 kilovolt ("kV") substation compounds including transformers, switchgear, circuit breakers, control equipment buildings, control functions, material storage, parking, as well as wider monitoring and maintenance equipment,
 - 132kV overhead wires coming from the existing electricity pylon (owned by National Grid Electricity Distribution ("NGED")) to the onsite 132kV substation,
 - Underground cable connections to connect and transmit electricity from the solar PV panels to the National Grid Electricity Distribution point of connection at the Dwr Cymru Court Farm Water Treatment Works,
 - Perimeter fencing (deer proof) and access gates around the perimeter of the Site,
 - Inward facing infrared CCTV system,
 - Associated internal access tracks within the Site,

- Relevant communications and monitoring equipment,
- Temporary construction compounds during the construction phase,
- Environmental mitigation and enhancement measures, including landscaping, habitat management and biodiversity enhancement,
- New permissive path walkways,
- Associated infrastructure including parking, lighting, drainage infrastructure, storage containers, earthworks, culverts, surface water management, maintenance and welfare facilities, security cabins and any other works identified as necessary to enable the development, and
- Creation of new or improvement of existing vehicular accesses for the construction, operational and decommissioning phases of the proposed development, predominantly utilising existing farm access points.

Design Parameters and the Rochdale Envelope

- 2.6. The design of the proposal has been refined throughout the EIA process. It is recognised that parts of the proposal's design and construction methodology may be subject to further refinement and optimisation prior to and during construction. This is very pertinent to solar development due to the rapid pace of change in technology. For example, as technology advances, it is possible that solar PV panels could become more efficient, which could result in a potential reduction in total panel area required to deliver the same amount of generation. This in turn could require the micro-siting of panels and the associated equipment and infrastructure to reflect such changes, i.e., the final alignments of cabling and the number and location of panels, substation, inverters and transformers.
- 2.7. The Point of Connection ("PoC") for the proposed development would consist of an underground cable connection between the Land Parcels to the National Grid Electricity Distribution point of connection at the Dŵr Cymru Court Farm Water Treatment Works within the Site, connecting into the 132kV overhead power lines passing through the Site.
- 2.8. Temporary planning permission is sought for a period of circa 40 years from the date of energisation. Subject to obtaining the necessary consents, construction of the proposed development is anticipated to commence in 2029, and to be completed and the proposed development fully operational in 2031.
- 2.9. Following cessation of energy generation and exportation of the proposed development, the Site would be restored back to full agricultural use with all equipment and below ground connections removed. The exception is the proposed onsite 132kV substation (and ancillary security measures around the substation compound e.g., perimeter fencing, lighting and CCTV equipment) and associated access to the onsite 132kV substation and compound will be retained on a permanent basis as this would remain as part of the essential National Grid distribution network infrastructure.
- 2.10. Depending on the depth of the cabling, some may be capped off from the local electricity network and left in-situ rather than removed via trenching. Returning the main solar farm site to its former agricultural use, it is recognised some elements of the landscaping may have to

be removed. However, it is assumed the established habitats such as any tree and hedgerow planting, the intention would be retained when handed back to landowners, who would then have the ability to do as they wish (within the restrictions of the planning system) with their land. It is anticipated that decommissioning of the proposed development would be controlled by planning condition.

Buffer Zones

2.11. A number of buffer zones have been established to protect valuable natural resources, including trees and ecologically important field margins. The following minimum buffers have been adopted as standard as part of the design of the proposed development:

- Existing 33kV (or lower) overhead Power Lines: 6m easement either side
- Existing 132kV overhead Power Lines: 30m square exclusion zone from the base of the pylon, 20m easement either side.
- Existing underground low voltage Electricity Lines: 3m easement either side
- Existing Telecom Lines: 6m easement either side.
- Existing Gas Lines: 5m easement either side.
- Existing Water Mains: 3m easement either side.
- Existing Sewer Surface Water: 3m easement either side.
- Watercourses: 7m easement either side.
- Ancient Woodland to fence line: 15m
- Smaller Vegetation and Root Protection Areas (RPA) to fence line: 5m.
- Established Vegetation to fence line: 10m.
- Fence line to panels: 3.5m
- 30m from any badger setts

2.12. The design parameters for each component of the proposed development are detailed within the following sections.

Solar PV Panels and Framework

2.13. The solar PV panels generate electrical power by converting solar irradiance into direct current (DC) electricity. A solar PV panel consists of a layer of silicon cells, an anodised aluminium frame and various wiring to allow current to flow from the silicon cells. Silicon is a non-metal with conductive properties that allow it to absorb and convert sunlight into electricity. When light interacts with a silicon cell, it causes electrons to be set into motion, which initiates a flow of electric current. Solar PV panels are proposed in Land Parcels 1-13 as shown in Figure 4.1 – Indicative Site Layout.

- 2.14. The solar PV panels are likely to have a typical maximum height of approximately 2.85m, however, for the purposes of the EIA, a worst-case height of 3m has been assumed in accordance with the Rochdale Envelope approach. This ensures that the assessment remains robust should panel dimensions increase during detailed design or procurement as a result of advances in solar technology. The panels will be mounted on a fixed framework, with a minimum clearance of 0.8m AGL to the lowest edge, set at a tilt of 15–30° facing south, and spaced between 1.5–4.5m between rows to respond to local topography.
- 2.15. For the fixed system the mounting structure will be supported at intervals by double mounted posts. The posts will be pushed into the ground with a small plant rig, to depths of up to 2.5m and this will be guided by localised ground conditions. The rest of the mounting frame would then be fitted to the posts to create angled support tables ready for the solar PV panel installation.
- 2.16. Depending on ground conditions, the posts may be mounted to ballast slabs. If any areas of archaeological interest are identified within the work area, then consideration will be given to the use of non-intrusive installation method, where the posts will be fixed into concrete pads resting on top of the ground. However, there is currently no identified need for this method within the site.
- 2.17. The solar PV panels would be preconstructed to help minimise on-site construction activity.
- 2.18. The solar PV panels will be connected in strings and insulated cabling will be routed in channels fixed on the underside of the mounting frame. The string cables will run along the entire underside of each row and connected to string inverters at the end of rows, before being taken below ground.
- 2.19. Land between and beneath the solar PV panels would be used for biodiversity enhancements and potential for seasonal sheep grazing for maintenance. Mechanical cutting may also be deployed to manage the grass.

String Inverters, MV Stations and Transformers

- 2.20. String inverters take direct current (DC), as generated by the solar PV panels, and convert it into alternating current (AC) to enable the on-site generated electricity to be transferred to the on-site substation, the Water Treatment Works and on to the local electricity distribution network. The design of string inverters varies between manufactures, but they are typically approximately 1.1 m wide × 0.9 m high × 0.4 m deep and attach to the end of panel rows. An approximate 173 inverters are anticipated to be spread across the solar PV panelled areas (Land Parcels 1–13).
- 2.21. The proposed development requires the installation of 16 MV Stations co located with 16 Transformers. These are distributed across Land Parcels 1–13 as shown in Figure 4.1 – Indicative Site Layout. The MV Stations and Transformers handle electricity at medium voltage levels and increase the voltage of the electricity generated by the solar panels before it reaches the on-site substation and ultimately the distribution network.
- 2.22. The Transformers comprise individual containers (approximately 6m long × 2.4 m wide × 2.9 m high). The MV stations would be approximately 2m long, × 1m wide × 1.8m high). An illustrative figure for the MV Stations and Transformers is provided at Figure 4.2– General Arrangement Drawings.

- 2.23. Due to the continuing advances in solar technology, it is not possible to specify the precise type of inverter, MV station or Transformer at this time, as this will depend on the detailed electrical design and competitive procurement process. However, final details could be controlled through suitably worded planning conditions requiring the final details to be submitted for approval.

Electrical Cabling

- 2.24. On-site cabling would be required to connect the solar PV panels to the string inverters, MV Stations/Transformers, and the onsite 132kV substation. As mentioned above, the solar PV panels will be connected in strings and insulated cabling will be routed in channels fixed on the underside of the mounting frame. The string cables will run along the entire underside of each row and connect to string inverters at the end of rows, before being taken below ground.
- 2.25. The 33kv electrical cabling from the arrays would be laid by open trench technique, concealed in shallow trenches linking the solar panels to the inverters / transformers and then to the 132kV onsite substation. The dimensions and depth of the trenches would vary depending on the amount of cabling and ground conditions, typically they would be minimum 1m in depth and 4.7m wide. The cable trench may also carry earthing and communications cables and will be backfilled with fine sands and excavated materials to the original ground level.
- 2.26. The underground cabling connecting the 132kV onsite substation to the existing overhead 132kV powerline would be laid by open-cut trench. At the point of connection, there may be upgrade works required to the existing pylon to facilitate the connection works.
- 2.27. The construction process will follow a soil management plan to ensure that the soil structure and quality are not degraded as part of the construction process, an Outline Soil Management Plan will be submitted as part of the DNS application.
- 2.28. The underground cables will be located in existing gaps in hedgerows wherever feasible, however this assessment assumes the loss of some hedgerows as a worst case. Hedgerows to be removed are identified within the accompanying Arboricultural Impact Assessment (Appendix 10.1 of the ES).
- 2.29. Some of the underground cabling will be routed a short distance south of Land Parcel 10 within the public highway, either in the carriageway or adjacent footways, to connect into the onsite 132kV substation adjacent to the Dŵr Cymru Welsh Water Treatment Works. Additionally, a short distance between Land Parcel 3 and Land Parcel 10 is proposed to have underground cabling connecting the Land Parcels located within the public highway (Candwr Road).
- 2.30. The electrical cabling would all be located underground and there would be no above ground infrastructure required other than within the onsite 132kV substation compound to connect to the 132kV overhead wires coming from the existing electricity pylon adjacent to the onsite 132kV substation compound.

Substation Compound

- 2.31. The design provides for an onsite 132kV substation and compound, positioned on land owned by Dwr Cymru Welsh Water within the Court Farm Water Treatment Works, north of Land

Parcel 8. A 11kV connection would link the Candwr Solar Farm to the Court Farm Water Treatment Works. Surplus energy would then be stepped up from 33kV to 132kV via the onsite 132kV substation for export to the National Grid.

- 2.32. The onsite 132kV substation compound would have a footprint area in total of approximately 0.71 ha and a maximum height of 6.2m. The arrangement of the 132Kv substation compound is split into 3 fenced and gated compounds connected by an access track. The arrangement has been designed to take into account constraints such as the overhead power lines, water mains, PRoW and vegetation with suitable buffers.
- 2.33. The onsite 132kV substation compound would be gated with security fencing, with a 3m high palisade fencing.
- 2.34. Except for the concrete foundations for the various equipment components, the onsite 132kV substation compound would comprise ground that would be permeable to surface water.
- 2.35. The substation will not be continuously lit, downward facing emergency lighting will be installed within the compound. The final design for the substation would be subject to agreement with the DNO.

Access

- 2.36. The Site is served by eight access points (5x existing and 3x new), the locations of which are shown in Draft Outline Construction Traffic Management Plan. The existing access points generally provide access to agricultural fields via field gate entrances located along unnamed rural roads, they are therefore associated with existing large agricultural vehicle movements, however, where necessary modifications will be made as outlined within Draft Outline Construction Traffic Management Plan. The new access points (1, 6 & 7) have been designed to accommodate construction and operational traffic associated with the proposed development, including larger vehicles where required.
- 2.37. The primary access is located off the B4236 Caerleon Road and designed to accommodate larger vehicles, including articulated HGVs, and will connect directly to an internal haul road to distribute traffic within the Site. Secondary new accesses are intended to accommodate smaller construction and maintenance vehicles, such as tractors with trailers, and provide connectivity to construction compounds and the onsite 132Kv substation.

Access Tracks

- 2.38. Access to the proposed development during operation would be required for maintenance. Access to the proposed development is proposed through a mix of existing and new access points for each Land Parcel. Once accessing the Site, the internal access tracks will connect into the various Land Parcels.
- 2.39. The proposed development would utilise existing farm track routes, where practicable, with new access tracks approximately 3.5m wide, created as required. The access tracks have been located so they utilise existing field gates between fields to reduce the impact on hedgerows where practicable. MV stations and Transformers will be located off a number of these internal access tracks.

- 2.40. The access track would be formed by excavating 150mm and laying clean Type 1 aggregates onto a terram geotextile layer. The access track would be laid on a compacted soil base, with a depth of 350 mm.

Construction Phase

- 2.41. During the construction phase, the primary construction access (Access 1) will be taken from the B4236 Caerleon Road, providing a purpose-built junction suitable for highway-capable vehicles, including articulated HGVs.
- 2.42. This access will connect directly to an internal haul road and primary construction compound, where materials will be delivered and redistributed across the Site. Secondary access points (Accesses 2–8) will support internal circulation and distribution across the Site.
- 2.43. All HGV traffic will be routed to and from the Site via Access 1, following a defined route from the strategic road network (M4/A4042), thereby avoiding the use of local rural lanes for large vehicles.
- 2.44. During the decommissioning phase, access to the Site is anticipated to follow a similar arrangement to the construction phase, with vehicle movements effectively reversing the established construction process.

Operational Phase

- 2.45. During the operational phase, all eight proposed access points will be retained and available for use by maintenance vehicles, providing flexible access across the Site.
- 2.46. Access to the Site will occur on an ad hoc basis, with maintenance visits undertaken only as required. It is anticipated that the level of activity will be low, with approximately four maintenance trips per month.
- 2.47. Vehicles accessing the Site during operation will typically comprise light vehicles such as 4x4s or small vans, rather than large construction vehicles.
- 2.48. The internal layout will allow vehicles to enter, circulate within the Site, and exit in a forward gear, avoiding the need for reversing onto the public highway.
- 2.49. Overall, the operational phase is characterised by low-frequency, small-scale vehicle movements, with the established network of access points ensuring safe and efficient access for routine maintenance without materially affecting the surrounding highway network

Public Right of Ways (PRoW)

- 2.50. Several PRoWs cross through and abut the Site, these are illustrated on the Indicative Site Layout. A Draft Outline Construction Traffic Management Plan is submitted to assess the impact on PRoWs and to provide a management strategy for the proposed development. There are no proposals to alter/divert or stop-up any PRoW during the construction and operational phase. Measures such as fencing, signage, and designated crossing points may be used to manage interactions between users and construction activity.

Permissive Paths

- 2.51. Enhancements to the PRow network within and around the Site are also proposed with additional permissive paths, as shown on the proposed Indicative Landscape Strategy (Figure 5.5). New proposed sections of permissive footpath include:
- 2.52. Two sections within the southeastern corner of Land Parcel 12,
- 2.53. Lengths running along the south and west of Land Parcel 7, running northeast and south of Parcel 6A and connecting to existing footpath southwest of Parcel 5 and northeast of Parcel 6B, and
- 2.54. Length to the south of Parcel 3, connecting to existing footpaths to the northwest and southeast of Land Parcel 3.

Crossings

- 2.55. Where internal access tracks are required to cross a watercourse, a culvert or similar feature will be required to be installed. The final design for watercourse crossings will be submitted at the detailed design stage prior to construction, agreed with the relevant Local Planning Authorities by way of planning condition.

Fencing and Security

- 2.56. Perimeter fencing will enclose Land Parcels as illustrated on Figure 4.1 – Indicative Site Layout. Fencing will be approximately deer/stock wire deer fencing approximately 2.4m in height with wooden posts piled into the ground. The fencing would be designed in such a way to allow small animals to pass through and would also be gated to allow access to and from the Site.
- 2.57. The design of the perimeter fencing has taken into account the design constraints of utilities, with appropriate buffers. As such, the proposed development has been split into a series of fenced areas, which ensure access into the proposed development is controlled, but still enables the operators of utilities to access their assets at the Site.
- 2.58. Pole mounted Closed Circuit Television (CCTV) system, inwardly facing, will be deployed around the perimeter of the operational areas of the Site. These cameras will be mounted on poles of approximately 4m in height, located adjacent to the perimeter fencing. It is anticipated that the CCTV system would have motion detection technology for recording and pointed directly within the Site and away from any land outside of the Site.
- 2.59. No areas of the proposed development would be continuously lit during operation, however, security lighting would be required around key electrical infrastructure i.e. the onsite 132kV substation compound.
- 2.60. Illustrative figures for fencing and CCTV detail are provided in Figure 4.2– General Arrangement Drawings.

Temporary Construction Compounds

- 2.61. For the construction process only, it is anticipated that there will be up to three temporary construction compounds, in Land Parcel 1, 10 and 13 to serve the Site. The primary compound is located in Land Parcel 13 with the secondary compounds in Land Parcel 10 and 1.
- 2.62. The primary compound allows all deliveries by HGVs to be made to a centralised area, decanted and shuttled across the Site (internally) to various parcels of land using a tractor and trailer. Secondary Compound A in Land Parcel 10 serves Land Parcels 8, 10 and 12, providing localised storage and distribution. Secondary Compound A in Land Parcel 1 serves Land Parcels 1, 2 and 11, providing localised storage and distribution.
- 2.63. The temporary construction compounds would typically have a footprint of approximately 0.3 ha. The construction compounds will typically have the soil stripped to 300–400mm depth with non-woven geotextile membrane laid down filled with compacted crushed stone to allow water to percolate into the ground.
- 2.64. The use of the temporary construction compounds could vary depending on the construction activities, however, likely uses include storage of equipment and material, construction worker welfare facilities, and deliveries.
- 2.65. The temporary construction compounds would comprise:
- Temporary portacabins providing office and welfare facilities for construction operatives
 - Heavy Goods Vehicle (HGV) / delivery turning area
 - Parking area for construction and workers vehicles
 - Secure compound for storage
 - Temporary hardstanding
 - Wheel washing facilities
 - Temporary gated compound
 - Storage bins for recyclables and other waste
- 2.66. At the end of the construction period the temporary construction compound would be decommissioned. During the operational phase, the areas used as temporary construction compounds phase will be returned to grassland and used for solar PV panel areas.

Drainage

- 2.67. A Flood Consequence Assessment and a Surface Water Drainage Strategy (Appendix 9.1) has been developed and sets out the outline drainage strategy for the Site. The documents outline how surface water will be managed in order to prevent any increase in flood risk. It describes measures to manage drainage from new infrastructure (e.g. solar PV panels, access tracks and areas of hardstanding across the Site) and manage any required changes to

existing land drainage arrangements through use of sustainable drainage systems (SuDS) . The strategy will be developed into a detailed drainage strategy prior to construction.

2.68. Key embedded mitigation measures incorporated into the scheme design include:

- All built development (with the exception of necessary watercourse crossings and access tracks) is located within areas of lowest flood risk (Flood Zone 1), avoiding higher risk areas associated with watercourses;
- Solar panels are elevated (approximately 0.8 m above ground level) to maintain existing overland flow paths and avoid impedance of surface water movement;
- The proposed development minimises impermeable area through the use of driven pile foundations and permeable access tracks, thereby limiting changes to runoff characteristics;
- A minimum 7 m easement from the top of bank of all Ordinary Watercourses is maintained free from development to enable maintenance and preserve natural hydrological function;
- The transition from intensive agricultural use to grassland beneath and around solar arrays will reduce soil compaction, increase infiltration and provide long-term hydrological betterment;
- A site-wide drainage strategy incorporating swales, permeable surfaces and attenuation features will manage runoff, maintain greenfield discharge rates and provide water quality treatment and biodiversity benefits.

2.69. Climate change resilience has been embedded within both the scheme design and the including the application of climate change allowances in line with current Welsh Government and Natural Resources Wales requirements

2.70. The documents demonstrate that the proposed development will be safe for its lifetime (40 years) taking account of the vulnerability of its users, without increasing flood risk elsewhere.

Biodiversity and Landscaping

2.71. The proposed development presents considerable opportunity for landscape and biodiversity mitigation and enhancement. The Landscape and Biodiversity proposals are discussed in detail in the supporting Draft Outline Landscape and Ecological Management Plan. It sets out measures for protection, retention, and establishment of new habitats, with measures to protect the species associated with these habitats. It also sets out measures for habitat management and enhancement, alongside schedules of maintenance.

2.72. In general, a number of measures and features are proposed for the benefit of biodiversity. This includes the planting of new hedgerows and bolstering of existing field boundaries to increase coverage of this habitat, provide effective landscape screening, and to improve connectivity of the hedgerow and woodland network across and beyond the Site.

2.73. Key landscape and ecological measures that are provided within the proposed development include:

- Sensitive design of the proposed development responding to constraints and opportunities including offsets to nearby receptors;
- Minimisation of land take in higher value areas with installation of infrastructure within existing field patterns and lower value habitats;
- Retention of key habitats, including: Existing hedgerows, trees and woodland and Ancient woodland retained with buffers;
- Native transplant woodland planting, comprising shrubs, light standard and standard trees to be maintained at a minimum mature height of 6m;
- Native hedgerow tree planting within proposed and existing hedgerows;
- Orchard planting of native species;
- Native hedgerow planting;
- Wildflower, meadow and wetland meadow planting, with appropriate species/seed mixes responding to the specific ground conditions across the Site;
- Measures implemented where species are present/potentially present, including – Badger protection measures (avoidance buffers, monitoring if required), Bat-sensitive design (e.g. avoiding key commuting routes, lighting control) and protection of breeding birds (seasonal restrictions)
- Safeguards for reptiles, amphibians and mammals where required; and
- Protection of watercourses and riparian corridors (e.g. Afon Lwyd) with measures to control runoff and pollution during construction

2.74. The final LEMP will be agreed with the LPA's by way of planning condition following grant of planning permission.

Construction Phase

- 2.75. The following section provides a summary of the key elements of the construction of the proposed development. Detailed consideration of potential effects during the construction process and any mitigation measures are provided in each relevant chapter of this ES.
- 2.76. Planning for construction is necessarily broad at this stage and may be subject to modification during the detailed design stage and in some instances when construction has commenced. Consequently, it has been necessary to predict some of the likely significant effects of the construction of the proposed development with the best possible degree of accuracy based on worst- case scenarios. The following description enables the principal construction phases and methods to be understood and assessed.
- 2.77. A Draft Outline Construction Environmental Management Plan has been developed for the construction phase of the development and will be submitted as part of the DNS planning application.

Programme of Works

- 2.78. The construction phase of the proposed development is currently anticipated to begin in 2029 and span for up to 18 months (minimum 12 months), targeting completion and operation in 2031; this will be dependent on the grant of planning permission for the proposed development, final design, and potential environmental constraints on the timing of construction activities.

Operational Phase

- 2.79. The design life of the proposed development is expected to be operational for a maximum of 40 years.
- 2.80. During operation of the proposed development, human activity on the Site will be minimal and would be restricted principally to:
- Landscaping and ecological management in accordance with the detailed LEMP,
 - equipment maintenance and servicing,
 - replacement of any components that fail, and
 - monitoring to ensure the continued effective operation of the proposed development.
- 2.81. There will not be any permanent jobs on the Site. Rather than permanent staff working within the operational proposed development, there will be frequent visits made by off-site workers in a small van or similar to ensure that the proposed development is maintained properly.
- 2.82. Operational areas will be surrounded by perimeter fencing with pole-mounted CCTV cameras adjacent to the perimeter fencing for security.
- 2.83. Access to the proposed development during operation for maintenance activities would utilise all available access locations into the Land Parcels.
- 2.84. Land between and beneath the solar PV panels would be used for biodiversity enhancements including dedicated skylark mitigation areas and potential for seasonal sheep grazing for maintenance which would retain associated areas in productive agricultural use. Mechanical cutting may also be deployed to manage the grass. In fields dedicated to skylark mitigation enhancement, management will be typical meadow management.
- 2.85. Given the proposed development is operational for a maximum of 40 years, there will be a need potentially for some or all of the solar equipment to be replaced during the operational phase. The solar equipment would be disposed of following the waste hierarchy, with materials being reused or recycled wherever possible. Any electrical waste would be disposed of in accordance with the Waste from Electrical and Electronic Equipment (WEEE) Regulations 2013, minimising the environmental impact of the replacement of any elements of the proposed development.

Decommissioning Phase

- 2.86. 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. The Applicant will ensure that appropriate financial and management mechanisms are in place to secure the decommissioning and restoration of the site at the end of its operational lifespan.
- 2.87. 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.

3. Background and Renewable Energy in Wales and the UK

Welsh Commitment to Address Climate Change

- 3.1. Part 2 of the Environment (Wales) Act 2016 (2016 Act) introduced the provisional requirements for the Welsh Government to reduce emissions of greenhouse gases, including a requirement to ensure that net emissions for 2050 are at least 80% lower than the baseline.
- 3.2. In 2017, the Welsh Government set renewable energy targets as part of their commitment to a more sustainable future for Wales. These targets included the need for Wales to generate electricity equal to 70% of its consumption from renewable sources by 2030.
- 3.3. The 70% renewable electricity target for 2030 represents an initial step in the development of renewable energy in Wales, as Wales' energy systems transition to net zero. In July 2023, following a consultation period in which broad support was received for the Welsh Government's renewable energy ambitions, the Welsh Government adopted new energy targets for 2035. These include:
 - Generating the equivalent of 100% of Wales' annual electricity consumption from renewable sources by 2035.
 - Installing 580,000 heat pumps across Wales by 2035.
 - 1.5 GW of renewable energy capacity to be locally owned by 2035
- 3.4. In February 2021, the Welsh Government adopted a suite of regulations, known as The Climate Change (Wales) Regulations 2021 which formally commit Wales, for the first time, to legally binding targets to deliver the goal of net-zero emission by 2050. By setting a long-term framework for meeting the net zero 2050 target, the regulations provide milestones and a direction of travel for Wales' decarbonisation pathway, whilst the carbon budgets help to focus near-term action to enable Wales to reach their long-term goal. They provide clarity on the Welsh Ministers' vision for, and commitment to, a net zero future. As such, they provide a context for today's decision-makers to safeguard the needs of future generations.
- 3.5. However, the targets and budgets are achieved, reducing Welsh emissions will help to lessen the impacts on Wales and the world arising from increased temperatures. These impacts include flooding, risks to health, water shortages and risks to biodiversity. The Welsh Government is proposing to increase Wales's climate targets in response to the latest climate science and the recommendations of the Climate Change Committee (CCC) regulations that priorities the delivery of renewables are: –
 - The Environment (Wales) Act 2016 (Amendment of 2050 Emissions Target) Regulations 2021, which increase the 2050 greenhouse gas emissions reduction target from 80% to at least 100% lower than the baseline;
 - The Climate Change (Interim Emissions Targets) (Wales) (Amendment) Regulations 2021, which update the existing 2030 and 2040 targets from 45% and 67% to 63% and 89% respectively. They align the interim targets with the new 2050 target and

front load climate action in the 2020s in line with the Climate Change Committee (CCC)'s advice;

- The Climate Change (Net Welsh Emissions Account Credit Limit) (Wales) Regulations 2021, which revise the existing carbon budgets for 2021–2025 and 2026–2030 to an average of 37% and 58% reductions below the baseline (respectively); and
- The Climate Change (Carbon Budgets) (Wales) (Amendment) Regulations 2021, which limit the use of carbon offsets for 2021–2025 to 0%. They effectively prohibit using carbon offsets during this period.

3.6. On 1 January 2021, the United Kingdom left the European Union Internal Energy Market (IEM). The IEM allows harmonised, tariff-free trading of gas and electricity across Europe (through interconnectors), leading to lower prices and greater security of supply. As wholesale gas and electricity prices in the UK are generally higher than elsewhere in Europe, interconnection has caused a reduction in wholesale prices, and hence consumer prices in the UK. Leaving the IEM has the potential to impact the trade of energy through interconnectors. The Government's Briefing Paper on Energy, Climate Change and Brexit identifies how one potential impact of leaving the IEM is an increase in the cost of energy imports and this in turn would be passed on to UK's householders and businesses. In terms of energy security, it notes how the interest of the United Kingdom should be to increase the flexibility and resilience of the grid, especially with increasing intermittent renewables.

3.7. In April 2006 all 22 unitary authorities in Wales signed the Welsh Commitment to address Climate Change. This commitment was developed with the Welsh Assembly Government. It commits the individual authorities to work to adapt to the effects of climate change and to reduce emissions of greenhouse gases. Wales is the only country in the European Union where all local authorities have signed a public commitment to address climate change.

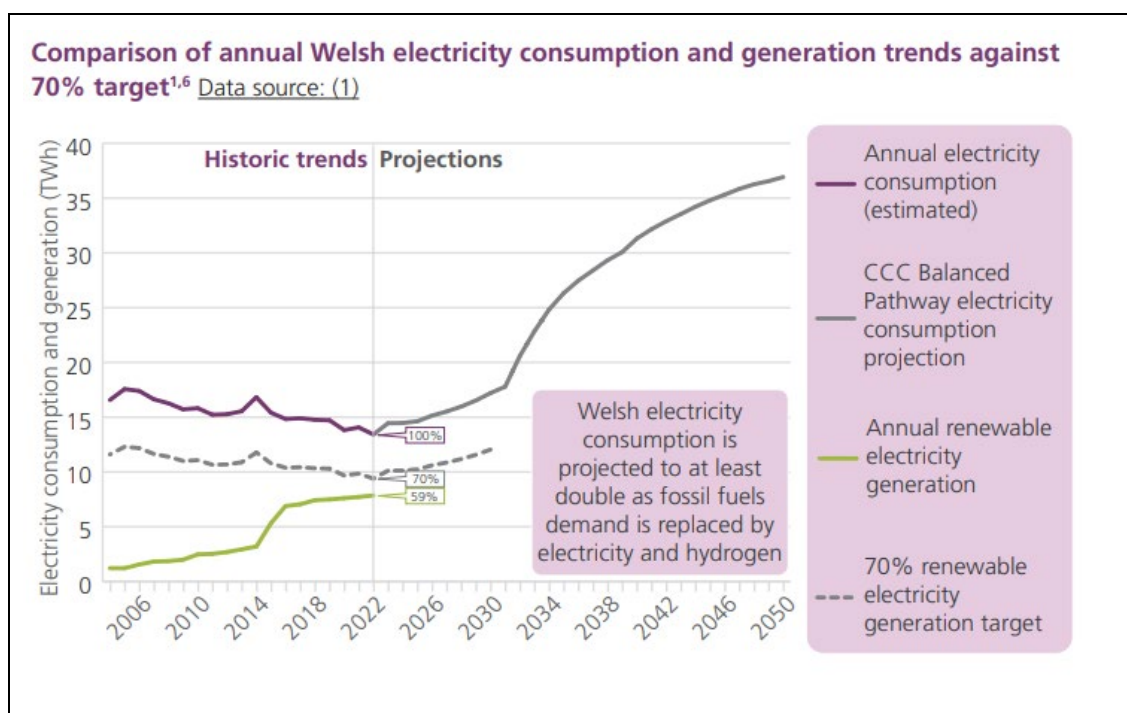
Energy Generation in Wales 2022, published October 2023

3.8. The Energy Generation in Wales report 2022, identified how approximately 27% of all Welsh electricity generation came from renewables. This is down from 33% in 2020 due to significant increase in generation from non-renewable sources.

3.9. Other key headlines of the report are: –

- Wales generated a total of 29 TWh of electricity in 2022, 7.9 TWh of which came from renewables and 21.1 TWh from fossil fuels
- 43 MW of renewable electricity capacity was installed in 2022, down from 116 MW installed in 2021
- Renewable electricity generation in Wales has tripled since 2008 and doubled since 2012, but has only increased by 11% in the last five years
- 2022's renewable energy installation rate is the second lowest in the last decade and is nearly ten times lower than the 2015 peak, when more than 1 GW of renewable energy capacity was installed

- 3.10. In terms of progress towards the 70% target by 2030 and 100% by 2035; in 2022, this figure stood at an estimated 59%, up from 55% in 2021 and 19% a decade ago.
- 3.11. Progress towards Wales's target is impacted by changes to both electricity consumption and electricity generation. Between 2021 and 2022, Welsh electricity consumption is estimated to have fallen by almost 650 GWh while renewable electricity generation increased by over 130 GWh. Therefore, progress towards the target in 2022 was predominantly due to a fall in electricity consumption. Although electricity consumption in Wales has reduced over the last two decades, it is projected to increase in the future. Fossil fuel consumption in the heat and transport sectors is projected to transition to electricity and hydrogen as Wales decarbonises, which could result in electricity consumption more than doubling by 2050 (this is discussed further below). This increasing electricity demand will need to be met by increasing renewable generation to meet and maintain Wales' progress towards targets. A comparison of annual Welsh electrical consumption and generation trends against the 70% is shown on the table below. A step change will be required in the provision of renewables to achieve the projected 100% of renewables by 2035.



Review of Wales' Renewable Energy Targets, published 24 January 2024

- 3.12. The document identifies that "The deployment of renewables in Wales and the UK has slowed since 2015, largely as a result of the UK Government's approach to its renewable incentives, withdrawing key subsidies that secured a route to market. While renewables-based electrical capacity continues to increase year-on-year, the current rate of growth will not be enough to meet our demand, especially in light of our future electricity needs. Our Energy Generation in Wales 2021 report provides a baseline for our current estimated generation".

- 3.13. The Energy Generation in Wales report 2021 estimates that only 28% of total electricity generation in Wales comes from renewable energy sources. Page 3 of the report identifies how *“An increase in electricity generation from gas in 2021 compared to 2020 has resulted in the estimated percentage of total electricity generation delivered by renewables decreasing from 33% to 28%, despite the absolute renewable generation figure increasing.”* It is therefore the case that electricity consumption in Wales is estimated to have increased at a faster rate than renewable electricity generation in Wales in 2021.
- 3.14. In recognition towards the recent surge in the global price of gas, combined with Russia’s war in Ukraine, has resulted in huge increases in energy prices across the world, with the impact felt hardest by those who are least able to bear it. Page 8 of the Report states (inter alia) *“The Welsh Government is providing support to those in urgent need in the short term, while building a future energy system which insulates Wales from the worst of the impacts. Extending fossil fuel use will only result in problems in the longer term. Instead, Wales will improve energy efficiency and develop a renewables based energy system fit for the future”.*

Local Area Action Plans

- 3.15. In 2022 Welsh Government committed to roll out Local Area Energy Plans (LAEPs) in every local authority area in Wales. A LAEP sets out the changes required to transition an area’s energy system to net zero carbon emissions against a specified time. By exploring a range of technologies and scenarios through whole energy system modelling and analysis, the most cost-effective preferred pathway to net zero can be identified. With Welsh Government funding, the Cardiff Capital Region (CCR) agreed to coordinate that process across the region. CCR collaborated with the eight local authorities, within its region, technical partners Arup, Carbon Trust & Afallen and wider stakeholders to develop each LAEP. LEMP have been prepared and published for all the host local authorities pertinent to the application proposal. Each plan is discussed in turn below.

Torfaen Local Area Energy Plan

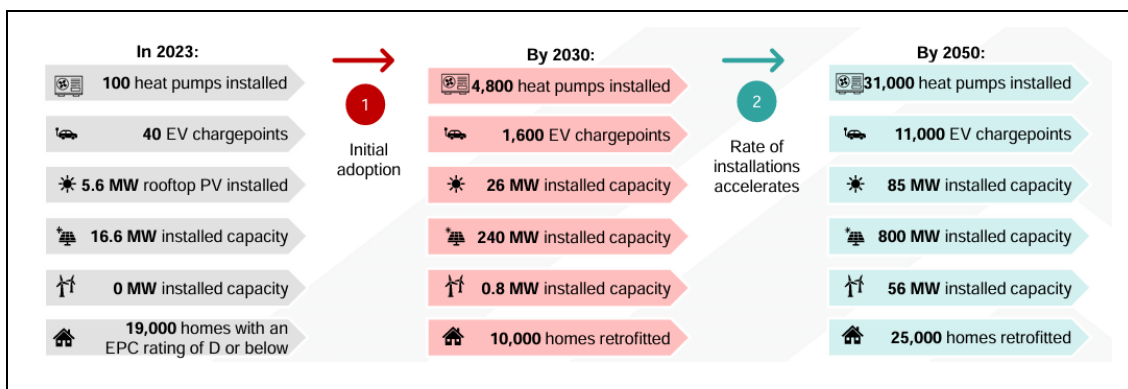
- 3.16. The Torfaen Local Area Energy Plan was published in 2024 and seeks to present evidence to identify the most effective route for Torfaen to reach net zero energy system. Page 20 of the document sets out Torfaen energy objectives and these are listed as: –

1. Make Torfaen more sustainable and connected by engaging with utility providers to ensure that strategic energy infrastructure can support the 2050 net zero energy pathway
2. Make Torfaen more sustainable and connected by developing enabling infrastructure to support the model shift to zero emission transport.
3. Use procurement, assets and data smartly to create opportunities for supporting the net zero transition.
4. Work collaboratively to identify and co-ordinate skills investment and actions to support the transition to net zero.

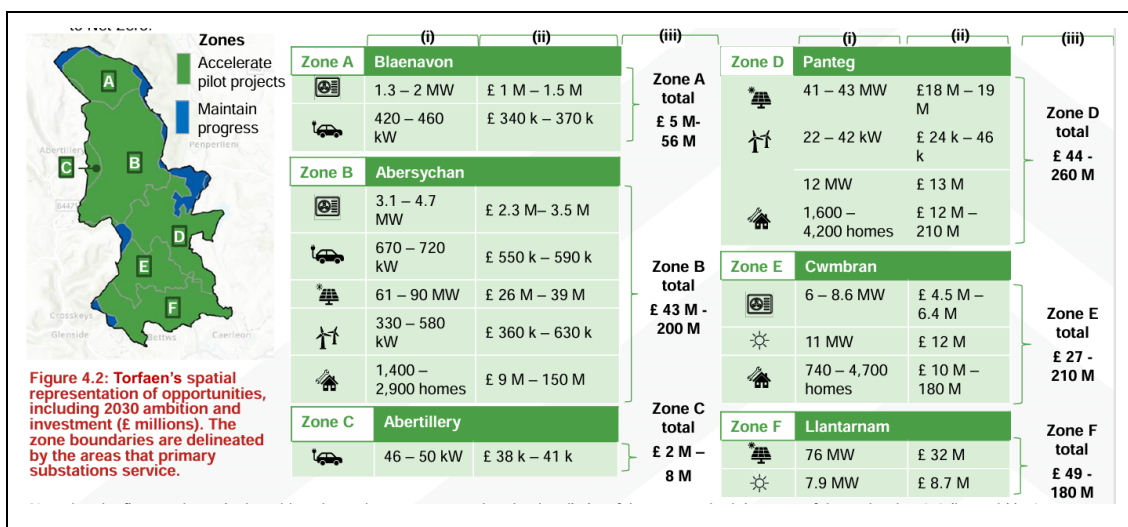
5. Involve communities and businesses on the net zero journey by providing information, guidance and support.
6. Make Torfaen a great place to do business by encouraging innovation and entrepreneurial activities relating to our net zero pathway.

3.17. Page 29 of the LAEP identifies how in 2023, the administrative area had a total installed capacity of only circa 10.4MW, with Ground-mounted solar assets, the largest total installed capacity at 10MW. Other renewable generation included hydroelectricity and biomass however, the installed capacities of these sites are significantly smaller at 0.03MW and 0.4MW, respectively.

3.18. Page 46 of the report summarises Torfaen aspirations for the future energy system and this is replicated in the table below. With regards to renewable energy, the objective includes the increase the deployment of ground mounted PV from circa 10MW in 2023 to 240MW by 2030 and then to 800MW by 2050. This represents a significant challenge for Torfaen.



3.19. With regards to spatial opportunities within the administrative area, page 532 of the LAEP sets out how the application site is located within the Llantarnam zone which is earmark for accelerated growth of 76MW of ground mounted solar by 2030:-



Monmouthshire County Local Area Energy Plan

- 3.20. The Monmouthshire LAEP dates from 2023 and its structure. Page 18 of the document sets out the County's vision and states *"To become a zero carbon county, supporting well-being, health and dignity for everyone at every stage of life"*. The vision is supported by the following energy objectives:

Monmouthshire County will be a:

- Fair place to live where the effects of inequality and poverty have been reduced;
- Green place to live and work with reduced carbon emissions, making a positive contribution to addressing the climate and nature emergency;
- Thriving and ambitious place, full of hope and enterprise;
- Safe place to live where people have a home where they feel secure in;
- Connected place where people feel part of a community, are valued and connected to others;
- Learning place where everybody has the opportunity to reach their potential.

- 3.21. Page 29 of the LEAP sets out the current energy systems within Monmouthshire and it identifies that in 2023, generators had a total installed capacity of 50 MW. Solar PV farms had the largest total installed capacity at 40 MW, predominantly comprised of ground-mount systems (39 MW). The largest asset in size (10 MW) is the Manor Farm solar farm, near Llanvapley, Abergavenny. Other renewable generators included a biomass, anaerobic digestors, hydropower and an onshore wind turbine which had a capacity of 6 MW, 0.36MW, 0.15 MW, 225 kW, respectively. There was one 3.2 MW fossil fuel powered generator.
- 3.22. Page 41 of the report summarises Monmouthshire's aspirations for the future energy system and this is replicated in the table below. With regards to renewable energy, the objective includes the increase the deployment of ground mounted PV from circa 40MW in 2023 to 560MW by 2030 and then to 1.8 GW by 2050. This represents a significant challenge for Monmouthshire.

Newport Local Energy Action Plan

- 3.23. Newport's Local Area Action Plan dates from 2023. The Executive Summary identifies how in November 2021, Newport City Council declared an Ecological and Climate Emergency, and committed to supporting the city's journey to net zero carbon by 2050. The Local Area Energy Plan for Newport sets out a vision for what a zero carbon energy system could look like in 2050, and describes key immediate actions for us as Newport City Council to support our journey. The Council's vision for Newport's future local energy system is to: Develop a net zero energy system for Newport, as a city on the rise.
- 3.24. With regards to the development of onshore renewables, page 20 of the document states

Scaling up of onshore renewables is an essential component of meeting Newport's future energy demand. Current market conditions and trends suggest ground PV is the least expensive to deliver. In the highest electricity demand scenario, we project that **up to 958MW of ground and rooftop PV** and 17.2MW of onshore wind is needed. This represents **an additional ~935MW of capacity in addition to current assets**. There is limited capacity to extend the already existing 16.1 MW of onshore wind"

UK OVERVIEW

- 3.25. The explicit need to introduce a step change in how the country deals with climate change has been recognised by the UK Government who, on 1 May 2019, declared an Environmental and Climate Change Emergency, following the finding by the Inter-governmental Panel on Climate Change, that to avoid more than 1.5°C rise in global warming, global emissions would need to fall by around 45 per cent from 2010 levels by 2030, reaching net zero by around 2050. Through the declaration, the Government recognises a need to move swiftly to capture economic opportunities and green jobs in the low carbon economy, while managing risks for workers and communities currently reliant on carbon intensive sectors. The Welsh Government made its climate emergency declaration in April 2019. The declaration sends a clear signal that the Welsh Government will not allow the process of leaving the EU, to detract from the challenge of climate change, which threatens our health, economy, infrastructure and our natural environment.
- 3.26. The Climate Change Act 2008 (2050 Target Amendment) Order 2019, SI 2019/1056 (the order), came into force on 27 June 2019 and amended the legally binding target to reduce greenhouse gas (GHG) emissions set in section 1 of the Climate Change Act 2008 (CCA 2008) from 80% to 100%, or net zero.
- 3.27. On 20 April 2021, the UK Government announced its commitment to reduce carbon emissions by 78% by 2035 compared to 1990 levels (including, for the first time, emissions from shipping and aviation). The new target is set out in The Carbon Budget Order 2021, which came into force on 24 June 2021.
- 3.28. In June 2022, the High Court found that the UK Government's Net Zero Strategy breached the Climate Change Act 2008 because it didn't detail how emissions cuts would be achieved. The High Court ordered the Government to inform parliament by April 2023 of how specific policies would contribute towards reducing emissions. On 30 March 2023, the Energy Security Secretary published a host of documents which outlined ambitious plans to scale up affordable, clean, homegrown power and build a thriving green industry. Powering Up Britain (March 2023) presents an overarching delivery plan which brings together the government targets for energy security, reducing household bills and maintaining its goal towards achieving net zero, including:-
 - Accelerating deployment of renewables by quintuple solar power by 2035.
 - Speeding up the planning consenting process – alongside Powering Up Britain, the Government has published a revised set of energy national policy statements for consultation, covering overarching energy, renewables, electricity networks, gas generation, and pipelines. On 23 February 2023 the Government published its Nationally Significant Infrastructure Project (NSIP) Action Plan, which sets out how the government will reform the consenting process to ensure the planning system can

deliver for the future, to meet the demands of a greater number and complexity of cases and deliver against government's ambitions.

- Through the Revised National Policy Statement for renewable energy (EN-3 (March), Government has committed to sustained growth in solar capacity to ensure that the UK maintains a pathway to meet net zero. EN-3 identifies how solar also has an important role in delivering the government's goal for greater energy independence. The British Energy Security Strategy states that government expects a five-fold increase in solar deployment by 2035.

3.29. There is a plethora of Government legislation, guidance and policy which support the transition to a low carbon future and the continued roll out of renewables and low carbon energy and associated infrastructure. With regards to the need for development, the explicit need to introduce a step change in how the country deals with climate change was recognised via the UK Government's declaration of an environmental and climate change emergency on 1 May 2019, following the findings of the Intergovernmental Panel on Climate Change (IPCC) who concluded that, to avoid a greater than 1.5°C rise in global warming, global emissions would need to fall by around 45 per cent from 2010 levels by 2030, and reach net zero by 2050 at the very latest.

3.30. The IPCC Sixth Assessment report, published in March 2023, is a stark warning of the devastation that will be unleashed if we fail to urgently limit global temperature rises and has been referred to as a "Code Red for Humanity" by the Secretary-General of the UN, António Guterres, illustrating the urgent and desperate need for rapid decarbonisation.

Energy White Paper

3.31. On 14 December 2020, the Government released the Energy White Paper which sets out the Government's vision of how the UK will clean up its energy system and reach net zero emissions by 2050. The white paper addresses the transformation of our energy system, promoting high-skilled jobs and clean, resilient economic growth as we deliver net-zero emissions by 2050. The white paper identifies how *"A low-cost, net zero consistent system is likely to be composed predominantly of wind and solar"* It goes on to state how *"Onshore wind and solar will be key building blocks of the future generation mix, along with offshore wind"*. COP26 agreement included accelerating the transition to 100% zero emissions cars and vans for the UK by 2035.

Clean Growth Strategy

3.32. The Clean Growth Strategy, published in October 2017, presented a comprehensive set of policies and proposals that aim to accelerate the pace of "clean growth", i.e. deliver increased economic growth and decreased emissions. To achieve the clean growth, the Government identifies how the UK will need to nurture low carbon technologies, processes and systems that are as cheap as possible, this includes subsidy free ground mounted solar parks as achieved by this development proposal. The Government places significant emphasis on securing increased investment across the energy systems whilst minimising, as much as possible, the public costs for securing such investments and makes multiple references to how they are seeking the delivery of solar without subsidy. Moreover, page 99 specifically states how the **'Government want to see more people investing in solar without government support'**

British Energy Security Strategy

- 3.33. The Government's British Energy Security Strategy (7 April 2022) explicitly highlights the urgent need for the UK to rapidly develop not only a decarbonised energy system but one that is more self-sufficient. This strategy provides a direct response by the Government to develop an energy system which is not so heavily reliant on imported oil and gas which has seen significant spikes in global cost and the overall cost of living following the impacts of the COVID-19 pandemic and Russia's invasion of Ukraine. As part of this strategy, the increased deployment of ground based solar development is identified by the Government to hold a key role in the realisation of these aims, with the government targeting a fivefold increase in the level of Solar PV development by 2035 (Up to 70GW). In addition to the increased uptake of decentralised renewable energy, the Energy Security strategy demonstrates the parallel need for improved grid flexibility and energy storage capacity and sets out that new appropriate policy will be developed to enable and encourage investment into sufficient, long duration electricity storage.
- 3.34. The targets set out within the Government's British Energy Security Strategy are reflected in the National Grid's annual Future Energy Scenarios Report (FES), the latest edition was published in November 2025. The report explores a range of routes to net zero in 2050 for energy demand and supply by considering the choices that can be made and the uncertainties. All pathways set out in the report sets out a need for high levels of solar deployment, from 18.8GW in 2024 to up to 46.8GW by 2030, and increasing to 55GW of solar by 2035. and reaching a minimum of 87.2GW by 2050.
- 3.35. However, it is currently estimated that the targeted delivery of up to 70GW of Solar PV generation required under the British Energy Security Strategy by 2035, will only be met under two scenarios, with Leading the Way achieving this target by 2040 and Consumer Transformation achieving this target prior to 2050.
- 3.36. The Government targets and National Grid estimations set out above are further compounded by the National Infrastructure Commission publication 'Net-Zero Opportunities for the Power Sector, March 2020) which sets out key infrastructure requirements needed to meet the UK's 2050 net-zero target, including the amount of renewable energy development that would need to be deployed.
- 3.37. The NIC recommends that in meeting these targets, the UK's energy mix needs to be made up of around 90% renewables. At page 18 of the report, it is recommended that across all scenarios, significant levels of solar, onshore wind and offshore wind will need to be deployed with between 129 – 237 GW (gigawatts) of renewable energy capacity in operation by 2050. To achieve this, the report recommends the following split:
- 56-121 GW of solar;
 - 18-27 GW of onshore wind; and
 - 54-86 GW of offshore wind.
- 3.38. To achieve the above targets would require a significant increase in installed capacity across the UK. The latest Digest of UK Energy Statistics (DUKES) for renewable sources of energy, published in July 2025, identified that as of 2024, the solar capacity was only 18GW.

- 3.39. When considering the above figures and applying them to the number of local authorities across the UK, this would mean that there is an additional 106.9 GW of solar capacity required across the 382 local authorities across England, Scotland, Wales and Northern Ireland required to meet the NIC's upper figure for solar.
- 3.40. It is therefore reasonable to surmise that every local planning authority, where appropriate developable land allows, should be delivering a significant amount of renewable energy capacity, considering a mixture of landscapes and terrain.
- 3.41. To support a prosperous and rural economy, the diversification of agricultural and other land-based businesses is strongly supported by the Government. With the risk of shortfalls resulting from the loss of future subsidies, many farmers are looking to diversify to improve income and provide stability for the agricultural sector. Currently over 60% of farms now employ some form of diversification (according to the 2015/16 Farm Business Survey (FBS)) with diversification ventures ranging from simple building lets, farm shops and installing solar panels for the generation of green energy. The diversification of agricultural land to provide renewable energy generation is a widely accepted form of agricultural diversification and is acknowledged to provide significant financial stability to existing farmsteads and rural businesses.

Mission Zero – Independent Review of Net Zero (Rt Hon Chris Skidmore MP, January 2023)

- 3.42. An Independent Review of the UK's Net Zero Targets and current progress, published by the Rt Hon Chris Skidmore MP, makes several recommendations to the Government to ensure UK remains on track to realise its Net zero targets by 2050. The main recommendations made to Government resulting from the review are as follows:

1. Using infrastructure to unlock net zero

- *accelerating the implementation of the British Energy Security Strategy to update the mandate of Ofgem, creating the Future System Operator and accelerating the connection of cheaper renewables such as solar and onshore wind*
- *developing a cross-sectoral infrastructure strategy by 2025 supporting the building and adaptation of infrastructure for electricity, hydrogen, other liquid and gaseous fuels and CO2 networks that support the green economy*
- *reforming our approach to planning, so that where locally supported, more solar and onshore wind can be developed more easily, helping communities reap the benefits of cheaper low-carbon electricity*

2. Creating sustainable governance structures for net zero

- *developing an over-arching government financing strategy by the end of 2023*
- *establishing an Office for Net Zero Delivery, responsible for placing net zero delivery at the heart of government thinking*

3. Backing businesses to go green

- *reviewing incentives for investment in decarbonisation, including via the tax system and capital allowances, and protecting British industries from environmental undercutting by progressing plans on carbon leakage measures and providing more detail on the UK's new Emissions Trading Scheme (ETS)*
- *building skills needed for the transition by driving forward the Green Jobs Taskforce recommendations and launching a 'Help to Grow Green' campaign, offering information and support to SMEs to plan and invest in the transition*

4. *Catalysing local action*

- *reforming the planning system at local and national level to place net zero at its heart*
- *back at least one Trailblazer Net Zero City, local authority and community, with the aim for these places to reach net zero by 2030*

5. *Increasing transparency and engaging people*

- *expanding the government's public reporting on net zero*
- *ramping up public information through a new engagement plan, a new carbon calculator on the carbon cost of choices, and a standardised approach to ecolabelling on products*
- *developing a Net Zero Charter mark, acknowledging 'best in class' among firms for their work in reaching net zero*

6. *Delivering cleaner, cheaper, greener homes*

- *legislating for the Future Homes Standard, meaning no new homes will be built with a gas boiler from 2025, and for all homes sold to be EPC C by 2033*
- *adopting a 10-year mission to make heat pumps a widespread technology in the UK and legislate for the end of new and replacement gas boilers by 2033 at the latest*
- *reforming EPC ratings to create a clearer, more accessible Net Zero Performance Certificate (NZPC) for households*

7. *Capitalising on international leadership*

- *conducting a strategic review on the UK's international climate leadership and introduce environmental and climate protections in future free trade agreements, removing trade barriers to environmental goods and services*

8. *Setting ourselves up for 2050 and beyond*

- *ramping up investment in research and development (R&D), with a new net zero R&D and technologies roadmap up to 2050, supporting up to 3 10-year demonstrator projects.*

UK Energy Security Strategy (2022)

- 3.43. On 7 April 2022, the Government published the UK Energy Security Strategy, a direct response to the energy market position following the significant spikes in energy prices resulting from the COVID-19 pandemic and Russia's invasion of Ukraine. Following the reopening of the global economy after the impacts of the COVID-19 pandemic, the sudden surge in demand for everything from foreign holidays to new cars has driven a significant spike in the demand for oil and gas, and consequentially greatly increasing the price of these fossil fuels. This was compounded following the Russian invasion of Ukraine and the restrictions placed on Russian gas to the European market, which has resulted in prices increases.
- 3.44. Fuel prices is at the forefront again with as soaring energy prices are driven by the Middle East conflict.
- 3.45. The published Energy Security Strategy highlights the urgent need to both develop an energy system which is more self-sufficient and further accelerate the Country's transition away from oil and gas. The Strategy reiterates how Government will ensure a more flexible, efficient network system for both generators and users by encouraging the deployment of renewable energy generation technologies such as Solar PV and encouraging all forms of flexible electricity storage systems to balance the overall system and reduce overall costs of electricity.
- 3.46. It is acknowledged that this transition is not a fast process and is critically dependant on the speed at which we can deploy new renewable energy technologies. The UK Energy Security Strategy outlines the urgent need for the rapid deployment of a range of renewable technologies including on and off-shore wind, nuclear, solar and other technologies. It is acknowledged that net zero targets cannot be sustainably met through the exploitation of only one or a few technologies and requires the exploitation of all available renewable technologies. For ground mounted solar technologies, the new Energy Security Strategy states that the Government will:

consult on amending planning rules to strengthen policy in favour of development on non-protected land, while ensuring communities continue to have a say and environmental protections remain in place. We will continue supporting the effective use of land by encouraging large scale projects to locate on previously developed, or lower value land, where possible, and ensure projects are designed to avoid, mitigate, and where necessary, compensate for the impacts of using greenfield sites.

The Growth Plan 2022, UK Government (September 2022)

- 3.47. The UK Government Growth Plan published on 23rd September 2022 reinforces the Government's commitment to the delivery of renewables within the UK to increase resilience.

The Energy Price Guarantee, UK Government (Updated November 2022)

- 3.48. The Energy Price Guarantee describes that *"Learning from the mistakes of the past, the government is taking action to accelerate domestic energy supply, increase our energy resilience and achieve our ambition to make the UK an energy exporter by 2040"* to include the need to *"drive forward the acceleration of new sources of energy supply"* including from solar.

Powering Up Britain: Energy Security Plan (March 2023)

- 3.49. The Government published a suite of documentation under Powering Up Britain in March 2023, including the Energy Security Plan, a revised Overarching National Policy Statement for Energy ("EN-1") and a revised National Policy Statement for Renewable Energy Infrastructure ("EN-3").
- 3.50. This included the Energy Security Plan ("ESP"). It is noted that the Government states that:
- "Low cost renewable generation will be the foundation of the electricity system and will play a key role in delivering amongst the cheapest wholesale electricity in Europe"* (Page 34).
- 3.51. The ESP continues to examine the role of solar over pages 37/38, and it reaffirms the Government's commitment to aim for 70GW of ground and rooftop capacity by 2035. It restates earlier commitments that this amounts to a fivefold increase on current installed capacity. The ESP then concludes on this matter:
- "We need to maximise deployment of both types of solar to achieve our overall target."*
- 3.52. The Government is therefore clear that the deployment of ground mounted solar (as well as roof mounted solar) needs to be maximised if the fivefold increase in deployment is to be met.
- 3.53. After considering ways that rooftop solar can be encouraged, the ESP turns to ground mounted solar, which is noted as being readily deployable at scale (as is the case with the proposed development). It continues to say that the Government 'seeks' large scale solar deployment across the UK, looking for development mainly on brownfield, industrial and low and medium grade agricultural land.
- 3.54. The ESP again restates that the Government considers that meeting energy security and climate change goals is "urgent" and "of critical importance to the country," and further that *"these goals can be achieved together with maintaining food security for the UK."*
- 3.55. The ESP further encourages deployment of solar technology that delivers environmental benefits, with consideration for ongoing food production or environmental management.
- 3.56. The conclusion is reached in the ESP that that *"the Government considers that there is a strong need for increased solar deployment."*

Connections Action Plan (November 2023)

- 3.57. The Department for Energy Security & Net Zero and Ofgem jointly published the Connections Action Plan in November 2023 and the Ministerial Foreword explains that over the last five years the volume of connection applications to the transmission network has grown approximately tenfold and this has led to an average delay of over five years for projects applying to connect to the transmission network. It goes on to say that this impacts the ability to decarbonise the energy system, roll out low carbon technologies and attract investment to the UK (page 5).

Clean Power 2030 Action Plan: A New Era of Clean Electricity (December 2024)

- 3.58. The UK Government published its Action Plan for Clean Power by 2030 in December 2024 and states that its successful delivery will require rapid deployment of new clean energy capacity across the whole of the UK.
- 3.59. The Action Plan highlights that achieving clean power is now a broader goal and key to growing the economy and improving national security and standards of living. The document identifies urgency of enacting policy by ***"Sprinting to clean, homegrown energy"***, placing delivering clean power by 2030 at the heart of one of the Prime Minister's five missions and the Plan for Change (page 6).
- 3.60. The Action Plan follows the Government's commissioning of expert advice from the National Energy System Operator (NESO) and builds on that advice, setting out the need to ***"move fast and build things to deliver the once in a generation upgrade of our energy infrastructure Britain needs"*** (page 7). The Government's summary identifies a requirement for rapid deployment of new clean energy, setting a high ambition for 2030 of ***"43-50 GW of offshore wind, 27-29 GW of onshore wind, and 45-47 GW of solar power, significantly reducing our fossil-fuel dependency."*** (Page 10)
- 3.61. The Action Plan outlines three major challenges as being ***"the need for a secure and affordable energy supply, the creation of essential new energy industries, supported by skilled workers in their thousands, the need to reduce greenhouse gas emissions and limit our contribution to the damaging effects of climate change."*** There is a clear link made between the steps to address energy security and climate change and the potential economic benefits from employment and investment in the energy industry, assisting the national plan for growth. The document (at page 20) refers to the Clean Power 2030 action plan ***"Playing a key part in supporting hundreds of thousands of jobs, as part of the wider transition to net zero"***.
- 3.62. The Action Plan states that "Government will work with industry to unlock barriers and will take an innovative approach. Additionally, it is important that government looks at a clean power system beyond 2030, where demand is expected to increase" (page 130).
- 3.63. The Applicants note that with regard to Planning specifically, the Action Plan requires:
- "Accelerating clean infrastructure projects through the planning system is critical to achieving our goal and unleashing investment to support the Prime Minister's Growth Mission. Our capacity range will ensure that planners and statutory consultees at the national and local level have a clear sense of which projects to prioritise for consideration"***

and, where appropriate, fast-track through the process to enable decisions on consent to be taken sooner" (Page 36).

- 3.64. Under the Summary for the Planning & Consenting section in the Action Plan, there is the stark acknowledgment that: *"Our current planning systems across Great Britain are not working at the pace required to meet our target for clean power by 2030... Lengthy paperwork and often-delayed processes for infrastructure projects hinder our energy security, our economic growth, and fails to deliver for the natural environment. The increased risks to projects associated with delays in planning decisions also increase costs across the system" (page 50).* It continues: *"Our planning system needs to quickly change to enable government's missions to grow the economy and deliver clean power. Since July, the government has taken decisive steps towards making planning work better for clean power and economic growth... We must go further. Processes are not suitable nor are examining authorities well-equipped to deal with the increase in new clean power projects and wider infrastructure that we expect in the coming years to achieve government's missions. There is particular urgency to accelerate the planning process across Great Britain for energy infrastructure since we do not have long for many clean power projects to begin construction if they are to be operational for 2030, especially networks and offshore wind developments" (page 50).* In considering the above, it is considered this latest Action Plan published by the Government continues to strongly advise that there is a critical need for rapid deployment of solar power, which the proposed development is well-placed to provide, subject to securing DNS planning permission to allow it to proceed.

Solar Roadmap: United Kingdom Powered by Solar (June 2025).

- 3.65. The UK Solar Roadmap was issued in June 2025 and outlines a strategy to accelerate solar deployment from 18GW to 45–47GW by 2030, with potential to exceed this target. It emphasises the role of solar in reducing energy costs, enhancing energy security, and tackling climate change while creating up to 35,000 jobs. The actions raised to address key challenges include reforming the planning systems, boosting rooftop solar adoption, addressing grid connection challenges, supporting innovative technologies, and ensuring ethical supply chains. The Roadmap also highlights the importance of skills development, community engagement, and collaboration across government, industry, and local stakeholders to achieve clean power goals. The UK Solar Roadmap sets out a range of illustrative plausible scenarios to highlight the potential of solar deployment relative to the 45–47GW ambition set out in the Clean Power Action Plan. These scenarios cover all types of solar, including large-scale ground-mount, commercial and domestic rooftop for the period up to 2035. These scenarios demonstrate that reaching the Clean Power 2030 range is achievable, but will require significant action.
- 3.66. The UK Solar Roadmap provides a breakdown of illustrative 2030 solar capacity by sub-group and scenario (GW). This demonstrates that whilst additional solar capacity could be provided through domestic and commercial rooftop installations, particularly if certain policy barriers are removed, the main growth in solar capacity will be from large scale solar development.

4. Application Site and Surrounds

- 4.1. The Site is located at land at Court Farm, Ponthir, Monmouthshire and extends to approximately 131.62 hectares ("ha"), incorporating cable routes. The Site is comprised of agricultural land across sixteen land parcels which are spread across three Local Authority boundaries including Monmouthshire Council, Torfaen County Borough Council and Newport City Council.
- 4.2. The agricultural land parcels which form the Site comprise a mixture of arable and pastoral fields bordered by hedgerow vegetation and trees.
- 4.3. The Application Site is located c.5.2km north-east of the City of Newport, c.1km east of the village of Ponthir and c.2.4km north of the town of Caerleon at the closest point (Land Parcel 12).
- 4.4. The Application Site is located adjacent to the Dwr Cymru Welsh Water Court Farm Water Treatment Works and would supply Dwr Cymru Welsh Water Court Farm Water Treatment Works with renewable energy via a direct private wire connection. The remainder will be exported to the National Grid via connection to the existing 132kV overhead line at Dwr Cymru Welsh Water Court Farm Water Treatment Works.
- 4.5. The Application Site is within an area of open countryside characterised by undulating ridges and valleys. The proposed development is proposed to be situated on relatively high ground utilising the south facing slopes of the valley landscape.
- 4.6. Sections of roads are included in the red line boundary for cable works including a section of an unnamed road between Land Parcel 10 and Land Parcel 1, and a section of Candwr Road between Land Parcel 10 and Land Parcel 3.

Land Parcel Context

- 4.7. A site description of the sixteen Land Parcels comprising the Application Site are detailed below.

Land Parcel One

- 4.8. Located north-east of the Dwr Cymru Welsh Water Court Farm Water Treatment Works in Monmouthshire Council administrative area, covering an area of c.7.68 ha.
- 4.9. A road runs through the centre of the Land Parcel from west to east and a public right of way ("PRoW") Footpath 367 40/1 runs through the southern section of the Land Parcel in a south-west to north-east direction. A number of unnamed drains bisect through the Land Parcel. The Land Parcel is bounded generally by mature vegetation separating the two fields within the Land Parcel.
- 4.10. The Land Parcel is bounded to the west/south-west by an access track with Dwr Cymru Welsh Water Court Farm Water Treatment Works and a reservoir beyond; to the north, east and south the Land Parcel is bounded by further agricultural fields with an individual farm property located to the east.

- 4.11. The topography of this Land Parcel is sloping falling from 70m AOD in the northwestern corner to 60m AOD along the eastern boundary.
- 4.12. According to Flood Map for Planning for Rivers by Natural Resource Wales, the Land Parcel is located within Flood Zone 1 which is considered to be of little risk of fluvial or coastal flooding.
- 4.13. The Agricultural Land Use and Soil Policy Advisor for the Welsh Government did not recommend a detailed ALC field survey is undertaken for Land Parcel one and can be considered ALC subgrade 3b (non-BMV) at best.
- 4.14. No statutory designations are located at Land Parcel 1. An area of Ancient Woodland is located immediately southeast of the Land Parcel 1.

Land Parcel Two

- 4.15. Located north of Land Parcel one within Monmouthshire Council administrative area, covering an area of c.7.69ha.
- 4.16. No statutory designations are located at Land Parcel 2. The Land Parcel is bounded generally by mature vegetation separating the three fields within the Land Parcel. There is an unnamed drain located within the centre of the Land Parcel running in a east to west direction. The Land Parcel is bounded by agricultural fields to the north, east, south and west. Footpath 367 is approximately 100m at its closest point north of Land Parcel 2, running in a broadly southwest to northeast direction.
- 4.17. The topography slopes from north to south from 50m AOD along the northern boundary to 30m AOD along the southern boundary.
- 4.18. The Land Parcel is located within Flood Map for Planning for Rivers by Natural Resource Wales, Flood Zone 1.
- 4.19. The Agricultural Land Use and Soil Policy Advisor for the Welsh Government did not recommend a detailed ALC field survey is undertaken for Land Parcel two and can be considered ALC subgrade 3b (non-BMV) at best.

Land Parcel Three

- 4.20. This is the most northern of the Land Parcels and is within Monmouthshire Council administrative area, covering an area of c.16.61 ha.
- 4.21. No statutory designations are located at Land Parcel 3. Torfaen Special Landscape Area (local, non-statutory designation) lies adjacent to the western boundary of this Land Parcel.
- 4.22. It is bounded to the east/south by Candwr Road, and to the north and west the Land Parcel is bounded by agricultural fields with individual farm properties beyond. The Land Parcel is bounded generally by mature vegetation separating the four fields within the Land Parcel.
- 4.23. Immediately north-west of this parcel is a Grade II Listed Building (Little Creiggydd).
- 4.24. Overhead powerlines runs through the western section of the Land Parcel.

- 4.25. Adjacent to the northern and western boundaries of this Land Parcel are two footpaths, Footpath 366 115/1 to the north and Footpath 367 46/1 to the west.
- 4.26. The topography of this Land Parcel slopes downwards from the south-eastern boundary from 80m AOD to 50m AOD along the northern boundary.
- 4.27. The Land Parcel is located within Flood Map for Planning for Rivers by Natural Resource Wales, Flood Zone 1 for flooding.
- 4.28. The Agricultural Land Use and Soil Policy Advisor for the Welsh Government did not recommend a detailed ALC field survey is undertaken for Land Parcel three and can be considered ALC subgrade 3b (non-BMV) at best.

Land Parcel Four

- 4.29. Located adjacent to the southern boundary of Land Parcel 3, within Monmouthshire Council administrative area, covering an area of c. 8.86ha.
- 4.30. No statutory designations are located at Land Parcel 4. The Land Parcel is bounded generally by mature vegetation.
- 4.31. To the north the parcel is bounded by an access track, with individual farm properties located adjacent to both the north-western and north-eastern corners, to the east it is bordered by Candwr Road, to the south and south-east by individual farm properties with agricultural fields beyond and to the west by further agricultural fields.
- 4.32. Adjacent to the southern boundary of this Land Parcel is Footpath 367 49/1. At the northern section of the Land Parcel Footpath 367 47/1 bisects the northwestern corner of the Land Parcel
- 4.33. Two unnamed tributaries of Candwr Brook run through the southern section of the Land Parcel aligned with the field boundaries in a south-west to north-east direction.
- 4.34. Overhead powerlines run through the northern section of the parcel from the northern to the north-eastern boundary.
- 4.35. The Land Parcel is located within Flood Map for Planning for Rivers by Natural Resource Wales, Flood Zone 1 for flooding.
- 4.36. The topography of this Land Parcel slopes from north to south from 80m AOD to 40m AOD.
- 4.37. The Agricultural Land Use and Soil Policy Advisor for the Welsh Government did not recommend a detailed ALC field survey is undertaken for Land Parcel four and can be considered ALC subgrade 3b (non-BMV) at best.

Land Parcel Five

- 4.38. Located adjacent to Land Parcel 4 to its west, within Monmouthshire Council administrative area, covering an area of c7.34 ha.

- 4.39. This Land Parcel is bordered to the north, east, and west by agricultural fields with a small, wooded area bordering the south-western boundary, an access track in the north-eastern corner and Candwr Brook borders the southern boundary. The eastern boundary is defined by an unnamed tributary and vegetation, separating Land Parcel 4 and 5.
- 4.40. No statutory designations are located at Land Parcel 5. Torfaen Special Landscape Area (local, non-statutory designation) lies adjacent to the southwestern boundary of this Land Parcel.
- 4.41. Footpath 367 47/1 bisects through the parcel along the north-western boundary of Land Parcel 5.
- 4.42. The topography of this parcel slopes from north to south from 80m AOD to 30m AOD.
- 4.43. The majority of the parcel is within Flood Map for Planning for Rivers by Natural Resource Wales, Flood Zone 1 for flooding; the south-western boundary is located in Flood Zone 2/ 3.
- 4.44. The Agricultural Land Use and Soil Policy Advisor for the Welsh Government did not recommend a detailed ALC field survey is undertaken for Land Parcel five and can be considered ALC subgrade 3b (non-BMV) at best.

Land Parcel Six

- 4.45. Located to the west of land parcel five, to the north of Candwr Road, within Torfaen County Borough Council administrative area. The parcel covers an area of c.8.89 ha.
- 4.46. No statutory designations are located at Land Parcel 6. This parcel is located within Torfaen Special Landscape Area (local, non-statutory designation).
- 4.47. In the surrounding area are a number of Listed Buildings to the south and west, including Grade II Listed (Glansirhowy Farm) and Grade II* Listed (Church of All Saints).
- 4.48. An unnamed road wraps around fields within the Land Parcel leading to individual farm properties beyond to the southeast. The Land Parcel to the west, north and south is bordered by further agricultural fields and to the east by small woodland designated an Ancient Woodland. Candwr Brook runs adjacent in part to the eastern boundary of the parcel. The Land Parcel is bounded generally by mature vegetation separating the four fields within the Land Parcel. A gas pipeline bisects in part the southern section of the Land Parcel.
- 4.49. Footpath 424 24/1 bisects through part of the southern section of the parcel, joining an unnamed north. Footpath 424 29/1 is c. 200m west of Land Parcel 6 running in a broadly north to south direction.
- 4.50. The topography is relatively flat at around 30m AOD across this parcel.
- 4.51. The majority of the parcel is within Flood Map for Planning for Rivers by Natural Resource Wales, Flood Zone 2 for flooding; the south-western boundary is located in Flood Zone 2/3.
- 4.52. Agricultural Land Classification Survey for the Site determined Land Parcel six to be a mixture of subgrade 2 and 3b land (i.e. a mix of BMV and non-BMV land).

Land Parcel Seven

- 4.53. Located to the north of parcel six within Torfaen County Borough Council administrative area, covering an area of c. 7.17 ha.
- 4.54. No statutory designations are located at Land Parcel 7. This parcel is located within Torfaen Special Landscape Area (local, non-statutory designation).
- 4.55. Grade II Listed Glansirhowy Farm is in close proximity, south-west of this parcel.
- 4.56. The Land Parcel is bounded generally by mature vegetation separating the two fields within the Land Parcel. The area surrounding the parcel is comprised of further agricultural land with individual farm properties located to the north, south and east. There is an area of Ancient Woodland located adjacent to the south-eastern corner of the parcel. The Candwr Brook runs adjacent to the south-western boundary of the parcel. Running along the western boundary of this parcel is an unnamed road running in a north to south direction.
- 4.57. A PRoW (Footpath 424 34/1) runs through the parcel in a north-south direction, located adjacent to the western boundary of the parcel. Footpath 367 46/ 2 and 367 46/1 is c.300m west of this Land Parcel running in a broadly north-south direction.
- 4.58. The topography is undulating ranging from 50m AOD is the north-western corner to 40m AOD in the south-eastern corner of the parcel.
- 4.59. The majority of the parcel is within Flood Map for Planning for Rivers by Natural Resource Wales, Flood Zone 1 for flooding with a small section in the south-eastern corner within Zone 2.
- 4.60. Agricultural Land Classification Survey for the Site determined Land Parcel seven to be a mixture of subgrade 2 and 3b land (i.e. a mix of BMV an non-BMV land).

Land Parcel Eight

- 4.61. Located to south of the Dwr Cymru Welsh Water Court Farm Water Treatment Works and lies within all administrative areas of Monmouthshire Council and Torfaen Council, covering an area of c.10.33 ha.
- 4.62. The Land Parcel is bounded generally by mature vegetation separating the two fields within the Land Parcel. Ponthir Waste Water Treatment Works lies adjacent to the southern/south-western boundary, Dwr Cymru Welsh Water Court Farm Water Treatment Works adjacent to the northern boundary and agricultural fields to the west and east. An area of Ancient Woodland lies close by. Land Parcel 8 is located adjacent to Land Parcel 12 (which is located adjacent to the southern boundary). A gas pipeline bisects the southern section of the Land Parcel running in a northwest – south east direction and a water mains line bisects the Land Parcel running in a north – south direction.
- 4.63. A Grade II Listed Building is located in close proximity to the south-east of the parcel, Barn at Pen-Twyn Farm.

- 4.64. No statutory designations are located at Land Parcel 8. The western and southern section of this parcel is located within the Torfaen Special Landscape Area (local, non-statutory designation).
- 4.65. Topography is gently undulating from 50m AOD along the northern boundary to 20m AOD in the southern section of the parcel.
- 4.66. The majority of the parcel is within Flood Map for Planning for Rivers by Natural Resource Wales, Flood Zone 1 for flooding; the southern boundary is Located adjacent to Flood Zone 2/3.
- 4.67. Agricultural Land Classification Survey for the Site determined Land Parcel eight to be a mixture of subgrade 2, 3a and non-agricultural land (i.e. a mixture of BMV an non-BMV land).

Land Parcel Nine

- 4.68. Located to south of Land Parcel 6 and lies within Torfaen County Borough Council, covering an area of c.7.69 ha.
- 4.69. No statutory designations are located at Land Parcel 9. This parcel is located within Torfaen Special Landscape Area (local, non-statutory designation).
- 4.70. The Land Parcel is bounded generally by mature vegetation separating the five fields within the Land Parcel. The area surrounding the parcel is comprised of further agricultural land with individual farm properties located to the south, east and west. Candwr Brook defines the eastern boundary. Pant-yr-eos Farm is adjacent to the south-western corner of the parcel.
- 4.71. The Grade II* Listed (Church of All Saints) is within close proximity to the south-western boundary of the parcel.
- 4.72. The majority of the parcel is within Flood Map for Planning for Rivers by Natural Resource Wales, Flood Zone 1 for flooding; the eastern boundary is located in Flood Zone 2/3.
- 4.73. Footpath 367 50/1 is immediately south of the parcel running in a south-west to north-eastern direction parallel to the southern boundary, Footpath 424 24/1 bisects through the north-western section of the parcel in a north-south direction.
- 4.74. Agricultural Land Classification Survey for the Site determined Land Parcel nine to be a mixture of subgrade 3b and 4 land (i.e. non-BMV land).

Land Parcel Ten

- 4.75. Located to the east of Candwr Road within the administrative area of Monmouthshire Council, covering an area of c.5.12 ha. An overhead power line bisects in a north-south direction through the centre of the parcel of land.
- 4.76. The Land Parcel is bounded generally by mature vegetation separating the three fields within the Land Parcel. The area surrounding the parcel is comprised of further agricultural land with individual farm properties located in all directions. Shaftesbury Farm is immediately south-east of the parcel. An unnamed tributary defines the eastern boundary of the parcel of land.

Candwr Road defines the length of the western boundary. Court Farm Reservoir is c.200m east of this parcel of land.

- 4.77. No statutory designations are located at Land Parcel 10.
- 4.78. Immediately south-west is a Schedule Monument, Candwr Camp, separated from the parcel of land by Candwr Road.
- 4.79. Footpath 367 29/1 runs the length of the northern boundary of this parcel in an east-west direction.
- 4.80. The entirety of the parcel is within Flood Map for Planning for Rivers by Natural Resource Wales, Flood Zone 1 for flooding.
- 4.81. Topography is relatively flat, steadily increasing from 40m to 50m AOD from the south - north of the parcel of land.
- 4.82. Agricultural Land Classification Survey for the Site determined Land Parcel ten to be subgrade 3b land (i.e. non-BMV land).

Land Parcel Eleven

- 4.83. Located to the south-east of Land Parcel 2, within the administrative area of Monmouthshire Council, covering an area of c. 2.54ha.
- 4.84. This Land Parcel is bounded generally by mature vegetation. The parcel is bounded by agricultural fields to the north, east, south and west. Residential property, Ty-Isaf, is c.160m east. An unnamed track bounds the eastern boundary of the parcel of land.
- 4.85. No statutory designations are located at Land Parcel 11.
- 4.86. The entirety of the parcel is within Flood Map for Planning for Rivers by Natural Resource Wales, Flood Zone 1 for flooding.
- 4.87. The topography steadily increases from 10m to 30m AOD from the south - north across this parcel of land.
- 4.88. Agricultural Land Classification Survey for the Site determined Land Parcel eleven to be subgrade 2 land (i.e. BMV land).

Land Parcel Twelve

- 4.89. Located adjacent to parcel eight and to the south of the Dwr Cymru Welsh Water Court Farm Water Treatment Works and lies within all administrative areas of Monmouthshire Council, Torfaen Council, and Newport City Council, covering an area of c. 10.99ha.
- 4.90. The Land Parcel is bounded generally by mature vegetation separating the three fields within the Land Parcel. Ponthir Water Treatment Works lies adjacent to the southern/south-western boundary with some dense vegetation adjacent noted as Ancient Woodland. Dwr Cymru Welsh Water Court Farm Water Treatment Works is adjacent to the northern boundary and

agricultural fields to the west and east. An area of Ancient Woodland is adjacent to the eastern boundary

- 4.91. A Grade II Listed Building is adjacent to the south-east corner of the parcel, Barn at Pen-Twyn Farm.
- 4.92. No statutory designations are located at Land Parcel 12. The southern section of this parcel is located within the Torfaen Special Landscape Area (local, non-statutory designation).
- 4.93. An overhead line bisects through the southern corner in an east-west direction. A gas pipeline bisects through the Land Parcel running in a northwest – south east direction and a water mains line bisects the Land Parcel near the western boundary running in a north – south direction.
- 4.94. Footpath 424 50/1 bisects through the southern section of the parcel of land in an east to west direction, and Footpath 389 24/1 runs along part of the eastern boundary of the Land Parcel.
- 4.95. The majority of the parcel is within Flood Map for Planning for Rivers by Natural Resource Wales Flood Zone 1 for flooding; the southern section is located in Flood Zone 2/3.
- 4.96. The topography steadily increases from 20m to 45m AOD from the south – north across the parcel of land.
- 4.97. Agricultural Land Classification Survey for the Site determined Land Parcel twelve to be a mixture of subgrade 2, 3a, 3b and non-agricultural land (i.e. a mix of BMV and non-BMV land).

Land Parcel Thirteen

- 4.98. Located to south of Land Parcel nine and lies within Torfaen County Borough Council, covering an area of c. 13.98ha.
- 4.99. No statutory designations are located at Land Parcel 13. This Land Parcel is located within Torfaen Special Landscape Area (local, non-statutory designation).
- 4.100. The Land Parcel is bounded generally by mature vegetation separating the seven fields within the Land Parcel. Pant-yr-eos Farm is adjacent to the north-eastern corner of the parcel. Grade II* Listed (Church of All Saints) is within close proximity, south-west of the parcel. An Ancient Woodland is located immediately outside of the eastern boundary of this parcel. The southern boundary of the Parcel is approx. 60m from the northern boundary of Ponthir.
- 4.101. A number of Footpaths bisect through this Land Parcel. Footpath 367 50/1 bisects through the centre of the parcel running in a south-west to north-eastern direction and Footpath 424 24/1 bisects through the north-western section of the parcel in a north-south direction. A short section of Footpath 424 22/1 connects Footpath 424 24/1 and 367 50/1.
- 4.102. An overhead line bisects through the centre of the Land Parcel in a broadly east to west direction. A gas pipeline bisects through the eastern section of the Land Parcel running in a broadly northwest – south east direction and a water mains line bisects the Land Parcel near the southern boundary running in a broadly east-west direction.

- 4.103. Candwr Brook sits within established tree belt on part of the eastern boundary of the parcel. The majority of the parcel is within Flood Map for Planning for Rivers by Natural Resource Wales Flood Zone 1 for flooding; the eastern boundary is located in Flood Zone 2/3.
- 4.104. The topography steadily decreases from 60m to 35m AOD from the west –east across the parcel of land.
- 4.105. Agricultural Land Classification Survey for the Site determined Land Parcel thirteen to be a mixture of subgrade 3b and 4 land (i.e. non-BMV land).

Land Parcel Fourteen

- 4.106. Located to south of Land Parcel 13 and lies within Torfaen County Borough Council, covering an area of c. 4.27ha.
- 4.107. No statutory designations are located at Land Parcel 14. This Land Parcel is located within Torfaen Special Landscape Area (local, non-statutory designation).
- 4.108. The Land Parcel is bound the south by Caerleon Road. To the east rear gardens of residential properties in Ponthir abut the eastern boundary. The northern boundary is line in part with mature vegetation with Land Parcel 13 to the north and Grade II* Listed (Church of All Saints) c.200m north. The end of Footpath 424 27/1 as it meets Caerleon Road is adjacent to the northern corner of the Land Parcel.
- 4.109. The Land Parcel is within Flood Map for Planning for Rivers by Natural Resource Wales Flood Zone 1 for flooding.
- 4.110. The topography steadily decreases from 50m to 35m AOD from north– south across the parcel of land.

Land Parcel Fifteen

- 4.111. Located to east of Land Parcel 8 and north of Land Parcel 12 and lies within Monmouthshire Council, covering an area of c. 7.36ha.
- 4.112. No statutory designations are located at Land Parcel 15. This Land Parcel is located adjacent to Torfaen Special Landscape Area (local, non-statutory designation).
- 4.113. The Land Parcel is bound the east by an unnamed road with further agricultural fields to the east. The northern, western and southern boundaries of the Site are lined with mature vegetation. To the northwest is Dwr Cymru Welsh Water Court Farm Water Treatment Works. To the west is further agricultural fields. A section of Ancient Woodland is adjacent to the western boundary. A Grade II Listed Building is c.160m south of the Land Parcel.
- 4.114. The Land Parcel is within Flood Map for Planning for Rivers by Natural Resource Wales Flood Zone 1 for flooding.
- 4.115. The topography steadily decreases from 45m to 30m AOD from northeast– southwest across the parcel of land.

Land Parcel 16

- 4.116. Located to north of Land Parcel 8 and lies within Monmouthshire Council, covering an area of c. 5.10ha. No statutory designations are located at this Land Parcel.
- 4.117. The Land Parcel is bound to the north by an unnamed road with Court Farm Reservoir beyond. To the east is Dwr Cymru Welsh Water Court Farm Water Treatment Works and a residential property. To the south and east is agricultural fields. The Land Parcel is bounded by mature vegetation.
- 4.118. Schedule Monument, Candwr Camp, is c.415m to the west of this Land Parcel at its closest point.
- 4.119. Footpath 367 37/1 bisects through the centre of this Land Parcel, running in a broadly west-east direction.
- 4.120. The Land Parcel is within Flood Map for Planning for Rivers by Natural Resource Wales Flood Zone 1 for flooding.
- 4.121. The topography steadily decreases from 65m to 45m AOD from northeast- southwest across the parcel of land.

Ecology & Biodiversity

- 4.122. There are no statutory or non-statutory sites designated for nature conservation located within any of the Land Parcels. Within the area surrounding the Site there are the following designations:
 - The River Usk which is designated as a Special Area of Conservation (European designation) and a Site of Special Scientific Importance (SSSI) (national designation) located c. 1.4km south at the closest point (land parcel 12). The watercourse is designated as a SAC for the presence of sea lamprey (*Petromyzon marinus*), European river lamprey (*Lampetra fluviatilis*), Brook Lamprey (*Lampetra planeri*), Allis shad (*Alosa alosa*), Twaite shad (*Alosa fallax*), Atlantic salmon (*Salmo salar*), European bullhead (*Cottus gobio*) and Eurasian otter (*Lutra lutra*); and
 - Brook Cottage SSSI c. 2.5km north-east of Land Parcel 3.

Landscape

- 4.123. The Site is not subject to any statutory landscape designations. Land Parcels 6, 7, 8, 9 and 12 are located within the Torfaen Special Landscape Area within Landscape Unit (LAU) 59, Countryside East of Cwmbran as defined by the 2021 Sensitivity Capacity Study for Renewable Energy Development, a non-statutory designation. The remainder of the parcels are not located within a designated landscape area.
- 4.124. The Site is within the following landscape character areas:
 - National Landscape Character Area 31 – Central Monmouthshire, and
 - National Landscape Character Area 35 – Cardiff, Barry and Newport

- 4.125. There are six Public Rights of Way (PRoW) that run through or are adjacent to the Site.
- 4.126. Further details of landscape and visual baseline information, site visits, methodologies, assessment and conclusions can be found in draft Chapter 5 Landscape and Visual of the ES.

Heritage

- 4.127. The baseline comprises a predominantly agricultural landscape containing limited recorded archaeological remains within the Site, but with potential for buried features of prehistoric, Roman and post-medieval origin. There is one known asset of the presumed alignment of a Roman road (Candwr Road) within the Site.
- 4.128. There are no designated heritage assets located within the Site, within the 3km study area surrounding the Site there are the following Scheduled Monuments:
- Scheduled Monument Candwr Camp immediately south of Land Parcel 10 (reference: MMI35);
 - Penrhos Camp (civil war earthworks) Scheduled Monument (reference: MM011) c. 500m south-east of Land Parcel 12;
 - Lodge Wood Camp Scheduled Monument (reference: MM023) is 1.3km south-west of Land Parcel 12; and
 - Cae Camp Scheduled Monument (reference: MM079) c. 1.3km east Land Parcel 2.
 - Several Listed Buildings are located within the wider area, largely associated with the following settlements Ponthir, Llantarnam, LLanfrechfa, LLandegveth and Llanddewi Fach. However, the following Listed Buildings have been identified within 1km of the Application Site boundary:
 - Grade II Listed Barn at Pen-Twyn Farm (reference: 26129) adjacent to the southeastern boundary of parcel 12;
 - Grade II Listed Little Creiggydd (reference: 2674) c. 35m north-east of Land Parcel 3; and
 - Grade II Listed Glansirhowy Farm (reference: 3141) c. 140m south of Land Parcel 7.
- 4.129. There are two Registered Historic Parks and Gardens within a 3km radius of the Site:
- Grade II Llantarnam Abbey, c.915m south-west of Land Parcel 3 at its closest point (PGW(Gt)25(TOR)); and
 - Grade II Glen Usk, c.2.1km east of Land Parcel 11 of the Site at its closest point (PGW(Gt)36(MON)).
- 4.130. Baseline conditions have been established through a desk-based assessment drawing on historic environment datasets (Cadw, HER and NMRW), historic mapping and archival sources, aerial imagery and LiDAR data, supported by site walkover surveys undertaken in April and June 2025. The assessment has been undertaken in accordance with ClfA guidance and relevant Welsh planning policy and Cadw guidance.

- 4.131. The assessment utilises GIS-based analysis and a Screened Zone of Theoretical Visibility (SZTV) to identify potential intervisibility between the proposed development and heritage assets. Spatial datasets, LiDAR analysis and site observations are used to inform a staged setting assessment in accordance with Cadw guidance. Impacts are assessed qualitatively by evaluating changes to the setting of heritage assets and the resulting effects on their significance.
- 4.132. Further details of the heritage and archaeological baseline information, surveys, methodologies, assessment and conclusions can be found in draft Chapter 10 Built Heritage Assessment of the ES.

Air Quality

- 4.133. The Application Site is not located within an Air Quality Management Area ("AQMA") the closest to the Application Site is the Caerleon High Street AQMA declared for Nitrogen dioxide located c. 1.6km south of Land Parcel 12.
- 4.134. Further details of the air quality baseline information, surveys, methodologies, assessment and conclusions can be found in draft Chapter 12 Air Quality Assessment of the ES.

Ground Conditions

- 4.135. The baseline conditions comprise an undeveloped, predominantly agricultural site with no significant on-site contamination sources identified. The geo-environmental setting is characterised by superficial deposits overlying mudstone and sandstone bedrock, with underlying secondary aquifers, surface water features and nearby residential receptors. Any potential contamination is considered to be localised and associated with limited areas of made ground and associated with farm gateways to improve access.
- 4.136. Based on published geological records, the majority of the Site is underlain predominantly of bedrock Raglan Mudstone Formation, with small areas underlain by the Downton Castle Sandstone Formation and the Upper Llanbadoc Beds and Llangibby Beds. The bedrock strata generally comprises mudstone and sandstone. The Site is not located within a Mineral Safeguarding Area. The majority of the Site does lie within Radon Affected Areas.
- 4.137. Baseline conditions have been informed through a desk-based assessment supported by a site walkover survey undertaken in September 2025. Sources include historical mapping, environmental database records, regulatory authority consultation, geological and hydrogeological data (including BGS mapping and borehole records), and hydrological datasets. The assessment has been undertaken in accordance with LCRM and relevant British Standards.
- 4.138. The assessment adopts a qualitative risk-based approach through development of a Conceptual Site Model (CSM), identifying potential contaminant sources, pathways and receptors. Potential linkages are evaluated using a likelihood-consequence risk matrix in accordance with CIRIA guidance and LCRM. The assessment is based on desk study information and site reconnaissance, with no quantitative modelling or intrusive investigation undertaken at this stage.
- 4.139. Further details of the ground conditions can be found in the Phase 1 Geo Environmental Desk Study.

Agricultural Land

- 4.140. An Agricultural Land Classification Survey (Appendix 8.1) has been undertaken for the Application Site. Consultation was undertaken with the Welsh Governments Agricultural Land Use & Soil Policy Advisor who advised (correspondence dated 20.12.2022) that land parcels 1-5 are very likely to be 'Gradient Limited' to Subgrade 3b at best and are therefore not considered best and most versatile (BMV) land. It was recommended by the Welsh Governments Agricultural Land Use & Soil Policy Advisor that no detailed ALC field surveys need to be undertaken for these Land Parcels.
- 4.141. The baseline conditions comprise agricultural land of varying quality (Grades 2-4) characterised by clay loam and silty clay loam soils. Land quality is primarily influenced by climatic conditions, soil properties and topography, with soil wetness representing the principal limiting factor, alongside localised effects of droughtiness, stoniness, depth and gradient. The Agricultural Land Classification Survey (Appendix 8.1) confirms xha (x%) of the Site is determined as Best and Most Versatile (BMV) land, and xha (x%) of the Site is non-BMV land.
- 4.142. Baseline conditions have been informed through detailed field surveys undertaken in February 2023, March and June 2025, including trial pits and auger sampling, supported by laboratory soil analysis. These data are supplemented by published datasets including predictive ALC mapping, BGS geological data, Soil Survey information, and Meteorological Office agro-climatic datasets.
- 4.143. The assessment has been undertaken in accordance with MAFF ALC guidance and relevant professional standards. The assessment adopts the MAFF Agricultural Land Classification methodology, whereby land quality is determined through systematic evaluation of climatic, soil and site factors. Field and laboratory data are used to assess physical parameters and interactive factors such as wetness and droughtiness, with moisture balance calculations applied where relevant. The most limiting factor at each survey point defines the ALC grade, which is then spatially interpreted to derive the overall land classification across the Site.
- 4.144. Further details of the agricultural circumstances baseline information, surveys, methodologies, assessment and conclusions can be found in draft Chapter 8 Agricultural Circumstances Assessment of the ES.

Flood Risk

- 4.145. Baseline conditions comprise a predominantly agricultural site characterised by gently undulating topography, freely draining soils, and underlying mudstone and sandstone geology. The Site contains a network of Ordinary Watercourses and is located within the catchment of the Afon Lwyd and Sor Brook. Flood risk mapping indicates that the majority of the Site lies within Flood Zone 1 for all sources, with localised higher-risk areas associated with watercourses. Overall, the existing flood risk baseline is low.
- 4.146. The majority of the Site is located within Flood Zone 1 for Rivers according to the Flood Map for Planning for Rivers by Natural Resource Wales and therefore has a low probability of flooding from rivers (less than 1 in 1,000 year). There are small localised higher-risk areas associated with watercourses located within Flood Zone 2 and 3.

- 4.147. The Flood Map for Planning for Seas by Natural Resource Wales does not predict the Site to be at risk. There are therefore no tidal flood risk mitigation measures recommended onsite.
- 4.148. The Flood Map for Planning for Surface Water and Small Watercourses by Natural Resource Wales shows that the Site is generally located in Flood Zone 1 and has a predominantly low risk of flooding from surface water and small watercourses (less than 1 in 1,000 year). Surface water flow paths are noted across the Site predicting small areas of the Site to be at risk of flooding from surface water and/or small watercourses (Flood Zone 2 and 3).
- 4.149. Baseline conditions have been informed by a combination of Natural Resource Wales flood mapping datasets, BGS geological and hydrogeological data, Soils mapping, and Strategic Flood Consequence Assessments. This is supported by site-specific data including topographical survey, LiDAR analysis, and utility records. The assessment has also drawn on relevant national and local planning policy and guidance, including TAN15 and Planning Policy Wales.
- 4.150. The assessment adopts a dataset-led approach to flood risk, drawing on Natural Resource Wales Flood Map for Planning datasets to define baseline flood extents. These datasets are interpreted alongside site-specific topographic and LiDAR data to refine understanding of flow routes and flood pathways. The design has been iteratively developed to avoid higher-risk flood zones. Surface water management has been informed by quantitative drainage modelling, including FEH-derived greenfield runoff rates and storage sizing undertaken using CausewayFlow tools, with allowances for climate change. A SuDS-based drainage strategy has been developed to ensure runoff is appropriately attenuated and does not increase flood risk on or off-site.
- 4.151. Further details of the water environment baseline information, surveys, methodologies, assessment and conclusions can be found in draft Chapter 9 Water Environment Assessment of the ES.

Noise

- 4.152. The baseline conditions comprise the prevailing background noise environment at surrounding noise-sensitive receptors, characterised by measured LA90 levels during the early morning, daytime and evening periods, and influenced primarily by existing road traffic and rural activities. The noise environment is rural in character, with low levels of road traffic from intersecting minor, local roads.
- 4.153. Baseline noise levels have been established through unattended field surveys undertaken at eight representative receptor locations over a defined monitoring period in September 2025, with data recorded in accordance with BS 4142 requirements. Statistical analysis of measured LA90 levels has been used to derive representative background noise levels for relevant operational periods.
- 4.154. Operational noise levels have been predicted using SoundPlan software implementing the ISO 9613-2 propagation methodology. The model incorporates plant noise data derived from manufacturer specifications, site layout and topographical information (including LiDAR data), and assumes worst-case operational conditions with all plant operating concurrently. Calculated noise levels at receptor locations have been compared against measured baseline background levels in accordance with BS 4142, with additional consideration of absolute noise criteria from BS 8233 and WHO guidance.

Transport

4.155. The proposed development is situated approximately three kilometres to the north of Junction 25 of the M4 Motorway. The most direct routes between the motorway junction and the proposed development are summarised below:

- A4042, B4236, Candwr Road, Unnamed Roads; and
- B4596, B4236, Candwr Road, Unnamed Roads.

5. Planning Policy Context

- 5.1. This section of the Statement identifies the national and local planning policy and guidance pertinent to the development proposal and development site. The plan led approach to development as enshrined by Section 38(6) of the Planning and Compulsory Purchase Act 2004 requires development proposals to accord with the adopted development plan unless material considerations indicate otherwise.
- 5.2. In the case of DNS schemes, Planning Policy Wales, at paragraph 5.75, states *“Planning applications for onshore generating projects in Wales which have an installed generation capacity of between 10MW and 350MW (there is no upper limit for onshore wind generating stations) are made directly to the Welsh Ministers under the Developments of National Significance (DNS) process and considered under policies in Future Wales”*.
- 5.3. Accordingly, as a DNS project, the main policy consideration for the assessment of Candwr Solar Farm is the relevant policies set out in **Future Wales**. The local development plan and Planning Policy Wales are material consideration.
- 5.4. Planning Policy Wales explains how material considerations could include current circumstances, planning policies of the Welsh Government¹ and job creation². It goes on to state how factors to be taken into account in making planning decisions (material considerations) must be planning matters; that is, they must be relevant to the regulation of the development and use of land in the public interest, towards the goal of sustainability³.
- 5.5. Whether a particular consideration is material in any given case will depend on the circumstances. Planning Policy Wales gives some guidance on what material considerations are. They must be genuine planning matters, that is, they must be relevant to the regulation of the development and use of land in the public interest, towards the goal of sustainability

Future Wales: The National Plan 2040 (February 2021)

- 5.6. Future Wales provides a spatial context for facilitating the delivery of development in Wales over the next 20 years and constitutes the development plan for DNSs in line with section 38(6) of the Planning and Compulsory Purchase Act 2004.
- 5.7. Future Wales will be used to guide both public and private investment. Welsh Government’s aim is to ensure investments and developments – whether large or small in scale – contribute to the broader ambitions of the Welsh Government and to the well-being of communities. Therefore, Future Wales will influence how communities develop over the next 20 years and it is important that we have a comprehensive understanding of the positive and negative effects this could have as the plan developed. Future Wales is the national development framework for Wales and has development plan status.
- 5.8. Page 15 of Future Wales identifies how Future Wales does not contain statements on all land use matters, but it provides specific policies on issues which the Welsh Government

¹ Planning Policy Wales paragraph 3.1.3

² Ibid paragraph 10.2.11

³ Ibid paragraph 3.14

considers them to be a national policy at this time, it goes on to state “*deciding where to locate renewable energy generation technology is a spatial issue of such significance that national ambitions are unlikely to be achieved without national planning policies*”.

- 5.9. Schemes qualifying as energy Developments of National Significance (DNS) must be determined in accordance with Policy 18 of Future Wales. This point is expanded on further below. 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. This message is repeated in the Foreword by the Minister for Housing and Local Government which states (inter alia) “*this Government is committed to supporting and delivering more active travel and sustainable transport infrastructure, new renewable energy schemes, improved digital communications infrastructure and new public services and facilities. In all these areas our decisions can contribute towards decarbonisation, healthy and active lifestyles, a resilient and diverse environment and increased economic prosperity and fairness*”.
- 5.10. *In the ‘Introduction’ to Future Wales, achieving decarbonisation and climate-resilience are noted as being one of the “key national priorities” for Wales; indeed Future Wales only includes policies “on issues where the Welsh Government considers a national priority at this time, or matters which are distinctly spatial and require national leadership. For example, ...deciding where to locate renewable energy generation technology is a spatial issue of such significance that national ambitions are unlikely to be achieved without national planning policies.” It also acknowledges that Wales faces a climate emergency.*
- 5.11. *It is clear that delivering renewable energy is one of the Welsh Government's top national priorities for the next 20 years. Future Wales sets out 11 outcomes that can be achieved by 2040 provided the planning system is focused on the long-term and provides quality development in the right places for the right reasons.*
- 5.12. The application proposal would contribute towards outcome 9, 10 and 11, these are:-
- 5.13. **Outcome 9 – A Wales where people live in places that sustainably manage their natural resources and reduce pollution.** Wales’ natural resources, including its minerals, soils and geodiversity, coast, water, forests and landscape support a range of activities and sectors and are assets of great value in their own right. The environmental, social and cultural value of our resources will be managed, maintained and enhanced, while economic benefits will be utilised sustainably and appropriately by promoting nature-based solutions and a circular economy. Across Wales the risks of flooding and coastal erosion will be effectively managed and mitigated while better resource choices will be reflected in more sustainable places. Places will benefit from reduced pollution and be healthier and more liveable.
- 5.14. **Outcome 10 – a Wales where people live in places with biodiverse, resilient and connected ecosystems.** The variety of flora and fauna found across Wales make Wales a special place. Biodiversity underpins the functioning of healthy, resilient ecosystems and the multiple benefits they provide. While biodiversity has declined in recent decades, we will reverse these losses and enhance the resilience of ecosystems. The planning system will ensure wildlife is able to thrive in healthy, diverse habitats, both in urban and rural areas, recognising and valuing the multiple benefits to people and nature
- 5.15. **Outcome 11 – a Wales where people live in places which are decarbonised and climate-resilient** The challenges of the climate emergency demand urgent action on carbon

emissions and the planning system must help Wales lead the way in promoting and delivering a competitive, sustainable decarbonised society. Decarbonisation commitments and renewable energy targets will be treated as opportunities to build a more resilient and equitable low-carbon economy, develop clean and efficient transport infrastructure, improve public health and generate skilled jobs in new sectors. New homes will be energy efficient and will help communities adapt to the changing climate.

- 5.16. Future Wales sets a clear 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 to 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.

- 5.17. Policy 17 states (own emphasis underlined):

Policy 17 – Renewable and Low Carbon Energy and Associated Infrastructure

The Welsh Government strongly supports the principle of developing renewable and low carbon energy from all technologies and at all scales to meet our future energy needs. In determining planning applications for renewable and low carbon energy development, decision-makers must give significant weight to the need to meet Wales' international commitments and our target to generate 70% of consumed electricity by renewable means by 2030 in order to combat the climate emergency. In Pre-Assessed Areas for Wind Energy the Welsh Government has already modelled the likely impact on the landscape and has found them to be capable of accommodating development in an acceptable way. There is a presumption in favour of large-scale wind energy development (including repowering) in these areas, subject to the criteria in policy 18. Applications for large-scale wind and solar will not be permitted in National Parks and Areas of Outstanding Natural Beauty and all proposals should demonstrate that they will not have an unacceptable adverse impact on the environment. Proposals should describe the net benefits the scheme will bring in terms of social, economic, environmental and cultural improvements to local communities. New strategic grid infrastructure for the transmission and distribution of energy should be designed to minimise visual impact on nearby communities. The Welsh Government will work with stakeholders, including National Grid and Distribution Network Operators, to transition to a multi-vector grid network and reduce the barriers to the implementation of new grid infrastructure.

- 5.18. Policy 18 provides a decision-making framework for renewable and low carbon energy technologies. Policy 18 states:

Renewable and Low Carbon Energy Developments of National Significance Proposals for renewable and low carbon energy projects (including repowering) qualifying as Developments of National Significance will be permitted subject to policy 17 and the following criteria:

- 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);
- 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.

5.19. The amplification to policies 17 and 18, at page 96 of Future Wales, identifies how *“Wales is abundant in opportunities to generate renewable energy and the Welsh Government is committed to maximising this potential. Generating renewable energy is a key part of our commitment to decarbonisation and tackling the climate emergency”*. It goes on to state how *“As set out in legislation, applications for Developments of National Significance must be determined in accordance with Future Wales, which is the national development plan for Wales”*

5.20. Policy 17 recognises the wealth of current and emerging renewable energy technologies that can contribute towards our energy and decarbonisation targets. It also demonstrates the

Welsh Government's support in principle for all renewable energy projects and technologies. Proposals should ensure there is no significant unacceptable detrimental impact on the surrounding natural environment and local communities and that the development delivers positive social, environmental, cultural and economic benefits.

- 5.21. On the issue of alternatives, 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"*.
- 5.22. It is clear that Policy 18 is the starting point when considering renewable energy Developments of National Significance. This provides that renewable energy DNS schemes will be permitted subject to Policy 17 and the criteria listed in Policy 18 itself.
- 5.23. Turning to the regional approach, Future Wales locates the application site within the south east catchment area. The published document, at page 131, sets out how the provision of renewable energy is vital for the south east to play its role in decarbonising. It states (inter alia) **"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 and Strategic and Local Development Plans should provide a framework for generation and associated infrastructure. The Welsh Government wishes to see energy generation, storage and management play a role in supporting the South East economy"**.
- 5.24. Through Policy 9 of Future Wales, the Welsh government will seek to ensure that actions towards securing the maintenance and enhancement of biodiversity (to provide a net benefit), the resilience of ecosystems and green infrastructure assets are demonstrated as part of development proposals through innovative, nature-based approaches to site planning and the design of the built environment.
- 5.25. Policy 5 of Future Wales, the Welsh Government seeks to 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.

Planning Policy Wales (Ed, 12 published February 2024)

- 5.26. 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.
- 5.27. PPW sets out five key principles which underpin Welsh Government's approach to sustainable development; these are: –

- **Growing our economy in a sustainable manner** – The planning system should enable development which contributes to long term economic wellbeing, making the best use of existing infrastructure and planning for new supporting infrastructure and services.
- **Making best use of resources** – The efficient use of resources, including land, underpins sustainable development.
- **Facilitating accessible and healthy environments** – Our land use choices and the places we create should be accessible for all and support healthy lives.
- **Creating & sustaining communities** – The planning system must work in an integrated way to maximise its contribution to well-being.
- **Maximising environmental protection and limiting environmental impact** – Natural, historic and cultural assets must be protected, promoted, conserved and enhanced.

5.28. Section 3 of PPW sets out the priority for strategic and spatial choices. Paragraph 3.1 considers that (own emphasis in bold) *“Effective strategic placemaking requires early collective consideration of placemaking issues at the outset, in the formulation of a development plan, or when developing specific proposals. **The policy issues should not be considered in isolation from one another.**”*

5.29. With regards to placemaking in the rural areas, paragraph 3.38 of PPW identifies how (inter alia) *“Fostering adaptability and resilience will be a key aim for rural places in the face of the considerable challenge of maintaining the vibrancy of communities and availability of services as well as contributing to the Cohesive Communities well-being goal. This is coupled with ensuring the countryside is resilient to the impacts of climate change and plays a role in reducing the causes of climate change through the protection of carbon sinks and as a **sustainable energy source** in line with the Resilient Wales well-being goal”.*

5.30. In regard to Best and Most Versatile Agricultural Land, Paragraph 3.59 sets out that: *‘When considering the search sequence and in development plan policies and development management decisions considerable weight should be given to protecting such land from development, because of its special importance. 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 grades is unavailable, or available lower grade land has an environmental value recognised by a landscape, wildlife, historic or archaeological designation which outweighs the agricultural considerations.’*

5.31. Paragraph 3.61 under the heading of ‘Supporting Infrastructure’ identifies how adequate and efficient infrastructure such as electricity is crucial 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 economically connected places...”*

5.32. Section 5 sets out the economic components of placemaking and Welsh Government vision here is to achieve productive and enterprising placemaking and well-being. Welsh Government outcomes for productivity and enterprise include:

- manages water resources naturally;

- reduces overall pollution;
- resilient to climate change;
- makes best use of natural resources;
- prevents waste;
- adaptive to climate change;
- fosters economic activity;
- embraces smart and innovative technologies;
- good connections;
- appropriate development densities;
- minimises the need to travel;
- not car dependent; and
- vibrant and dynamic.

5.33. Page 76 of PPW identifies how places which are productive and enterprising contributes to the seven goals of the Well-being of Future Generations (Wales) Act 2015 which includes the following.

- A **Prosperous Wales** can be achieved through increased economic activity across all sectors and at all scales. This is realised through the availability of employment land, lifelong learning and training opportunities, reliable communication networks and investment in renewable and low carbon energy sources. Resource efficient choices are promoted which have financial benefits both now and over the lifetime of development.
- A **Resilient Wales** is supported by our agriculture and tourism industries and through the beauty of our natural, built and historic environment. Tourism development, which can finance preservation activities, needs careful management to ensure continued enjoyment by future generations. Sustainable agricultural practices can also assist in nature conservation and enhancement. Wales' topography also lends itself to renewable energy generation.
- A **Healthier Wales** can be achieved through the reduction in emissions and air pollution as a result of generating energy from non-carbon sources. Greater distribution of our economic wealth can also help alleviate poverty which is a key determinant of health.
- A more **Equal Wales** can be achieved through promoting sufficient employment and enterprise opportunities for people to realise their potential and by recognising and building on the existing economic strengths of places to assist in delivering prosperity for all.

- **Cohesive Communities** are created by people who have access to fulfilling work which is easily reached locally through sustainable transportation infrastructure and who can communicate effectively and safely with their friends and neighbours.
- A **Vibrant Culture** and thriving Welsh Language are supported by the provision of jobs and economic activity which needs to be strategically planned and managed. The Welsh language and culture makes a distinctive contribution to the viability of communities. Our tourism offer also needs promotion to capitalise on and support activities which reflect our distinctiveness.
- Above all, a **Globally Responsible Wales** is promoted by reducing our carbon footprint through integrated public transportation infrastructure, encouraging globally responsible business and the promotion of renewable energy over carbon-emitting sources and resource choices through which multiple benefits can be realised.
- Development should **prevent** problems from occurring or getting worse such as the generation of carbon emissions, poor air quality and waste and the depletion of our natural resources which will need to be managed for many years to come
- Development should be **integrated** to ensure that common issues are considered and accommodated early on, such as equipping our homes and businesses with the necessary digital and physical infrastructure and ensuring we have the right natural resources to do so.
- **Collaboration** is necessary to strategically plan for our employment, energy, waste and mineral needs. These are areas where 'larger than local' issues need to be addressed by planning authorities with the involvement of other agencies and communities to ensure sustainable outcomes are delivered across Wales.

5.34. Page 77 of PPW sets out the Welsh Government trends and issues in the productive and enterprising places, these include:

- ensuring that there is sufficient employment land to meet the needs and requirements of a range of future employment scenarios (including increased automation and the significant contribution of SMEs to the Welsh economy) whilst ensuring that an over-supply of employment land does not prevent the release of land for other uses;
- 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;
- embracing the challenge of decarbonising our energy and transport sectors including phasing out of fossil fuels and moving towards local, decentralised renewable energy systems, the increased use of energy storage to balance supply and demand and the challenge this creates on our distribution networks
- supporting and enabling training, education, infrastructure, construction and manufacturing capacity to support progress towards a circular economy; and

- supporting and enabling renewable, low carbon globally responsible material choices and their efficient and most appropriate use, so as to prevent waste and ensure finite resources are not unnecessarily diminished.

5.35. Page 77 to 78 of PPW sets out the Welsh Government position on how policy topics of the Productive and Enterprising Places theme can collectively work together to create sustainable places through development plan strategies, policies and allocations and development management decision making. These include: –

- encouraging policies and proposals which promote low carbon developments and sites for renewable energy, manufacturing, research and development close to areas of deployment of renewable energy
- promoting the economic benefits of energy schemes and in particular supporting those developments which maximise planning-related benefits to communities;

5.36. Subsection 5.4 on economic development includes Paragraph 5.4.2 which recognises that: “Economic land uses include the traditional employment land uses (offices, research and development, industry and warehousing), as well as uses such as retail, tourism, and public services. The construction, energy, minerals, waste and telecommunications sectors are also essential to the economy and are sensitive to planning policy.” The paragraph goes on to identify how the Welsh Government strongly supports growth in renewable and low carbon proposals.

5.37. Section 5.7 of PPW specifically relates to Energy.

5.38. Paragraph 5.7.12 identifies how **“Overall power demand is expected to increase as a result of growing electrification of transport and heat. In order to ensure future demand can be met, significant investment will be needed in energy generation, transmission and distribution infrastructure. The system will need to integrate renewable generation with storage and other flexibility services, in order to minimise the need for new generation and grid system reinforcement. Collectively we will need to concentrate on reducing emissions from fossil fuel sources, whilst driving further renewable generation which delivers value to Wales”**.

5.39. Paragraph 5.7.3 identifies how **“These priorities contribute to reducing carbon emissions, as part of our approach to decarbonisation, whilst enhancing the economic, social, environmental and cultural well-being of the people and communities of Wales, in order to achieve a better quality of life for our own and future generations. This means taking precautionary action to prevent Wales being ‘locked in’ to further fossil fuel extraction and high carbon development”**.

5.40. Paragraph 5.7.6 identifies how **“The planning system should secure an appropriate mix of energy provision, which maximises benefits to our economy and communities whilst minimising potential environmental and social impacts. This forms part of the Welsh Government’s aim to secure the strongest economic development policies, to underpin growth and prosperity in Wales, recognising the importance of decarbonisation and the sustainable use of natural resources, both as an economic driver and a commitment to sustainable development”**.

- 5.41. Paragraph 5.7.7 goes on to state how the benefits of renewable and low carbon energy, as part of the overall commitment to tackle climate change is of '**paramount importance**' to the Welsh Government. It goes on to state how the planning system should: –
- maximise renewable and low carbon energy generation; and
 - optimise energy storage.
- 5.42. Renewable energy targets are discussed at paragraph 5.7.14 of PPW, to recap the Welsh Assembly will seek that: –
- for Wales to generate 70% of its electricity consumption from renewable energy by 2030; and
 - for one Gigawatt of renewable electricity capacity in Wales to be locally owned by 2030.
- 5.43. Subsection 5.9 provides support for renewable and low carbon development. Paragraph 5.9.1 states *"Local authorities should facilitate all forms of renewable and low carbon energy development. In doing so, planning authorities should seek to ensure their area's full potential for renewable and low carbon energy generation is maximised and renewable energy targets are achieved."*
- 5.44. 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"*.
- 5.45. Paragraph 5.9.21 states *"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"*.
- 5.46. Section 6 of PPW deals with the themes of planning policy topics covering landscape, historic environment, biodiversity, geodiversity and habitats, coastal characteristics, air quality, soundscape, water services, flooding and other environmental (surface and sub-surface) risks.
- 5.47. With regards to the historic environment, paragraph 6.1.9 seeks that *"Any decisions made through the planning system must fully consider the impact on the historic environment and on the significance and heritage values of individual historic assets and their contribution to the character of place."*

- 5.48. Section 6.2 of PPW deals with green infrastructure. Paragraph 6.2.4 states how green infrastructure plays a fundamental role in shaping places and our sense of well-being, and is intrinsic to the quality of the spaces we live, work and play in. It goes on to state how the planning system must maximise its contribution to the protection and provision of green infrastructure assets and networks as part of meeting society's wider social and economic objectives and the needs of local communities. The key requirements are
- Green Infrastructure: stronger emphasis on taking a proactive approach to green infrastructure covering cross boundary considerations, identifying key outputs of green infrastructure assessments, the submission of proportionate green infrastructure statements with planning applications and signposting Building with Nature standards.
 - Net Benefit for Biodiversity and the Step-wise Approach: further clarity is provided on securing net benefit for biodiversity through the application of the step-wise approach, including the acknowledgement of off-site compensation measures as a last resort, and, the need to consider enhancement and long-term management at each step. The importance of strategic collaboration to identify and capture larger scale opportunities for securing a net benefit for biodiversity is recognised.
 - Protection for Sites of Special Scientific Interest: strengthened approach to the protection of SSSIs, with increased clarity on the position for site management and exemptions for minor development necessary to maintain a 'living landscape'. Other development is considered unacceptable as a matter of principle. Exceptionally, a planned approach may be appropriate where necessary safeguards can be secured through a development plan.
 - Trees and Woodlands: closer alignment with the stepwise approach, along with promoting new planting as part of development based on securing the right tree in the right place.

Local Development Plans

- 5.49. The Site is located across the three administrative areas of MCC, TCBC, and NCC. Therefore, the adopted Local Development Plan (LDP) documents that are pertinent to the Site and proposed development include the following:
- Monmouthshire County Council Local Development Plan 2011–2021 (February 2014);
 - Torfaen County Borough Council Local Development Plan (to 2021) (December 2013);
 - Newport Local Development Plan (2011–2026) (January 2015)

Monmouthshire LDP

- 5.50. The MCC Local Development Plan ("LDP") 2011–2021 was adopted in February 2014, replacing the Monmouthshire Unitary Development Plan, to become the adopted development plan for the County (excluding part within the Brecon Beacons National Park).
- 5.51. MCC are currently preparing an emerging Replacement Local Development Plan 2018–2033. Most recently, MCC consulted on the Deposit Replacement Local Development Plan ("RLDP"),

together with the supporting Integrated Sustainability Appraisal Report and Habitats Regulations Assessment, between November and December 2024.

- 5.52. A revised Delivery Agreement was agreed by Welsh Government on 25 October 2024 which sets out the amended timetable for plan preparation and anticipates adoption by May 2026.
- 5.53. The emerging RLDP can only be afforded limited weight in decision making, but is still a key material consideration, including the relevant studies and evidence prepared to inform the plan-making process.

Torfaen LDP

- 5.54. The TCBC LDP was adopted in December 2013 and sets out the development strategy and detailed policies and proposals for the future development and use of land in a local authority administrative area.
- 5.55. TCBC are also currently preparing an emerging Replacement Local Development Plan which will set out local planning policy until 2037. TCBC are working towards the Preferred Strategy stage of the Replacement Local Development Plan process which will set out the key issues, vision, objectives, options considered, overall strategy and strategic sites for Torfaen up to 2037.
- 5.56. A revised Delivery Agreement, which sets out an amended timetable for Plan preparation, was agreed by Welsh Government on 25 November 2024 and work on the RLDP is progressing in accordance with the revised Delivery Agreement with an anticipated adoption date of December 2028.
- 5.57. The emerging RLDP can only be afforded limited weight in decision making, but is still a key material consideration, including the relevant studies and evidence prepared to inform the plan-making process.

Newport LDP

- 5.58. The NCC LDP was adopted in January 2015 which sets out the vision for Newport and ways of achieving a number of objectives which seek to address the key issues facing the local area.
- 5.59. On 14 October 2020 Newport City Council agreed to begin the formal review process of the LDP and prepare a new RLDP. It is understood NCC have recently consulted on the Preferred Strategy.

Local Strategy and Guidance

- Monmouthshire County Council declared a Climate Emergency (May 2019);
- Torfaen County Borough Council Climate and Nature Emergency Action Plan (January 2022); and
- Newport City Council Organisational Climate Change Plan 2022–2027 (March 2022).

Supplementary Planning Documents

- MCC: Renewable Energy and Energy Efficiency SPG (March 2016);
- MCC: Green Infrastructure SPG (April 2015);
- TCBC: Green Infrastructure SPG (February 2024);
- TCBC: Biodiversity, Ecosystem resilience and Development SPG (February 2024);
- NCC: Archaeology and Archaeologically Sensitive Areas SPG (August 2015);
- NCC: Wildlife and Development SPG (August 2015);
- NCC: Trees, Woodland, Hedgerows and Development Sites SPG (January 2017); and
- NCC: Mineral Safeguarding SPG (January 2017).

6. Planning Assessment

- 6.1. This section of the Statement contains a detailed analysis of the application proposal against the relevant material and planning policy considerations. These considerations have been derived from an understanding of the application site and its surroundings, as well as the policy analysis of the previous section and the legislative background set out in Section 3

Principle of Development

- 6.2. Future Wales is the national development framework, setting the direction for development in Wales to 2040, and forms part of the development plan alongside the Local Development Plan, and in time, Strategic Development Plans when they are adopted. Future Wales' strategy is to address key national priorities through the planning system, including sustaining and developing a vibrant economy, achieving decarbonisation and climate-resilience, developing strong ecosystems, and improving the health and well-being of our communities.
- 6.3. Future Wales is the highest tier of development plan in Wales and local development plans *"are required to be in conformity with Future Wales and must be kept up to date to ensure they and Future Wales work together effectively."* (p.8 and p.15). In addition, Future Wales provides (at p.10) that *"The specific purpose of Future Wales is to ensure the planning system at all levels is consistent with, and supports the delivery of, Welsh Government strategic aims and policies."* This is a legal requirement, as the local development plan must be in conformity with Future Wales under s.62(3A) of the Planning and Compulsory Purchase Act 2004.
- 6.4. Policies 17 and 18 of Future Wales provide the framework for the consenting of renewable energy DNS schemes in Wales.
- 6.5. Policies 17 and 18 of Future Wales are clear that achieving decarbonisation and climate-resilience is one of the **"key national priorities"** for Wales, and Future Wales recognises the need for Wales to focus on generating the energy it needs to support its communities and industries over the next twenty years. The proposed development is for a solar farm which will power the equivalent of approximately 17,265 typical family homes per year. Therefore, through policies 17 and 18, Future Wales supports the principle of the proposal and its potential to contribute to the national priorities of decarbonisation and climate-resilience.
- 6.6. At paragraph 1.2, the PPW identifies its primary objective as being to ensure that the planning system contributes towards the delivery of sustainable development and improves the social, economic, environmental and cultural being of Wales as required by the Well-being of Future Generation (Wales) Act 2015. There is no dispute that the proposed development will increase Wales' installed renewable energy capacity, contributing to meeting local and national renewable energy targets, reducing reliance on energy generated from fossil fuels and thus actively facilitating the transition to a low carbon economy. To this end, the proposed development would achieve the WBFG Act goals to build a globally responsible, prosperous and resilient Wales. The WBFG goals are further explored in section 7 of this Statement.
- 6.7. Policy 17 states that decision-makers should give **'significant weight'** to the urgent need to meet the target of generating 70% of consumed electricity by renewable means by 2030.

This is part of Wales' international commitment to combating climate change. Further to this, Policy 17 prohibits the development of DNS schemes where they will cause significant visual impact. Additionally, Policy 17 also dictates that applicants must present the benefits to the local community brought about by the development. The benefits include the wider benefits of renewable energy which include security of energy supply and reduced energy costs for the consumer. Benefits of the project are to be realised through reduced energy bills and security of supply which will reduce Wales' exposure to the volatility of the wholesale energy markets. These are important factors in addressing fuel poverty, which disproportionately affects low-income households across Wales and contributes to economic inequality. The proposal would reduce reliance upon overseas energy sources. The energy production would help to meet the national and local need for energy and therefore the development would fulfil an important social role.

How the development accords with Policy 18 of Future Wales

- 6.8. Policy 18 specifically relates to qualifying energy Developments of National Significance and presents 11 principles which should be satisfied to secure consent. The requirements set out in Policy 18 are considered in turn 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)

- 6.9. The site is not located within a statutory protected landscape designation such as a National Park or National Landscape of national importance. The proposal 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 5 of the draft Environmental Statement which accompanies the statutory pre-application consultation.

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

- 6.10. ***Chapter 5 Landscape and Visual*** of the Environmental Statement is accompanied by a Residential Visual Amenity Assessment (RVAA). The RVAA considers the possible effects of the proposed solar farm on the amenity of residents of properties located in close proximity to the proposed development. The assessment has been produced in response to the EIA Scoping Report from PEDW, which considered that residential visual amenity should be within the scope of the Environmental Statement.

- 6.11. It is a widely accepted and long held planning principle that no individual person has a private right to a view. However, there are situations where the effect on the outlook or the visual amenity of a residential property and associated living condition would be so great that it would not be considered in the public interest to permit such conditions to occur when they did not previously exist. The threshold in terms of what would be unacceptable adverse

visual impacts in residential visual amenity terms is high, and is usually associated with wind farm developments as opposed to solar photovoltaic (PV) developments, which have low vertical elevations and a low possibility of introducing effects that would be considered 'overbearing' in nature.

- 6.12. The issue of Residential Visual Amenity was considered by Inspector Lavender in the Carland Cross Appeal Decision (APP/DO840/A/O921030260) and has since been referred to as 'The Lavender Test'. In paragraph 23 of the Appeal Decision, the inspector stated:

"The planning system is designed to protect public rather than private interests, but both interests coincide here where, for example, a visual intrusion is of such a magnitude as to render a property an unattractive place to live. This is because it is not in the public interest to create such living conditions where they did not exist before. This I do not consider that simply being able to see a turbine or turbines from a particular window or part of a garden of a house is sufficient reason to find the visual impact unacceptable (even though a particular occupier might find it objectionable). However, when turbines are present in such number, size and proximity that they represent an unpleasantly overwhelming and unavoidable presence in main views from a house or garden, there is every likelihood that the property concerned would come to be widely regarded as unattractive (rather than simply less attractive, but not necessarily uninhabitable) place in which to live."

- 6.13. The threshold regarding the unacceptable adverse visual impacts of residential properties is therefore not whether the development would give rise to significant visual effects on the surrounding visual properties, but whether the visual effects would be of such magnitude that they would render the property an unpleasant place to live. The RVAA therefore seeks to determine whether the solar arrays would appear overbearing or overwhelming to residents to the extent that this threshold would be crossed.
- 6.14. The RVAA has considered effects on properties lying adjacent to the redline boundary of the Site in locations where views of solar arrays may be prominent in the landscape and result in a fundamental change to the character of the views from the property. The majority of the settlement edge of Ponthir was scoped out of assessment due to intervening landscape features, distance from the Site, and the residential built context. Some individual properties were clustered into small groups where a number of properties experience a similar outlook. A total of 52 individual properties or clusters were subject to an initial scoping exercise. This sought to understand the distance and direction of the nearest solar arrays in relation to the principal outlook from the property, to determine the extent of the views from the property that may be affected by the proposed development. As a result of this initial scoping exercise, a total of 7 individual properties, assessed as 6 standalone properties and one cluster of two properties were subject to a second more detailed assessment. This investigated in more detail how the Proposed Development may be seen from different points from within the property and wider curtilage; the mitigating effect of existing landscape features (topography and vegetation); and the effect of proposed landscape mitigation and enhancement as shown in the Landscape Strategy. The salient points of the RVAA are presented below:

Pant-yr-eos Farm

- 6.15. Pant-yr-eos Farm is located in the western section of the Site, to the east and north of Parcel 13 and to the south and west of Parcel 9. It is comprised of a collection of agricultural buildings

surrounding a farmhouse, and in this respect is laid out as a traditional farmstead. The closest solar arrays lie approximately 100m from the dwelling at their closest point, and are located within Parcel 9A and 9B to the north and northeast, and Parcel 13b to the west.

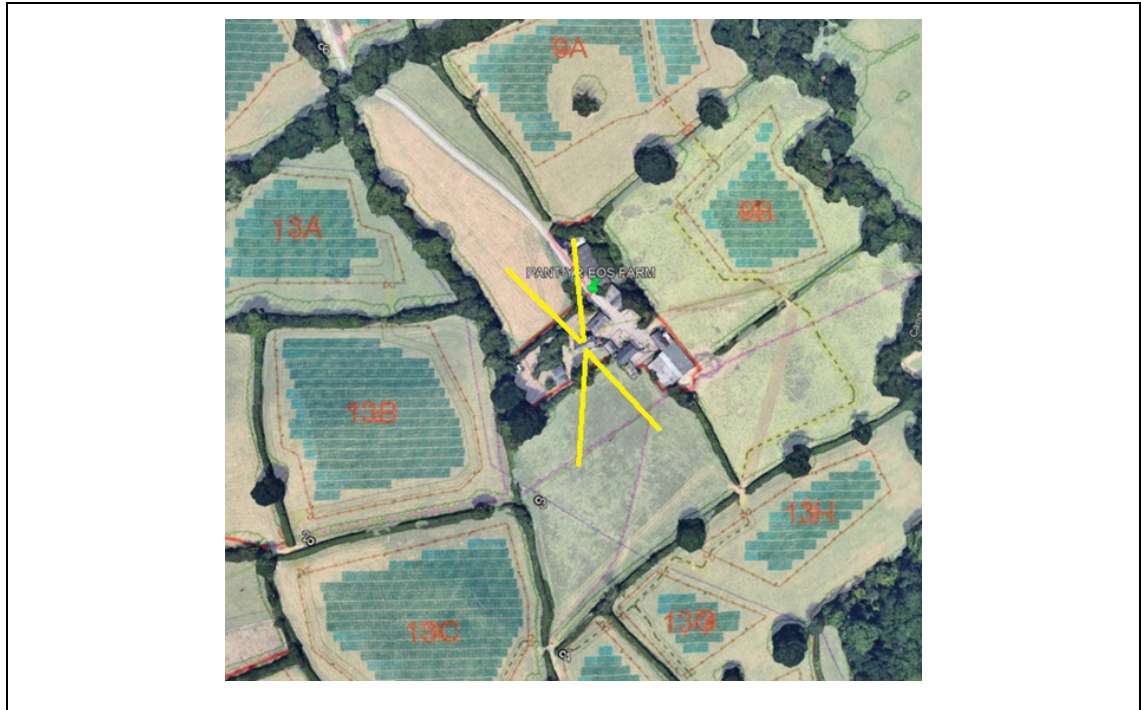


Illustration 1: Extract from Google Earth indicating location of closest solar arrays and principal sight lines from Pant-Yr-Eos Farm

- 6.16. The dwelling is oriented with its principal elevations facing southeast and northwest, such that the main views from the property are facing out over fields which are not proposed to contain solar arrays. **Illustration 1** shows an aerial view of the farmhouse relative to the closest solar arrays, with principal sight lines from the property indicated in yellow. From the dwelling, it is likely that views to the north in the direction of Parcel 9A would be available, affording views of solar arrays within the field parcel. Parcel 9B is relatively low lying within the Candwr Brook Valley, and the solar arrays are low in height (3m), meaning that receptors within the property would be looking down on the solar arrays. This does not indicate that overbearing effects would be possible, as the outward view from the property – although changed – would not be obscured by the proposed solar arrays. It is anticipated that the highest magnitude of change would be experienced by receptors on the first floor of the dwelling. There are a limited number of windows that occupy this position within the dwelling, meaning that this view is not a defining feature of a substantial proportion of rooms within the property. Views to the north and northwest from the ground floor would be substantially limited by intervening vegetation and built form associated with the wider farmstead.
- 6.17. Views to the northeast in the direction of Parcel 9B are limited from the property due to the layout and orientation of the building. There are no windows on the western gable end of the building from which views in this direction are available, and views from the northern/northeastern elevation would likely offer very limited oblique views in this direction. There is substantial intervening tree cover in this direction, meaning there would be no possibility of overbearing effects from the development of this Parcel. Views to the southeast in the direction of Parcel 13 would be available from the southern/southeastern

elevation of the building. The immediate field within view has been left undeveloped, such that the immediate outlook would remain free of solar arrays. The developed parts of Parcel 13 within the view are on ground that slopes away from the property in a southeasterly direction.

- 6.18. The Landscape Strategy shows that the field parcel to the northwest of Parcels 13E and 13G (i.e. lying between the closest solar arrays and the dwelling) would be planted with native orchard planting. Over time, this would mature and further limit views in the direction of the solar arrays. Whilst – especially before planting matures – solar arrays would likely be obliquely visible on the opposite side of the hedgerow that defines the northeastern boundary of these parcels, the orientation of the arrays, distance from the dwelling and intervening existing hedgerow and new orchard planting would limit the overall visual effect. Whilst the view would experience a degree of change, the proposed solar arrays would not give rise to overbearing effects to receptors appreciating the view in this direction for the reasons outlined.

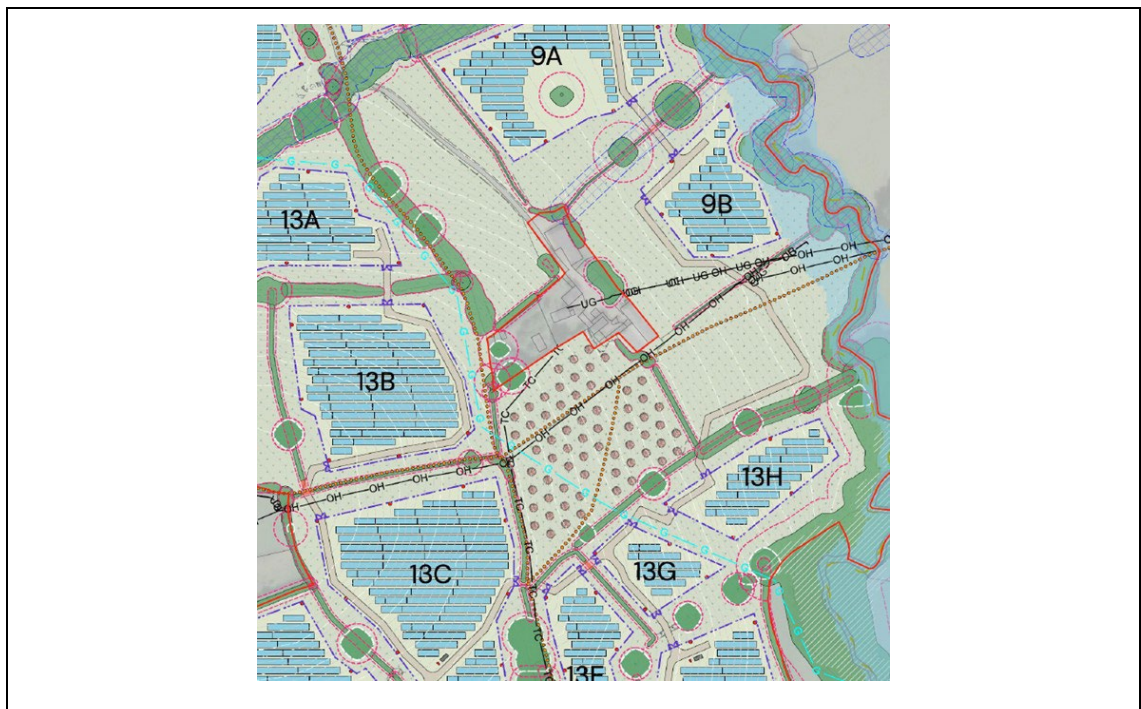


Illustration 2: Extract from Landscape Strategy (prepared by Pegasus Group) showing orchard planting relative to Pant-yr-eos Farm and Parcels 13F and 13G

- 6.19. In summary, whilst the Proposed Development involves the placement of solar arrays within a number of fields in different directions from the dwelling at Pant-yr-eos Farm, the layout has been designed to avoid the development of field parcels that occupy the principal outlook from the house. It is considered that the design of the layout and Landscape Strategy combine to ensure residents of Pant-yr-eos Farm would not experience overbearing effects, and it is therefore concluded that effects on residential visual amenity in this property would not cross the public interest threshold

Little Acres

- 6.20. Little Acres is located in the western half of the Site, to the north of Parcels 4 and 5. It sits in a relatively elevated position to the south of Candwr Road. The most proximal solar arrays lie

approximately 130m to the south in Parcel 5, and occupy approximately half the length of the field parcel. The principal outlook from the dwelling is to the southeast, as indicated below.

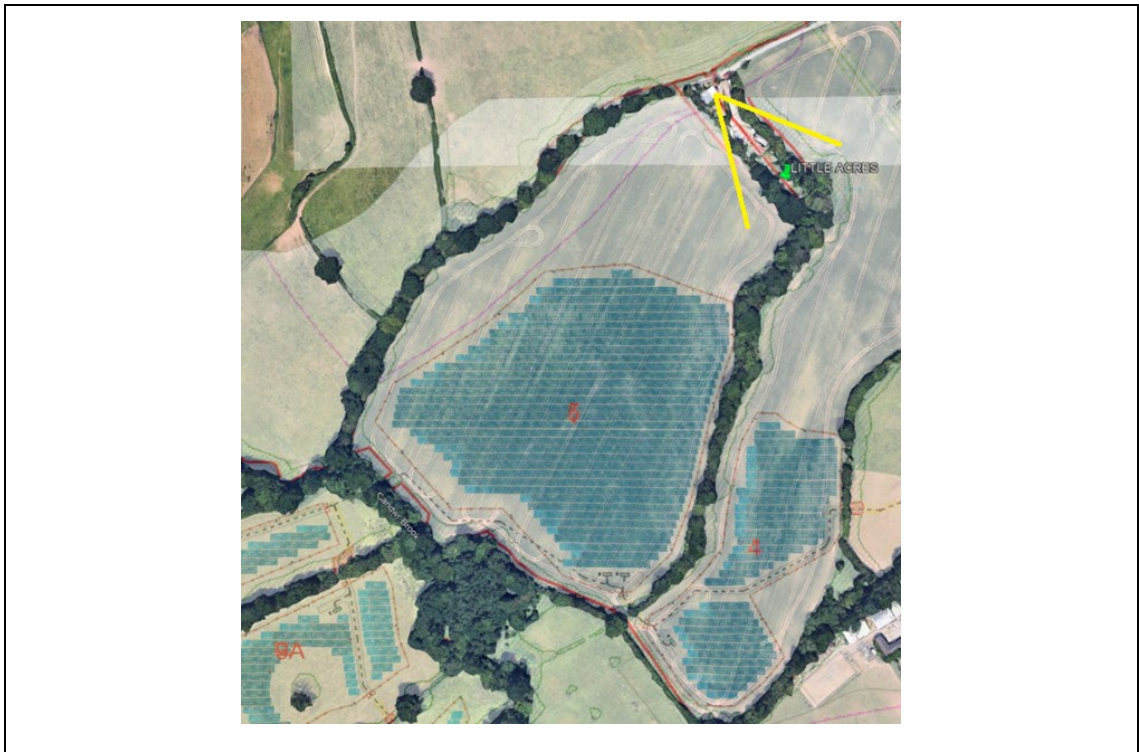


Illustration 3 Extract from Google Earth indicating location of closest solar arrays and principal sight lines from Little Acres.

- 6.21. The topography in the direction of Parcel 5 to the south falls away relatively sharply. Little Acres lies at an elevation of approximately 82m Above Ordnance Datum (AOD), whilst the closest solar arrays sit at an elevation of approximately 62m AOD. Assuming a built height of 3m for the solar arrays, this would mean the closest array would be seen substantially downhill from the property, notwithstanding the fact that the principal outlook does not face in this direction. From within the wider curtilage of the property, the same considerations apply: the solar arrays would be substantially downslope of the receptor, such that any available wider view would remain open in character. The southwestern boundary of the residential curtilage is defined by a line of mature trees and hedgerow, which would have a limiting effect on views over Parcel 5 itself.
- 6.22. The layout has been designed to situate solar arrays away from residential receptors where possible, meaning there is a buffer between the dwelling and the nearest arrays. The landscape strategy shows how a new field boundary would effectively be formed by the provision of planting along the northern edge of the solar arrays and boundary fence. This would comprise native hedgerow planting and hedgerow trees. In addition, new native woodland planting to the northwest and Parcel 5 would further serve to soften views of solar arrays from this dwelling. This would, over time, serve to screen views from the higher ground to the north – including from Little Acres – in the direction of the closest arrays. LVIA Viewpoint 3 is taken from a gateway to the southwest of Little Acres, looking out over Parcel 5. It shows the falling topography, and how the wider view in the direction of Ponthir would remain open with the proposed solar arrays in place. Views in the direction of Parcel 4 are substantially limited by intervening mature trees and hedgerow.

- 6.23. In summary, owing to both the topography of the Site area in the immediate vicinity of Little Acres, and the provisions of both the layout and Landscape Strategy, it would not be possible for the solar arrays to give rise to overbearing effects, even though the outlook from the property in some directions would be changed with the Proposed Development in place.

The Hollies

- 6.24. The Hollies is located in the northern part of the Site, to the southeast of Parcel 3 and to the north of Parcels 4 and 5. It occupies a position on relatively high ground to the north of Candwr Road. It is a single-storey dwelling with principal outlooks to the northwest and southeast. The closest solar arrays would be located within Parcel 3 approximately 160m to the northwest of the dwelling. The full extent of Parcel 3 abuts the northwestern boundary of the curtilage of the dwelling.



Extract from Google Earth indicating location of closest solar arrays and principal sight lines from The Hollies

- 6.25. The Hollies occupies a position at approximately 87m AOD. The topography in the direction of Parcel 3 falls away, with the closest proposed solar arrays lying on ground approximately 72m AOD. With an elevation of 3m, the solar arrays would still be sat substantially downhill of the dwelling. The principal outlook is over a longer distance valley view. The nature of the slope within Parcel 3 is such that the solar arrays, although possibly visible, would not obscure or overbear the view in this direction. It would remain of an open character.
- 6.26. The Landscape Strategy shows how the southern end of Parcel 3 (i.e. the closest point to The Hollies) would be planted with native hedgerow planting and hedgerow trees. These would, over time, mature to screen views of the proposed solar arrays. The new field boundary would blend into the landscape. Due to the low-lying nature of the dwelling (i.e. no first or second storey windows), downward views onto the solar arrays would be limited. Whilst there would be some change to the view, it is not considered that these effects would be overbearing in nature.

Ullett House

- 6.27. Ullett House lies in a central position within the Site, to the south of the reservoir to the west of Ponthir Road. It is a large three storey dwelling occupying a relatively elevated position with long views to the west and south due to falling topography in these directions. The garden of the property lies principally to the west of the property. The closest solar arrays would lie within Parcel 10 to the west, on rising ground on the opposite valley side, approximately 190m away.



Extract from Google Earth indicating location of closest solar arrays and principal sight lines from Ullett House

- 6.28. The immediate outlook over the fields adjacent to the west of the property would remain unchanged – as indicated above, these are not proposed to contain solar arrays. Parcel 10 is proposed to contain a mixture of solar arrays and a short section of access track running broadly north-south between Parcels 10A and 10B.
- 6.29. Views from the dwelling in the direction of Parcel 10 are partially intervened by a belt of mature trees. Views of the solar arrays and access track would likely be available from both the property and the garden but would be situated on ground that is relatively lower lying than the dwelling itself. Ullett House sits on ground approximately 51m AOD, whereas solar arrays within Parcel 10 lie on ground at approximately 48m AOD at their highest point. Considering a panel elevation height of 3m, the solar arrays would sit – at their highest – at

the same elevation as the property itself, at this point at a distance of approximately 340m. Panels within Parcel 10 that sit closer to the property would be lower lying, and the screening effect of the vegetation on the panels further east within the parcel would be greater. Due to topography and existing intervening vegetation, there is limited opportunity for additional landscape mitigation to further filter views from the property in the direction of the closest solar arrays. However, owing to distance from the Site and the relative height AOD of the property in relation to the closest solar arrays, it is considered there would not be a possibility of overbearing effects on views to the west.

Pentwyn Farm and Pentwyn Barn

- 6.30. Pentwyn Farm and Pentwyn Barn are located effectively adjacent to one another in the southeastern corner of the Site, to the southeast of Parcel 12. They are accessed via a private track, along which PRow Footpath 389 24/1 also runs. At their closest points, the properties are less than 100m from the nearest proposed solar arrays. In addition, the access track runs along the southern boundary of Parcel 12D.
- 6.31. The principal outlook of Pentwyn Farm is to the southwest and northeast (indicated in yellow), whilst Pentwyn Barn has principal outlooks to the southwest and northeast, although aligned slightly differently (indicated in orange).



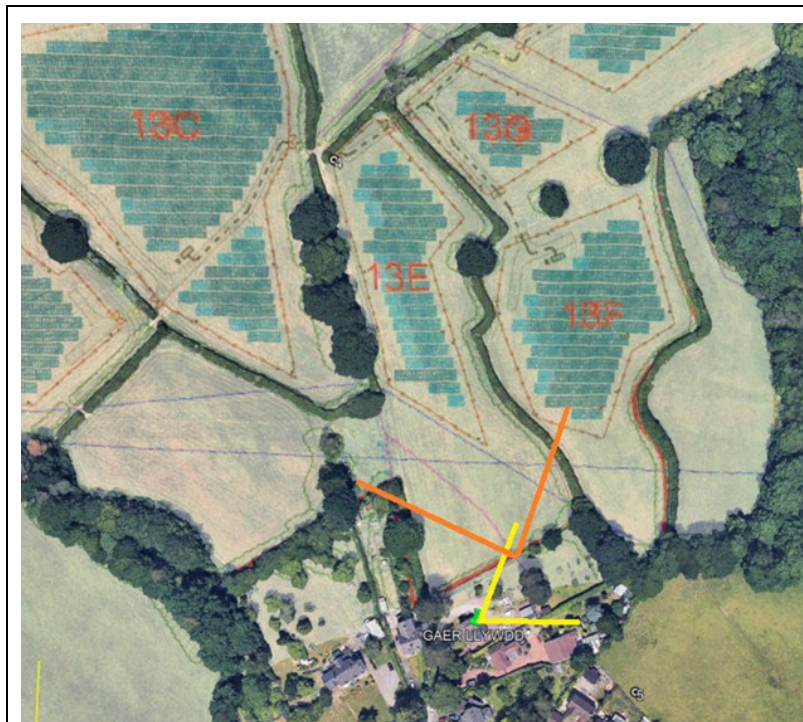
Extract from Google Earth indicating location of closest solar arrays and principal sight lines from Pentwyn Farm and Pentwyn Barn

- 6.32. From these two properties, the most likely impacted views would be those facing northeast from Pentwyn Farm in the direction of Parcel 12D, and those southwest from Pentwyn Barn in the direction of Parcel 12B. Northeastern views from Pentwyn Barn are oriented further east, meaning views of Parcel 12D would be oblique, whilst southwestern views from Pentwyn Farm would benefit from the buffer/offset within the adjacent field, and the outlook would remain open with only the possibility of oblique views..

- 6.33. A combination of topography, existing vegetation and the orientation of the properties means that, some views from both properties of solar arrays – principally to the northeast in Parcel 12D may be available – these would be glimpse and there would not be overbearing effects on either property. Views would be oblique owing to the direction of windows from the properties, whilst the nature of the topography is such that the view would not be redefined by the introduction of the Proposed Development.
- 6.34. Longer distance views into Parcel 8 would likely be available from the wider curtilage of both properties, but due to distance (min 250m), there would be no possibility of overbearing effects as a result of this.
- 6.35. In summary, it is not anticipated that effects on residential visual amenity would cross the public interest threshold in this case.

Gaer Llwyd

- 6.36. Gaer Llwyd is located on the northeastern edge of Ponthir, off Lamb Lane, south of Parcel 13F. It is a two-storey dwelling with a principal elevation facing west/northwest. The closest proposed solar arrays are located within Parcel 13E, approximately 100m to the north. The garden of the property lies principally to the west of the house, and has an outlook to the north, affording views upslope in the direction of Parcel 13F. The redline of the Site boundary abuts the residential curtilage, but proposed solar arrays are offset within the immediate field parcel. Illustration below indicates the location of Gaer Llwyd relative to the closest solar arrays, with the principal outlook from the house indicated in yellow and the northward outlook from the garden indicated in orange.
- 6.37. It is not anticipated that receptors within the dwelling would experience potentially overbearing effects as a result of the Proposed Development due to the orientation of the windows on the property. A review of satellite imagery shows a limited number of windows on the northern elevation which appear to be connected with uses such as bathrooms, meaning the effect of locating solar arrays within the adjacent field would be less adverse than if the outlook was from principal living rooms. The windows associated with these uses are also likely to be frosted glass.



Extract from Google Earth indicating location of closest solar arrays and principal sight lines from Gaer Llwyd

- 6.38. The northern boundary of the garden of Gaer Llwyd is defined by a mature hedgerow. This hedgerow would be unaffected by the Proposed Development and would have a screening effect upon northward views from the garden in the direction of Parcel 13. The garden of Gaer Llwyd lies at an elevation of approximately 36m AOD. To the north, the topography rises gently and the solar arrays within Parcel 13E would be located on sloping ground which is higher up than the garden itself. At the highest point, solar arrays are proposed to be sited on ground at an elevation of approximately 50m AOD. When considering the height of the solar arrays (3m), the proposed arrays would sit at approximately 17m above the receptor in the garden, at a distance of approximately 200m at the highest and furthest point. At their lowest and closest point, the solar arrays would sit approximately 11m above the receptor at a distance of approximately 100m. It is also possible that glimpsed views into Parcel 13C and 13G would also be available, which also sit at an elevation greater than the garden of the dwelling (49m and 40m AOD respectively, at their lowest points).
- 6.39. The Landscape Strategy shows how the southern end of Parcel 13E is proposed to be planted with a native hedgerow. At Year 1, this would have a limited effect upon the view, providing a degree of filtering in the direction of proposed solar arrays. Upon reaching maturity, new hedgerow is proposed to be maintained at 3-4m height, such that a receptor at the same elevation as the solar arrays would not be able to see them. From a lower elevation, this screening effect would still be considerable and by Year 15 it is not anticipated that solar arrays would form a notable part of the view from this property.
- 6.40. Whilst there would be a medium magnitude of change to receptors in the garden of Gaer Llwyd, resulting in major adverse and significant visual effects, it is not considered that these effects would be so overbearing in nature so as to render the property an unpleasant place

to live, noting that views from principal elevations of the property would not be subject to these visual effects.

- 6.41. 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) & 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

- 6.42. Internationally designated sites comprise Ramsar sites, Special Areas of Conservation (SAC's), Special Protection Areas (SPAs), and Biosphere Reserves. Chapter 6 of the Environmental Statement confirms that there are no internationally designated site located within the planning application boundary. Within 10km of the application site, there are four Internationally designated sites, these are: –

Site Name and Designation	Approximate Distance (km) and Direction from Site	Description
River Usk / Afon Wysg (SAC)	1.4km south	Annex I habitats present as a qualifying feature, but not a primary reason for selection of this site: • 3260 Water courses of plain to montane levels with the <i>Ranunculion fluitantis</i> and <i>Callitricho-Batrachion</i> vegetation. Annex II species that are a primary reason for selection of this site: • Sea lamprey • Brook lamprey; • River lamprey; • Twaite shad; • Atlantic salmon; • Bullhead; and,

		• Otter Annex II species present as a qualifying feature, but not a primary reason for site selection: • Allis shad.
Severn Estuary (SPA)	8.5km south	Qualifying features of the SPA: • Bewick's swan (non-breeding); • European white-fronted goose (non-breeding); • Dunlin (non-breeding); • Redshank (non-breeding); • Shelduck (non-breeding); • Gadwall (non-breeding); • Curlew (non-breeding); • Pintail (non-breeding); • Ringed plover (non-breeding); and • Waterbird assemblage.
Severn Estuary (Ramsar)	8.5km south	The estuary has the second highest tidal range in the world and consists of an extensive intertidal zone comprising intertidal mudflats, sand banks, saltmarsh, shingle, and rocky platforms. Flora and fauna communities typical of extreme physical conditions occur at the site. The invertebrate community provides an important food source for passage and wintering waders. The site is of particular importance for staging nationally important numbers of several species of waterbirds, including shelduck and whimbrel, and supports internationally important numbers of various species of wintering waterbirds, including Icelandic black-tailed godwit. This site is important for several species of fish migrating between sea and river via the estuary. Small patches of a

		nationally rare plant <i>Lythrum hyssopifolia</i> are found in the grassland zone.
Severn Estuary (SAC)	8.5km south	Annex I habitats that are a primary reason for selection of this site: • 1130 Estuaries; • 1140 Mudflats and sandflats not covered by seawater at low tide; and • 1330 Atlantic salt meadows. Annex I habitats present as a qualifying feature, but not a primary reason for selection of this site: • 1110 Sandbanks which are slightly covered by sea water all the time • 1170 Reefs

6.43. Turning to national statutory designated sites, these include Sites of Special Scientific Interest (SSSIs) and National Nature Reserves. Chapter 6 of the Environmental Statement confirms that there are no nationally designated site located within the planning application boundary. Within 10km of the application site, there are 24 nationally designated sites, these are: –

Site Name and Designation	Approximate Distance (km) and Direction from Site	Description
River Usk (Lower Usk) / Afon Wysg (Wysg Isaf) (SSSI)	1.4km south	The reasons for the Lower Usk designation are; mesotrophic lowland river and plant communities, craneflies, aquatic flora, otter, bat, and fish species.
St. Julians (LNR)	2.5km south	Remnant ancient woodland, ponds and grassland, which supports numerous breeding birds.
Llwynceilyn (LNR)	3.1km west	Designated for its conservation value.
Church Wood and Springvale Ponds (LNR)	3.7km north west	Remnant ancient woodland, ponds and grassland.

Cilwrgi Quarry (SSSI)	3.7km north	Designated for geological reasons – added here for context only.
Llandegfedd Reservoir (SSSI)	3.8km north	This reservoir is the largest inland open water habitat in the County and since its formation in 1963 has developed into one of the three regionally important overwintering wildfowl refuges in Wales. The site is particularly important for the overall numbers and variety of wintering wildfowl, with large numbers of wigeon, pochard and mallard. Other notable species include goosander, teal and goldeneye.
Henllys Open Space (LNR)	4.3km west	Accessible green space of grassland and woodland.
Allt-Yr-Yn (LNR)	4.9km south west	Designated for its diverse flora.
Langstone-Llanmartin Meadows (SSSI)	5.0km south east	Two unimproved wet meadows located in the same hydrological unit which are the remnants of a formerly more extensive low-lying area of meadow and fen.
Henllys Bog (SSSI)	5.6km west	This small fen with a ground flora rich in plant species lies in pastoral lowlands at the eastern part of the coalfield uplands. It is the only site in the County for marsh helleborine.
Gwent Levels – Nash and Goldcliff (SSSI)	5.9km south	The Gwent Levels are an example of one of the most extensive areas of reclaimed wet pasture in Great Britain and is the largest area of its kind in Wales. The Gwent Levels reens are rich in plant species and communities, many of which are rare or absent in other Levels systems. The regular maintenance of some reens provides conditions for submerged species such as hairlike pondweed and openwater emergents such as arrowhead an opportunity to flourish. The Nash and Goldcliff area forms an important part of the Gwent Levels system and is of particular botanical interest as it is the only area in Wales for the Least Duckweed. There is also an interesting

		community where two species of hornwort grow together.
Cwmynyscoy Quarry (LNR)	6.1km north west	Designated for its calcareous grasslands and orchids.
Parc Seymour Woods (SSSI)	6.5km east/south east	Area of coppiced sessile oak woodland, overlying Upper Old Red Sandstone and Quartz Conglomerate rocks, is the last major relict of the formerly extensive ancient woodland of Wentwood Forest.
Cwm-Ton, Glascoed (SSSI)	6.7km north	Designated for geological reasons – added here for context only.
Gwent Levels – Whitson (SSSI)	7.2km south/south east	This area of the Gwent Levels is important for its botanical interest as it contains the nationally rare hairlike pondweed and is the only location in Gwent for the tussock sedge. Arrowhead also grows in abundance in several main reens in this area.
Gwent Levels – Redwick and Llandevenny (SSSI)	7.7km south east	This area of the Gwent Levels contains a number of nationally rare plant species including the rare <i>Myriophyllum verticillatum</i> located in peaty ditches in the northern part of the site and the brackish water crowfoot associated with the ditches bordering the sea wall.
Gwent Levels – St. Brides (SSSI)	7.8km south/south west	The reens in the St Brides area support a number of interesting plant species most notably thread-leaved water-crowfoot and small pondweed. Reen bank and green lane habitats in this area are also important for relict meadow plant species such as the regionally notable grass vetchling and common meadow-rue. The St Brides area also supports rich invertebrate communities with a number of nationally notable and notable marshland species, e.g. the true fly <i>Chrysogaster macquarti</i> and the beetle <i>Hydaticus transversalis</i> . It is the only area on the Gwent Levels where the rare fly <i>Stenomicroa cogani</i> has been recorded.

Cwrt y Bela a Springdale (SSSI)	7.9km north east	Designated for its neutral grassland.
Coed-y-Darren (SSSI)	7.9km west	Designated for geological reasons – added here for context only.
Penhow Woodlands (SSSI and National Nature Reserve (NNR))	8.0km east	Two areas of ancient semi-natural woodland. The structure is a mixture of high forest, coppice and coppice-with-standards comprising a range of woodland types, several of which have a restricted distribution in Britain. The ground flora is predominately calcicolous and includes a number of nationally rare and locally distributed species, for example Tintern spurge, green hellebore, bird's nest orchid and wild daffodil.
Severn Estuary (SSSI)	8.4km south	Beds of eel-grass occur on the more sheltered mud and sand banks. The estuary fringes have large areas of saltmarsh. These are generally grazed by sheep and/or cattle, a significant factor determining the plant communities. A range of saltmarsh types is present, with both gradual and stepped transitions between bare mudflat and upper marsh. The SSSI is of international importance for wintering and passage wading birds, with total winter populations averaging about 44,000 birds. The SSSI holds most of the estuary's internationally important curlew and redshank populations, and most of its nationally important ringed plover and grey plover populations. Other waders which occur in significant numbers within the SSSI are snipe, knot, whimbrel and turnstone. The SSSI is internationally important for dunlin and supports about 7.5% of the British wintering population of this species. The estuary as a whole supports about 10.5% of the British wintering population and is the single most important wintering ground of dunlin in Britain.

Newport Wetlands (SSSI and NNR)	8.5km south	This site is of special interest for its breeding and wintering birds, invertebrates and aquatic and marginal flora. Also of special interest are the ditch habitat and reedbeds.
Tir-Pentwys (LNR)	8.7km north west	This former landfill and colliery site contains ancient beech woodland which contrasts with a reclaimed area of grassland, ponds, quarries and streams.
Ty'r Hen Forwyn (SSSI)	9.7km north west	Ty'r Hen Forwyn is of special interest for its species-rich neutral grassland and for the association of this habitat with others including acid grassland, scrub, bracken and well-developed hedgerows. Species rich neutral grassland can be found throughout and is characterised by a high herb cover.

- 6.44. In accordance with CIEEM guidance (2018, updated 2024) and the principal of proportionate EIA, Chapter 7 of the ES only assesses in detail the international and national ecological receptors that are considered important and potentially affected.
- 6.45. For the River Usk SAC, it is acknowledged that multiple watercourses (Candwr Brook and unnamed tributaries of Candwr Brook) within the Site drain directly or indirectly (via Candwr Brook) into the Afon Lwyd. The Afon Lwyd is hydrologically connected to the Afon Wysg. In the event of a pollution and/or sedimentation incident into watercourses within the Site, there is the potential for adverse effects on qualifying features (watercourses of plain montane levels Ranunculus fluitans and Callitriche-Batrachium vegetation) of the Afon Wysg. With the implementation of embedded mitigation (pollution/sedimentation controls and site protection fencing) no adverse effects on watercourses, and in turn on the qualifying features of the Afon Wysg are anticipated.
- 6.46. For the Severn Estuary SAC, Ramsar & SPA, multiple watercourses (Candwr Brook and unnamed tributaries of Candwr Brook) within the Site drain directly or indirectly (via Candwr Brook) into the Afon Lwyd. The Afon Lwyd is hydrologically connected to the Afon Wysg, which eventually drains into the designated area. In the event of a pollution and/or sedimentation incident into watercourses within the Site, there is the potential for direct and indirect adverse impacts on the reasons for designation (flora, habitats, fish and non-breeding birds). However, the implementation of embedded mitigation (pollution/sedimentation controls and site protection fencing) would minimise the potential for adverse impacts on watercourses, and in turn on the habitats that support the designated features within the designated area over 8km distant.
- 6.47. Due to the mobility of ornithological features there is potential for non-breeding birds associated with these designated areas to also be in the vicinity of the Site, where they could be subject to disturbance or displacement impacts during the construction and operational phases. The data gathered suggests there is little or no connectivity with the Site but a precautionary approach has been taken and further assessment has been undertaken.

Severn Estuary (SSSI, SPA and Ramsar site) are scoped in (construction, operation and decommissioning) for ornithological features only, the Severn Estuary SAC is scoped out.

- 6.48. As set out under the assessment of construction impacts, the qualifying features listed in the citation for the Severn Estuary SPA comprise non-breeding populations of Bewick's swan, European white-fronted goose, dunlin, redshank, shelduck, gadwall, curlew, pintail and ringed plover, as well as the waterfowl assemblage. The Ramsar site designation additionally includes breeding lesser black-backed gull and the SSSI citation additionally adds non-breeding snipe, knot and turnstone.
- 6.49. Impacts during the operational phase would only occur where qualifying species from the designated areas also utilise habitats within the vicinity of the Site, potentially leading to disturbance and displacement impacts. However, the lack of suitable habitats on Site (i.e. an absence of marshes, mudflats and intertidal areas) preclude there being connectivity with the SSSI for the large majority of listed species. In addition, the separation distance (8.5km) is greater than foraging distance for most qualifying features, e.g. waterfowl (geese and dabbling ducks) have an average winter foraging flight distance of 4.2 ± 3.2 km (Johnson et al., 2014) and curlew (used here as an example of a large wader that may commute inland) has a maximum foraging distance of 3.5km (Mander et al., 2022).
- 6.50. This is evidenced in the baseline survey data for the Proposed Development, with snipe and mallard the only qualifying wader or waterfowl species (or assemblage component species) that were recorded during the WBS; albeit only occasionally and in small numbers. The desk study data returned occasional records of redshank, lapwing, white-fronted goose, shelduck, wigeon, teal, pochard, tufted duck, mallard and shoveler from within the search area (Site plus 2km) within the last ten years., but these were mostly from the buffer and not from within the Site itself. The desk study data returned records for three duck species from Ponthir Reservoir (which lies adjacent to the Site) but these species (mallard, teal and tufted duck) are widespread species that would be expected to be present occasionally irrespective of the proximity of the Severn Estuary designated area (i.e. they are considered to be 'wider countryside' not SPA birds). For species with widespread wintering distributions and which may potentially use fields within the Site on occasion (e.g. lapwing (whether 'wider countryside' or SPA birds)) displacement from close proximity of the Proposed Development, due to the presence of panels and other infrastructure, would be expected to have a negligible impact on these mobile species.
- 6.51. For all the waterfowl and wader species listed as part of the Severn Estuary designations, any disturbance or displacement impacts on these species' populations as a result of the Proposed Development (operational phase) are considered to be nil or negligible.
- 6.52. Based on the typical foraging distances provided above, regular commuting flights over the Site by qualifying species from the designated area would not be expected. Occasional flights overhead may still occur, however, e.g. during spring and autumn migration. It has been hypothesised that the glare from photovoltaic panels can result in birds confusing a solar farm for a waterbody, which could attract waterbirds passing overhead, potentially disrupting migration or leading to collision. However, although this may occur in certain arid/desert regions, a research review did not find strong evidence for the 'lake effect hypothesis' (Anderson et al, 2025) . The panels of the Proposed Development would be low-profile (<3m in height) and non-intrusive relative to the existing landscape features of hedgerows, trees and buildings, which will help integrate the Proposed Development into the Site and wider area. The Proposed Development will, therefore, not provide a novel feature in a uniform

landscape as is the case in arid areas where attraction of waterbirds has been noted. Furthermore, the panels themselves would have a non-reflective coating and would have fixed tilt to the south, which would limit the occurrence of glare. A negligible impact is predicted from glint and glare on the listed ornithological features of the designated areas.

- 6.53. Lesser black-backed gull was recorded infrequently during the breeding season baseline surveys, with most records being of birds simply passing overhead and so not at risk of adverse impacts from the Proposed Development. Lesser black-backed gulls associated with the Ramsar site are those that breed on Flatholm which, at 29.5km from the Site, is located at the edge of mean foraging distance (14.9 ± 5.9 km) for this species (Thaxter et al., 2005). It is considered more likely that the gulls recorded in the vicinity of the Site are from the large roof-nesting population that breed in industrial areas in towns such as Newport. Disturbance and displacement impacts on lesser black-backed gulls (whether from the Ramsar site or more locally) are likely to be negligible during the operational phase of the Proposed Development given their tolerance of human activity and generalist foraging behaviour and no identifiable impact can be concluded.
- 6.54. For the Severn Estuary SPA, Ramsar site and SSSI, the predicted impacts of the Proposed Development during the operational phase would be temporary long-term and would be of nil or negligible magnitude at the International (SPA and Ramsar) and National (SSSI) scale. This would lead to a potential effect that is Negligible and Not Significant.

Newport Wetlands SSSI and NNR

- 6.55. The ornithological features listed in the citation for Newport Wetlands SSSI comprise breeding birds (including avocet, redshank, lapwing, water rail, Cetti's warbler, bearded tit, ringed plover and little ringed plover) and wintering species (including shoveler, black-tailed godwit, gadwall, wigeon, shelduck, dunlin, redshank, whimbrel and curlew). The lack of suitable habitat on Site (i.e. an absence of marshes, scrapes, wetlands and reedbeds, etc) preclude there being connectivity with the SSSI for the large majority of listed species.
- 6.56. None of the listed ornithological species were recorded during the baseline surveys for the Proposed Development. The desk study data returned occasional records for shelduck, shoveler, wigeon, avocet, redshank and lapwing from the last ten years but all records came from the 2km buffer used in the search, and not from the Site itself. The Site cannot be considered an important area for these species, irrespective of whether the recorded individuals are associated with the SSSI or represent birds from the 'wider countryside' population.
- 6.57. The occasional use of watercourses and waterbodies within the 2km buffer of the Site suggests that disturbance or displacement impacts on these species' populations during the operational phase of the Proposed Development would be nil or negligible.
- 6.58. Regular commuting flights over the Site by qualifying species from the designated area would not be expected, however occasional flights overhead may still occur e.g. during spring and autumn migration. It has been hypothesised that the glare from photovoltaic panels can result in birds confusing a solar farm for a waterbody, which could attract waterbirds passing overhead, potentially disrupting migration or leading to collision, although a research review did not find strong evidence for the 'lake effect hypothesis' (Anderson et al, 2025). The panels of the Proposed Development would be low-profile (<3m in height) and non-intrusive relative to the existing landscape features of hedgerows, trees and buildings, which will help integrate the Proposed Development into the Site and wider area. The Proposed Development will,

therefore, not provide a novel feature in a uniform landscape as is the case in arid areas where attraction of waterbirds has been noted. Furthermore, the panels themselves would have a non-reflective coating and would have fixed tilt to the south, which would limit the occurrence of glare. A negligible impact is predicted from glint and glare on the listed ornithological features of the designated area.

6.59. For Newport Wetlands SSSI and NNR the predicted impacts of the Proposed Development during the operational phase would be temporary long-term and be of nil or negligible magnitude. This would lead to a potential effect that is **Negligible** and **Not Significant**.

6.60. For the reasons set out above it is considered that the proposed development duly accords with the requirements of criteria 3 and 4 of Policy 18 Future Wales.

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

6.61. 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 consolidated 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.

6.62. As set out in the accompanying Green Infrastructure Strategy, the Proposed Development seeks to follow the Step-wise Approach.

Step 1 – Avoid

6.63. The proposed development avoids direct impacts on all statutory designated sites for nature conservation. No designated sites are located within or adjoining the Site boundary, and the scheme has been designed to ensure no direct loss or encroachment occurs in relation to nearby designated features identified within the Environmental Statement. The Site was selected on the basis that it was considered that a viable solar farm could be designed and built in this location whilst avoiding key environmental assets as identified at the site selection stage, in line with the step-wise approach (Step 1 – Avoid).

6.64. The design evolution strategy was guided by the principles of avoiding, minimising or offsetting significant adverse environmental effects while maintaining operational efficiency and cost-effectiveness, and responding to feedback from consultations. Chapter 4, lists the design constraints which guided the positioning of the solar panels and infrastructure, of relevance to green infrastructure and Step 1 of the step wise approach including:

- Ecology: Avoiding direct/indirect impacts on habitats of principal importance and avoiding direct/indirect impacts on species protected under Welsh or international law;
- Ecology: Maintaining buffers of at least 5m around hedgerows and vegetation to retain and protect connectivity corridors for a multitude of species;
- Ecology/Arboriculture: Maintaining a 15m buffer (apart from one location) around ancient woodland to protect
- Ecology/Hydrology: Maintaining a 7m buffer where possible from watercourses and minimising the number and extent of new watercourse crossings;

- 6.65. The design evolution has been an iterative process that has considered the feedback from environmental surveys and consultation responses.

Habitats

- 6.66. As noted in Chapter 6 of the Environmental Statement, a variety of surveys have been undertaken during the design stage including habitat surveys, arboriculture surveys, individual species surveys, and surveys of abiotic factors including hydrology and soils. The results of these were used to avoid, where possible, permanent loss of high value and sensitive habitats.
- 6.67. Prior to construction the Ecological Clerk of Works (EcoCoW) will demarcate and set construction exclusion zones around watercourses, identified badger setts and any invasive, non-native species to avoid their spread during construction to avoid any spread of invasive, non-native flora.
- 6.68. Furthermore, the Newport, Torfaen and Monmouthshire Local Nature Recovery Biodiversity Action Plans were reviewed so that consideration of locally important species and habitats identified within it are appropriately accounted for and that net biodiversity loss of these species and habitats were avoided.

Woodland, trees and hedgerows

- 6.69. Stands of ancient woodland partially overlap the Site boundary. There will be no direct impacts on ancient woodland through land-take and buffers to protect ancient woodland have been built into the design, however, encroachment into a buffer is anticipated to occur in one location, to avoid impacts to a group of class C2 trees. There will be no direct impacts to the ancient woodland in this location; the proposals in this location are to use the existing fjord between Field 6a and 7b. In doing so, access between these fields is obtained as per current farming practices and negates the need for widening access along this linear feature and partially removing a group of class C2 trees.
- 6.70. Three veteran trees and one ancient tree has been identified within the Site. Direct impacts on these trees have been avoided.

Step 2 – Minimise

Design strategy

- 6.71. Once options for avoiding loss of or damage to biodiversity have been exhausted, Paragraph 6.4.15 (2) of PPW12 requires that applicants must seek to minimise the initial impact on biodiversity and ecosystems by e.g. maintaining the largest possible area of existing habitat supporting biodiversity and functioning ecosystems, particularly habitats and species where present; ensuring that retained habitats continue to be well connected to adjacent habitats; and retaining existing features.
- 6.72. As detailed in Chapter 4 of the Environmental Statement, the design has sought to balance the capacity for energy generation and environmental and technical constraints. It has not been possible, however, for the Proposed Development to avoid all environmental effects. As such, effects have been minimised wherever possible. The changes that were made during the design evolution relating to 'Step 2: minimise' include:

- Access tracks proposed to utilise existing hedgerow gaps wherever feasible;
- length of track minimised for haul road
- provide appropriate buffers between development and any ecological receptors and watercourses

6.73. The total developable area of the 131.62ha Site is 44.58ha with the remaining 36.1% of the Site retained as existing or enhanced with landscaping and/or ecological enhancements.

Habitats

6.74. Chapter 6 and the oCEMP describe measures taken to minimise the impacts of the Proposed Development on surrounding habitats and protected species. Some key minimisation measures include:

6.75. Protection of habitats will be implemented through the use of heras fencing/similar to protect ecological or hydrological features during the site preparation works and construction phase of the project.

- The works will adhere to 'British Standards BS5837:2012 Trees in relation to design, demolition and construction' as set out in Appendix 5.10.
- Pre-construction surveys for protected species will be undertaken (badger, water vole and otter) prior to the commencement of construction activities for the Proposed Development to confirm the presence or absence and to minimise disturbance. The results will inform any protection and/or mitigation requirements to minimise disturbance.
- Precautionary working method statements (PWMS) would be implemented to avoid significant impacts on dormouse and reptile populations, if present. The PWMS would include a 'toolbox talk', and a species-specific strategy to clear vegetation sensitively.
- A Fisheries Management and Monitoring Plan (FMP) will be implemented to record pre-, during, and post- construction fish populations with measures to protect fish during construction will be included in the CEMP.
- All construction work associated with watercourse crossings should be undertaken outside the recommended spawning, incubation and emergence times thus minimising disturbance.
- Pre-construction nesting bird surveys will be undertaken to locate any nests and minimise disturbance to breeding birds if works affecting vegetation cannot be undertaken outside the nesting season. If a new nest site should be located, works will avoid these areas during the period of between one hour before dusk and one hour after dawn.
- Best practice methods will be implemented during the construction and operational phase to reduce the impact on the water environment by managing risk from sedimentation and potential contamination.

- A sensitive lighting strategy will be implemented (no nighttime working) within 10 m of any watercourses and any lighting will be directed away from watercourses and terrestrial habitats to minimise disturbance.

6.76. The oCEMP sets out that works will be scheduled outside of bird breeding seasons, where possible (typically March to August) to minimise the likelihood of disturbing sensitive bird species. The pre-commencement surveys will identify any active nests up to a maximum of 750 m with protection measures to be implemented to prevent disturbance.

Step 3 – Mitigate/Restore

6.77. Paragraph 6.4.15 (3a) of PPW 12 states that where biodiversity and ecosystems could still be damaged or lost after measures to minimise impact, a proposal should mitigate that damage to limit the negative effects of the development.

Habitats and key species

6.78. Extensive ecological surveys have been undertaken (Chapter 6) and have informed the mitigation and compensation measures detailed in the oLEMP. Mitigation and compensation measures include (but are not limited to):

- Employment of an EcoCoW during construction to oversee ecologically sensitive activities, agree and monitor measures designed to minimise damage to retained habitats and; undertake pre-construction surveys/checks and advise on ecological issues and working restrictions where required.
- A detailed CEMP will be developed and implemented prior to construction to ensure all mitigations identified within the ES are implemented throughout the construction phase. This will be secured by a planning condition. Should signs of otter presence be confirmed, suitable mitigation measures will be implemented, as advised by the EcoCoW including but not limited to implementing appropriate exclusion zones (200 m from breeding holts, 30 100 m from non-breeding holts) and seeking a Mitigation Licence issued by NRW.
- An EcoCoW will demarcate relevant trees within the Site suitable for roosting bats prior to construction. Micro siting of proposed infrastructure will be employed to retain trees suitable for bat roosting where possible within the Site. Pre-construction inspections of trees and further surveys pre-cautionary working methods and licensing will be obtained if micro siting is not possible.

Woodland, trees and hedgerows

6.79. As outlined in Appendix 5.10, any tree works required to facilitate the Proposed Development will be carried out in accordance with British Standards BS5837. Tree protection measures shall be specified within an Arboricultural Method Statement (AMS). All retained trees and tree groups shall be protected by fencing. Any fenced areas will form a Construction Exclusion Zone and will remain undisturbed for the duration of construction unless approved works are required within it. Such works should be undertaken under arboricultural supervision and in line with an approved method statement. All site operatives should be made aware of the need to respect the fencing, and signage should be affixed to every third panel to ensure it is not moved.

- 6.80. PPW12 states that tree planting should be replaced at a 3:1 ratio. A total of 25 trees are proposed to be removed to facilitate the proposals, therefore, the replanting of 75 trees mitigates for this loss.
- 6.81. PPW12 does not state specific for hedgerow replacement, however, 161.5m of hedgerow are proposed to be removed, therefore, like-for-like replacement planting of 161.5m of hedgerow will mitigate for this loss.
- 6.82. Further planting is proposed and this is classified as enhancement (Step 4 – Compensate) and is set out below.

Water and drainage

- 6.83. The following key mitigation measures, as outlined in Chapter 9 and the oCEMP will be implemented:
- Pollution prevention measures, as well as spillage and emergency response procedures are included in the oCEMP. A Pollution Prevention and Incident Plan will be developed to manage the risk of pollution.
 - A Pollution Management Plan (PMP) will be developed.
 - A Flood Consequence Assessment and Surface Water Drainage Strategy
 - Construction Surface Water Management Plan will be developed;
 - A Water Quality Management Plan will be developed.
 - An outline Soils Management Plan which provides guidance on soil stripping and soil handling.
- 6.84. The above mitigations ensure land and water are managed sustainably through the implementation of robust plans. The measures included will protect sensitive ecosystems, safeguard soil integrity and maintain hydrological balance within the Site. Collectively this promotes long-term resilience of natural assets.

Step 4 – Compensate

- 6.85. Paragraph 6.4.15 (3b and 4) of PPW12 notes that where like-for-like mitigation measures are not possible it may be necessary to consider on-site compensation measures in the first instance. Off-site compensation measures should be considered as a last resort. Paragraphs 6.4.5 and 6.4.11 of the PPW12 also state that Net Benefit for Biodiversity should be provided either on or immediately adjacent to a subject site.
- 6.86. Although the losses have been minimised where possible, a total of 52 arboricultural features are identified for removal, partial removal or impacted due to construction of Site access, track widening, and earthworks. As proposed in the oLEMP, a suitable landscaping scheme is proposed. Of which the following is classified as compensation (enhancement) for the native tree and hedgerow losses; 26,792m² (2.6ha) of new woodland planting, 19no. native hedgerow trees, 19no. orchard trees and 2,241.5 linear m of hedgerow. Additionally, with sensitive working methods, and robust tree protection, the Proposed Development is considered arboriculturally acceptable. The remaining habitat loss associated with the Proposed

Development will be compensated by enhancing parts of the remaining habitat and creating higher quality habitats on areas of existing low-quality habitat. In line with the DECCA framework, measures are proposed to facilitate biodiversity enhancements.

6.87. To compensate and enhance for the loss onsite a number of habitats will be targeted for creation and enhancement and will be appropriately managed. In addition to the mitigation by design habitat creation and enhancement measures provided through Figure 5.5: Landscape Strategy the following measures will be included as part of the Proposed Development to provide ecological enhancement, as set out in and secured via the oLEMP. These measures have been identified based on the baseline surveys to date (as described above), consultation responses and local/national priorities. The measures include:

- 2,241.50 linear m of hedgerow planting;
- Approximately 2.6ha of new woodland planting;
- 18no. native hedgerow trees;
- 18no. orchard trees;
- Enhancement of approximately 0.18ha existing low value (modified grassland) grassland to botanically diverse grassland;
- Enhancement of approximately 22.84ha of existing low value (modified grassland) grassland to other neutral grassland;
- Enhancement of approximately 9.7ha of arable land to organic set-aside;
- Enhancement of approximately 4.3ha coastal floodplain grazing marsh;
- Creation of hibernacula to improve shelter and refuge opportunities for wildlife;
- 44 no. general purpose bird boxes (mixture of hole and open-fronted);
- 4 no. barn owl boxes;
- 2 no. raptor boxes;
- 30 no. bat boxes, including minimum;
- 5 no. hibernation boxes;
- 5 no. colony boxes;
- 10 no. reptile/ amphibian refugia;
- 10 insect hotels; and
- 10 no. hedgehog boxes.

- 6.88. These measures would more than mitigate/compensate for the habitat losses of the Proposed Development and would provide enhancements by targeting key species and leading to a net biodiversity benefit across the Site in line with PPW12.
- 6.89. Enhancement opportunities are multi-faceted and will all contribute to increasing the resilience of ecological networks onsite and in the surrounding area. Enhancement opportunities are detailed in the accompanying Outline Landscape Ecological Management Plan.
- 6.90. Through implementation of the measures within the oLEMP, the project will achieve a net benefit for biodiversity, for habitats and species.
- 6.91. No significant effects on biodiversity are likely through the adherence of the avoidance, minimisation, mitigation and compensation measures set out above.
- 6.92. The oLEMP has demonstrated how net benefit for biodiversity can be delivered for habitats and species, through at least the construction, operation and decommissioning phases, whilst improving green infrastructure and the resilience of ecosystems.
- 6.93. The proposed ecological enhancements fit with the Diversity, Extent, Condition, Connectivity and Aspects of ecosystem resilience and adaptability (DECCA) Framework⁴

Step 5 – Development of management plans

- 6.94. The Proposed Development will include management plans over the lifetime of the Proposed Development that will provide long-term control and security of the enhancements documented.
- 6.95. Monitoring of the implementation of dust and pollution prevention measures included in the oCEMP will be the responsibility of the contractor. Further specific associated management plans have been recommended, and would be implemented through the CEMP prior to construction works. These include plans such as the Soils Management Plan, Drainage Management Plan, and Water Quality Management Plan as well as Species Protection Plans and a Fisheries Monitoring and Management Plan.
- 6.96. Monitoring is proposed as part of the oLEMP during operation this would consist of checks of the habitat enhancement measures detailed in the oLEMP. The monitoring plan would also include details of checks of the habitat mitigation and habitat enhancement measures, and details of response and remediation measures in the event that mitigation/enhancement measures are found not to be performing.
- 6.97. Monitoring would be also undertaken during construction in accordance with the oCEMP in relation to pollution prevention measures, drainage management, dust prevention and suppression measures, fish monitoring and water quality monitoring (pre, during and post-construction).
- 6.98. The monitoring that will be implemented above, will contribute to ensuring that land, air and water will be managed sustainability, through measures to reduce pollution, and improved

⁴ Garrett HM., and Ayling SC. (2021) Terrestrial and freshwater Resilient Ecological Networks: a guide for practitioners in Wales. 43 pp. NRW Report No. 483 Natural Resources Wales. Dolgellau. Available at [Terrestrial and freshwater Resilient Ecological Networks: a guide for practitioners in Wales](#)

management of water quality for on-site water resources. The new planting monitoring, as proposed in the oLEMP, demonstrates the commitment to improve the ecosystem quality by allowing native species to thrive, improving biodiversity, connectivity, and habitat management to ensure longevity, a key theme within the South East Wales Area Statement.

- 6.99. 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

- 6.100. Chapter 8 of the Environmental Statement and its supporting Heritage Assessment 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 also been considered. The salient points are summarised below.
- 6.101. With regards to archaeology, the proximity of the Site to Candwr Camp and the presence of other Iron Age sites in the wider landscape raises potential for remains from these periods to occur within the Site. The geophysical survey identified anomalies in Parcel 4 that could possibly represent the remains of an enclosure, but the interpretation is tentative. Any remains of Iron Age livestock enclosures, field systems or trackways would likely be considered non-designated historic assets of local significance.
- 6.102. One HER monument coincides with the redline boundary of the Site: the postulated route of a Roman road. There is considered to be potential for Roman metallurgy below the modern road surface, as well as infilled ditches on either side of the road agger. Such remains would most likely be considered a non-designated historic asset of local to regional significance.
- 6.103. During the Roman period it is possible that the Site was part of the agricultural hinterland of the legionary fortress and civilian settlement of Caerleon. There is potential for the infilled ditches of Roman livestock enclosures or field systems and perhaps trackways. Such remains would likely be considered non-designated historic assets of local significance.
- 6.104. There is nothing to suggest that the medieval settlement of Llanfrehfa extended into the Site, or that the Site was part of the medieval monastic estate of Llantarnam Abbey or the medieval deer park of Llanvihangel Park. The Site has likely been in agricultural use from the medieval period onwards. Evidence of historic agricultural activity would be considered non-designated historic assets of no more than local significance.
- 6.105. Following discussions with Heneb, embedded and additional mitigation has been secured. The access track through Parcel 4 has been re-routed to ensure construction groundworks do not impact the possible enclosure. Heras fencing will also be erected around the enclosure for the duration of the construction phase to protect it from impacts arising from plant movements. Suggested limits for the fenced area, comprising a 5m buffer from the geophysical survey anomalies, is illustrated on the Landscape Strategy ("Area of Below-Ground Archaeological Sensitivity"). The requirement for Heras fencing will need to be included in the final CEMP.
- 6.106. It has also been agreed with Heneb that the low archaeological potential of the remainder of the Site does not warrant an archaeological trial trench evaluation either pre or post consent.

6.107. Turning to the built heritage, all designated historic assets within a minimum 3km radius of the Site have been subject to an appropriate and proportionate level of setting assessment in accordance with Cadw guidance. A select group of assets, which were deemed sensitive to the Proposed Development on account of their physical proximity to and intervisibility with the Site, and their potential visibility of the Proposed Development as demonstrated by screened zone of theoretical visibility modelling, were progressed for further assessment with the Environmental Statement, as listed below: –

- Parcel 10 contributes to the significance of the Scheduled Monument of Candwr Camp;
- The northern / western part of Parcel 13 contributes to the significance of the Grade II* Listed All Saints Church;
- Parcel 7 contributes through setting to the significance of the Grade II Listed Glansirhowy Farmhouse;
- The long thin field of Parcel 3 contributes through setting to the significance of the Grade II Listed Little Creigydd; and
- The eastern part of Parcel 12 contributes to the significance of the Grade II Listed Barn at Pen-twyn Farm.

6.108. The likely effect for each asset are discussed in turn below.

Scheduled Monument of Candwr Camp

6.109. During the construction phase, construction traffic along the section of Candwr Road adjacent to Candwr Camp will be visible and audible from Candwr Road itself, as well as the public right of way around the northern and western sides of the asset. The distraction of the sight and sound of heavy goods vehicles may compromise the ability to appreciate the asset and its landscape setting. It is considered that this will constitute a minor magnitude of change to the very high significance of the asset. This will equate to a moderate adverse effect, which is considered 'not significant'.

6.110. For the operational phase of the development, the Proposed Development will be partially visible from Candwr Camp and its immediate surrounds, specifically:

- 40–60% from a discrete location just south of centre within the interior;
- 20–40% from the remainder of the interior;
- 20–40% from the exterior of the western and northern ramparts; and
- Less than 20% from the exterior of the eastern and southern ramparts.

6.111. To illustrate the 20–40% visibility predicted for the western and northern ramparts, a photomontage has been produced for a viewpoint on the public footpath to the north of Candwr Camp. The current, outward north-westerly view is characterised by pasture in the foreground, woodland and the house and barns of Candwr Farm in the foreground to midground, the large building of The Grange University Hospital in the further midground, and high ground (moorland) in the background.

- 6.112. At Year 1, there will be glimpses of a very small area of solar panels in the south-eastern fields of Parcel 13 to the north-west. These glimpses will appear between the canopies of the trees in the midground, below the moorland in the background. There will also be visibility of a small area of solar panels in Parcel 5, seen behind Candwr Farm and partially screened and softened by intervening hedgerows. There may be greater visibility of the Proposed Development in outward views from the interior of Candwr Camp, but overall, the combined visibility from the interior and the perimeter of the asset is anticipated to be limited. Glimpses of the solar arrays within the wider panoramas will not compromise the ability to appreciate the asset's form or to understand its geographical and topographical context; and the overall character of the surrounding landscape as experienced in these views will not be altered.
- 6.113. It is considered that the Proposed Development will have at most a minor magnitude of change to the very high significance of Candwr Camp. This will equate to a **moderate adverse** effect, which is considered '**not significant**'.
- 6.114. As mitigation by design for Candwr Camp, solar infrastructure has been excluded from the southern field of Parcel 10. This field, which is most proximate to the asset and is co-visible in certain views towards the asset, will be maintained as grassland.

Grade II* Listed All Saints Church at Llanfrechfa

- 6.115. Construction traffic will not pass through the village of Llanfrechfa. However vehicles and machinery will be in operation in the nearby fields of Parcel 13. Noise from these fields may disturb the currently tranquil character of the churchyard, which is the location from where the church is best experienced. It is considered that this will constitute a minor magnitude of change to the very high significance of the asset. This will equate to a moderate adverse effect, which is considered 'not significant'.
- 6.116. Turning to the operational phase of development, the Proposed Development will be partially visible from All Saints Church and its immediate surrounds, specifically:
- Less than 20% on the approach via Church Road;
 - Less than 20% from the majority of the churchyard, with 0% at the south-eastern corner and tiny pockets of 20-40% and 40-60% in the west, centre, and north-east;
 - Between 0% and 60% from the public footpath extending from Church Lane through the field to the south of the church, up to the redline boundary of the Site (Parcel 13);
 - 20-40% and 40-60% from the public footpaths through Parcel 13;
 - Less than 20% from the lane that branches north from Church Road and eventually connects with the track to Pant-yr-eos; and
 - For the most part 20%, but with a section of 20-40%, from the public footpath extending north from Llanfrechfa to Glansirhowy.
- 6.117. The Proposed Development will result in some visible change to the historic landscape character of the wider setting of All Saints Church, as experienced in dynamic views when traversing the public right of way network through the agricultural hinterland of Llanfrechfa village.

- 6.118. It is considered that the Proposed Development will have a minor magnitude of change to the very high significance of All Saints Church. This will equate to a moderate adverse effect, which is considered 'not significant'
- 6.119. As mitigation by design for All Saints Church, solar infrastructure has been excluded from the western field of Parcel 13. This field, which is most proximate to the asset and features in views towards the asset, will be maintained as grassland.

Grade II Listed Building of Glansirhowy Farm

- 6.120. During the construction period, construction traffic will not use the road and farm track from Llanfrechfa to Glansirhowy. However vehicles and machinery will be in operation in the nearby fields of Parcels 6 and 7. The distraction of the sight and sound of heavy goods vehicles may compromise the ability to appreciate the asset within its wider landscape setting. It is considered that this will constitute a minor magnitude of change to the high significance of the asset. This will equate to a slight adverse effect, which is considered 'not significant'.
- 6.121. For the operational phase of development, the Proposed Development will be partially visible from Glansirhowy Farmhouse and its immediate surrounds, specifically:
- Less than 20% from the public footpath to the west of the farm;
 - Less than 20% from the lower third, and 20–40% with a small section of 40–60% from the central and upper third, of the lane and farm track from Llanfrechfa to Glansirhowy; and
 - Less than 20% from the lower section, and 20–40% from the mid- and upper section, of the continuation through Parcel 7 of the aforementioned public footpath from Llanfrechfa.
- 6.122. The current easterly view looks across the valley of Candwr Brook towards a point of high ground occupied by the buildings of Creigydd Farm. At Year 1, there will be visibility of solar panels on the east-facing slopes of Parcels 6 and 7, which descend towards Candwr Brook; and of solar panels on the south-east-facing slopes of Parcels 4 and 5. In this view, however, Glansirhowy Farmhouse itself is not co-visible.
- 6.123. The Proposed Development will result in a visible change to the historic landscape character of part of the immediate setting of Glansirhowy Farmhouse (namely, Parcels 6 and 7). This change will be experienced in views from the farmstead and from the lanes/tracks and footpaths that lead towards and offer partial views of the farmstead (including the footpath through Parcel 7 itself).
- 6.124. It is considered that the Proposed Development will have a minor magnitude of change to the high significance of Glansirhowy Farmhouse. This will equate to a slight adverse effect, which is considered 'not significant'.
- 6.125. As mitigation by design for Glansirhowy Farmhouse, solar infrastructure has been excluded from the western margin of Parcel 7A. This will retain a sense of openness to the public footpath and reduce co-visibility of the Proposed Development in the south-westerly views towards the asset.

Grade II Listed Building of Little Creigydd

- 6.126. During the construction period, construction traffic along the unnamed road outside the southern boundary of Parcel 3 will be visible and audible from the road itself, as well as the track that branches north to provide access to Little Creigydd. The distraction of the sight and sound of heavy goods vehicles may compromise the ability to appreciate the asset within its wider landscape setting. It is considered that this will constitute a minor magnitude of change to the high significance of the asset. This will equate to a slight adverse effect, which is considered 'not significant'.
- 6.127. For the operational phase, the Proposed Development will be partially visible from Little Creigydd and its immediate surrounds, specifically:
- Less than 20% from the farmstead itself; and
 - Less than 20% from the road to its south and east; and
 - Less than 20% from the public footpath across the field to the west.
- 6.128. The Proposed Development will result in extremely little visible change to the historic landscape character of the immediate setting of Little Creigydd. The most proximate solar infrastructure in Parcel 3 is positioned off the high ground, on opposite-facing slopes to the asset, and so is not anticipated to be co-visible in views from or towards Little Creigydd.
- 6.129. Any visibility of solar infrastructure elsewhere within the Site, in views from or towards Little Creigydd, would be partial and long-ranging, and would not compromise the ability to appreciate and understand Little Creigydd within a rural agricultural context.
- 6.130. It is considered that the Proposed Development will have a minor adverse magnitude of change to the high significance of Little Creigydd. This will equate to a slight adverse effect, which is considered 'not significant'.
- 6.131. As mitigation by design for Little Creigydd, solar infrastructure has been excluded from the majority of Parcel 3. Panels are located only on the north-west facing slopes of the north end of the parcel. The long field in the north-eastern part of the parcel, which is most proximate to the asset and features in views from and towards the asset, will be maintained as grassland.

Grade II Listed Building of Barn at Pen-twyn Farm

- 6.132. Construction traffic will not use the private drive to Pen-twyn Farm. However, vehicles and machinery will be in operation in the nearby fields of Parcel 12. The distraction of the sight and sound of heavy goods vehicles may compromise the ability to appreciate the asset within its wider landscape setting. It is considered that this will constitute a minor magnitude of change to the high significance of the asset. This will equate to a slight adverse effect, which is considered 'not significant'.
- 6.133. Once operational, the Proposed Development will be partially visible from Pen-twyn Farm and its immediate surrounds, specifically:
- 20-40% from the private drive to Pen-twyn Farm;
 - Less than 20% from the public footpath through the fields due south of Pen-twyn Farm (outside the Site); and

- Less than 20% from the westerly continuation of that same public footpath through the south end of Parcel 12– with the exception of a short section with 20–40%.

- 6.134. The Proposed Development will result in some visible change to the historic landscape character of the immediate setting of Pen-twyn Farm. The most proximate solar infrastructure in Parcel 12 is set back from the private drive and screened by the intervening hedge, and is not anticipated to be co-visible in views towards or from the asset. Any co-visibility of the solar infrastructure in Parcels 12 and 15 (or elsewhere) in views towards Pen-twyn Farm through the fields to its south (outside the Site) are not anticipated to detract from an appreciation of the asset in its historic agricultural landscape context – since farmland will remain in the foreground of the view.
- 6.135. It is considered that the Proposed Development will have a minor magnitude of change to the high significance of the Barn at Pen-twyn Farm. This will equate to a slight adverse effect, which is considered 'not significant'.
- 6.136. As mitigation by design for the Barn at Pen-twyn Farm, solar infrastructure has been excluded from the southern margin of Parcel 12D, thereby achieving offset from the private drive to the farmstead and minimising visibility of the Proposed Development on the approach to the asset.
- 6.137. Overall, the proposed development would conform with the requirements of 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

- 6.138. 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.
- 6.139. Noise and vibration are considered through the Noise Assessment which accompanies the pre-application consultation. The report has presented an assessment of the noise levels attributable to the operation of the solar farm at surrounding noise-sensitive properties, to enable potential constraints to be identified. The assessment establishes that the proposal would not increase the prevailing background noise levels at these properties. Accordingly, the proposal would not result in the potential for any adverse noise impacts.
- 6.140. With regard to the construction phase, 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 appropriate levels.
- 6.141. In terms of reflected light, this is considered through Chapter 7 Glint and Glare of the Environment Statement and its supporting Solar Photovoltaic Glint and Glare Study. In total, 153 dwelling receptors have been geometrically assessed to model residential properties within 1km of the panel areas, with solar reflections are geometrically possible towards 132 of the 153 assessed dwellings. It is noted that since the proposed panels are south-facing, properties located to the north of the site have not been modelled as reflected light is geometrically unachievable.

- 6.142. Of the 132 dwellings, no impacts are predicted on 126 dwellings due to existing vegetation, buildings, and/or intervening terrain that obstruct views of the reflecting panels. Of the remaining 6 assessed dwellings, existing vegetation and/or buildings are deemed to partially obstructs views of the reflecting panels, however residual views are considered possible, either in the early morning or late evening under clear sky conditions. This assessed as being minor and not significant.
- 6.143. Turning to the local highway network, solar reflections are geometrically possible towards a 2.8km section of the B4236 and a 1.95km section of Usk Road. For all sections of the B4236 and Usk Road, existing vegetation, buildings, and/or intervening terrain are predicted to significantly obstruct views of the reflecting panels such that solar reflections are not predicted to be experienced in practice. No impact is predicted and mitigation is not required.
- 6.144. Turning to aviation considerations,
- Grange Hospital Helipad – Solar reflections with an intensity of ‘low potential for temporary after-image’ are geometrically possible towards the 2-mile helicopter approach paths. This category of glare intensity is acceptable in accordance with the associated guidance and industry best practice. A low impact is predicted and mitigation is not required.
 - Park Farm Airfield – Solar reflections with an intensity of ‘low potential for temporary after-image’ are geometrically possible towards sections of the splayed approach paths and the final sections of the visual circuits for runway 06/24. This intensity of glare is considered acceptable in accordance with the associated guidance (Appendix D) and industry best practice. A low impact is predicted and mitigation is not required.
 - Croes-Carn-Einion Farm Airfield, Upfield Farm Airfield, and Kemeys Commander Airfield – Solar reflections towards the splayed approaches and final sections of visual circuits at Croes-Carn-Einion Farm Airfield, Upfield Farm Airfield, and Kemeys Commander Airfield are predicted to occur outside a pilot’s field-of-view (50 degrees on either side relative to the runway threshold bearing) or have intensities no greater than ‘low potential for temporary after-image’. Overall, no significant impact upon aviation activity associated with Croes-Carn-Einion Farm Airfield, Upfield Farm Airfield, and Kemeys Commander Airfield is predicted.
- 6.145. Turning to air quality, Chapter 12 of the Environmental Statement assesses the likely significant effects of the Site on air quality during the construction and decommissioning stage. The assessment considers the potential effects of nitrogen dioxide (NO₂) and particulate matter (PM₁₀ and PM_{2.5}) produced from vehicles and machinery, as well as dust, on sensitive receptors. These receptors primarily comprise nearby residential properties and locations where people may be regularly present, alongside ecological receptors where relevant.
- 6.146. The methodology defines a study area surrounding the Site and considers baseline air quality conditions, the characteristics of potential emission sources, and the sensitivity of receptors in order to identify and evaluate likely significant effects, together with any required mitigation measures and the resulting residual effects.
- 6.147. The construction works have the potential to create dust. During construction it will therefore be necessary to apply a package of mitigation measures to minimise dust emissions.

Comprehensive guidance has been published by the IAQM23 that describes measures that should be employed, as appropriate, to reduce the impacts, along with guidance on monitoring during demolition and construction. This reflects best practice experience and has been used, together with professional experience of the consultant who has undertaken the dust impact assessment and the findings of the assessment, to draw up a set of measures that should be incorporated into the specification for the works. Appropriate measures have been recommended, and with these measures in place, it is expected that any residual effects will be 'not significant'.

- 6.148. The potential air quality effects of the Site in the decommissioning phase will be similar to those in the construction phase, due to the similarities being undertaken (although there will be demolition but no construction). The same mitigation measures have been recommended during the decommissioning phase as during the construction phase.
- 6.149. In addition, an Outline CEMP and Outline CTMP will be adopted to minimise the impacts of the construction works. The mitigation measures described above will be integrated into the Outline CEMP.
- 6.150. With regards to electromagnetic disturbance, all equipment that generates, distributes or uses electricity produces electric and magnetic fields (EMFs). The proposed substation accompanying the application would conform 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.
- 6.151. 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)

- 6.152. 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

- 6.153. The application is supported by an Outline Construction Traffic Management Plan. The salient points of the report are set out below.
- 6.154. All potential construction traffic routes to the site have been considered and presented to the local highway authorities. The initial strategy was to split deliveries equally between two

routes with construction traffic heading to one of two construction compounds located centrally within the site. The first route was from the south from the M4, the B4236 through Caerleon, Candwr Road and then the unnamed rural roads leading to the site. The second route was from the northwest via the A4042, Tre-Herbet Road and then the unnamed rural roads leading to the site. Routing from the west via the A4042, the B4236 Caerleon Road and Candwr Road was discounted from the initial routing strategy set out above due to a constrained junction. The constrained junction was the B4236 Caerleon Road/Candwr Road priority junction and swept path assessments confirmed that vehicles ranging from 16.5m articulated HGVs down to 10m rigid HGVs were unable to navigate this junction to and from the west. Routing from the west via the A4042, the B4236 Caerleon Road and Church Road was also discounted as Church Road and the unnamed road leading to the site are unsuitable to accommodate HGV traffic. Routing from the northeast via the A449 through Usk was also discounted due to the weight restrictions and a low bridge through the village.

6.155. In November 2025, a meeting was held between the three local highway authorities (TCBC, MCC, and NCC), Pegasus Group, and the Applicant. The initial routing strategy and reasoning behind the discounted routes as set out above were presented at the meeting. The forecast vehicle trips associated with the construction phase were also discussed at the meeting with details on this provided in Chapter 7 of the Environmental Statement. The key points raised by the local authorities were:

- MCC officers confirmed that routing to the site from the north-east via the A449 through Usk is not possible due to the weight restrictions and a low bridge.
- MCC officers advised that although construction traffic could technically route along Tre-Herbet Road to the northwest of the site, the unnamed roads leading to the site from Tre-Herbet Road are not suitable for use by large HGVs.
- NCC officers were strongly opposed to construction traffic routing from the south through Caerleon noting that the main one-way system through the town is narrow and can get heavily congested.
- NCC officers also advised that Caerleon is an Air Quality Management Area (AQMA) and there are restrictions placed on HGVs routing through the AQMA.
- The consensus among highway officers from all three authorities was that routing HGVs along the unnamed rural lanes surrounding the site directly to the construction compounds was undesirable.

6.156. It was suggested by highway officers that a potential haul route could be implemented from the A4042 or the B4236 directly to the site in order to limit the impact of construction traffic on the local highway network. TCBC highway officers advised that evidence would need to be provided to prove that the impact on the A4042 and B4236 roundabouts near the Grange Hospital would not be severe. Following the November pre-application meeting, routing options were re-considered, and a revised strategy was devised. Further to suggestions by highway officers, the Applicant was able to secure additional land to facilitate a haul road between the B4236 Caerleon Road and the southeast of the site via Land Parcel 14. The revised routing strategy was to bring the majority of construction vehicles into the site via a new haul road access served from the B4236 Caerleon Road accessed to and from the west via the A4042. HGVs would then decant their loads in a primary compound, and smaller vehicles would distribute the loads around the site and to the secondary construction compounds as required. The Applicant also sought to bring a minority of construction

deliveries from the north via Tre-Herbet Road to Land Parcel 3 via Tre-Herbet Road and the Unnamed Road leading to the site. These vehicles would be limited in size so that no 16.5m HGVs would use this route.

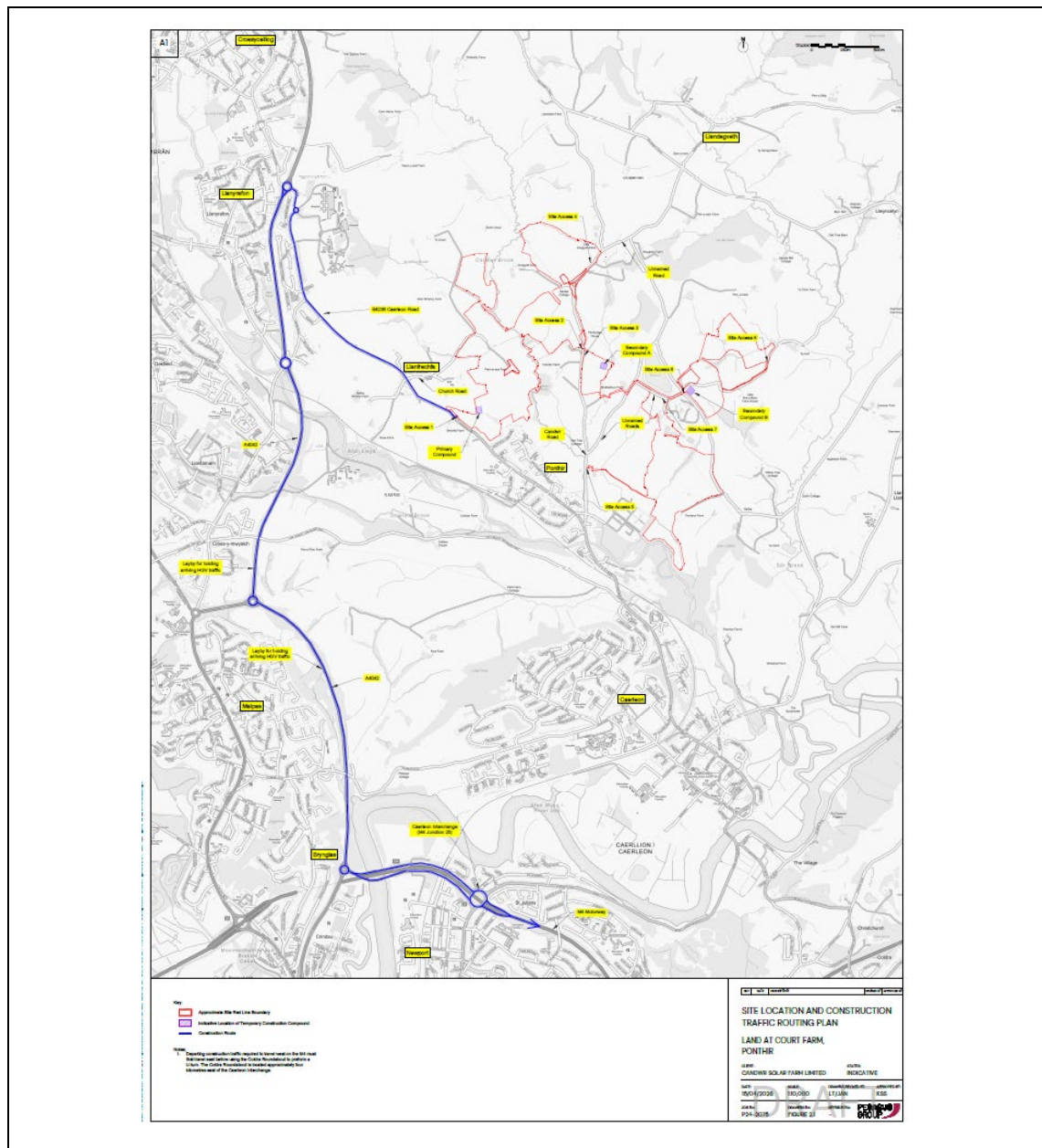
6.157. This revised routing strategy was presented to TCBC, MCC and NCC at a follow up meeting in March 2026. The key points raised by the local authorities were:

- MCC and NCC highway officers were supportive of the proposed haul road as an alternative route to the site but were opposed to routing a minority of deliveries from the north to access Land Parcel 3. They reiterated what was discussed in the initial meeting that this route was unsuitable for HGVs of any size, and suggested that Land Parcel 3 could be served via tractor and trailers as is proposed for the rest of the site. The Applicant agreed with highway officers, and the decision was made during the meeting to route all construction traffic to the site via the haul road instead.
- The TCBC highway officer advised that although the revised route provided advantages over the previously proposed routes, there was concern about construction traffic routing past the Grange Hospital. Pegasus Group outlined a suite of mitigation measures that could be implemented to limit the impact of construction traffic in this location. The TCBC highway officer confirmed that the mitigation measures seemed sensible but could not provide a definitive opinion until presented with full details of the mitigation, backed up and supported by evidence in the form of traffic survey data.

6.158. Further to the pre-application discussions with local highway authorities, the proposed route for all construction traffic associated with the scheme is:

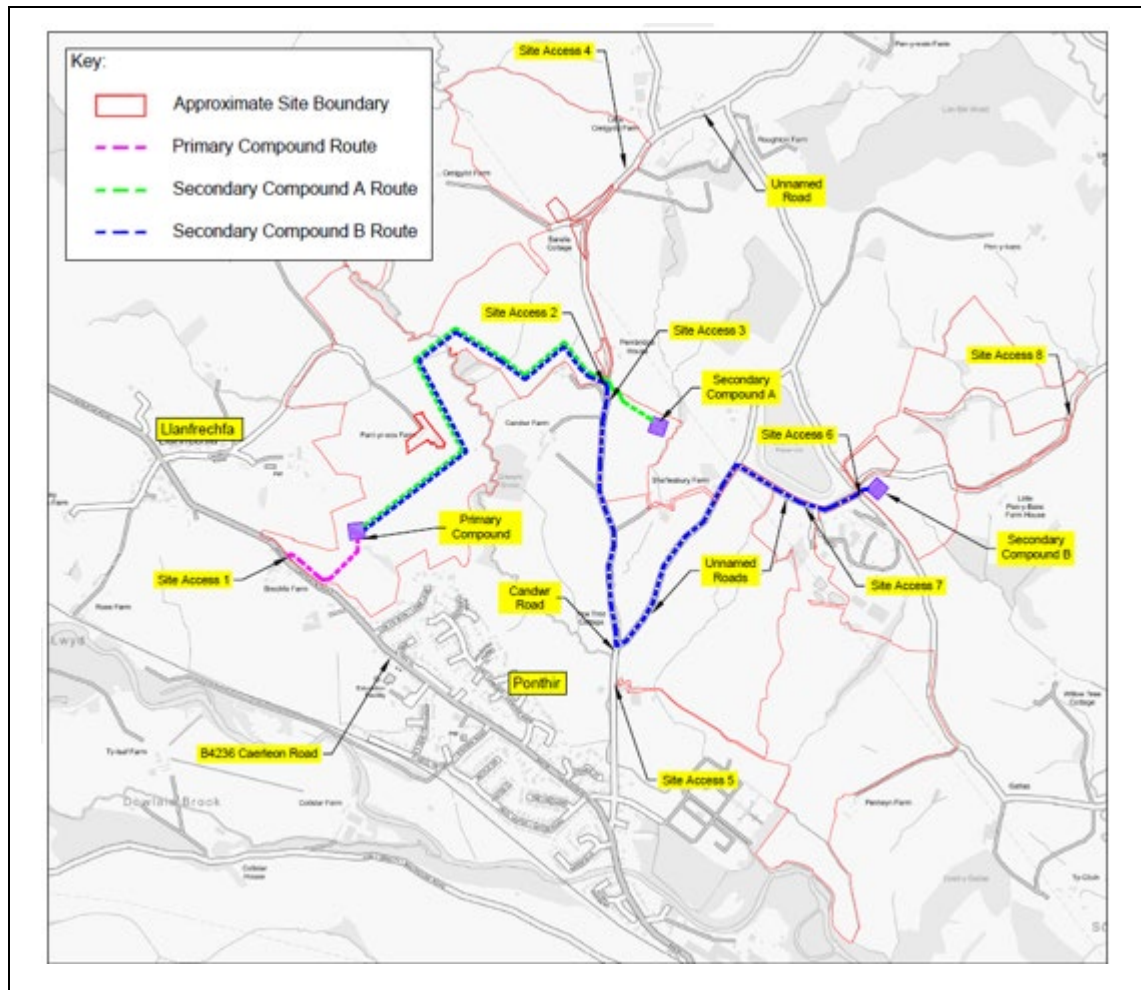
- Exit the M4 at Junction 25A turning north onto the A4042.
- Follow the A4042 north for approximately five kilometres.
- At the Turnpike Roundabout turn right onto B4236 Caerleon Road following it southeast before turning left into the site.

6.159. This route will be used for all traffic associated with the site including HGV deliveries and construction workers. Departing construction traffic will follow the same route in the opposite direction, and illustration of the route is set out below.



- 6.160. The solar farm components will be transported to the site by HGVs the majority of which will be 16.5 metre long articulated HGVs or smaller. At least one Abnormal Indivisible Load (AIL) delivery is also anticipated which will be subject to a detailed route assessment in due course. Once materials and plant have been delivered to and decanted within the primary construction compound, smaller vehicles (tractor and trailer) will transfer the materials to the rest of the site and the secondary compounds, as required. Three temporary construction compounds are proposed during the construction phase of the development, including one primary compound and two secondary compounds. All HGVs will route directly to the primary compound via the haul road where they will decant their loads, before smaller vehicles distribute plant and material around the site or to the secondary compounds as required. This approach removes the need to route construction traffic in from the south via Caerleon or the north via Tre-Herbet Road.

- 6.161. The illustration below shows the suggested location of the primary and secondary construction compounds, together with the internal routing.



- 6.162. A total of 408 deliveries (816 two-way movements) are forecast to be associated with the construction of the site. During the peak delivery periods there could be up to two HGV deliveries per day (four two-way movements) on average. Deliveries will be limited to outside of the highway network peak periods (08:00–09:00 and 16:00–17:00). The Grange Hospital roundabout currently operates with around 316 HGV movements during the day (not including movements undertaken between 20:00–06:00). It is not considered that the additional four daily two-way HGV movements will have a material impact on the operation or safety of the Grange Hospital roundabout or the wider local highway network.
- 6.163. The construction vehicles will only access the site via the designated construction traffic route identified in this CTMP. An appropriate signage scheme will be put in place from the A4042 for HGV drivers to follow. Drivers will be informed of the route prior to departing for the site and will be advised not to use Sat-Nav.
- 6.164. Temporary construction signage will be located within the site adjacent to the main Site Access 1 indicating that construction vehicles are required to turn right out onto the B4236 Caerleon Road. This will ensure that construction vehicles will not turn left out of the site

access point and will only depart northwest towards the A4042. In the unlikely event of unforeseen road closures or adverse weather conditions, deliveries to the site will be held to prevent HGVs from routing through local towns and villages. It is considered that this can be secured by an appropriately worded planning condition. Appropriate signage will be displayed in strategic locations within the vicinity of the site accesses, warning other road users of potential slow moving construction traffic in the area. The signage will be provided in accordance with TSRGD standards in Welsh above English, the details and location of which will be agreed with the highway authority prior to commencement of the development.

- 6.165. Deliveries to the site will be limited to outside the typical highway network peak hours and will occur between 10:00–16:00 Monday to Friday, and between 08:00–13:00 on Saturdays. This will also avoid the peak periods at the Grange Hospital roundabout. A member of the construction team can be situated at the Grange Hospital roundabout during deliveries to monitor for emergency situations and warn approaching HGVs if an emergency situation is occurring so they can wait on A4042 as they approach until the situation clears.
- 6.166. After energisation, it is anticipated that maintenance vehicles will access the Site on an ad-hoc basis, when required, with around four maintenance trips forecast to the Site per month. Maintenance trips will generally be made by 4x4 or a small van type vehicle. Whilst the contractor's compounds will have been removed, space will remain within the site for such vehicles to turn around to ensure that vehicles can turn and exit in a forward gear.
- 6.167. It is expected that decommissioning the site will involve a similar profile of vehicles as the construction phase with processes predominately in reverse of those which will be undertaken during the construction phase. This would be dealt with at the time of decommissioning.
- 6.168. 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

- 6.169. 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 prior to the start of construction.

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

- 6.170. 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.
- 6.171. The applicant / operator 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 is therefore in position to provide the appropriate provisions for the decommissioning of the scheme.

- 6.172. 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.
- 6.173. Overall, Candwr Solar Farm duly accords with the 11 principles set out in Policy 18 of Future Wales and when weighed against the benefits, the proposal would favour approval.

Sustainable Development

- 6.174. Welsh Government's main outcomes for the planning system reflect their vision of sustainable development which means the process of improving the economic, social, environmental and cultural well-being of Wales by taking action, in accordance with the sustainable development principle, aimed at achieving the well-being goals. Overall, this means meeting the needs of the present without compromising the ability of future generations to meet their own needs. The provision of renewable energy plays an important part within Welsh Government priorities towards reducing carbon emissions, as part of decarbonisation, whilst enhancing the economic, social and environmental well-being of the people and communities of Wales.
- 6.175. Solar projects create opportunities for local businesses through the supply chain, including aggregates suppliers, security and monitoring during operation, farming and landscaping contractors and other aspects of the construction process, such as fencing. Construction workers may also use local services, which can bring further benefits to an area.
- 6.176. It is estimated that there will be around 52 on-site jobs generated during the construction period, which is estimated to be up to 9-months. These on-site employment opportunities will support further jobs in the supply chain, which is known as the multiplier effect. Research published by the Centre for Economics and Business Research (Cebr) suggests an employment multiplier for large-scale solar PV investments of 2.33 – i.e. for every job supported on-site, 1.33 indirect/induced jobs are supported in the wider economy. Applying this multiplier to the 52 on-site jobs, the Scheme could support 69 temporary jobs in the wider economy during the 9-month build phase. In total, the Scheme could support 121 temporary jobs, both direct jobs on-site and indirect/induced roles in the wider economy, during the 9-month construction period. A similar number of jobs are expected to be supported as part of the decommissioning process after 40 years when the solar project comes to the end of its lifespan.
- 6.177. Another way of looking at the economic impact of the construction phase is to calculate the contribution a development makes to wealth creation, as measured by the increase in the value of goods and services generated within an area. This can be done by looking at the increase in gross value added (GVA), a common proxy for economic output. Using ONS data, it is possible to calculate GVA per employee by sector at a regional level.
- 6.178. The Cebr report referred to in paragraph 9.5.2 gives a GVA multiplier of 2.39. This means for every £1 of GVA generated by on-site activities, a further £1.39 of GVA is generated in the

wider economy. Factoring this into the analysis, the overall GVA impact associated with the construction phase is estimated at £6.8million (£2.8million associated with the on-site construction jobs and £4million from the multiplier effects) over the 9-month build timeframe.

- 6.179. Turning to the operational phase, research published by Cardiff University suggests that 0.4 Full Time Employment jobs will be produced per MW installed for solar/Photovoltaic (PV) schemes during the operational phase. Applying this to the Proposed Development and cumulative sites combined (156 MW), once operational the Scheme could support up to 62 full-time equivalent (FTE) jobs on-site and in the wider economy.

- 6.180. Overall, the Proposed Development is considered to provide significant beneficial effects for the south east region during the construction phase in relation to employment and economic contribution. Significant beneficial effects are expected to be provided during the decommissioning phase in relation to economic contribution. Negligible beneficial effects are predicted in respect of employment, economic contribution and business rates revenue once operational.

- 6.181. Social gain would be provided through the generation of local electricity that will be connected directly to the local grid; the proposal would reduce reliance upon overseas energy sources. The energy production would help to meet the national and local need for energy and therefore the development would fulfil an important social role. Furthermore, as part of the community benefits associated with the application proposal, the Applicant is proposing a legacy community benefit fund. Details of the fund will be discussed with the council and community councils prior to the start of construction.

- 6.182. Turning to environmental gains, these would be secured through carbon reduction and local biodiversity enhancements. The proposed solar farm presents a considerable opportunity to deliver landscape and biodiversity enhancement measures.

- 6.183. The proposed development would therefore deliver on the environmental arm of sustainable development.

- 6.184. With regards to need, Planning Policy Wales identifies how, 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 target includes the need to generate 70% of its electricity consumption from renewable energy by 2030. It has a legally binding target to reduce greenhouse gas emissions by at least 80% by 2050 but it also announced in June 2019 to reach net-zero greenhouse gas emissions by 2050, in response to recommendations by the Committee on Climate Change. The Energy Generation in Wales 2018 report identifies how, of all electricity generated in Wales, 25% is from renewable sources, up from 22% in 2017. In terms of its own electrical consumption target of 70% by 2030, Wales reached the milestone of 50% electrical consumption being generated by renewable energy by 2018.

- 6.185. In terms of progress towards the 70% target, the Energy Generating in Wales 2018 report states how renewable energy installation rates have significantly cut as a result of reductions in government subsidies and "There remain significant challenges to meeting the 70% target by 2030, notably the lack of available price support for renewable generation, as well as network constraints and network unavailability in some areas restricting the ability for new projects to connect".

- 6.186. The United Kingdom has withdrawn from the European Union Internal Energy Market (IEM). The IEM allows harmonised, tariff-free trading of gas and electricity across Europe (through interconnectors), leading to lower prices and greater security of supply. As wholesale gas and electricity prices in the UK are generally higher than elsewhere in Europe, interconnection has caused a reduction in wholesale prices, and hence consumer prices in the UK. Leaving the IEM has the potential to impact the trade of energy through interconnectors. The Government's Briefing Paper on Energy, Climate Change and Brexit identifies how one potential impact of leaving the IEM is an increase in the cost of energy imports and this in turn would be passed on to UK's householders and businesses. In terms of energy security, it notes how the interest of the United Kingdom should be to increase the flexibility and resilience of the grid, especially with increasing intermittent renewables. The development proposal would contribute towards the objectives set out in the briefing note.
- 6.187. Reflecting on the above, the social, economic, cultural and environmental issues are balanced and integrated for this proposal and as such in applying the legislative requirements of presumption in favour of sustainable development, it is clear that the need for the application proposal has been clearly justified and should be approved without delay.

Welsh Language

- 6.188. New development can influence population movement in an area. It may have positive effects through stabilising populations or promoting growth through in-migration. However, significant levels of migration, in or out, can have an adverse effect on the social balance of an area and, as a result, influence key characteristics of a community such as the use of Welsh language. With regards to development management considerations, TAN 20 sets out how the need for a Welsh language impact assessment would be limited to residential schemes (ten or more units) or commercial employment sites which generate new populations. Neither threshold applies to this development proposal, which relates to ground-mounted solar arrays.
- 6.189. Furthermore, as the development would not be permanently manned during its operational phase and as such it would not create any new permanent population to the local area, which would require consideration by way of a Welsh language impacts assessment.
- 6.190. There is no evidence to indicate that the scheme will prevent opportunities for local people to stay in their communities. As stated elsewhere in this statement, the application site is shared across four operational farms, all which benefit from farm diversification as a result of the scheme. There are not considered to be any negative impacts on the four operational farms, there are not considered to be any negative impacts on existing communities.
- 6.191. As a result, the scheme would not generate impacts resulting in the community migrating away with the development in place. Furthermore, it is not expected that the scheme will lead to a change in any demographics (age groups) of the community.
- 6.192. In line with the Planning (Wales) Act 2015, which requires, amongst other things, the consideration of the Welsh language at every level of the planning system, the applicant has adopted specific steps during the planning application process; these have included:
- Consultation materials in English and Welsh

- Allowing community the opportunity to communicate directly in Welsh, by email or telephone, directly to a key member of the main project team without the need for any translation service.
- 6.193. These bilingual provisions will continue throughout the statutory pre-application consultation process.
- 6.194. The development proposal itself would contribute to the local community by way of a legacy community benefit fund. Details would be agreed at a later date and prior to construction.

7. Planning Balance

- 7.1. In terms of establishing a planning balance, this section of the statement examines the various material considerations to assist in determining the acceptability of the proposed development.

Context

- 7.2. It is clear that delivering renewable energy is one of the Welsh Government's top national priorities for the next 20 years. The Future Wales set a clear 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. Future Wales correctly picks up on the regulations set out in the Senedd on 9 February 2021 which formally commits Wales, for the first time, to legally binding targets to deliver the goal of net-zero emissions.
- 7.3. Paragraph 5.9.15 of PPW makes the important recognition that (inter alia) ***"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"***. Future Wales and PPW identify how significant weight should be given to renewable energy development.
- 7.4. Acknowledgement must be given to the pace of the legislative and policy evolution pertaining to the energy sector and the strong support to the principle of developing renewable and low carbon energy from all technologies and at all scales to meet our future energy needs. In particular, Policy 17 of Future Wales explains that in determining planning applications for renewable and low carbon energy development, decision-makers must give significant weight to the need to meet Wales' international commitments and Welsh Government's initial step towards net zero which is to generate 70% of consumed electricity by renewable means by 2030 and 100% by 2035.
- 7.5. Turning to the regional approach, Future Wales locates the application site within the northwest catchment area. The published document, on page 171, sets out how the provision of renewable energy is vital for south east Wales to play its role in decarbonising. It states (inter alia) that it is vital the region plays its role in decarbonising society and supports the realisation of renewable energy.
- 7.6. 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 and Strategic and Local Development Plans should provide a framework for generation and associated infrastructure. The Welsh Government wishes to see renewable energy play a role in supporting the regional economy in the south east. Local ownership and distribution is important for ensuring communities in proximity to renewable energy development benefit from it and that our future energy system better serves Wales.
- 7.7. It is worth highlighting that the applicant does not consider that the proposal would result in significant effects simply by virtue of the development being visible from any particular location.

- 7.8. At paragraph 1.2, the PPW identifies how its primary objective 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 Well-being of Future Generation (Wales) Act 2015. There is no dispute that the development would increase the installed renewable energy capacity, contributing to meeting local and national renewable energy targets, reducing reliance on energy generated from fossil fuels and actively facilitating the transition to a low carbon economy. To this end, it would embrace the WBFG Act goals to achieve a globally responsible, prosperous and resilient Wales (this is discussed below). Overall, the applicants say that the application proposals are in accordance with Welsh Government policies in meeting the challenges of the climate emergency as set out in the Future Wales and PPW. Accordingly, in this case the Future Wales & PPW favours approval.
- 7.9. PPW and Future Wales make it clear that achieving decarbonisation and climate-resilience is a key national priority for Wales, and a recognition of a need for Wales to focus on generating the energy it needs to support its communities and industries over the next twenty years. The application proposal would align with and support this approach. However, there is more at play here, there are additional matters which weigh in favour of the proposed development. These are discussed in turn below.

Renewable and low carbon projections

- 7.10. PPW sets out a need for a precautionary action on the delivery of renewables to prevent Wales being 'locked in' to further fossil fuels extraction and high carbon development. In the context of energy, the precautionary approach manifest itself as a 'factor of safety' (or additional renewable energy capacity) that should be added to the overall provision of renewable energy. As discussed elsewhere in this Statement, the Energy Generation in Wales Report 2023 (2025), identified how approximately 34% of all Welsh electricity generation came from renewables in 2023. This is up from 27% in 2022 due to significant increase in generation from renewable sources. It is clear that Wales is heading in the right direction and this application will help with the target of reaching 1.5 GW of locally owned renewable energy capacity by 2035. This demonstrates and constitutes the overriding need for the application proposal.

Well-being and Future Generations (Wales) Act 2015

- 7.11. Planning Policy Wales identifies how the planning system in Wales should seek to maximise the contribution planning makes to achieve the goals set out in the Well-Being of Future Generations (Wales) Act. The Well-being of Future Generations (Wales) Act is about improving the social, economic, environmental and cultural well-being of Wales. The Well-being Act has established seven well-being goals which are intended to shape the work of all public bodies in Wales. In order to demonstrate that appropriate consideration has been given to the well-being goals and sustainable development principle in the decision-making process, public bodies are required to have regard to the 'five ways of working' contained in the Well-being Act. These require consideration of: involvement; collaboration; integration; prevention; and long term factors.
- 7.12. The Wellbeing of Future Generations (Wales) Act requires planning decisions to comply with the 7 well-being goals of the Act. The seven well-being goals are discussed below together with an assessment of how the application proposal contributes towards them.

Well-Being Goals	Applicant's Assessment
A prosperous Wales – An innovative, productive and low carbon society which recognises the limits of the global environment and therefore uses resources efficiently and proportionately (including acting on climate change); and which develops a skilled and well-educated population in an economy which generates wealth and provides employment opportunities, allowing people to take advantage of the wealth generated through securing decent work	Welsh Government's main outcomes for the planning system reflect their vision of sustainable development which means the process of improving the economic, social, environmental and cultural well-being of Wales by taking action, in accordance with the sustainable development principle, aimed at achieving the well-being goals. Overall, this means meeting the needs of the present without compromising the ability of future generations to meet their own needs. The provision of renewable energy plays an important part within Welsh Government priorities towards reducing carbon emissions, as part of decarbonisation, whilst enhancing the economic, social and environmental well-being of the people and communities of Wales. Economic benefits will arise through the provision of: – i. Construction phase employment: The Proposed Development could support up to 350 temporary jobs, both direct jobs on-site and in the wider supply chain, during the construction period. ii. Spend in the local area by construction employees: The construction employees from outside the local area could spend around £2.3million in local businesses. This will help support the 2,300 accommodation & food and retail businesses that operate within the Combined Area⁵. iii. Contribution of construction phase to economic output: The gross value added (GVA – a proxy for economic output) generated by jobs supported during the construction phase could be up to £36.6million. iv. Permanent employment: It is estimated that the Proposed Development will support up to 18 full-time equivalent jobs (FTE) in the

⁵ The Combined Area is made up of Monmouthshire, Newport and Torfaen local planning authorities.

	Combined Area and the wider economy once it is operational. v. Contribution to economic output associated with the permanent employment: The GVA associated with the 18 FTEs is estimated to be £1.2million per annum. vi. Business rates revenue: Business rates generated by the solar project could be in the region of £1.1million (present value⁶) over the Proposed Development's 40-year operational lifespan. vii. Homes powered: The Proposed Development is estimated to power 17,265 homes per annum⁷. viii. Community benefit fund: An annual community fund payment in the region of £46,000 ⁸ will be made, amounting to £1.8million over the 40-year lifespan of the scheme (current prices). The scheme would contribute towards farm diversification, which is discussed further below.
A resilient Wales – A nation which maintains and enhances a biodiverse natural environment with healthy functioning ecosystems that support social, economic and ecological resilience and the capacity to adapt to change (for example climate change)	This Statement has highlighted the national legislation, guidance and policy which supports the transition to a low carbon future and the continued roll out of renewable energy infrastructure. PPW states how the benefits of renewable and low carbon energy, as part of the overall commitment to tackle the climate emergency and increase energy security, is of paramount importance and that the planning system should, inter alia, maximise renewable and low carbon energy generation. The application proposal will have a positive impact on climate change over its 40-year lifespan. The application proposal would contribute to limiting the impacts of climate change and thus increasing the social, economic and ecological resilience to the

⁶ Where future benefits are calculated over a 10-year timeframe, they have been discounted to produce a present value. This is the discounted value of a stream of either future costs or benefits. A standard discount rate is used to convert all costs and benefits to present values. Using the Treasury's Green Book, the recommended discount rate is 3.5%.

⁷ Information provided by the Applicant.

⁸ Figure is indicative.

	challenge. The application would deliver significant increases in habitats and hedgerows across the development site.
A healthier Wales – A society in which people’s physical and mental well-being is maximised and in which choices and behaviours that benefit future health are understood.	Again, as discussed elsewhere in this statement, national guidance, policy and objectives are clear in their support towards the transition and delivery of a low carbon future. The continued roll out of renewable energy infrastructure is a critical element to achieve net zero by 2050. Adapting to climate change can drive a more sustainable, greener, cleaner society by bringing people together to create better places, through urban and rural green infrastructure; improved air quality; locally managed nature-based solutions; less wastage of resources; and citizen science and engagement in building community resilience. The Welsh Government has recognised the need to take action to prepare for climate change in publishing Prosperity for all: A Climate-conscious Wales in 2019, its five-year plan to adapt to climate change impacts.
A more equal Wales – A society that enables people to fulfil their potential no matter what their background or circumstances (including their socio economic background and circumstances).	The wider benefits of renewable energy include security of energy supply and reduced energy costs for the consumer. Indeed, the proposed scheme would be delivered without any government subsidy support and as such, there is no burden placed on the taxpayer to fund the development. In this respect, the benefits of the project are to be realised through reduced energy bills and security of supply, which will reduce Wales’ exposure to the volatility of the wholesale energy markets. These are important factors in addressing fuel poverty, which disproportionately effects low-income households across Wales and contributes to economic inequality. To summarise, social gain would be provided through the generation of local electricity that will be connected directly to the local grid. The proposal would reduce reliance upon overseas energy sources. The energy production would help to meet the national and local need for energy and therefore the development would fulfil an important social role.

A Wales of cohesive communities – Attractive, viable, safe and well-connected communities.	The application proposal delivers decentralised low carbon energy generation to Dwr Cymru's Court Farm Treatment Works, and would therefore contribute towards energy provision & security at a local level. The application proposal is therefore considered to contribute to the aim of achieving an attractive, viable, safe, cohesive communities in these terms.
A Wales of vibrant culture and thriving Welsh language – A society that promotes and protects culture, heritage and the Welsh language, and which encourages people to participate in the arts, and sports and recreation.	The well-being of the language depends upon a wide range of factors, including education, demographic change, community activities and a sound economic base to maintain thriving, sustainable communities and places. The development would not result in any demographic changes that would put pressure on education or community activities. The development would not impact the current working practices of agricultural units surrounding the development site. The proposed green infrastructure would encourage recreational activity. The proposal would not conflict with goals for the Welsh Language.
A globally responsible Wales – A nation which, when doing anything to improve the economic, social, environmental and cultural well-being of Wales, takes account of whether doing such a thing may make a positive contribution to global well-being	The scheme would principally and directly address the causes of climate change and the declared climate emergency. The development of the scheme would therefore contribute to meeting Wales' net zero target by 2050 and contribute towards meeting the Welsh Government target of meeting 70% of Wales electricity demands from renewables by 2030. The proposal is therefore in line with the objectives of a globally responsible nation as set out in the Well-being of Future Generations Act 2015.

- 7.13. Overall, there can be no dispute that the proposed development will increase the installed renewable energy capacity, contributing to meeting local and national renewable energy goals, reducing reliance on energy generated from fossil fuels and actively facilitating the transition to a low carbon economy; this carries significant weight in the determination process. To this end, it would clearly embrace the WBFG Act goals to achieve a globally responsible, prosperous, and resilient Wales and be in accordance with Welsh Government policies in meeting the challenges of the climate emergency as set out in Future Wales and PPW. Overall, it is considered that there is no conflict with Policy 18 of Future Wales.

8. Conclusion

- 8.1. The purpose of this Planning Statement is to provide a balanced justification for the proposed development. For the reasons outlined in this Planning Statement, it is considered that the draft application submission has demonstrated that the proposal would not have an unacceptable adverse impact on the environment and as such accords with Future Wales Policies 17 and 18.
- 8.2. The supporting technical documents confirm that the selected site is appropriate in that it can accommodate the proposed development. The application proposal is considered to be acceptable within the open countryside as it represents agricultural diversification. The benefits of the development are multiple: (i) it would provide a valuable contribution with regards to provision of decentralised renewable energy provision to allow Dwr Cymru to decarbonise its operations at Court Farm Treatment Works as well as its wider operations. (ii) it would contribute towards the viability of the farming enterprises through diversification of income; (iii) with regards to ecology, it has followed the stepwise approach and it would deliver significant biodiversity improvements and these can be secured by planning condition; (iv) economic benefits would be secured in terms of construction and less so operational management of the application proposal. The application proposal will provide employment and business opportunities for component suppliers / installers and those involved in grid connection, transport and logistics. Where possible, local businesses will be contracted for relevant parts of the scope of works over the period of construction, operation and maintenance. There will be additional induced impacts during the construction period with any incoming construction workers (engineers, project managers etc) spending their wages at a local level (restaurants, retail stores etc) and using local accommodation.
- 8.3. It is clear that delivering renewable energy is one of the Welsh Government's top national priorities for the next 20 years. The Future Wales set a clear 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 to this future direction. Future Wales correctly picks up on the regulations set out in the Senedd on 9 February 2021 which formally commits Wales, for the first time, to legally binding targets to deliver the goal of net-zero emissions. Paragraph 5.9.15 of PPW makes the important recognition that (inter alia) "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". Future Wales and PPW identifies how significant weight should be given to renewable energy development.
- 8.4. Turning to the regional approach, Future Wales locates the application site within the south east regional catchment area. The published document, at page 171, sets out how the provision of renewable energy is vital for the south east to play its role in decarbonising and supporting the realisation of renewable energy. 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 and Strategic and Local Development Plans should provide a framework for generation and associated infrastructure. The Welsh Government wishes to see energy generation, storage and management play a role in supporting the South East economy. Local ownership and distribution is important for ensuring communities in proximity to renewable energy development benefit from it and that our future energy system better serves Wales***"

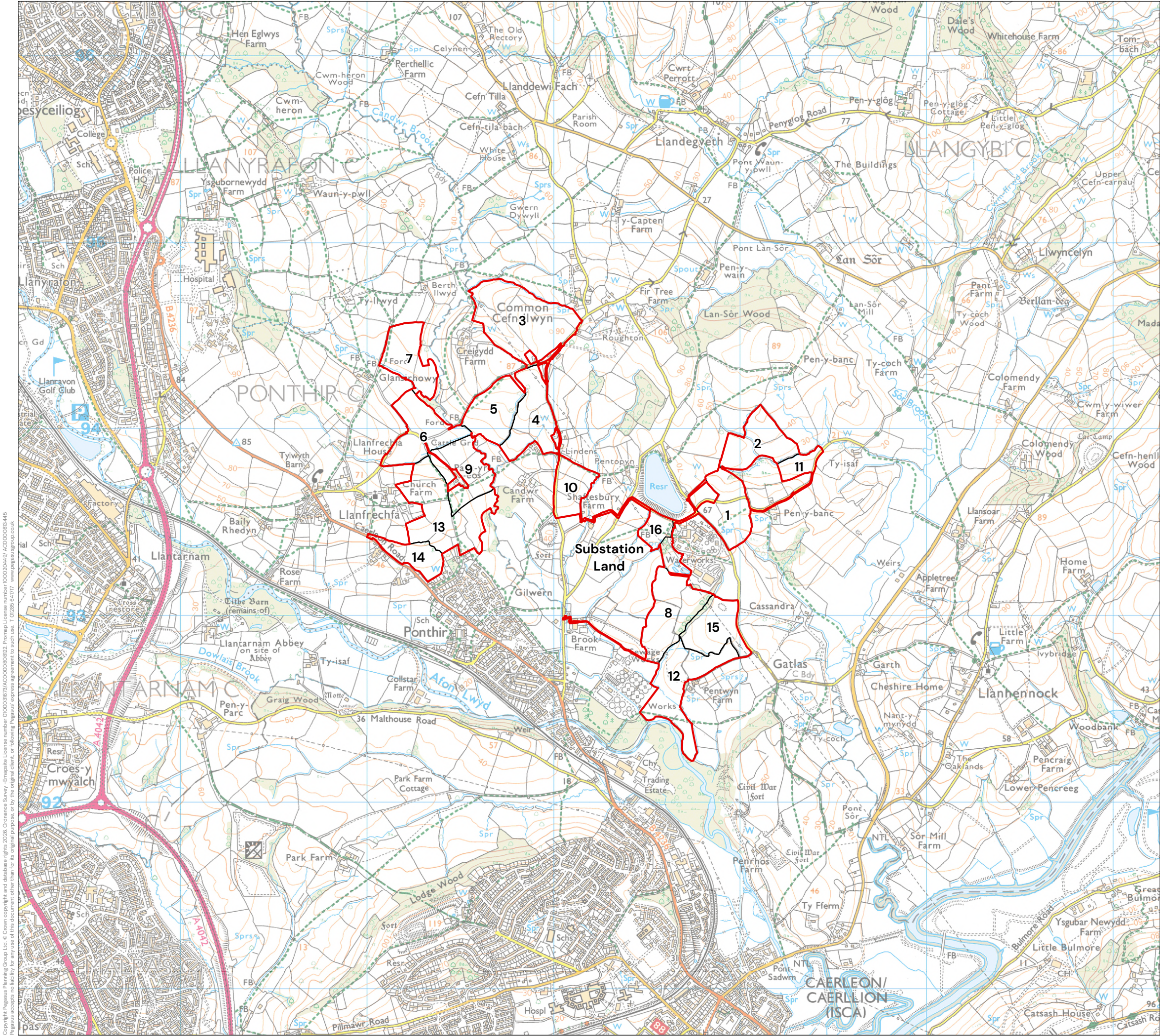
- 8.5. There is more at play here, the Energy Generation in Wales Report 2023 identified how approximately 34% of all Welsh electricity generation came from renewables in 2023. This is up from 22% in 2022 due to a significant increase in generation from non-renewable sources. It is clear that Wales is heading in a positive direction in terms of its energy mix and its reliance on non-renewable sources. Accordingly, further change is required to achieve the projected 100% of renewables by 2035. This application proposal will make a positive proportionate contribution towards this target.



Appendix 1 Site Location Plan



Appendix 2 Land Parcel Plan



KEY

Site Boundary

Field Boundaries

REV	DATE	DESCRIPTION
-----	------	-------------

FIGURE 3.2: LAND PARCEL PLAN

CANDWR SOLAR FARM

CANDWR SOLAR FARM LIMITED

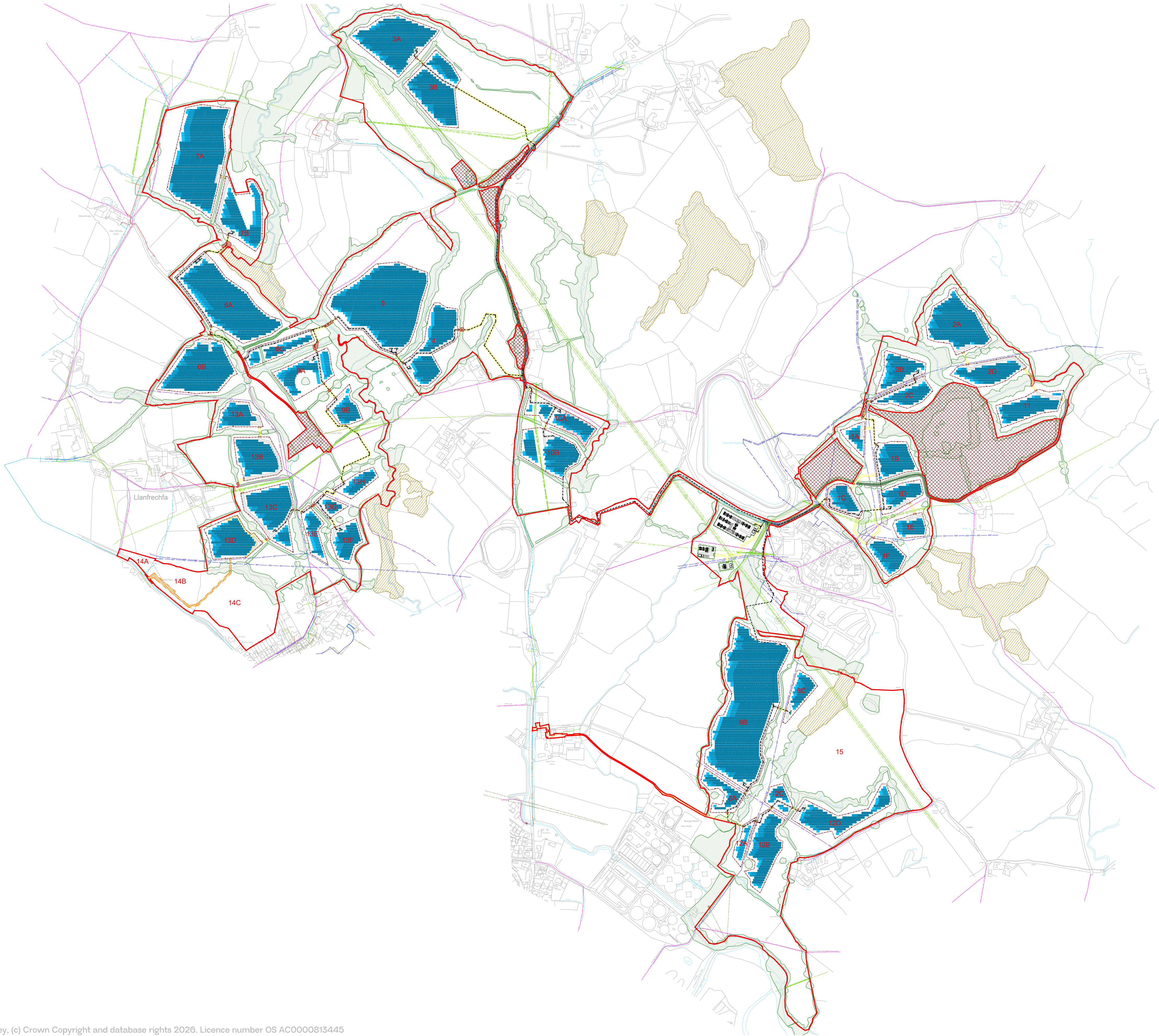
DATE	SCALE	DRAWN	APPROVED
29/06/2026	1:20,000@A3	CS	EHF
SHEET	REV	N	0
-	H	▲	L

DRAWING NUMBER
P24_2075_EN_11





Appendix 3 Indicative Layout



This drawing is the copyright of TOTAL ENERGIES RENEWABLE UK LIMITED and must not be reproduced in whole or in part or used in any manner without their written permission.
This drawing is to be submitted for planning purposes only. All dimensions are to be confirmed on site prior to commencement of work.

Revisions:				
Revision	Date	Revision Notes	Drawn	Inspected
01	03.10.25	First Issue (2 in portrait panels with inter row spacing of 2m)	RR	TH
02	09.10.25	Adjusted inter row spacing to 1.5m and distance from fence to panels to 3.5m	RR	TH
03	27.10.25	Adjusted tracks and amended RLB	EW	TH
04	11.12.25	Planning Application Boundary and Access Adjusted	RE	TH
05	05.01.26	Tracks and Gates Adjusted in Parcels 5, 6 and 7, CCTV and Fence Adjusted	RE	TH
06	06.01.26	Planning Application Boundary Amended	RE	TH
07	16.04.26	Cable Route Added	RR	TH
08	17.04.26	Updated Substation Design Added, Planning Application Boundary and Cable Route Adjusted	RR	TH
09	12.05.26	RLB, Access Tracks, Cable Route and Legend Adjusted, Land Not Part of Planning Application Boundary, Main Site Compound, Haul Road and Substation Design Added	RR	TH
10	20.05.26	RLB, CCTV and Haul Road adjusted, panels relocated / removed	RR	TH
11	27.05.26	Fenceline and Access Tracks Adjusted	RR	HB

LEGEND:	
	WATER COURSE
	PLANNING APPLICATION BOUNDARY
	LAND NOT PART OF PLANNING APPLICATION BOUNDARY
	PUBLIC HIGHWAY
	FOOTPATH

SOLAR SITE INFRASTRUCTURE:	
	SUBSTATION
	CABLE ROUTE
	PERIMETER FENCELINE
	PALISADE FENCELINE
	INDICATIVE TEMPORARY CONSTRUCTION COMPOUND
	MAIN SITE COMPOUND
	INDICATIVE HAUL ROAD
	PASSING PLACE
	INDICATIVE TEMPORARY CONSTRUCTION ACCESS
	SITE ACCESS TRACK
	MAINTENANCE TRACK
	TRANSFORMER
	MV STATION
	INVERTER
	PV FULL TABLE
	PV HALF TABLE
	PV QUARTER TABLE
	SECURITY GATE (PERIMETER)
	SECURITY GATE (PALISADE)
	CCTV CAMERA

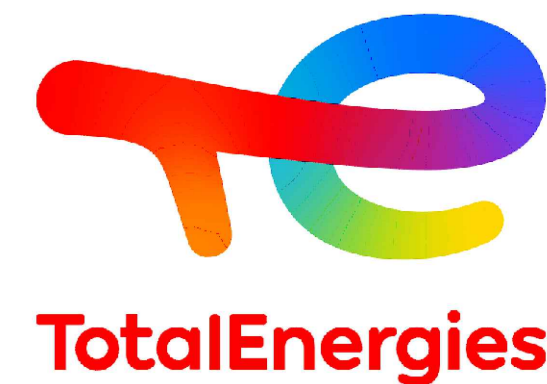
SERVICES:	
	ELE — HV — ELE — EXISTING O/H CABLE ROUTE
	ELE — HV 33kV — EXISTING 33kV O/H CABLE ROUTE
	ELE — HV 132kV — EXISTING 132kV O/H CABLE ROUTE
	ELE — LV — ELE — EXISTING U/G CABLE ROUTE
	TEL — TEL — EXISTING TELECOM SERVICES
	GAS — GAS — EXISTING GAS SERVICES
	WAT — WAT — EXISTING WATER MAIN
	SW — SW — EXISTING SEWER SURFACE WATER

VEGETATION:	
	EXISTING VEGETATION
	ANCIENT WOODLAND
	VEGETATION TO BE REMOVED

Status:

PLANNING

Project: **CANDWR SOLAR FARM**
LAND AT COURT FARM, PONTNIR, MONMOUTHSHIRE
Client:



10th Floor, 10 Upper Bank Street, Canary Wharf, London, E14 5BF
solaruk@totalenergies.com www.solar.totalenergies.co.uk

Designer:



UTU DESIGN LTD
Unit B2, The Courtyard, Severn Drive, Tewkesbury Business Park, GL20 8DD
+44(0) 1854 850019 design@utu.design www.utu.design

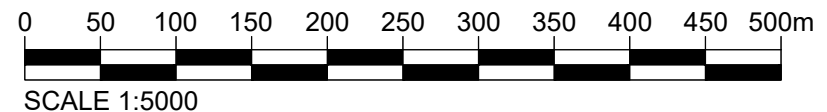
Drawing Title: **CAMDWR SOLAR FARM**
INDICATIVE SITE LAYOUT PLAN (2 IN PORTRAIT)

Drawn: RR	Checked: TH	Drawing Scale: 1:5000	Size: A1
Project Code: PEG002-	Drawing Number: PL-01.1	Revision: 11	

Ordnance Survey, (c) Crown Copyright and database rights 2026. Licence number OS AC0000813445

CANDWR SOLAR FARM - INDICATIVE SITE LAYOUT PLAN (2 IN PORTRAIT)

Scale: 1:5000@A1

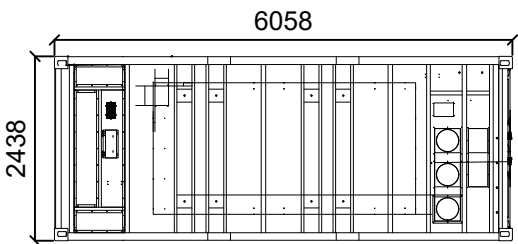




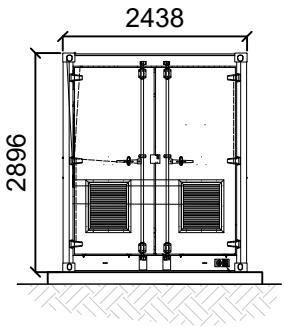
Appendix 4 Ancillary Drawings

Revisions:				
Revision	Date	Revision Notes	Drawn	Inspected
01	10.08.25	First Issue	RR	EHF
02	19.09.25	Project name changed	RR	EHF
03	18.05.26	Titleblock changed	RR	TH

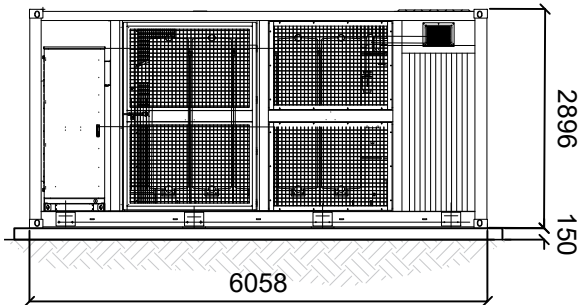
LEGEND:



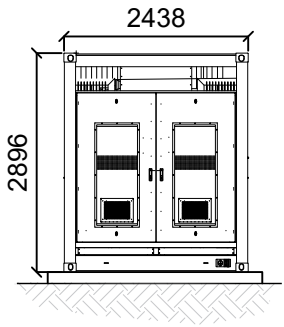
PLAN VIEW



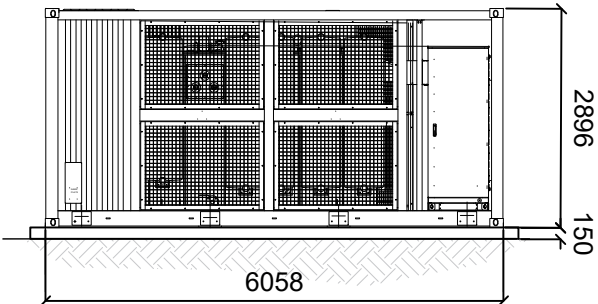
SIDE ELEVATION



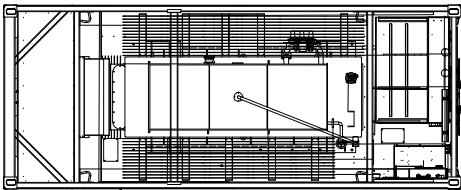
FRONT ELEVATION



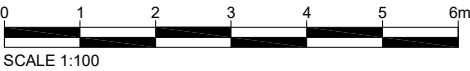
SIDE ELEVATION



REAR ELEVATION



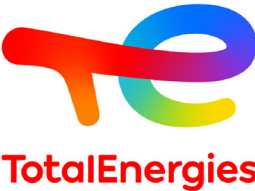
PLAN VIEW (internal distribution)



Status: **PLANNING**

Project: **CANDWR SOLAR FARM**
LAND AT COURT FARM, PONTNIR, MONMOUTHSHIRE

Client:



10th Floor, 10 Upper Bank Street, Canary Wharf, London, E14 5BF
solaruk@totalenergies.com www.solar.totalenergies.co.uk



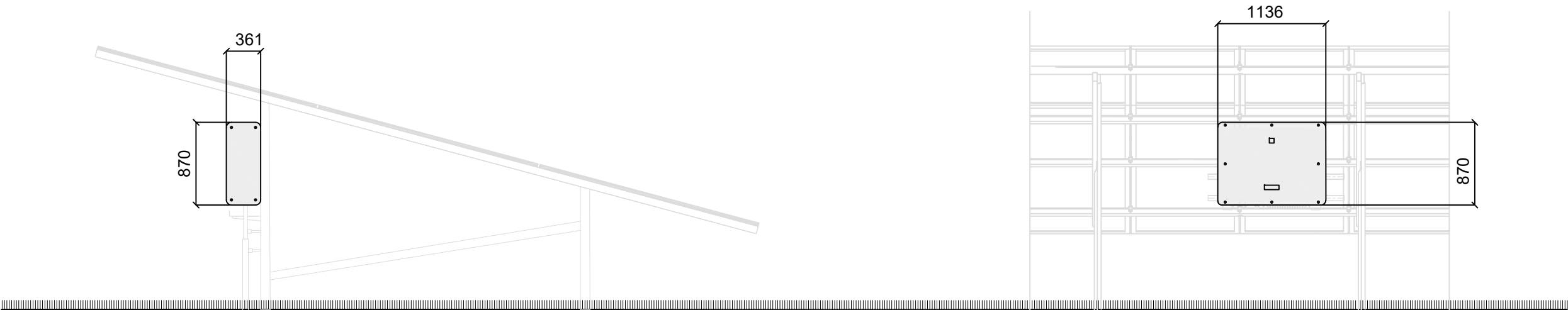
UTU DESIGN LTD
Unit B2, The Courtyard, Severn Drive, Tewkesbury Business Park, GL20 8GD
+44(0) 1854 850019 design@utu.design www.utu.design

Drawing Title: **STANDARD DRAWING**
TRANSFORMER STATION

Drawn	Checked	Drawing Scale	Size
RR	EHF	1:100	A3
Project Code	Drawing Number	Revision	
PEG002-	SD-01	03	

Revisions:				
Revision	Date	Revision Notes	Drawn	Inspected
01	10.08.25	First Issue	RR	EHF
02	19.09.25	Project name changed	RR	EHF
03	18.05.26	Titleblock changed	RR	TH

LEGEND:



SIDE ELEVATION

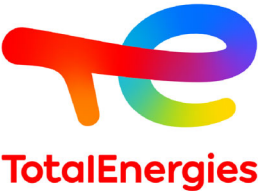
FRONT ELEVATION

Status:

PLANNING

Project: CANDWR SOLAR FARM
LAND AT COURT FARM, PONTNIR, MONMOUTHSHIRE

Client:



10th Floor, 10 Upper Bank Street, Canary Wharf, London, E14 5BF
solaruk@totalenergies.com www.solar.totalenergies.co.uk

Designer:



UTU DESIGN LTD
Unit B2, The Courtyard, Severn Drive, Tewkesbury Business Park, GL20 8DD
+44(0) 1854 850019 design@utu.design www.utu.design

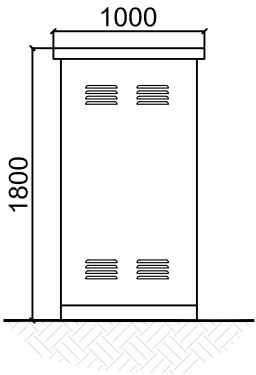
Drawing Title: STANDARD DRAWING
STRING INVERTER

Drawn RR	Checked EHF	Drawing Scale 1:50	Size A3
Project Code PEG002-	Drawing Number SD-02	Revision 03	

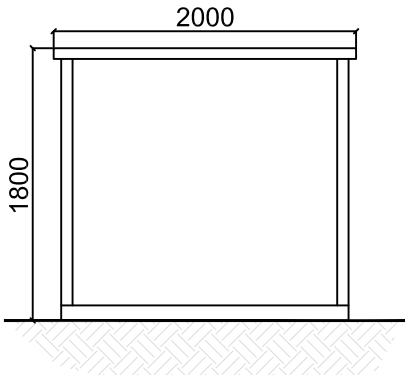


Revisions:				
Revision	Date	Revision Notes	Drawn	Inspected
01	10.05.25	First Issue	RR	EHF
02	19.09.25	Project name changed	RR	EHF
03	18.05.26	Titleblock changed	RR	TH
04	26.05.26	Drawing Renamed	MR	TH

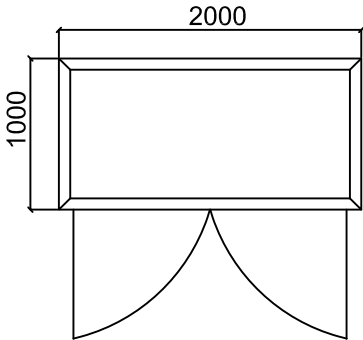
LEGEND:



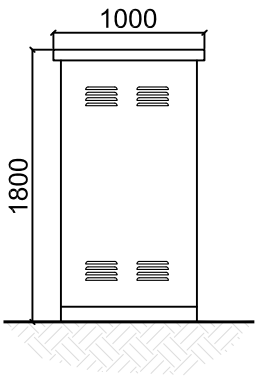
SIDE ELEVATION



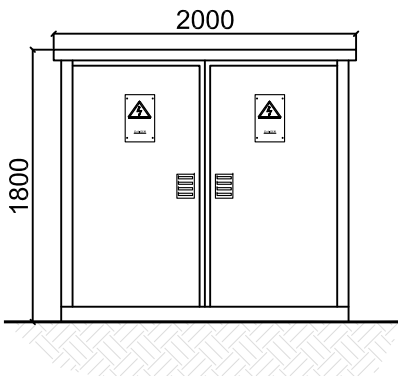
REAR ELEVATION



PLAN



SIDE ELEVATION

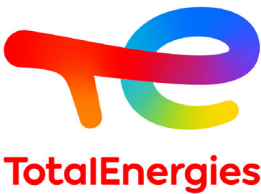


FRONT ELEVATION

Status:

PLANNING

Project: **CANDWR SOLAR FARM**
LAND AT COURT FARM, PONTHIR, MONMOUTHSHIRE
Client:



10th Floor, 10 Upper Bank Street, Canary Wharf, London, E14 5BF
sol@uk@totalenergies.com www.solar.totalenergies.co.uk

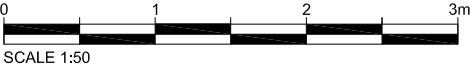
Designer:



UTU DESIGN LTD
Unit B2, The Courtyard, Severn Drive, Tewkesbury Business Park, GL20 8GD
+44(0) 1854 350010 design@utu.design www.utu.design

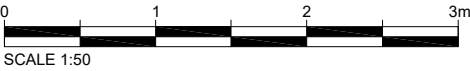
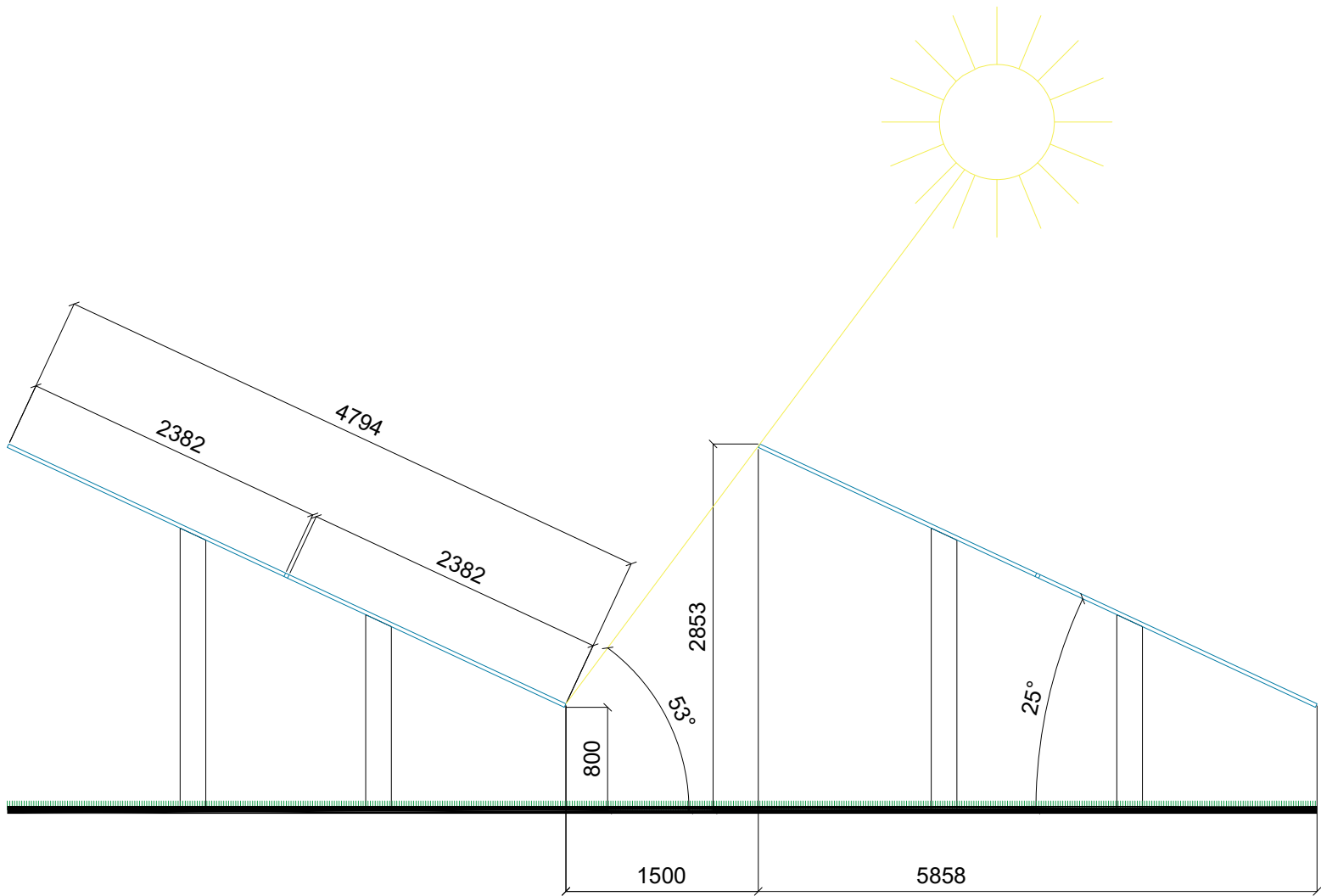
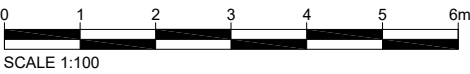
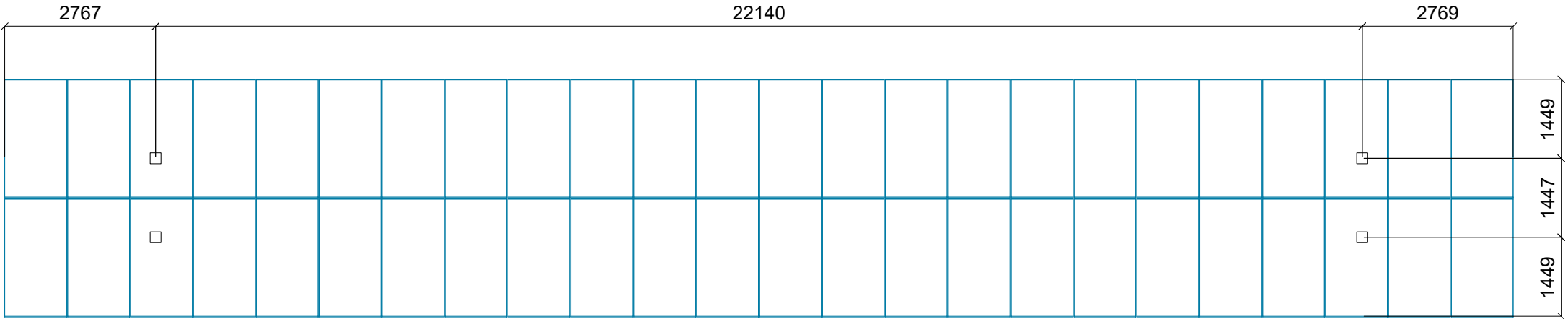
Drawing Title: **STANDARD DRAWING**
MV STATION

Drawn: RR	Checked: EHF	Drawing Scale: 1:50	Size: A3
Project Code: PEG002-	Drawing Number: SD-03	Revision: 04	



Revisions:					
Revision	Date	Revision Notes	Drawn	Inspected	
01	10.06.25	First Issue	RR	EHF	
02	10.10.25	Frame height at lowest point / inter row spacing adjusted, front panel elevation added, project name changed	RR	EHF	
03	16.05.26	Titleblock changed	RR	TH	

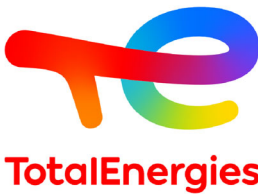
LEGEND:



Status: **PLANNING**

Project: **CANDWR SOLAR FARM**
LAND AT COURT FARM, PONTNIR, MONMOUTHSHIRE

Client:



10th Floor, 10 Upper Bank Street, Canary Wharf, London, E14 5BF
solaruk@totalenergies.com www.solar.totalenergies.co.uk



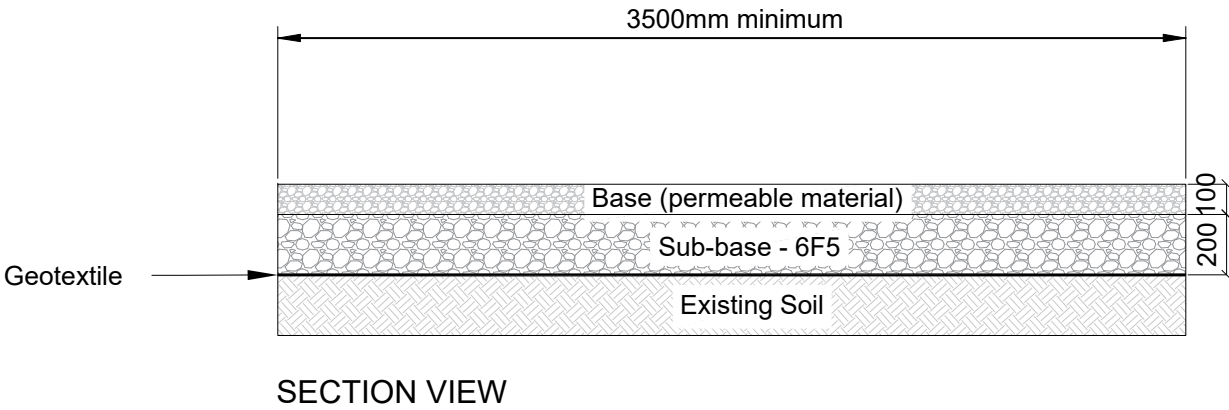
UTU DESIGN LTD
Unit B2, The Courtyard, Severn Drive, Tewkesbury Business Park, GL20 8GD
+44(0) 1854 850019 design@utu.design www.utu.design

Drawing Title: **STANDARD DRAWING**
PV ARRAY

Drawn	Checked	Drawing Scale	Size
RR	EHF	A.N	A3
Project Code	Drawing Number	Revision	
PEG002-	SD-04	03	

Revisions:				
Revision	Date	Revision Notes	Drawn	Inspected
01	10.05.25	First Issue	RR	EHF
02	19.09.25	Project name changed	RR	EHF
03	18.05.26	Titleblock changed	RR	TH
04	15.05.26	Adjusted track width to 3.5m and depth to 200mm	RR	AZ

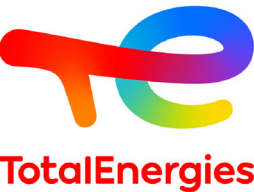
LEGEND:



Status: **PLANNING**

Project: **CANDWR SOLAR FARM**
LAND AT COURT FARM, PONTHIR, MONMOUTHSHIRE

Client:



10th Floor, 10 Upper Bank Street, Canary Wharf, London, E14 5BF
solaruk@totalenergies.com www.solar.totalenergies.co.uk

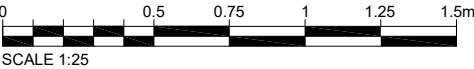
Designer:



UTU DESIGN LTD
Unit B2, The Courtyard, Severn Drive, Tewkesbury Business Park, GL20 8GD
+44(0) 1854 550016 design@utu.design www.utu.design

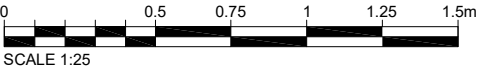
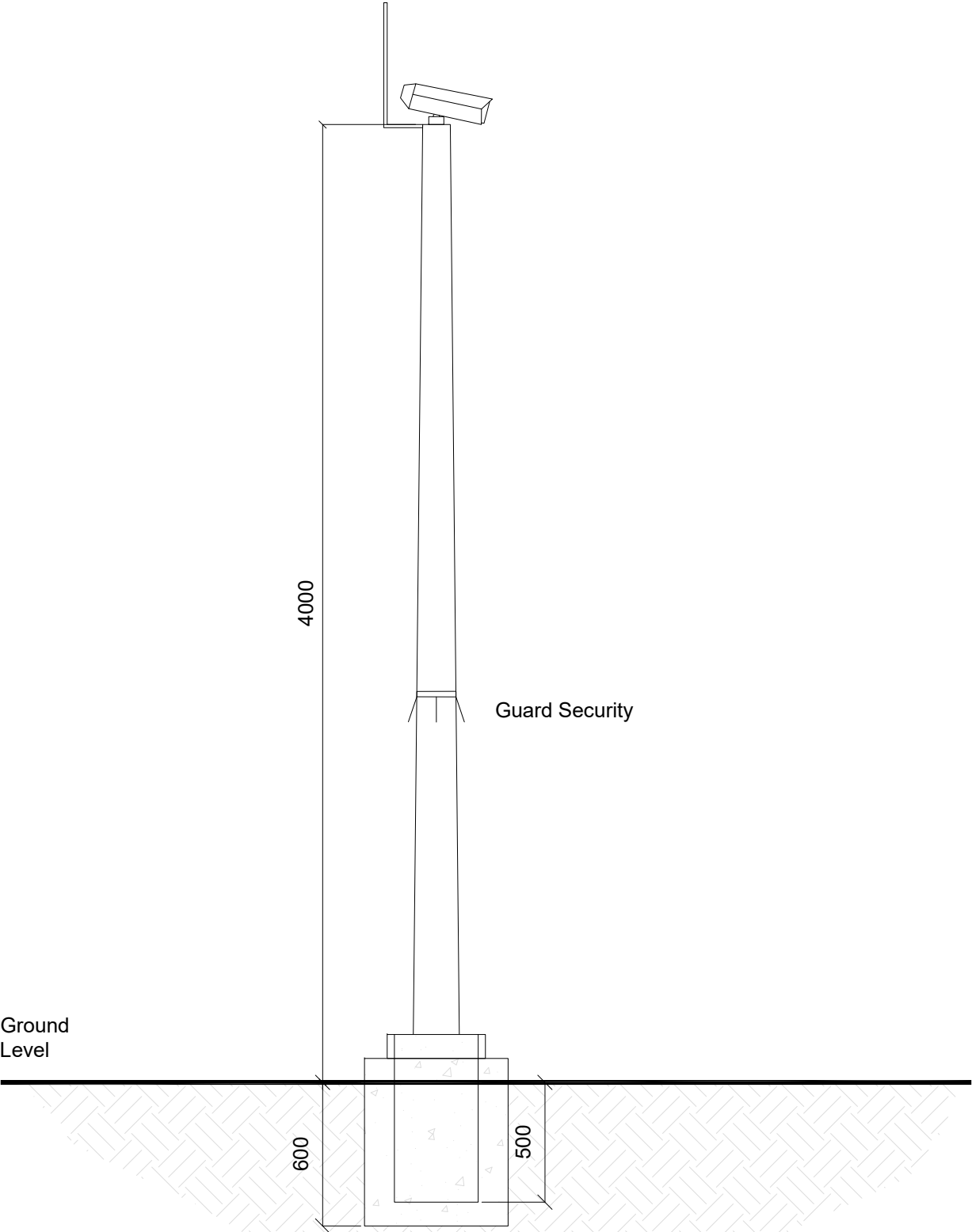
Drawing Title: **STANDARD DRAWING**
ACCESS TRACK

Drawn	Checked	Drawing Scale	Size
RR	EHF	1:25	A3
Project Code	Drawing Number	Revision	
PEG002-	SD-05	04	



Revisions:				
Revision	Date	Revision Notes	Drawn	Inspected
01	10.08.25	First Issue	RR	EHF
02	19.09.25	Project name changed	RR	EHF
03	18.05.26	Titleblock changed	RR	TH

LEGEND:



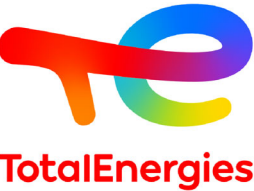
Status

PLANNING

Project

CANDWR SOLAR FARM
LAND AT COURT FARM, PONTNIR, MONMOUTHSHIRE

Client



10th Floor, 10 Upper Bank Street, Canary Wharf, London, E14 5BF
solaruk@totalenergies.com www.solar.totalenergies.co.uk



UTU DESIGN LTD
Unit B2, The Courtyard, Severn Drive, Tewkesbury Business Park, GL20 8GD
+44(0) 1854 850010 design@utu.design www.utu.design

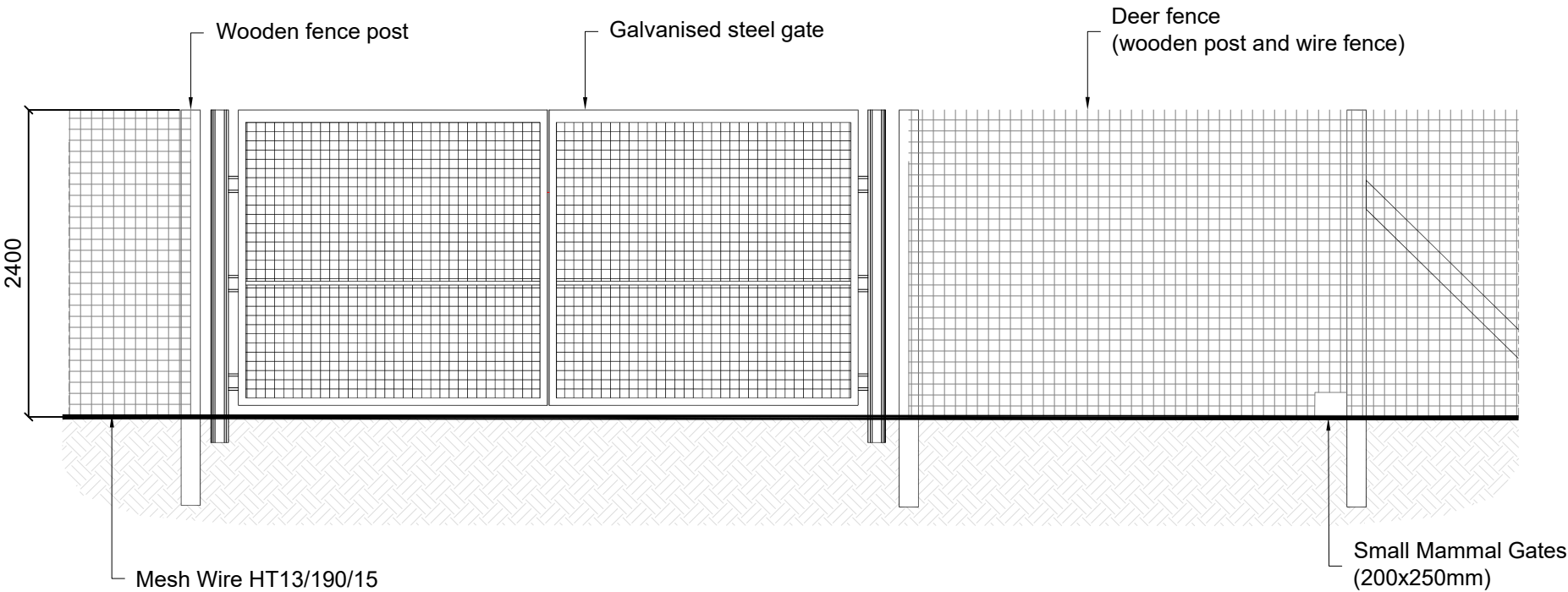
Drawing Title

STANDARD DRAWING
CCTV CAMERA AND POLE

Drawn	Checked	Drawing Scale	Size
RR	EHF	1:25	A3
Project Code	Drawing Number	Revision	
PEG002-	SD-06	03	

Revisions:				
Revision	Date	Revision Notes	Drawn	Inspected
01	10.08.25	First Issue	RR	EHF
02	19.09.25	Project name changed	RR	EHF
03	18.05.26	Titleblock changed	RR	TH
04	15.06.26	Removed 'optional' from mammal gate description	RR	AZ

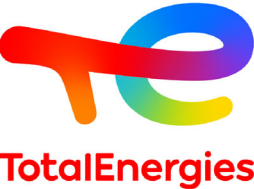
LEGEND:



Status
PLANNING

Project
CANDWR SOLAR FARM
LAND AT COURT FARM, PONTNIR, MONMOUTHSHIRE

Client:



10th Floor, 10 Upper Bank Street, Canary Wharf, London, E14 5BF
solaruk@totalenergies.com www.solar.totalenergies.co.uk

Designer:



UTU DESIGN LTD
Unit B2, The Courtyard, Severn Drive, Tewkesbury Business Park, GL20 8GD
+44(0) 1854 850010 design@utu.design www.utu.design

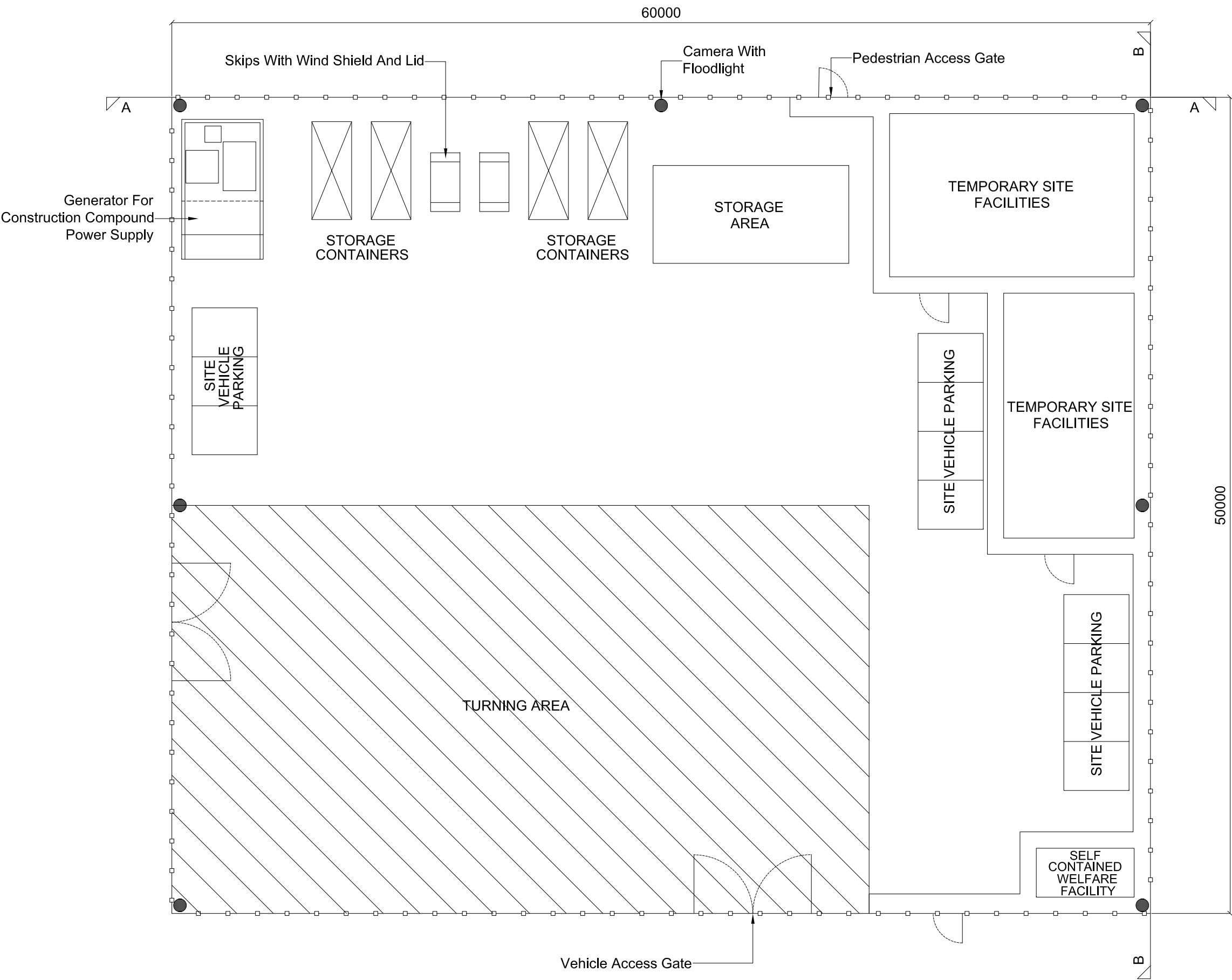
Drawing Title
STANDARD DRAWING
PERIMETER FENCE

Drawn	Checked	Drawing Scale	Size
RR	EHF	1:50	A3
Project Code	Drawing Number	Revision	
PEG002-	SD-07	04	



Revisions:				
Revision	Date	Revision Notes	Drawn	Inspected
01	06.05.20	First Issue	RR	TH

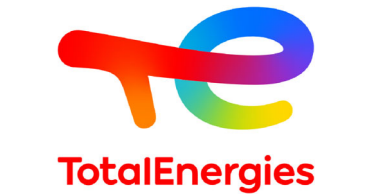
LEGEND:



Status: **PLANNING**

Project: **Candwr Solar Farm**
Land at Court Farm, Ponthir, Monmouthshire

Client:



10th Floor, 10 Upper Bank Street, Canary Wharf, London, E14 5BF
solaruk@totalenergies.com www.solar.totalenergies.co.uk



UTU DESIGN LTD
Unit B2, The Courtyard, Severn Drive, Tewkesbury Business Park, GL20 8GD
+44(0) 1854 850010 design@utu.design www.utu.design

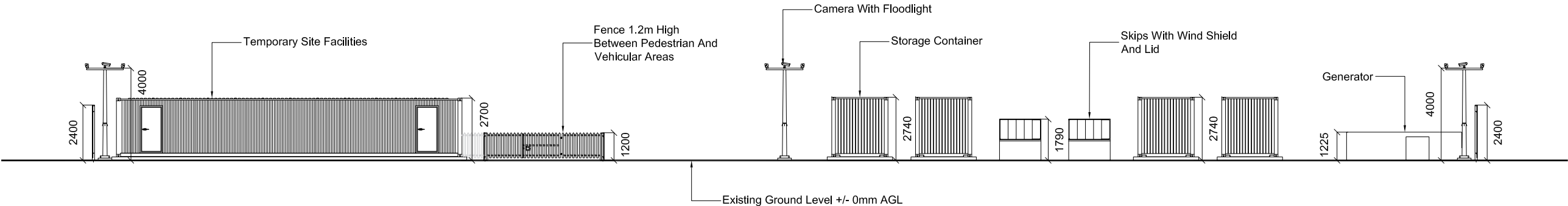
Drawing Title: **STANDARD DRAWING
CONSTRUCTION COMPOUND**

Drawn	Checked	Drawing Scale	Size
RR	TH	1:250	A3
Project Code	Drawing Number	Revision	
PEG002-	SD-08	01	

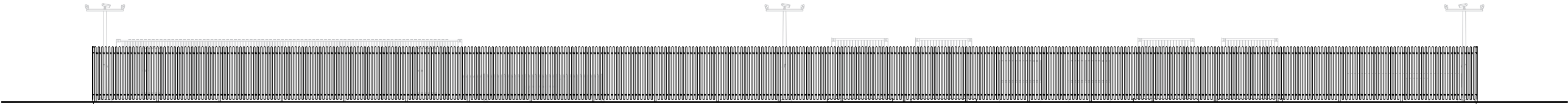


Revisions:				
Revision	Date	Revision Notes	Drawn	Inspected
01	06.05.20	First Issue	RR	TH

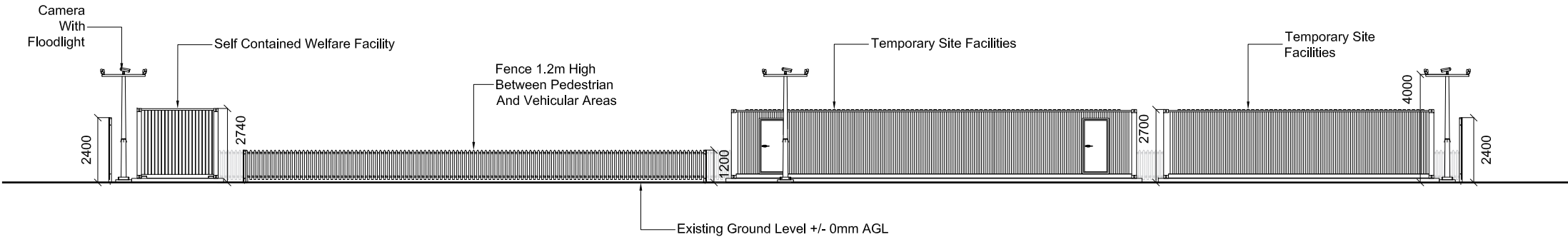
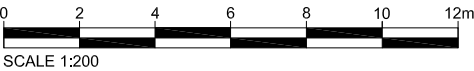
LEGEND:



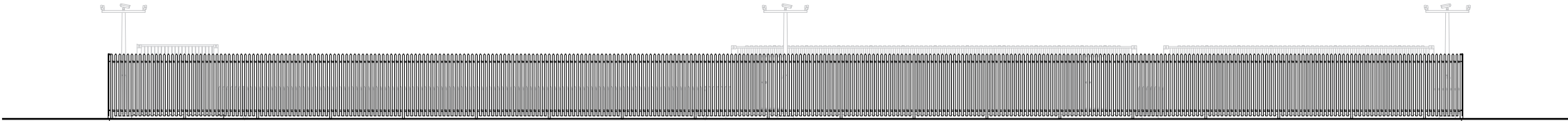
SECTION A-A (UNFENCED)
REFER TO PLAN DRAWING SD-08



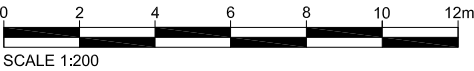
SECTION A-A (FENCED)
REFER TO PLAN DRAWING SD-08



SECTION B-B (UNFENCED)
REFER TO PLAN DRAWING SD-08



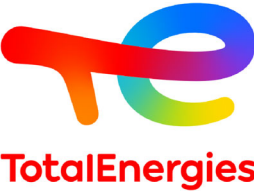
SECTION B-B (FENCED)
REFER TO PLAN DRAWING SD-08



Status: **PLANNING**

Project: **Candwr Solar Farm**
Land at Court Farm, Ponthir, Monmouthshire

Client:



10th Floor, 10 Upper Bank Street, Canary Wharf, London, E14 5BF
solaruk@totalenergies.com www.solar.totalenergies.co.uk

Designer:

UTU DESIGN LTD
Unit B2, The Courtyard, Severn Drive, Tewkesbury Business Park, GL20 8GD
+44(0) 1684 850019 design@utu.design www.utu.design

Drawing Title: STANDARD DRAWING CONSTRUCTION COMPOUND SECTIONS			
Drawn	Checked	Drawing Scale	Size
RR	TH	1:200	A3
Project Code		Drawing Number	Revision
PEG002-		SD-09	01

Revisions:				
Revision	Date	Revision Notes	Drawn	Inspected
01	20.05.20	First Issue	RR	TH

Status

PLANNING

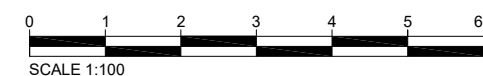
Project

**CANDWR SOLAR FARM
LAND AT COURT FARM, PONTIHR, MONMOUTHSHIRE**

Client

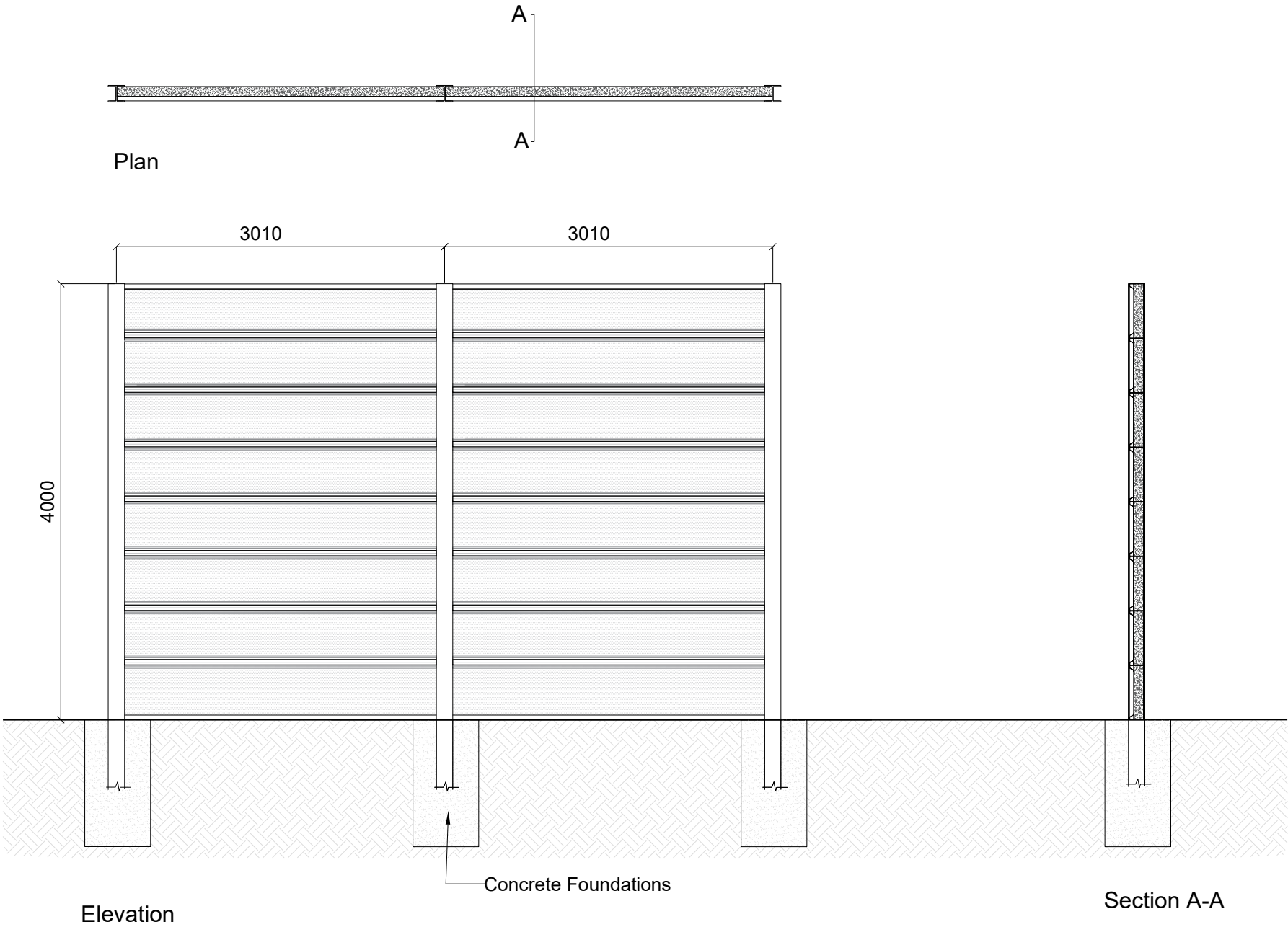


Drawn: RR	Checked: TH	Drawing Scale: 1:100	Size: A3
Project Code: PEG002-		Drawing Number: SD-10	Revision: 01



Revisions:				
Revision	Date	Revision Notes	Drawn	Inspected
01	10.05.20	First Issue	WC	AZ

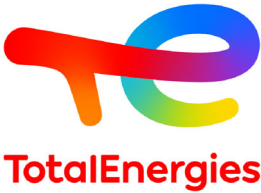
LEGEND:



Status: **PLANNING**

Project: **CANDWR SOLAR FARM**
LAND AT COURT FARM, PONTIHR, MONMOUTHSHIRE

Client:



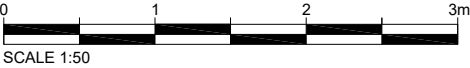
10th Floor, 10 Upper Bank Street, Canary Wharf, London, E14 5BF
solaruk@totalenergies.com www.solar.totalenergies.co.uk

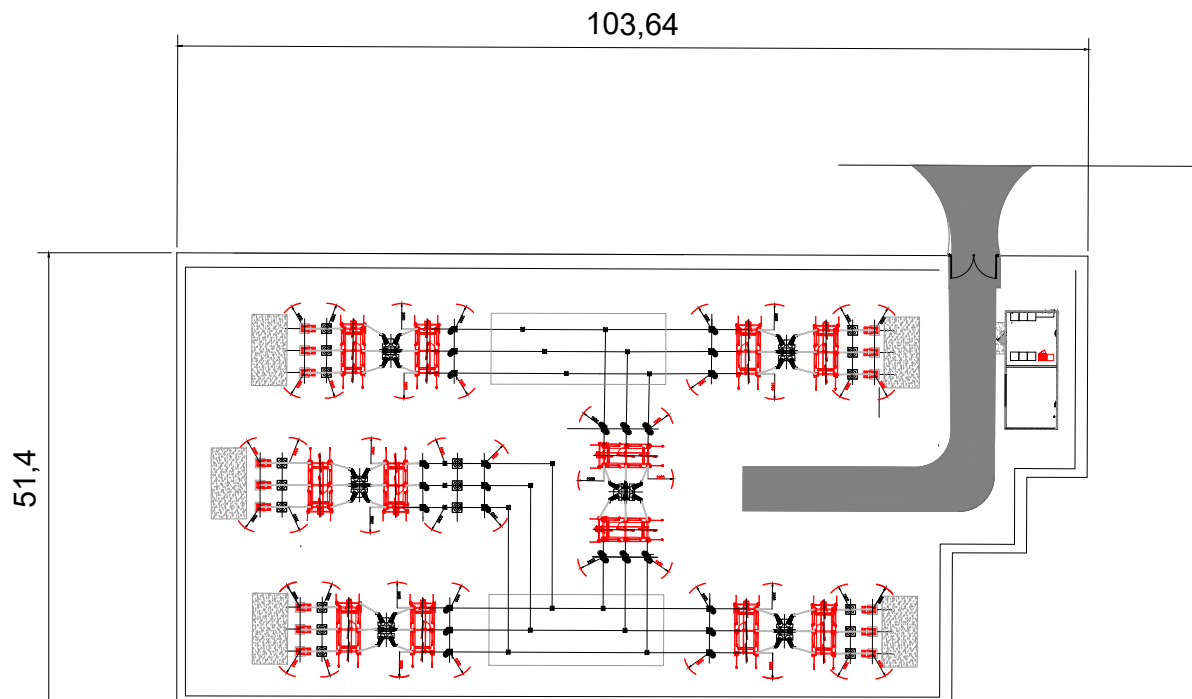


UTU DESIGN LTD
Unit B2, The Courtyard, Severn Drive, Tewkesbury Business Park, GL20 8GD
+44(0) 1854 850019 design@utu.design www.utu.design

Drawing Title: **STANDARD DRAWING**
ACOUSTIC BARRIER

Drawn: WC	Checked: AZ	Drawing Scale: 1:50	Size: A3
Project Code: PEG-002	Drawing Number: SD-12	Revision: 01	





132KV MINIMUM ELECTRICAL CLEARANCES	
DESCRIPTION	DISTANCE (m)
PHASE TO PHASE CLEARANCE	1.5
PHASE TO EARTH CLEARANCE	1.5
DESIGN CLEARANCE FOR SAFETY (VERTICAL) D81	3.5
DESIGN CLEARANCE FOR SAFETY (HORIZONTAL) D8H1	3.1
INSULATION HEIGHT (PEDESTRIAN ACCESS)	2.4
SAFETY DISTANCE	3.0
VIEWP DESIGN CLEARANCE FOR SAFETY (VERTICAL) D82	5.5
VIEWP DESIGN CLEARANCE FOR SAFETY (HORIZONTAL) D8H2	4.5

ABBREVIATION:

AUX TX	AUXILIARY TRANSFORMER
CB	CIRCUIT BREAKER
CSE	CABLE SEALING END
CVT	CAPACITIVE VOLTAGE TRANSFORMER
DIS	DISCONNECTOR
E/S	EARTH SWITCH
HK	MARSHALLING KIOSK
PA	PANTOGRAPH
PI	POST INSULATOR
SA	SURGE ARRESTER
TX	TRANSFORMER

TO BE VIEWED IN CONJUNCTION WITH LAYOUT DRAWING WEST BURTON 2 LAYOUT.

THE PROPOSED SUBSTATION LAYOUT IS BASED ON ASSUMPTION THAT THERE ARE NO SITE RESTRICTIONS.

THE PROPOSED BAY BUSBAR SIZE IS 90mm x 7mm. THE BUSBAR SIZE SHALL BE CONFIRMED DURING DETAILED DESIGN.

PRELIMINARY
NOT FOR SITE USE

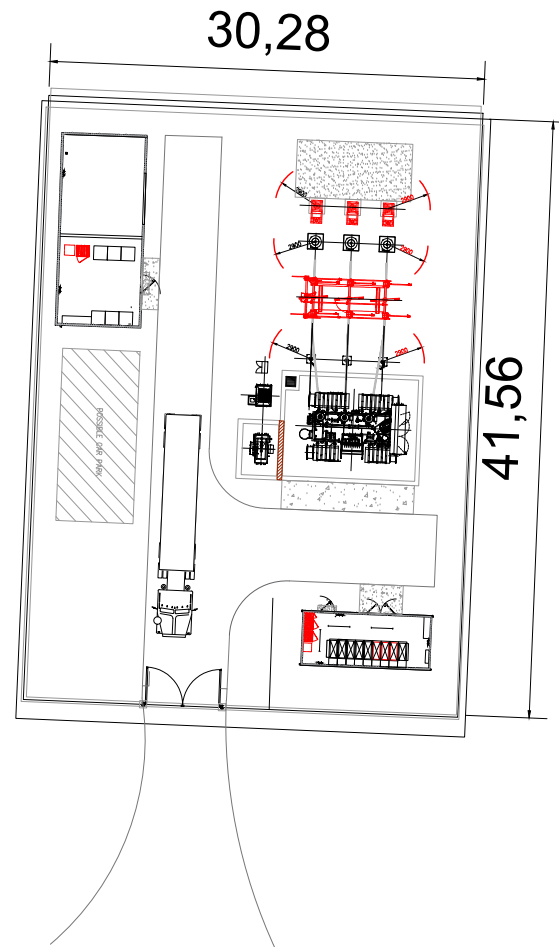
3	PLANNING ISSUE- DESIGN CHANGE	TB	TB	LGOS	25.02.25
2	PLANNING ISSUE- DESIGN CHANGE	TB	TB	LGOS	25.10.25
1	PLANNING ISSUE- LAYOUT CHANGE	TB	TB	LGOS	15.10.25
0	PLANNING ISSUE	TB	TB	LGOS	06.10.25
Rev	REVISION	Draw	Design	Appd	Date



Project Title			
COURTFARM 132/33/11KV SOLAR PV			
Title			
COURTFARM 132KV OHL AIS LOOP-IN SWITCHYARD SUBSTATION LAYOUT - FOR PLANNING ONLY			
Drawn	Designer	Checked	Date Approved
TB	TB	LGOS	25.02.25
Drawing No. TE@CRF-14.13-PE-GA-AIS-019			
Status	Scale	Rev	
PRELIMINARY	NTS	5	



[illegible][illegible]



132KV MINIMUM ELECTRICAL CLEARANCES	
DESCRIPTION	DISTANCE (m)
PHASE TO PHASE CLEARANCE	1.0
PHASE TO EARTH CLEARANCE	1.4
DESIGN CLEARANCE FOR SAFETY (VERTICAL) DS1	3.5
DESIGN CLEARANCE FOR SAFETY (HORIZONTAL) DSHT	3.1
INDICATION HEIGHT (PEDESTRIAN ACCESS)	2.4
SAFETY DISTANCE	3.0
NEWP DESIGN CLEARANCE FOR SAFETY (VERTICAL) DS2	5.5
NEWP DESIGN CLEARANCE FOR SAFETY (HORIZONTAL) DSHT	4.5

ABBREVIATION:	
AUX TX	AUXILIARY TRANSFORMER
CB	CIRCUIT BREAKER
CSE	CABLE SEALING END
CVT	CAPACITIVE VOLTAGE TRANSFORMER
DIS	DISCONNECTOR
EIS	EARTH SWITCH
MK	MARSHALLING KIOSK
PA	PANTOGRAPH
PI	POST INSULATOR
SA	SURGE ARRESTER
TX	TRANSFORMER

TO BE VIEWED IN CONJUNCTION WITH LAYOUT DRAWING WEST BURTON 2 LAYOUT.

THE PROPOSED SUBSTATION LAYOUT IS BASED ON ASSUMPTION THAT THERE ARE NO SITE RESTRICTIONS.

THE PROPOSED BAY BUSBAR SIZE IS 90mm x 7mm. THE BUSBAR SIZE SHALL BE CONFIRMED DURING DETAILED DESIGN.

PRELIMINARY
NOT FOR SITE USE

2	PLANNING ISSUE - DESIGN CHANGE	TB	TB	LGOS	25.02.25
1	PLANNING ISSUE - LAYOUT CHANGE	TB	TB	LGOS	15.10.25
0	PLANNING ISSUE	TB	TB	LGOS	06.10.25
Rev	REVISION	Drawn	Design	Appd	Date



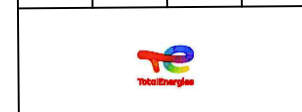
Project Title

COURTFARM 132/33/11KV SOLAR PV

Title

COURTFARM 132/33KV CUSTOMER SUBSTATION LAYOUT - FOR PLANNING ONLY

Drawn	Designer	Checked	Date Approved
TB	TB	LGOS	25.02.25



Drawing No TE@CRF-14.13-PE-GA-33-003			
Status	Scale	Rev	
PRELIMINARY	NTS	3	

132KV MINIMUM ELECTRICAL CLEARANCES	
DESCRIPTION	DISTANCE (m)
PHASE TO PHASE CLEARANCE	1.8
PHASE TO EARTH CLEARANCE	1.8
DESIGN CLEARANCE FOR SAFETY (VERTICAL) D8T	3.5
DESIGN CLEARANCE FOR SAFETY (HORIZONTAL) D8T	1.1
INSULATION HEIGHT (PEDESTRIAN ACCESS)	2.4
SAFETY DISTANCE	3.0
NEWP DESIGN CLEARANCE FOR SAFETY (VERTICAL) D8Z	3.5
NEWP DESIGN CLEARANCE FOR SAFETY (HORIZONTAL) D8Z	4.5

ABBREVIATION:

AUX TX	AUXILIARY TRANSFORMER
CB	CIRCUIT BREAKER
CSE	CABLE SEALING END
CVT	CAPACITIVE VOLTAGE TRANSFORMER
D/S	DISCONNECTOR
E/S	EARTH SWITCH
MK	MARSHALLING KIOSK
PA	PHOTOGRAPH
PI	POST INSULATOR
SA	SURGE ARRESTER
TX	TRANSFORMER

TO BE VIEWED IN CONJUNCTION WITH LAYOUT DRAWING WEST BURTON 2 LAYOUT.

THE PROPOSED SUBSTATION LAYOUT IS BASED ON ASSUMPTION THAT THERE ARE NO SITE RESTRICTIONS.

THE PROPOSED BAY BUSBAR SIZE IS 90mm x 7mm. THE BUSBAR SIZE SHALL BE CONFIRMED DURING DETAILED DESIGN.

PRELIMINARY
NOT FOR SITE USE

2	PLANNING ISSUE: DESIGN CHANGE	TB	TB	LGOS	25.02.25
1	PLANNING ISSUE: LAYOUT CHANGE	TB	TB	LGOS	15.10.25
0	PLANNING ISSUE	TB	TB	LGOS	06.10.25
Rev	REVISION	Drawn	Design	Appd	Date



Project Title

COURTFARM 132/33/11KV SOLAR
PV

Title

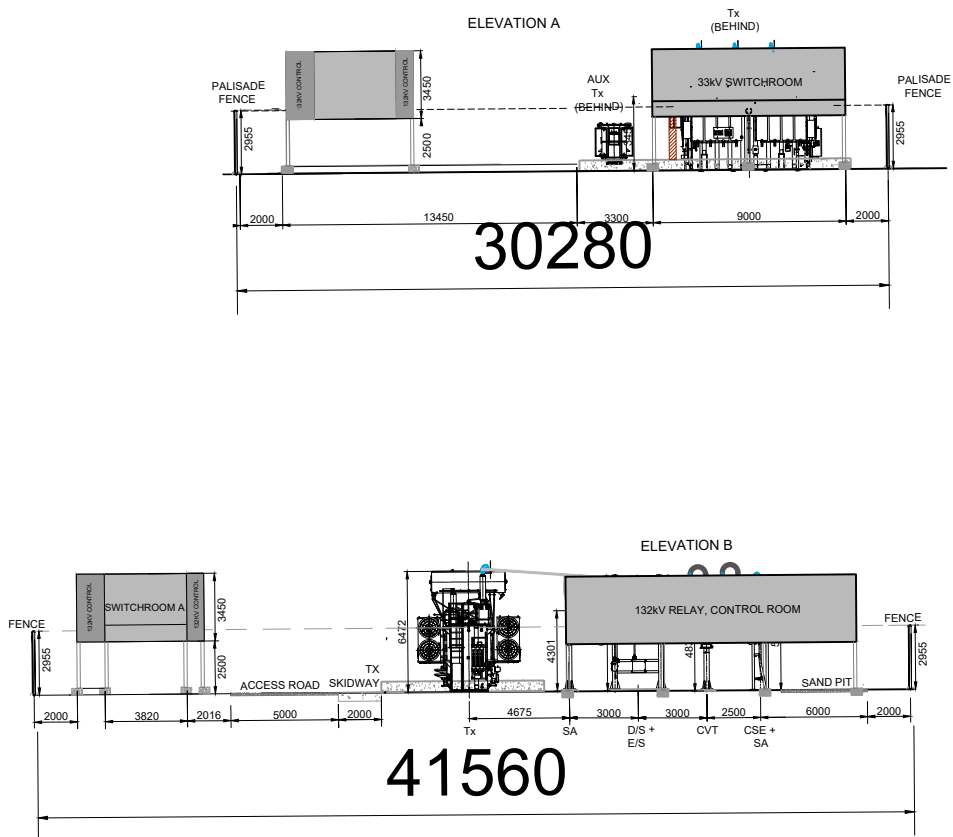
COURTFARM 132/33KV CUSTOMER
SUBSTATION ELEVATION - FOR
PLANNING ONLY

Drawn	Designer	Checked	Date Approved
TB	TB	LGOS	25.02.25



Drawing No
TE@CRF-14.13-PE-GA-33-004

Status	Scale	Rev
PRELIMINARY	NTS	4



N.T.S. IF PRINTED FROM PDF

17810

33100

FROM 132/33kV SUBSTATION

132kV MINIMUM ELECTRICAL CLEARANCES

DESCRIPTION	DISTANCE (m)
PHASE TO PHASE CLEARANCE	1.6
PHASE TO EARTH CLEARANCE	1.8
DESIGN CLEARANCE FOR SAFETY (VERTICAL) DS1	3.5
DESIGN CLEARANCE FOR SAFETY (HORIZONTAL) DS1H1	3.1
INSULATOR HEIGHT (PEDESTRIAN ACCESS)	2.4
SAFETY DISTANCE	5.0
WEVP DESIGN CLEARANCE FOR SAFETY (VERTICAL) DS2	5.5
WEVP DESIGN CLEARANCE FOR SAFETY (HORIZONTAL) DS2H	4.5

ABBREVIATION:

AUX TX	AUXILIARY TRANSFORMER
CB	CIRCUIT BREAKER
CSE	CABLE SEALING END
CVT	CAPACITIVE VOLTAGE TRANSFORMER
DIS	DISCONNECTOR
E/S	EARTH SWITCH
MK	MARSHALLING KIOSK
PA	PANTOGRAPH
PI	POST INSULATOR
SA	SURGE ARRESTER
TX	TRANSFORMER

TO BE VIEWED IN CONJUNCTION WITH LAYOUT DRAWING WEST BURTON 2 LAYOUT.

THE PROPOSED SUBSTATION LAYOUT IS BASED ON ASSUMPTION THAT THERE ARE NO SITE RESTRICTIONS.

THE PROPOSED BAY BUSBAR SIZE IS 90mm x 7mm. THE BUSBAR SIZE SHALL BE CONFIRMED DURING DETAILED DESIGN.

PRELIMINARY
NOT FOR SITE USE

2	PLANNING ISSUE- DESIGN CHANGE	TB	TB	LGOS	25.02.25
1	PLANNING ISSUE- LAYOUT CHANGE	TB	TB	LGOS	15.10.25
0	PLANNING ISSUE	TB	TB	LGOS	08.10.25
Rev	REVISION	Drawn	Design	Appd	Date



Project Title

COURTFARM 132/33/11kV SOLAR
PV

Title

COURTFARM 33/11kV CUSTOMER
SUBSTATION ELEVATION - FOR
PLANNING ONLY

Drawn	Designer	Checked	Date Approved
TB	TB	LGOS	25.02.25



Drawing No.

TE@CRF-14.13-PE-GA-11-003

Status	Scale	Rev
PRELIMINARY	NTS	3

17810 EAST

EAST

Tx
(BEHIND)

AUX
Tx
— (BEHIND)

33kV RELAY, CONTROL ROOM and STORES

PALISADE
FENCE

5810

10000

2000

33100

SOUTH

NORTH

PALISADE
FENCE

2955

12KV CONTROL		32KV CONTROL	
--------------	--	--------------	--

5000

200

ACCESS ROAD SKIDWAY

6472

Tx

CSE +
SA

PALISADE
FENCE

29.55

ABBREVIATION:

AUX TX	AUXILIARY TRANSFORMER
CB	CIRCUIT BREAKER
CSE	CABLE SEALING END
CVT	CAPACITIVE VOLTAGE TRANSFORMER
D/S	DISCONNECTOR
E/S	EARTH SWITCH
MK	MARSHALLING KIOSK
PA	PANTOGRAPH
PI	POST INSULATOR
SA	SURGE ARRESTER
TX	TRANSFORMER

TO BE VIEWED IN CONJUNCTION WITH LAYOUT DRAWING
WEST BURTON 2 LAYOUT.

THE PROPOSED SUBSTATION LAYOUT IS BASED ON ASSUMPTION
THAT THERE ARE NO SITE RESTRICTIONS.

THE PROPOSED BAY BUSBAR SIZE IS 90mm x 7mm. THE BUSBAR SIZE SHALL BE CONFIRMED DURING DETAILED DESIGN.

PRELIMINARY
NOT FOR SITE USE

2	PLANNING ISSUE - DESIGN CHANGE	TB	TB	LGOS	25.10.25
1	PLANNING ISSUE- LAYOUT CHANGE	TB	TB	LGOS	15.10.25
0	PLANNING ISSUE	TB	TB	LGOS	06.10.25
Rev	REVISION	Drawn	Design	Appd	Date



Project Title

COURTFARM 132/33/11kV SOLAR
PV

Title	Description	Status	Priority	Due Date	Assignee	Comments
Task 1	Develop new feature X	In Progress	High	2023-12-15	John Doe	Initial development
Task 2	Fix bug in module Y	Not Started	Medium	2023-12-20	Jane Smith	Waiting for requirements
Task 3	Update documentation	Completed	Low	2023-12-10	John Doe	All updates completed
Task 4	Review code for module Z	In Progress	Medium	2023-12-18	Jane Smith	Awaiting code from dev
Task 5	Test integration	Not Started	High	2023-12-22	John Doe	Waiting for deployment

COURTFARM 33/11KV CUSTOMER
SUBSTATION ELEVATION - FOR
PLANNING ONLY

Drawn	Designer	Checked	Date Approved
TB	TB	LGOS	25.10.25



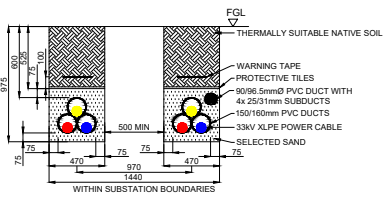
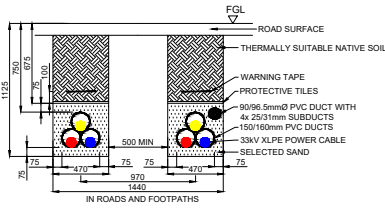
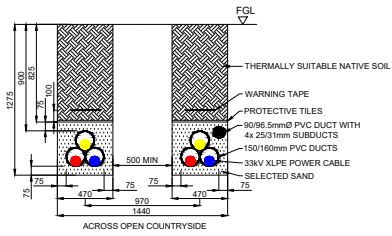
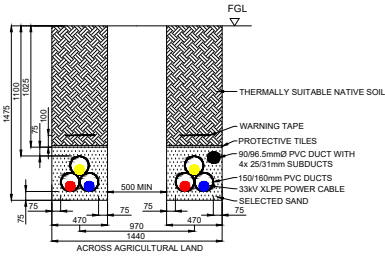
Drawing No

COURTFARM 33/11KV ELEVATION REV2

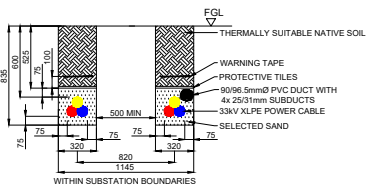
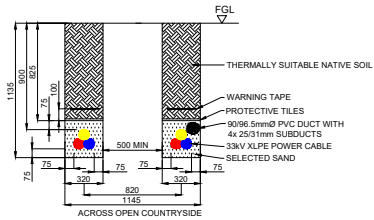
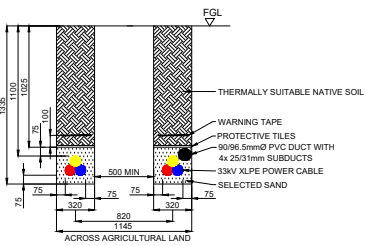
Status	Scale	Rev
PRELIMINARY	NTS	2

N.T.S. IF PRINTED FROM PDF

TYPICAL TRENCH CROSS SECTIONS - DUCTED INSTALLATION



TYPICAL TRENCH CROSS SECTIONS - DIRECT BURIED INSTALLATION



N.T.S. IF PRINTED FROM PDF

132KV MINIMUM ELECTRICAL CLEARANCES	
DESCRIPTION	DISTANCE (m)
PHASE TO PHASE CLEARANCE	1.6
PHASE TO EARTH CLEARANCE	1.5
DESIGN CLEARANCE FOR SAFETY (VERTICAL) DS1	3.5
DESIGN CLEARANCE FOR SAFETY (HORIZONTAL) DSHT	3.1
INSULATION HEIGHT (PEDESTRIAN ACCESS)	2.4
SAFETY DISTANCE	3.0
REWP DESIGN CLEARANCE FOR SAFETY (VERTICAL) DS2	5.5
REWP DESIGN CLEARANCE FOR SAFETY (HORIZONTAL) DSHT2	4.5

ABBREVIATION:

AUX TX	AUXILIARY TRANSFORMER
CB	CIRCUIT BREAKER
CSE	CABLE SEALING END
CVT	CAPACITIVE VOLTAGE TRANSFORMER
DIS	DISCONNECTOR
E/S	EARTH SWITCH
MK	MARSHALLING KIOSK
PA	PANTOGRAPH
PI	POST INSULATOR
SA	SURGE ARRESTER
TX	TRANSFORMER

TO BE VIEWED IN CONJUNCTION WITH LAYOUT DRAWING
WEST BURTON 2 LAYOUT.

THE PROPOSED SUBSTATION LAYOUT IS BASED ON ASSUMPTION THAT THERE ARE NO SITE RESTRICTIONS.

THE PROPOSED BAY BUSBAR SIZE IS 90mm x 7mm. THE BUSBAR SIZE SHALL BE CONFIRMED DURING DETAILED DESIGN.

PRELIMINARY
NOT FOR SITE USE

0	PLANNING ISSUE	TB	TB	LGOS	25.10.1
Rev	REVISION	Drawn	Design	Appd	Date



Project Title

HEDGEHOG GROVE 132/33kV SOLAR
PV

Title	Author	Year	Journal	Volume	Page
...	...	...	...	...	...

TYPICAL CABLE CROSS
SECTION 33kV 2-CIRCUIT

Drawn TB	Designer TB	Checked LGOS	Date Approved 25.10.25
-------------	----------------	-----------------	---------------------------

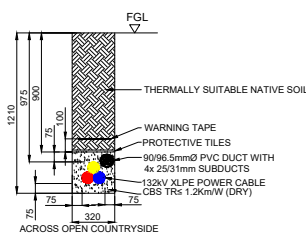
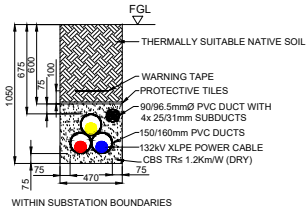
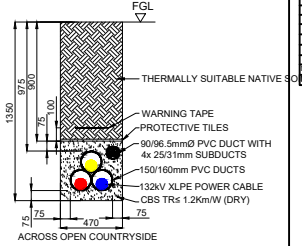
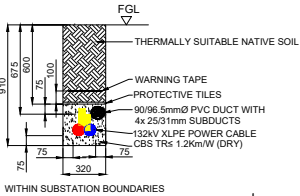
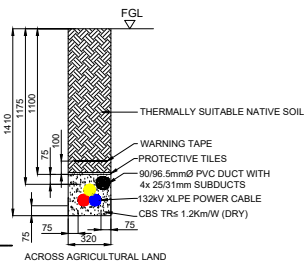
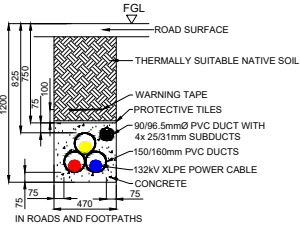
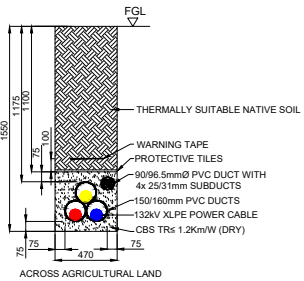


Drawing No.

TYPICAL 001-02 33kV-2 CIRCUIT

Status	Scale	Rev
PRELIMINARY	NTS	1

TYPICAL TRENCH CROSS SECTIONS - DUCTED INSTALLATION



TYPICAL TRENCH CROSS SECTIONS - DIRECT BURIED INSTALLATION

DESCRIPTION	DISTANCE (m)
PHASE TO PHASE CLEARANCE	1.6
PHASE TO EARTH CLEARANCE	1.5
DESIGN CLEARANCE FOR SAFETY (VERTICAL) DS1	3.5
DESIGN CLEARANCE FOR SAFETY (HORIZONTAL) DSHT	3.1
INSULATION HEIGHT (PEDESTRIAN ACCESS)	2.4
SAFETY DISTANCE	3.0
MEWP DESIGN CLEARANCE FOR SAFETY (VERTICAL) DS2	5.5
MEWP DESIGN CLEARANCE FOR SAFETY (HORIZONTAL) DSHT2	4.5

ABBREVIATION

AUX TX	AUXILIARY TRANSFORMER
CB	CIRCUIT BREAKER
CSE	CABLE SEALING END
CVT	CAPACITIVE VOLTAGE TRANSFORMER
DIS	DISCONNECTOR
E/S	EARTH SWITCH
MK	MARSHALLING KIOSK
PA	PANTOGRAPH
PI	POST INSULATOR
SA	SURGE ARRESTER
TX	TRANSFORMER

TO BE VIEWED IN CONJUNCTION WITH LAYOUT DRAWING
WEST BURTON 2 LAYOUT.

THE PROPOSED SUBSTATION LAYOUT IS BASED ON ASSUMPTION THAT THERE ARE NO SITE RESTRICTIONS.

THE PROPOSED BAY BUSBAR SIZE IS 90mm x 7mm. THE BUSBAR SIZE SHALL BE CONFIRMED DURING DETAILED DESIGN.

PRELIMINARY
NOT FOR SITE USE

0	PLANNING ISSUE	TB	TB	LGOS	25.10.2
Rev	REVISION	Drawn	Design	Appd	Date



Project Title

HEDGEHOG GROVE 132/33kV SOLAR
PV

Table

TYPICAL CABLE CROSS
SECTION 132kV 1-CIRCUIT

Drawn	Designer	Checked	Date Approved
TB	TB	LGOS	25.10.25



Drawing No.

TYPICAL 001-02 132kV-1 CIRCUIT

Status	Scale	Rev
PRELIMINARY	NTS	1

Town & Country Planning Act 1990 (as amended)
Planning and Compulsory Purchase Act 2004

Expertly Done.

DESIGN | ECONOMICS | ENVIRONMENT | HERITAGE | LAND & PROPERTY | PLANNING | TRANSPORT & INFRASTRUCTURE

Pegasus Group is a trading name of Pegasus Planning Group Limited (07277000) registered in England and Wales.

Registered office: 33 Sheep Street, Cirencester, GL7 1RQ

We are ISO certified 9001, 14001, 45001



Pegasus_Group



@pegasusgroup



Pegasus_Group

PEGASUSGROUP.CO.UK